

City of Virginia Beach
Public Works
Project Manual
for the Construction of

CIP # _____

(Federal & State Funded Project)

Version 4.4



Bid Number _____

Date: _____

Prepared by:

DIVISION I

Description of Changes

Section #	Date	Description of Change
Section 100	June 4, 2024	Added Civil Rights provision to Section 100.06
Section 101	August 1, 2025	Updated Section Abbreviations, Acronyms and Terms and added DEQ and VESMP
Section 102	May 7, 2024	Updated to the 2022 VDOT Supplemental Specifications & added Section 102.01 CPE
Section 103	March 1, 2026	Updated items in 103.06 (a) Contract
Section 104	May 1, 2022	Updated to the 2020 VDOT Road and Bridge Specifications
Section 105	May 7, 2024	Updated Sections 105.02, 105.10(d) 6., 105.14(c) and 105.19(a) & to 2022 VDOT Supplemental Specifications & VDOT comments
Section 106	November 1, 2022	Updated to the 2022 VDOT Supplemental Specifications & VDOT comments
Section 107	March 11, 2026	Added Virginia Human Rights Act to 107.01(c)2.c.
Section 108	November 1, 2022	Updated to the 2022 VDOT Supplemental Specifications & VDOT comments
Section 109	August 1, 2024	Updated Sections 109.08(a), 109.08(c) & to 2022 VDOT Supplemental Specifications & VDOT comments

DIVISION I GENERAL PROVISIONS

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DIVISION II - VIII

See City of Virginia Beach Amendments to the 2020 VDOT Road and Bridge Specifications
(Available for download online): <https://pw.virginiabeach.gov/bids/standards-specifications>

DIVISION IX

See City of Virginia Beach Amendments to the 2016 VDOT Road and Bridge Standards (Available
for download online): <https://pw.virginiabeach.gov/bids/standards-specifications>

DIVISION X

Mandatory Specification(s):

DIVISION XI

Supplemental Specification(s):

SECTION 100

BID SUBMITTAL

100.01 – Invitation to Bid:

PROJECT:

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

The Owner 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 _____ P.M. (local time), _____, by the Purchasing Agent’s Office, in the Purchasing Division, 2401 Courthouse Drive, 3rd Floor, Finance Department, Virginia Beach, VA 23456. Bids time stamped _____ 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.

Questions regarding the referenced bid documents should be submitted to _____ at _____@vbgov.com. The closing date for questions is _____ by 3:00 P.M. (local time).

Bid documents may be obtained online at <https://finance.virginiabeach.gov/purchasing/supplier-services>

_____% DBE Goal – See Commonwealth of Virginia Department of Transportation Minimum DBE Requirements (C-111)

The work includes _____

A pre-bid conference will be held on _____ at _____ at the _____.

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

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
2401 Courthouse Drive
3rd Floor, Finance Department
Virginia Beach, VA 23456

If you are physically disabled or visually or hearing impaired and need assistance in obtaining or inspecting the bid document please call the _____ at _____.
For hearing impaired dial 711.

100.02 - 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.

100.03 - Bidders Representation:

Each Bidder by making a bid represents that:

- (a) They have read and understands the Bid Documents and their bid is made in accordance therewith.
- (b) They have visited the site and has familiarized himself with the local conditions under which the work is to be performed.
- (c) Their bid is based upon the materials, systems and equipment which meet or exceed those described in the bidding documents.

100.04 - Proposals:

- (a) 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 signature, and notarization is required from a member of the firm with name in full of each member. If a corporation, a signature, and notarization is required by an officer of the corporation, in corporate name with corporate seal.

- (b) Proposals shall be addressed as an Invitation to 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.

100.05 - 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
2401 Courthouse Drive
3rd Floor, Finance Department
Virginia Beach, VA 23456

100.06 - 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 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 ninety (90) calendar days after the scheduled closing for receipt of bids.

The City of Virginia Beach, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

100.07 - 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/or sewer construction betterments are included in a single project, separate schedules of prices for each shall be included.]

SECTION 100.07 - SCHEDULE OF UNIT PRICES

PROJECT: Construction of (ININSERT PROJECT TITLE) (ININSERT CIP NO.)
Page (ININSERT #) of Bid Proposal

Bid Number: (ININSERT BID NUMBER)

Item No.	Spec. Section	Item Descriptions	Quantities	Unit	Unit Price in Figures	Total Item Price in Figures
1	VDOT 513	Mobilization	1	L.S.	\$30,000.00	\$30,000.00
2	VDOT 301	Clearing and Grubbing	1	L.S.	\$10,000.00	\$10,000.00
3	CVB 303	Regular Excavation	11,908	C.Y.	\$30.00	\$357,240.00
4	CVB 303	Undercut Excavation	1000	C.Y.	\$60.00	\$60,000.00
5	VDOT 303	Select Borrow, Min. CBR 15	1000	C.Y.	\$40.00	\$40,000.00
6	CVB 302	Select Borrow for Trench Backfill	12	C.Y.	\$50.00	\$600.00

7	CVB 303	Construction Entrance, VDOT #1 Aggregate	70	TON	\$80.00	\$5,600.00
8	CVB 303	Temporary Silt Fence	690	L.F.	\$5.00	\$3,450.00
9	VDOT 302	15" RCP, Class III	40	L.F.	\$60.00	\$2,400.00
10	Supp. Spec.	Test Pits	2	EA.	500.00	\$1,000.00
		Total Base Bid This Sheet				\$510,290.00

100.08 - Term of Contract:

The Owner agrees to issue a Notice of Intent to Award letter within ninety (90) days of the Bid Opening. Upon receiving the Notice of Intent to Award letter, the Contractor agrees to begin work in accordance with Section 105.01 herein, that they will carry out the work with such force, and in such manner and order, and at such time and seasons as may be directed by the Owner, and further that they will fully and entirely perform this Contract, and all work incidental thereto, before the expiration of _____ consecutive calendar days from the Notice to Proceed date set in accordance with Section 105.01 herein.

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.

100.09 - Schedule of Payment:

Approved Monthly Progress Estimates will be paid within thirty (30) days of receipt by the Owner.

100.10 - 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 (3) of the requirements of Section 2.2-4342 of the Code of Virginia shall be public information in accordance with State statutes.

100.11 – Faith Based – Nondiscrimination:

The City of Virginia Beach does not discriminate against Faith Based organization.

100.12 - Drug-Free Workplace Provisions:

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

- (a) Contractor will provide a drug-free workplace for Contractor's employees.
- (b) 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.
- (c) Contractor will state in all solicitations or advertisements for employees placed by or on behalf of Contractor that Contractor maintains a drug-free workplace.
- (d) 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.

100.13 – Certification and Licensing of Bidders:

- (a) Bidders are required under Code of Virginia, Section 54.1-1100, as amended, to show evidence of certification or licensing by the Board for Contractors before any bid may be received and considered.
- (b) Code of Virginia Chapter 5, Title 59.1, as amended, requires any person, partnership, limited liability company or corporation transacting business in the State under an assumed or fictitious name to file a certificate of Ownership with the State Corporation Commission and the Clerk's Office of the Virginia Beach Circuit Court.

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
(Circle One)

If yes, 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 Addresses allowed)

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

Per Code of Virginia, Title 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 _____,
202_____, 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

Per Code of Virginia, Title 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 _____,
202____, 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:

Per Code of Virginia, Title 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 _____,
202_____, 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: _____

Per Code of Virginia, Title 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 _____,
202_____, 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: _____

Print Name: _____
CITY PURCHASING AGENT

100.14 – Retainage:

The Contractor has two (2) options on how the retainage will be managed. Select one option by marking the corresponding box below:

- Waive the right to interest on such retainage. In this Option, the Owner holds all retainage until the project is accepted by the Owner,

- Set up an interest-bearing escrow account in accordance with Virginia law to hold such retainage. Said account shall be jointly held between the Contractor and the Owner. It is the Contractor's responsibility to set up this account, ensure the Owner's access to such an account and ensure it meets all requirements of the law. If such account is not set up by the Contractor, Contractor has waived the right to interest on all retainage.

SECTION 101

DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS

101.01—Abbreviations and Acronyms

In these Specifications and 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
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
ATSSA	American Traffic Safety Services Association
AWG	American Wire Gage
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
BOCA	Building Officials and Code Administrators
BMP	Best Management Practice
C	Celsius, when preceded by “degree(s)”
CABB	Contractor Advertisement Bulletin Board
CBPA	Chesapeake Bay Preservation Act
CBR	California Bearing Ratio
CEI	Construction, Engineering and Inspection
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIP	Capital Improvement Program
CMS	City’s Mandatory Specifications
CQC	Contractor Quality Control
CRSI	Concrete Reinforcing Steel Institute
CSS	City’s Supplemental Specifications
CWA	Clean Water Act
dB	decibels

DBE	Disadvantaged Business Enterprise
DC	Direct Current
DEQ	Virginia Department of Environmental Quality
DHV	Design Hourly Volume
DTM	Digital Terrain Model
ECTC	Erosion Control Technology Council
EEL	Edison Electric Institute
EEO	Equal Employment Opportunity
EIA	Electronic Industries Alliance
EPA	Environmental Protection Agency
EPDM	Ethylenepropylenedienemonomer (an elastomer)
ESC	Erosion and Sediment Control
ESCCC	Erosion and Sediment Control Contractor Certification
EWA	Engineered Wood Association
F	Fahrenheit, when preceded by “degree(s)”
F/A	Filler/Asphalt ratio
FAT	Field Acceptance Test
FHWA	Federal Highway Administration
FN	Formal Notification
FOOH	Field Office Overhead
FS	Federal Specifications, General Services Administration
GFCI	Ground Fault Circuit Interrupter
GP	General Permit
HARN	High Accuracy Reference Network
HDG	Hot-Dip Galvanizing
HOOH	Home Office Overhead
HUC	Hydrologic Unit Code
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IIM	VDOT’s Instructional and Informational Memoranda
IMSA	International Municipal Signal Association
ISO	International Organization for Standardization
ITB	Invitation to Bid
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System
LCC	Life Cycle Cost
LCCA	Life Cycle Cost Analysis
LCD	Liquid Crystal Display
LDA	Land-Disturbing Activity
LED	Light-Emitting Diode
LOD	Limit of Disturbance
LPG	Liquid Petroleum Gas
MASH	Manual for Assessing Safety Hardware
MBE	Minority Business Enterprise
MEKP	Methyl Ethyl Ketone Peroxide
MIL	Military specifications

MOU	Memorandum of Understanding
MSDS	Materials Safety Data Sheet
MS4	Municipal Separate Storm Sewer System
MUTCD	<i>Manual on Uniform Traffic Control Devices for Streets and Highways: 11th Edition,</i> December 2023 and the Virginia supplement to same
NAD	North America Datum
NBS	National Bureau of Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NHI	National Highway Institute
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NTM	Notice to Mariners
NTP	Notice to Proceed
NTPEP	National Transportation Product Evaluation Program
OSHA	Occupational Safety and Health Administration
PAA	Post Award Addendum
PCI	Precast / Prestressed Concrete Institute
PE	Polyethylene
PSC	Product Selection Committee
PTL	Plywood Testing Laboratory
PVC	Polyvinylchloride
PVF	Polyvinylfluoride
PWDSM	City of Virginia Beach Public Works Design Standards Manual
QP	Qualified Personnel
REA	Rural Electrification Administration
ROW	Right-of-Way
SAE	Society of Automotive Engineers
SAT	System Acceptance Test
SBEP	Small Business Enhancement Program
SDS	Safety Data Sheet
SIA	Schedule Impact Analysis
SOR	Schedule of Record
SP	VDOT's Special Provision
SPCN	VDOT's Special Provision Copied Note
SPIB	Southern Pine Inspection Bureau
SS	Supplemental Specification
SSPC	Society for Protective Coatings
SWaM	Small, Women-Owned, and Minority-Owned Businesses
SWM	Stormwater Management
SWMF	Stormwater Management Facility
SWMRD	Stormwater Management Regulatory Division
SWPPP	Stormwater Pollution Prevention Plan

TAPPI	Technical Association of the Pulp and Paper Industry
TCS	Traffic Control Supervisor
TFE	Polytetrafluoroethylene
TIE	Ticket Information Exchange (Miss Utility)
TMDL	Total Maximum Daily Load
TOCIT	Traffic Operations Center Integration Test
UL	Underwriters' Laboratories, Inc.
USCG	United States Coast Guard
USC	United States Code
VAC	Virginia Administrative Code, when referencing a legal code
VDC	Volts Direct Current
VDOT	Virginia Department of Transportation
VECP	Value Engineering Contractor Proposal
VESCP	Virginia Erosion and Sediment Control Program
VFA	Voids Filled with Asphalt
VMA	Voids in Mineral Aggregate
VOSH	Virginia Occupational Safety and Health
VSCC	Virginia State Corporation Commission
VESMP	Virginia Erosion Stormwater Management Program
VTM	Virginia Test Methods; voids in total mix
VWAPM	Virginia Work Area Protection Manual, Version 11.0, January 2026
WBE	Women Business Enterprise
WLA	Waste load Allocation
WQS	Water Quality Standards

101.02—Terms

In these Specifications and other Contract Documents, the following terms and pronouns used in place of them shall be interpreted as follows:

—A—

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

Adjustment. An increase or decrease in the Contract amount or in the Contract Time unless the context dictates otherwise.

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

Affiliate. Any business entity that is closely associated to another business entity so that one has the power to control the other either directly or indirectly; or, where one business entity systematically shares resources, officers, and/or other management with another business entity to the extent that a business relationship legally exists or is publicly perceived to exist; or, when a third party has the power to control both; or, where one business entity has been so closely allied with another through an established course of dealings including, but not limited to, the lending of financial wherewithal or engaging in joint ventures, so as to cause a public perception that the two (2) firms are one entity.

Alkali soil. Soil in which total alkali chlorides calculated as sodium chloride are more than one-tenth percent (0.10%) based on total solids.

Alternative Bid. An alternative bid is a defined portion of Work that is priced separately that the Owner may added or subtracted from the quoted prices if alternate methods and materials are within the project budget. With alternative bid(s), the low bidder is determined in the bid document.

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

Available funds. Those funds which have been appropriated by the Owner for goods or services described in the bid specifications set forth herein.

Award. The decision of the Owner to accept the bid of the lowest responsive and responsible Bidder for the Work or such other criteria set forth in the solicitation. The award of the Contract is subject to the execution and approval of a satisfactory Contract for the Work, and such other approvals and conditions as may be specified or required by law.

Award date. The date on which the Owner signed the contract to accept the bid or proposal of the lowest responsive and responsible Bidder, or such other criteria set forth in the solicitation.

–B–

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 bid. The sum of the bid which the bidder offers to perform the work as described by the bid documents exclusive of any alternate bids.

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

Base flood. The flood or tide having a one percent (1%) chance of being exceeded in any given year.

Best management practice (BMP). BMP is the schedule of activities, prohibitions of practices, maintenance procedures, and other management practices, including both structural and nonstructural practices, to prevent or reduce the pollution of surface waters and groundwater systems.

Bid. The offer of a Bidder submits on paper if so specified in the Proposal to perform the Work and furnish the materials, equipment, and labor at the prices set forth therein; valid only when properly signed and guaranteed. Sometimes referred to as “Proposal”.

Bidder. Any individual, partnership, corporation, limited liability company, 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.

Bidders of Record. The actual bidders that have submitted bids in a timely fashion for a specific bid solicitation.

Bid Documents. Documents and other documents included in the bidding process as specified in the Invitation to Bid and at the Prebid Conference utilized by the Bidder to formulate the Bid.

Bid Package. The package means all necessary bidding documents, drawings, specifications, addendum and/or advertisements that will be used in the formal sealed bid solicitation.

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.

Bids, Invitation for. See **Advertisement, Notice of.**

Bid Solicitation. The formal offering to prospective bidders requesting their response for specific goods and/or services. The bid solicitation shall include the bid number, bid closing date and time, and complete bid package.

Borrow. Suitable material not available from designated Regular Excavation or other sources of useable materials on-site that is used primarily for embankment or 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 (0.10%) based on total solids.

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

Bridge lift. A layer of fill material placed in excess of standard depth over an area that does not support the weight of hauling equipment and for which compaction effort is not required.

Business. Any corporation, partnership, limited liability company, joint venture, firm, association, individual, or sole proprietorship operated for profit.

Bypass. The intentional diversion of waste streams from any portion of a treatment facility.

–C–

Calendar day. Any day shown on the calendar, including Saturday and Sunday, beginning at 12:01 a.m. and ending at midnight.

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.

Certification of Insurance. A document or form used to provide information on specific insurance coverage. The certification provides verification of the insurance and usually contains information on types and limits of coverage, insurance company, policy number, named insured, and the policies effective periods.

Change Order. A written order signed by the Owner to incorporate changes, alterations, or other modifications into the Contract. A Change Order may be used to add, modify, or delete pay items, Contract time, Contract Documents, or other terms of the Contract. Change Orders may be issued on a bilateral or unilateral basis. The term change order means bilateral Change Order, except where the Change Order is designated or understood from the context as being a unilateral Change Order.

Bilateral Change Order. A written change order signed by both the Owner and the Contractor where the Owner and Contractor agree upon the scope, the cost, and the time adjustment for the proposed change, alteration, or other modification to the Contract. This type of change order is what is typically meant when the term change order is used elsewhere in Owner publications.

Unilateral Change Order. A written change order signed only by the Owner used to effect a change, alteration, or other modification to the Contract when the Owner and the Contractor cannot agree upon the scope, the cost, or the time estimation of the proposed change, alteration, or other modification to the Contract or where due to issues of emergency, safety, environmental damage, or other similar critical factors the Owner must act quickly and unilaterally to effect the change. In these cases, the Owner must act unilaterally to establish a scope, cost, or time adjustment for, the change, alteration, or other modification to the Contract.

Channel. A watercourse or drainage way.

City. City of Virginia Beach.

City Employee. A person employed in the public sector that represents the City or Owner.

Claim. The Contractor's written request or demand for an adjustment to the Contractor's compensation or to the Contract time, for costs, expenses, or other damages, adjustment of the Contract terms, or for any entitlement available under the Contract, made within the time, in the form, and pursuant to the provisions for claims specified in the Contract Documents.

Commonwealth. Commonwealth of Virginia.

Completion Date. The date specified in the Contract, by which the Contractor shall achieve Final Acceptance according to Section 108.09 (c).

Composite hydrograph. A graph showing the mean daily discharge versus the calendar day, indicating trends in high and low flow for a one-year period.

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

Construction activity. Construction activity is associated with constructing a building and/or infrastructure. Construction may include, but not limited to, the following activities: clearing, grading, excavation, paving, pile driving, dredging, landscaping, and installing foundations, streetlights, pavement markings, water mains, drainage pipes and sanitary sewer lines.

Construction area. The area where authorized construction occurs.

Construction limits (On-Site). The disturbed area required for the construction of a Project including the intersection of side slopes with the original ground, plus slope rounding and slopes

for drainage ditches, bridges, culverts, channels, temporary or incidental construction, and identified by the surface planes as shown and/or described within the Contract Documents.

Contract. The written agreement executed by and between the Owner and the Contractor that sets forth the obligations of the parties thereunder. The documents that make up the Contract are specified in Sections 100.06 and 103.06. Oral agreements, representations or promises will not be considered a part of the Contract.

Contract Amount. The sum stated as the bid total in the executed Proposal as adjusted according to the Contract.

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 execution date. The date on which the Contract is signed by the Owner.

Contract item, bid item, or pay item. A specifically described unit of work for which a price is provided in the Contract Schedule of Items.

Contract Time. The time allowed in the Contract for Final Completion of the Work.

Contract Time Limit. The date, whether set by a number of calendar days or fixed calendar date, for Final Completion of the Work prescribed in the Contract, including all authorized time extensions.

Contractor. The business, corporation, partnership, joint venture, and individual that has a direct contract with the Owner, which is in writing and signed by the Owner, to perform the prescribed Work as an independent Contractor and not as an agent for the Owner.

Controlling item of work. See **Critical Path Work**.

Corporation. A business entity organized and existing under the laws of the Commonwealth or other jurisdiction by virtue of articles of incorporation, amendment, or merger.

Critical Activity. Any activity on the critical path.

Critical Path. The longest continuous sequence of work or chain of activities throughout the project that defines the overall time needed to complete the project.

Critical Path Work. Any work on the critical path. A delay to any critical path work is expected to delay completion of the project.

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. When used as a noun with reference to earthwork, that portion of a roadway formed by excavating below the existing surface of the earth and limited by design or the direction of the Owner.

Cut Slope. See also **Fill Slope.** A surface plane generally designated by design or the direction of the Owner which is formed during excavation below existing ground elevations that intersects with existing ground at its termini.

–D–

Day. A Calendar Day, unless specifically stated otherwise.

Debarment. A legal action taken by the City that excludes, prohibits, or disqualifies a person or company for a specific period of time, generally not longer than three (3) years due to allegations of fraud, mismanagement, and similar improprieties.

Debarred. To legally exclude or prohibit any individual, partnership, corporation, limited liability company or joint venture to perform business or enter an agreement with the City.

Deflection. The vertical or horizontal movement occurring between the supports of a bridge superstructure, guardrail, other structure, or the components (beams, girders, and slabs) thereof 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. Virginia Department of Transportation (VDOT).

Design flood. The magnitude of flood that a given structure can convey without exceeding a designated flood level.

Detour. The removal of traffic from one roadway or highway to an alternate roadway or highway.

Development. Land disturbance and the resulting landform associated with the construction of residential, commercial, industrial, institutional, recreation, transportation, or utility facilities or structures or the clearing of land for nonagricultural or nonsilvicultural purposes. The regulation of discharges from development, for purposes of this chapter, does not include the exemptions found in 9VAC25-870-300 of the Code of Virginia.

Digital Identification (I.D.). An encrypted signature that is the legal equivalent of a written signature thus allowing for the digital signing of the bid.

Direct Costs. Project-specific costs the Contractor incurs in the performance of the Work, consisting of labor; material; ownership cost, operating expense, or invoiced rental rates of equipment; and job-site general and administrative overhead.

Disincentive. If provided for in the Contract, an agreed monetary sum that the Owner deducts from compensation due or to become due to the Contractor if a specified milestone is not satisfactorily completed on or before the specified milestone date.

Disposable material. Material generally found to be unsuitable for roadway construction or surplus material that is to be placed in a disposal area, unless specified otherwise.

Disposal areas. Areas generally located outside of the Construction Limits identified in the Contract where unsuitable or surplus material is deposited.

Disqualification/Debarment. The suspension or revocation of a Bidder's qualification to bid.

Diversion. A traffic shift that temporarily moves an existing Road to a new alignment.

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

–E–

Earthwork. The work consisting of constructing roadway earthwork in conformity with the specified tolerances for the lines, grades, typical sections, and cross sections shown on the plans or as established by the Owner. Earthwork shall include regular, borrow, undercut, and minor structure excavation; constructing embankments; disposing of surplus and unsuitable material; shaping; grading; compaction; sloping; dressing; and temporary erosion control work.

Easement. A grant of the right to use property for a specific use.

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

Employee. Any person working on the project who is under the direction or control of or receives compensation from the Contractor or a Subcontractor at any tier.

Engineer. The Owner who acts directly or through their duly authorized representative(s) and who is responsible for roadway and highway design, construction, and maintenance. The Owner and their representative(s) act within the scope of the particular duties or the authority given to them by the Code of Virginia, the Commissioner, these Specifications, and the Contract Documents.

Environment Permit. Any permit, approval, authorization, certificate, license, variance, filing, or permission required by or from any Governmental Authority pursuant to any Environmental Law.

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

Excavation (Excavate). The act of creating a man-made cavity in the existing soil for the removal of material necessary to obtain a specific elevation or to install a structure, material, component, or item necessary to complete a specific task or form a final surface or subsurface.

Extra work. Any work that was not provided for or included in the Contract as awarded but the Owner determines is essential to the satisfactory fulfillment of the Contract within its intended scope and is identified in an authorized change order for its execution subject to the limitations, exceptions and provisions in Sections 104.02, 104.03, and 109.05.

–F–

Falsework. A temporary framework used to support work in the process of constructing permanent structural units.

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

Fill Slope. See also **Cut Slope.** A surface plane formed during embankment above existing ground elevations that intersects with existing ground at its termini.

Final Acceptance. Acceptance of the project after Final Completion of all the Work specified in the Contract, as determined by and contingent on a final inspection by the Owner.

Final Completion. All work, including punch list items noted at the final inspection, is complete to the satisfaction of the Owner.

Final Completion Date. The date specified in the Contract, by which the Contractor shall achieve Final Acceptance according to Section 108.09 (c).

Firm. A commercial partnership of two (2) or more persons formed for the purpose of transacting business.

Flood frequency. A statistical average recurrence interval of floods of a given magnitude.

Flooding. A volume of water that is too great to be confined within the banks or walls of the stream, water body or conveyance system and that overflows onto adjacent lands, thereby causing or threatening damage.

Floodplain. The area adjacent to a channel, river, stream, or other water body that is susceptible to being inundated by water normally associated with the 100-year flood or storm event. This includes, but is not limited to, the floodplain designated by the Federal Emergency Management Agency.

Flood-prone area. The component of a natural or restored stormwater conveyance system that is outside the main channel. Flood-prone areas may include, but are not limited to, the floodplain, the floodway, the flood fringe, wetlands, riparian buffers, or other areas adjacent to the main channel.

Floodway. The channel of a river or other watercourse and the adjacent land areas, usually associated with flowing water, that must be reserved in order to discharge the 100-year flood or storm event without cumulatively increasing the water surface elevation more than one foot. This includes, but is not limited to, the floodway designated by the Federal Emergency Management Agency.

Force account work. A type of extra work for which the Contractor is compensated as specified in Section 109.05 (b) Payment by Force Account pursuant to an executed Force Account authorization for use when the scope or quantity of the extra work is undefined.

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. All such work shall be performed under the applicable provisions of the Contract Documents.

Formwork. A temporary structure or mold used to retain the plastic or fluid concrete in its designated shape until it hardens. Formwork shall be designed to resist the fluid pressure exerted by plastic concrete and additional fluid pressure generated by vibration and temporary construction loads.

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

–G–

Gage. U.S. Standard Gage.

Grade separation. Any structure that provides a traveled way over or under another traveled way or over a body of water.

–H–

Hazardous substance. Any substance designated under the Code of Virginia or 40 CFR Part 116 pursuant to § 311 of the Clean Water Act.

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

Historical flood level. The highest flood level that is known to have occurred at a given location.

Holidays. The days specifically set forth in Section 108.02 or in the Contract Documents.

Hydrologic data sheet. A tabulation of hydrologic data for facilities conveying a 100-year discharge equal to or greater than five hundred (500) cubic feet per second

Hydrologic Unit Code (HUC). A watershed unit established in the most recent version of Virginia's 6th Order National Watershed Boundary Dataset unless specifically identified as another order.

-I-

Illicit discharge. Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a separate VPDES or state permit (other than the state permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-870-400 D 2 c (3).

Impervious cover. A surface composed of material that significantly impedes or prevents natural infiltration of water into soil.

Incentive. If provided for in the Contract, an agreed monetary sum that the Owner pays to the Contractor if a specified milestone or condition is satisfactorily completed or achieved and accepted by the Owner on or before the specified milestone date.

Inspection. An on-site review of the project's compliance with the permit or the state permit, the VESMP, VESCP, and any applicable design criteria, or an on-site review to obtain information or conduct surveys or investigations necessary in the implementation or enforcement of the Act and this chapter.

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 requirements and provisions of the Contract.

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

-J-

Joint venture. Two (2) or more businesses that join together in the nature of a partnership for the purpose of bidding on and constructing a project, for which they are all jointly and individually liable to the Owner.

-K-

Kickback. A form of negotiated payment or percentage of income given to a recipient in position of power or influence as compensation or reward for providing favorable treatment or services rendered.

–L–

Laboratory. Any testing laboratory that may be designated and approved by the Owner or by provisions in the Contract.

Land disturbance or land-disturbing activity. A manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include those exemptions specified in § 62.1-44.15:34 of the Code of Virginia.

Liquidated damages. The agreed damages the Contractor owes to the Owner when the Contractor fails to achieve Final Completion by the specified Final Completion Date. These damages include, but are not limited to, additional costs associated with administration, engineering, supervision, and inspection of the project, and other expenses.

–M–

Major Item. Any pay item specifically indicated as such in the Schedule of Items included in the Contract.

Mandatory Specifications (MS). See **Specifications**

Match-Cure. A process where concrete test specimens are cured at the same temperature as the product by monitoring the concrete temperature in both the product and the test specimens and applying heat to the test specimens to match the temperature of the concrete.

Material. Any substance that is used in the Work specified in the Contract.

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

Milestone. An event or a date that marks the start or completion of a specified portion of the Work. If provided for in the Contract, milestones are used to specify when the Work or a specified portion thereof must be completed in accordance with the Contract Documents. The Contract may provide for one or more Completion milestone.

Minor Item. Any pay item that is not specified as being a Major Item in the Schedule of Items included in the Contract.

Municipal separate storm sewer system (MS4). All separate storm sewers that are defined as “large” or “medium” or “small” municipal separate storm sewer systems or designated under 9VAC25-870-380 A 1 of Code of Virginia.

–N–

National Pollutant Discharge Elimination System (NPDES). The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing state permits, and imposing and enforcing pretreatment requirements under §§ 307, 402, 318, and 405 of the Clean Water Act. The term includes an approved program.

Non-Contract item. Item(s) of work that is required to permit completion of the specified work in an acceptable manner, located within the Limits of Construction, but is not included in the Contract Documents and will be completed by others prior to or during the construction of the Project.

Nonpoint source pollution. Pollution such as sediment, nitrogen, phosphorous, hydrocarbons, heavy metals, and toxics whose sources cannot be pinpointed but rather are washed from the land surface in a diffuse manner by stormwater runoff.

Notice of Invitation to Bid. The official notice by the Owner searching for qualified Bidders for the advertised project or services. The notice usually includes information about the project or services and provide details about solicitation, rules for submission of bids and awarding of the contract.

Notice of Intent to Award letter. A written notice to the Contractor that they met the requirements of the bid, been successful in submitting their bid and will be awarded the contract.

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

–O–

Offeror. One that makes an offer or an offering.

Operator. The owner or operator of any facility or activity subject to the Act and this chapter. In the context of stormwater associated with a large or small construction activity, operator means any person associated with a construction project that meets either of the following two (2) criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other state permit or VESMP authority permit conditions (i.e., they are authorized to direct workers at a site to carry out activities required by the stormwater pollution prevention plan or comply with other permit conditions). In the context of stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the operator of the regulated MS4 system.

Ordinary high water. A water elevation based on analysis of all daily high waters that will be exceeded approximately twenty-five percent (25%) of the time during any 12-month period.

Outfall. When used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.

Owner. City of Virginia Beach.

–P–

Pavement structure. The combination of select or stabilized materials, subbase, base, and surface courses, described in the Typical Pavement Section in the Plans that is placed on a subgrade to support the traffic load and distribute it to the roadbed.

Pay item. See **Contract item.**

Permit. Permit or VESMP authority permit means an approval to conduct a land-disturbing activity issued by the VESMP authority for the initiation of a land-disturbing activity after evidence of state VESMP general permit coverage has been provided where applicable.

Permittee. Permittee means the person to which the permit or state permit is issued.

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

Plans/Drawings. The approved project plans and profiles, which may include but are not limited to survey data, typical sections, summaries, general notes, details, plan and profile views, cross-sections, special design drawings, computer output listings, supplemental drawings, or exact reproductions thereof, and all subsequently approved revisions thereto which show the location, character, dimensions, and details of the Work specified in the Contract.

Planholders of Record. The actual prospective bidders that have obtained bid packages for a specific bid solicitation.

Pollution. Such alteration of the physical, chemical or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters, or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution, but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state

waters; and (iii) contributing to the contravention of standards of water quality duly established by the State Water Control Board, are “pollution” for the terms and purposes of this chapter.

Post Award Addendum. The documents changing the bidding requirements that is issued after the award.

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 centerline of the roadbed.

Progress Estimate. A progress estimate is an official written itemization of the value of materials in-place and work performed according to the Contractor which the Contractor is compensated.

Project. The designated section of highway, roadway, or property including all work to be performed according to the Contract Documents.

Project Drawings. See **Plans**.

Project Limits. Area depicted on the project drawings for the Contractor’s use in construction of the project. Effects of construction shall be limited to this area.

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.

Proposal (Bid Proposal). The Owner’s documents in the Notice of Advertisement for Bids that contain the project requirements and other information upon which a bid is to be based. The Proposal includes the plans, Specifications, Mandatory Specifications, Supplemental Specifications, referenced Standards, addenda, revisions, all other documents referred to therein, whether or not attached, and the forms on which the Owner’s requires bids to be submitted.

-Q-

Qualified personnel. A person knowledgeable in the principles and practices of erosion and sediment and stormwater management controls who possesses the skills to assess conditions at the construction site for the operator that could impact stormwater quality and quantity and to assess the effectiveness of any sediment and erosion control measures or stormwater management facilities selected to control the quality and quantity of stormwater discharges from the construction activity. On or after July 1, 2025, "qualified personnel" as defined by 9VAC25-881-1, shall hold an unexpired Dual Inspector Certification Issued by the department; an unexpired Inspector for Erosion and Sediment Control Certification and an unexpired Inspector for Stormwater Management certification, both issued by the department; a

Construction General Permit Qualified Personnel Certificate issued by the department or the Virginia Department of Transportation; or an equivalent certification approved by EPA.

–R–

Ramp. A connecting roadway between two (2) highways or traveled ways or between two (2) intersecting highways at a grade separation.

Responsible Bidder. A Contractor 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. Also, a Contractor who has not been debarred from bidding per City of Virginia Beach Procurement Policy.

Responsive Bidder. A Contractor who has submitted a bid which conforms in all material respects to the invitation to bid.

Right of way. A general term denoting the Commonwealth's or the City's land, property, or interest therein, that is acquired for or devoted to a roadway or other transportation facilities. As used herein, the term does not denote the legal nature of the Commonwealth's or the City's 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.

Road and Bridge Specifications. See **Specifications.**

Roadbed. The graded portion of a roadway 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 and width that 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, and extensive areas between the roadways of a divided highway.

Roadside development. Items that are necessary to complete a roadway that provide 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 service life and enhance the appearance of the roadway.

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

Roadway Prism. The cross-sectional area of a roadway topped by the full width of the surface of the roadway and shoulders. It is bounded horizontally by the limits of roadway and shoulder load bearing limits between either shoulder break points or curbs. The Roadway Prism slopes down away from these points at the surface slope grade in a shoulder section, or at the soils' design phi angle in a curb section. The Roadway Prism theoretically has no bottom limit. In the case of soil modifications beneath the roadbed, the definition of Roadway Prism shall also include the bounds of those modifications and the surrounding soils that become load-bearing thru those modifications. The Roadway Prism may include, but not limited to: bridge abutments and foundations, drainage culverts, pipes and structures, utilities, retaining walls, roadway pavement, load-bearing fills, medians, and curb and gutter.

Root mat. Any material that, by volume, contains approximately sixty percent (60%) or more roots.

Runoff volume. Runoff volume means the volume of water that runs off the land development project from a prescribed storm event.

–S–

Schedule Impact Analysis (SIA). A process of analyzing a schedule to determine the effects of an unplanned events including potential impact on the project schedule of a change in the Work or condition, or of a delay event, for the purposes of quantifying and apportioning the effects to the party responsible for the impact and its Critical Path.

Schedule of compliance. A schedule of remedial measures included in a state permit, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the Act, the CWA and regulations.

Schedule of Record (SOR). The most recent baseline progress schedule accepted by the Owner. Upon acceptance by the Owner, the initial baseline progress schedule or a subsequently revised baseline progress schedule shall be the SOR. The SOR is the agreed, official, and only baseline schedule with which all work required to complete the project will be planned and executed, on which all subsequent schedule updates shall be based, and against which progress of the Work will be evaluated.

Seawater. Water in which total alkali chlorides calculated as sodium chloride are more than one-tenth percent (0.10%) 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 designated in the Contract Documents.

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 the use of pedestrians.

Site. The land or water area where any facility or land-disturbing activity is physically located or conducted, including adjacent land used or preserved in connection with the facility or land-disturbing activity. Areas channel ward of mean low water in tidal Virginia shall not be considered part of a site.

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

Special Provision (SP). See **Specifications**.

Special Provision Copied Note (SPCN). See **Specifications**.

Specialty Item. A Contract item designated as a “Specialty Item” in the Proposal that requires highly specialized knowledge, abilities, craftsmanship, or equipment not ordinarily provided by Contractors prequalified to bid on the Contract as a whole. Specialty Items are usually limited to minor components of the overall Contract.

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 VIII, dated 2020, as amended in the City of Virginia Beach Amendments to the VDOT “Road and Bridge Specifications,” Divisions II - VIII, the 2016 edition of the Virginia Department of Transportation “Road and Bridge Standards”) necessary for the proper fulfillment of the Contract. Specifications are found in the following Contract Documents:

Road and Bridge Specifications. The VDOT standard specifications applicable to contracts awarded by Owner.

Special Provision (SP). VDOT’s Road and Bridge Specifications or requirements for a particular project that add to or modify the standard specifications.

Special Provision Copied Note (SPCN). Specific VDOT’s Road and Bridge Specifications or requirements, usually limited in scope, for a particular project.

Supplemental Specifications (SS). Additions and revisions to the VDOT’s Road and Bridge Specifications.

City's Mandatory Specifications (CMS). Mandatory specifications that add to or require revisions to the City's Amendments to the VDOT's Road and Bridge Specifications.

City's Supplemental Specifications (CSS). Additional supplemental specifications or requirements for particular projects that add to the City's Amendments to the VDOT's Road and Bridge Specifications.

Standard drawings. Unless otherwise specified, applicable drawings in the VDOT's Road and Bridge Standards and such other standard drawings as are referred to on the plans.

State. Commonwealth of Virginia.

State Permit. The State permit means an approval to conduct a land-disturbing activity issued by the Board in the form of a state stormwater individual permit or coverage issued under a state general permit or an approval issued by the Board for stormwater discharges from an MS4. Under these permits, the Commonwealth imposes and enforces requirements pursuant to the federal Clean Water Act and regulations and this article and its attendant regulations.

Station. When used as a definition or term of measurement, one hundred (100) linear feet.

Storm Sewer System. A drainage system consisting of a series of at least two (2) interconnecting pipes and structures (minimum of two (2) drop inlets, manholes, junction boxes, etc.) designed to intercept and convey stormwater runoff from a specific storm event without surcharge.

Stormwater management facility. A control measure that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.

Stormwater Management (SWM) Plan. Stormwater management plan or SWM plan is a document containing material defining the requirements to ensure compliance with the VESMP and the SWM Act and its attendant regulations.

Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is the document that is prepared in accordance with good engineering practices and that identifies potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges. The SWPPP required under a VESMP for construction activities shall identify and require the implementation of control measures, and shall include, but not be limited to the inclusion of, or the incorporation by reference to an approved erosion and sediment control plan, an approved stormwater management plan, and a pollution prevention plan.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, surface runoff and drainage.

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

Structures. Bridges, culverts, catch basins, inlets, retaining walls, cribs, manholes, end walls, pump station 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.

Subcontract. A contract between the Contractor and any other business to perform part of the Contract subject to the requirements of the Contract Documents including, but not limited to, Sections 102.05 and 105.06.

Subcontractor. Any business that has a subcontract, including any business that provides on-site labor, but not any business that furnishes or supplies only materials or equipment for the Project.

Subgrade. The top earthwork surface of a roadbed, prior to application of Select or Stabilized material courses, shaped to conform to the typical section on which the pavement structure and shoulders are constructed, or the surface that must receive an additional material layer, such as Topsoil, Stone or other Select Material.

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.

Sublet. See **Subcontract**.

Substantial Completion. The Owner's receipt of uninterrupted beneficial use of the infrastructure constructed or affected by the project.

Substantial Completion Date. The date specified in the Contract Documents on or before which Substantial Completion must be achieved by the Contractor. This date will not change except for an extension of the Contract Time Limit for a compensable delay.

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 Contractor's onsite Project representative who is authorized to receive and fulfill instructions from the Owner and who supervises and directs the work and Subcontractors on the Contractor's behalf. 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 above the substructure.

Supplemental Specifications (SS). See **Specifications**.

Supplier. Any business who manufactures, fabricates, distributes, supplies, or furnishes materials or equipment, but not on-site labor, for use in performing the Work on or for the project according to the requirements of the Contract Documents including, but not limited to, Sections 102.05 and 106.02.

Surety. A business bound with and for the Contractor for full and complete fulfillment of the Contract and for payment of debts pertaining to the Work. When applied to the proposal guaranty, it refers to the business that engages to be responsible in the execution by the Bidder, within the specified time, of a satisfactory Contract and the furnishing of an acceptable payment and contract bond.

Surety Documents. The documents required for bonding and insurance; i.e. bid bonds, performance and payment bonds, liability, automobile and Workers Compensation insurance, etc., that will protect the City's interest during the performance of any related contract.

Surface course. One or more top layers of a pavement structure designed to accommodate the traffic load, which is designed to resist skidding, traffic abrasion, and disintegrating effects of weather. Also see 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, or is designated as surplus material in the Contract Documents.

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.

–T–

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

Theoretical maximum density. The maximum compaction of materials that can be obtained in accordance with the values established VTM-1.

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

Top of earthwork. The uppermost surface of the regular or embankment excavation, not including select material, which is shaped to conform to the typical section shown in the plans or directed by the Owner.

Topsoil. The uppermost original layer of material that will support plant life and contains more than five percent (5%) organic material reasonably free from roots exceeding 1-inch in diameter, brush, stones larger than three (3) inches in the largest dimension, and toxic contaminants.

Total maximum daily load (TMDL). The sum of the individual waste load allocations for point sources, load allocations (LAs) for nonpoint sources, natural background loading and a margin of safety. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. The TMDL process provides for point versus nonpoint source trade-offs.

Toxic pollutant. Any pollutant listed as toxic under § 307(a) (1) of the Clean Water Act or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing § 405(d) of the Clean Water Act.

Traveled way. The portion of the roadway for the movement of vehicles, not including shoulders.

–U–

Unsuitable Material. Any material which contains more than five percent (5%) by weight organic matter, or which has unstable bearing capacity, excessive moisture content, plasticity indexes or liquid indexes, or other characteristics defined by the Owner or the Contract Documents as unsuitable for the use intended.

Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Utilities. Private, city, municipal or public facility, structure, or infrastructure, designed, owned, and maintained for public use or to provide a public service such as electricity, water, sanitary sewer, storm sewer, drainage culverts, telecommunications, conduits, gas, oil, jet fuel, traffic, fiber optics, cable television, that is not identified as a Pavement Structure, Roadway, Highway, Street or Traveled way.

–V–

Virginia Department of Environmental Quality (DEQ). DEQ administers state and federal laws and regulations for air quality, water quality, water supply and land protection.

Virginia Erosion and Sediment Control Program (VESCP). A program approved by the board that has been established by a VESCP authority for the effective control of soil erosion, sediment deposition, and nonagricultural runoff associated with a land-disturbing activity to prevent the unreasonable degradation of properties, stream channels, waters, and other natural resources and shall include such items where applicable as local ordinances, rules, permit

requirements, annual standards and specifications, policies and guidelines, technical materials, and requirements for plan review, inspection, enforcement where authorized in the Erosion and Sediment Control Act and its attendant regulations, and evaluation consistent with the requirements of the Erosion and Sediment Control Act and its attendant regulations.

Virginia Erosion and Sediment Control Program authority (VESCP authority). A locality that is approved by the department to operate a Virginia Erosion and Sediment Control Program in accordance with Article 2.4 (§ 62.1-44.15:51 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia.

Virginia Stormwater Management Act. Means Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia.

Virginia Stormwater Management Handbook (VSMH). VSMH is a dynamic and evolving resource published by the Virginia Department of Environmental Quality (DEQ). It provides comprehensive guidance on stormwater management practices, including erosion and sediment control, within the Commonwealth of Virginia.

Virginia Erosion and Stormwater Management Program (VESMP). VESMP means a program approved by the department that is established by a VESCP authority for the effective control of soil erosion, sediment deposition, and non-agricultural runoff associated with a land-disturbing activity to prevent the unreasonable degradation of properties, stream channels, waters, and other natural resources and shall include such items where applicable as local ordinances, rules, policies and guidelines, technical materials, and requirements for plan review, inspection, and evaluation consistent with the requirements of the ESCL (Program in accordance with articles 2.3, 62.1-44.15 et seq., and 9VAC25-875-20).

Virginia Erosion and Stormwater Management Program authority (VSEMP authority). The VESMP authority means the department or locality approved by the department to operate a VESMP. For state agency of federal entity land-disturbing activities and land-disturbing activities subject to approved standards and specifications, the department shall serve as the VESMP authority

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

-W-X-Y-Z-

Waste load allocation or waste load (WLA). The portion of a receiving surface water's loading or assimilative capacity allocated to one of its existing or future point sources of pollution. WLAs are a type of water quality-based effluent limitation.

Water quality standards (WQS). Provisions of state or federal law that consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based on such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water, and serve the purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia), the Act (§ 62.1-44.15:24 et seq. of the Code of Virginia), and the CWA (33 USC § 1251 et seq.).

Watershed. A defined land area drained by a river or stream, karst system, or system of connecting rivers or streams such that all surface water within the area flows through a single outlet. In karst areas, the karst feature to which the water drains may be considered the single outlet for the watershed.

Wearing course. (See **Surface course**) The top and final layer of any pavement.

Wetlands. Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

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.

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

102.01 – 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.

Upon completion of the contract or work order, a Contractor Performance Evaluation (CPE) score shall be placed on file. This information will be maintained on file with the City of Virginia Beach Purchasing Division for bidding debarment purposes outlined below. Further, this process shall be open for review by the subject firm who may tender any relevant and appropriate observations, as outlined below, to be included as a matter of record.

At no time shall CPE evaluation comments, ratings, or scores be used as a negotiating tool for settlement of any contractual claim or dispute.

102.02 – Content of Proposal

Standard Proposal - The Proposal will specify the location of the proposed Work, include all of the following, and will be considered part of the bid.

- (a) a description of the Work, including an estimate of the various quantities and kinds of work to be performed or materials to be furnished, and a schedule of items for which unit bid prices are invited;
- (b) the Contract Time in which the Work shall be completed, and the date and time by which bids must be submitted;
- (c) any Specifications, plans, attachments, revisions, addenda, and any other documents specified or referenced in the Proposal.

102.03 - Interpretation of Quantities in Proposal

The quantities of work to be performed and materials to be furnished identified in the Proposal are approximate only and provided as a basis for cost analysis and comparison. The Contractor will be paid for the quantities of work accepted and materials furnished and correctly placed or installed according to the Contract. The quantities of work to be performed and materials to be furnished may vary, be increased, diminished, or eliminated, as provided within the Contract without invalidating the Contract. A variance, increase, decrease, or elimination of the quantities in the Proposal will not be sufficient grounds for granting an increase in the bid price, except as specified for a significant change in Section 104.02. Costs for items determined by the Contractor to be necessary for completion of the job for which no pay item is listed in the Proposal shall be included in the prices for other pay items. The Contractor will be paid according to Section 109 and other applicable Contract provisions.

102.04 – Examination of Site of Work and Proposal

(a) Evidence of Examination of Site of Work and Proposal

The submission of a bid will be considered conclusive evidence that the Bidder has (1) conducted a reasonable examination of the site of the proposed Work, the Proposal and other documents referenced therein, and the plans before submitting a bid, (2) is satisfied as to the nature, character, qualities, quantities, and conditions to be encountered in performing the Work and the requirements specified in the Proposal, and (3) has taken such matters into consideration when submitting the bid. A reasonable site investigation may include investigating the project site, borrow sites, disposal areas, and hauling routes related to the performance of the Work.

(b) Subsurface Data

Subsurface data may be included in the Proposal or may be made available for review by the Bidder at the Owner's office. Data not included in the Proposal are not part of the Contract but are made available to the Bidder in good faith to notify the Bidder of information in possession of the Owner. The Owner does not warrant any data not included in the Proposal or Contract, or any conclusions drawn from such data, either expressly or by implication. The Bidder shall make their own interpretation of the subsurface data that may be available and satisfy himself with regard to the nature, condition, and extent of the material to be excavated, graded, or driven through. The submission of a bid will be considered conclusive evidence that the Bidder is satisfied with regard to the subsurface conditions to be encountered in the work and has taken such conditions into consideration when submitting the bid.

(c) Notice of Alleged Ambiguities, Conflicts, Errors or Omissions, Bulletins, Addenda and Interpretation

If a Bidder has any questions or doubts about a word, phrase, clause, specification, or any other portion of the Proposal or alleges an ambiguity, conflict, errors or omission, or find discrepancies and/or ambiguities in or omissions from the bidding documents, or should they be in doubt as to their meaning, the Bidder should at once notify the Owner in writing, least ten (10) calendar days prior to bid opening and request an interpretation thereof by as specified in the Advertisement of Bid in Section 100.01. The ten (10) calendar days are required to assure distribution of information in the form of an addendum to all document holders of record. The Owner will provide clarification in the form of an addendum. Authorized interpretations will be issued by the Owner to each person who received a Proposal and will be posted as specified in the Advertisement of Bid in Section 100.01. After this, no questions, clarifications, or interpretation of bidding documents will be considered until after bids are opened. The Owner will not be responsible for any other explanations or interpretations. Prior to submitting a bid, it shall be Bidder's responsibility to make inquiry as to addenda issued.

The Bidder shall not take advantage of obvious or apparent ambiguities, conflicts, errors, or omissions in the Proposal. If the Bidder fails to submit a question to the Owner and request an interpretation of an obvious or apparent ambiguity, conflict, error, or omission within the specified time, the Bidder shall waive any right it may have had to its own interpretation of the ambiguity, conflict, error, or omission. Further, if awarded the Contract the Bidder waives any claims and shall not be entitled to any additional compensation or time or entitled to sue the Owner based on such obvious or apparent ambiguity, conflict, error, or omission.

It is recognized that the Bidder's review of the Proposal is made in the Bidder's capacity as a Contractor and not as a licensed design professional unless otherwise specifically provided in the Contract. The Bidder is not required to ascertain that the Contract is in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any nonconformity discovered by or made known to the Bidder shall be reported promptly to the Owner.

All questions relative to the bid documents should be submitted at least ten (10) 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.

(d) Utilities

In general, the bid proposal will indicate the various utility items known to exist, will indicate items to be adjusted or improvements proposed by the respective owners and will designate any items that are to be adjusted by the Contractor. Information contained in the bid proposal regarding utility locations is advisory only and shall not be construed as being a representation of completeness or accuracy. The Bidder shall contact the owners of the various utilities to determine the exact location of the utilities and the owner's schedule of work. Unless otherwise noted, all utility adjustments will be performed by the Utility or its representative. The Contractor shall cooperate with the owners of any utilities in their adjustment operations. Prior to preparing a bid, the Bidder shall contact known utility owners to determine the nature, extent, and location of existing, adjusted, or proposed new utility facilities within the areas of construction. It is understood and agreed that the Contractor (1) has considered in their bid all of the permanent and temporary utility appurtenances in their present and relocated positions and, any proposed utility capital improvements, and (2) the Contractor has contacted the utility owner with regard to the Contractor's proposed schedule of work. The Contractor shall include in their proposed schedule the amount of time to make utility adjustments, from time estimates furnished by the utility owners. Any costs associated with contacting and coordinating with the utilities shall be reflected in the bid price for other items in the Contract. In the event the utility owners are non-responsive to the Contractor's efforts to contact them, the Contractor shall notify the Owner prior to submitting a bid, as required in Section 102.05(a).

102.05 – Preparation of Bid

(a) General

The Bidder shall furnish a unit or lump sum price as called for in the Proposal, in numerical figures, for each pay item listed. The Bidder shall also show the products of the unit prices and quantities in numerical figures in the column provided for that purpose and the total amount of the bid.

If a unit or lump sum price is omitted, the bid will be rejected. If there is a discrepancy between the unit price and its extension, the unit price will govern.

Bids will be considered irregular and may be rejected for any of the reasons stated in Section 102.06.

The Bidder shall submit a proposal guaranty in accordance with Section 102.07.

A bid will be rejected, and the Bidder disqualified for any of the reasons stated in Section 102.08.

All Bidders shall return Form No. C-48 listing all Subcontractors/suppliers that were solicited to supply quotes for work on this project within ten (10) calendar days after the date designated in the proposal for the opening of bids. This form shall show the VDOT vendor identification number (if applicable), legal names of Subcontractors, suppliers, and vendors, whether SWaM or DBE, and utilization or non-utilization for work on this project.

(b) Design Options

Except as otherwise specified in the Proposal, when regular and alternate design options are shown in the Proposal, the Bidder shall submit a bid price for at least one design option. The Owner may award the Contract to the responsive and responsible Bidder who submitted the lowest bid for the regular design option or the lowest bid for the alternate design option, whichever is deemed to be in the best interest of the Owner.

(c) Debarred Suppliers

The Bidder is cautioned against utilizing price quotes for materials for use in the preparation of bids from suppliers or vendors that are debarred by VDOT or the Owner. The Owner will not approve for use any material furnished by a supplier debarred by VDOT. The Bidder shall ascertain from VDOT's listings which suppliers are debarred. Lists of approved suppliers can be found on VDOT website and a list of debarred supplies from Owner's Purchasing Division website.

If a previously debarred supplier is reinstated to eligibility subsequent to the award of a contract, the Owner may approve the use of the supplier when requested by the Contractor.

(d) Required Certifications

A Bidder who makes a false certification in his proposal will be subject to forfeiture of their proposal guaranty or disqualification from bidding on future work for a 90-day period, or both. The Owner will determine the imposition and extent of such sanctions.

(e) Acknowledgement of Addenda

The Bidder shall acknowledge all addenda to the Proposal documents issued prior to receipt of bids as delineated in Section 100.09. Bidders are responsible for checking the Purchasing Website, Oniva DemandStar for addenda to ensure that they have seen and considered all addenda before submitting a bid. Failure to acknowledge any addendum by the method outlined here and in Section 100 may result in the bid being rejected as non-responsive and irregular.

(f) Signing the Bid

The names of persons authorized to sign bids shall be on file with the VSCC. A name will be considered to be on file if it appears as that of a person legally authorized to bind the company or an owner on the current VSCC Clerk's Information System. A bid signed by someone whose name is as required above may be rejected. If the individual signing the bid for a joint venture is not previously on file, the firm of record is responsible for the bid.

(g) Anti-Collusion:

1. 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.
2. 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.
3. 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.
4. 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.

5. The undersigned further agrees that the Bidder will comply with Section 2.2-4374, Code of Virginia, 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.
6. 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.
7. 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.

102.06 – Irregular Bids

Bids will be considered irregular and may be rejected for any of the reasons below.

- (a) The Bidder fails to comply with Sections 102.05 and 102.07.
- (b) The Bidder adds any provisions reserving the right to accept or reject an award or enter into a contract pursuant to an award except as otherwise permitted in these Specifications.
- (c) The Bidder fails to provide Certification of Prequalification Classification at the time of bid opening unless a waiver had been issued.
- (d) The bid is not properly signed.
- (e) The Bidder fails to acknowledge all addenda to the Bid Documents.
- (f) There are unauthorized additions, conditional or alternate bids, or irregularities of any kind that may make the bid incomplete, indefinite, or ambiguous.
- (g) The prices in the bid are obviously mathematically and materially unbalanced, either in excess or below the cost analysis values as determined by the Owner. A mathematically unbalanced bid is a bid containing lump sum or unit price items that do not include reasonable labor, equipment, and material costs plus a reasonable proportionate share of

the Bidder's overhead costs, other indirect costs, and anticipated profit. A materially unbalanced bid is when the Owner determines that an award to the Bidder submitting a mathematically unbalanced bid will not result in the lowest ultimate cost to the Owner.

- (h) The bidder fails to submit a statement concerning collusion.
- (i) The bid submitted identifies a project different than the project for which the bid is submitted.
- (j) The bid is not totaled or is totaled incorrectly.
- (k) Erasures or alterations in the Bidder's entries on paper bids, when allowed, are not initialed by the Bidder.
- (l) Attachments included in the bid are detached or altered when the bid is submitted except as otherwise provided for herein.

102.07 – Proposal Guaranty (Bid Bond)

A bid in excess of \$500,000.00 will be rejected unless accompanied by a proposal guaranty, also known as a bid bond, made payable to the City, and executed on the form (Form C-24). The amount of the proposal guaranty shall be five percent (5%) of the total bid.

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 percent (5%) of the total amount of the bid, made payable to the Treasurer, City of Virginia Beach, Virginia. For Bid Security Requirements for Add Alternate Bids, Bidder's bid bond must be no less than percent (5%) of the total the sum of base bid and all alternates.

Upon City Attorney approval, in accordance with Section 2.2-4338, Code of Virginia, 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 proposal guaranty shall be accompanied by a certified copy of the power of attorney for the surety's attorney-in-fact. Said proposal guaranty 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 proposal guaranty shall be returned after ninety (90) days from opening of bids.

When the principal is a joint venture, each member of the joint venture shall be named and shall execute the proposal guaranty. Each surety to the proposal guaranty shall be named, and shall execute the proposal guaranty, and shall provide a certified copy of the power of attorney for the surety's attorney-in-fact.

102.08 – Disqualification of Bidder

- (a) Any of the reasons set out in the Rules Governing Prequalification Privileges may be considered sufficient for the disqualification of a Bidder or the rejection of a bid, or both. Such reasons for disqualification are not exclusive and disqualification may occur based on other requirements in these Specifications.
1. The Bidder does not have sufficient financial ability to perform the Contract. If a bond is required to ensure performance of a Contract, evidence that the Bidder can acquire a surety bond from a corporation included on the U. S. Treasury Listing of Approved Sureties in the amount and type required by the public body will be sufficient to establish the financial ability of the Bidder to perform the Contract.
 2. The Bidder or any current officer, director, owner, project manager, procurement manager, or chief financial official thereof has been convicted of, or pled guilty or nolo contendere within the past ten (10) years to a crime related to governmental or nongovernmental construction or contracting, including, but not limited to, a violation of (i) Ethics in Public Contracting statutes, § 2.2-4367 et seq. of the Code of Virginia, (ii) the Virginia Governmental Frauds Act, § 18.2-498.1 et seq. of the Code of Virginia, (iii) Conspiracy to Rig Bids to Government statutes § 59.1-68.6 et seq. of the Code of Virginia, (iv) any substantially similar law of the United States or another state, or (v) any criminal offense indicating a lack of moral or ethical integrity as may reasonably be perceived to relate to or reflect upon the Bidder's business practices.
 3. The Bidder or any officer, director or owner thereof is currently debarred pursuant to an established debarment procedure from bidding or contracting by any public body, agency of another state, or agency of the federal government.
 4. The Bidder failed to respond to the Owner's request for clarifying information requested by the Owner relevant to the preceding paragraphs 1 through 3.
 5. The Bidder fails to register and participate in the E-Verify program as required by § 2.2-4308.2 of the Code of Virginia.
 6. The Bidder or any officer, director, or owner thereof has had a judgment entered against them for violation of the Virginia Fraud Against Taxpayers Act (Code of Virginia § 8.01- 216.1, et seq.).
 7. More than one bid for the same work is submitted by an individual, partnership, corporation, or joint venture under the same or different name. A bid submitted by an affiliate of an individual, partnership, corporation, or any party of a joint venture will be considered as more than one bid submitted for the same work. Affiliate as used herein shall conform to the definition in Section 101.02 - Terms.

8. Evidence of collusion among Bidders; participants in such collusion will not be considered for future bids until new applications for prequalification are approved according to the Rules Governing Prequalification Privileges.
 9. Incompetency or inadequate machinery, plants, or other equipment as revealed by the Bidder's financial and experience statements required by these Specifications and the Rules Governing Prequalification Privileges.
 10. Unsatisfactory workmanship or unsatisfactory progress toward timely completion of the Work as described within Sections 102.08, 105.05, 108.03, 108.07, or other applicable Specifications as demonstrated by performance records of current or past work for the Owner, other agencies or departments of the City of Virginia Beach, other public bodies in the City of Virginia Beach, or agencies or departments of other states in the United States or federal government.
 11. Uncompleted work under contract with the Owner that in the judgment of the Owner might hinder or prevent prompt completion of additional work if awarded.
 12. Failure to promptly pay or settle satisfactorily all undisputed bills for materials, labor, equipment, supplies, or other items specified in contracts in force at the time the new work comes before the Owner for award.
 13. Failure to comply with any prequalification rule or regulation of the Owner.
 14. Failure to cooperate properly with representatives of the Owner inspecting, monitoring, or administering construction or disorderly conduct toward any such representative in contracts.
 15. Default under a previous contract with the Owner.
 16. Failure to pay amounts owed to the City of Virginia Beach, as specified in Section 109.10, on other contracts.
 17. Making materially false statements in a bid or certified statement submitted to the City of Virginia Beach.
 18. Documentation of the failure to meet SWaM or DBE requirements on the VDOT's projects according to Section 107.15.
- (b) Temporary disqualification of a Bidder as provided herein will result in the temporary disqualification of each member of a joint venture and any affiliate of the Bidder having substantially the same operational management or drawing from the same equipment or labor resource pool. Temporary disqualification will also result in disqualification of the Bidder, each member of a joint venture, and affiliates as defined herein, for performance of work as Subcontractors that in the opinion of the Owner, could adversely affect other work under contract to the Owner.

- (c) Disqualified Bidders may challenge and appeal their disqualification according to the Rules Governing Prequalification Privileges. Disqualified Bidders may be allowed to reapply for prequalification and be reinstated on the List of Prequalified Vendors at the discretion of the Owner, upon satisfactory compliance with any requirements that may be imposed. In addition, the disqualified Bidder shall submit a new prequalification application package and satisfy all prequalification requirements of these Specifications and the Rules Governing Prequalification Privileges.

102.09 – Submission of Bid

Bids shall be submitted prior to the time and at the place specified in the Notice of Advertisement for Bids. Bids received after that time will be returned to the Bidder unopened. The date for the opening of bids may be deferred by the Owner, in which case the Bidders will be notified.

102.10 – Withdrawal of Bid

A bidder may withdraw a bid in accordance with the following.

(a) Modifications or Withdrawal of Bids Prior to Time of “Receipt of Bids”

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. Telephonic or facsimile notices will not be considered. Additions or deletions marked on the outside of the proposal envelope will not be considered.

(b) 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 their claim within two (2) 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 (5%).

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, as amended.
6. A Bidder may withdraw a bid provided the request for the withdrawal is written and signed by a person(s) who qualifies to execute the bid in accordance with Section 102.05.

102.11 – DELETED.

102.12 – Public Opening of Bids

All bids will be opened and read publicly at the time and place specified in the Notice of Advertisement. Interested parties are invited to be present at the opening.

102.13 – “E-Verify” - Verification of Work Authorization

By signing and submitting the bid, the Bidder certifies that it does not, and shall not during the performance of the Contract knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

- (a) “E-Verify program” means the electronic verification of work authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (P.L. 104-208), Division C, Title IV, § 403(a), as amended, operated by the U.S. Department of Homeland Security, or a successor work authorization program designated by the U.S. Department of Homeland Security or other federal agency authorized to verify the work authorization status of newly hired employees under the Immigration Reform and Control Act of 1986 (P.L. 99-603).
- (b) Contractors with more than an average of fifty (50) employees for the previous twelve (12) months entering into a contract in excess of \$50,000 with the Department shall register and participate in the E-Verify program to verify information and work authorization of their newly hired employees performing work pursuant to such contract. Bidders are not required to be registered with E-Verify program at the time bids are submitted, however, prior to award, the lowest responsive and responsible Bidder must be registered with E-Verify program or the bid will be rejected.

- (c) Contractors who fail to comply with Section 102.13(b) shall be debarred from contracting with any agency of the Commonwealth for a period up to one (1) year. Such debarment shall cease upon registration and participation in the E-Verify program.

SECTION 103 – AWARD AND EXECUTION OF CONTRACTS

103.01 – Consideration of Bids

After bids have been opened and read, the Owner will evaluate bid submittals to determine whether all requirements of Section 102 and the Proposal have been met. Bids not submitted in accordance with Section 102 and the Proposal may be rejected.

Bids will be compared on the basis of the summation of the products of the quantities shown in the bid schedule and the unit bid prices in accordance with Section 100.07.

The Owner may correct arithmetical errors in the bid prior to such comparison, in accordance with Section 102.05. The results of the comparisons will be available to the public after the determination has been made to award the Contract.

The Owner reserves the right to reject any or all bids, waive informalities, advertise for new bids, or proceed to do the Work otherwise if it deems that the best interest of the Owner would be promoted thereby.

The Owner may, as part of its deliberations toward award of a contract, enter into a Memorandum of Understanding (MOU) with the apparent lowest responsive and responsible Bidder if any of the following is determined to be necessary:

- (a) Provide and document further clarification of a specification or drawing.
- (b) Establish an order of priority (ranking) where there are conflicting specification requirements.
- (c) Ensure proper understanding of the intent\meaning of a specification or drawing.
- (d) Document the inclusion of inadvertently excluded pages from the Contract.
- (e) Document the correct unit of measurement where a conflict exists within the bid documents.
- (f) Document the elimination of an item(s).
- (g) Limit the Owner's exposure to contract overruns or potential unbalancing of a bid item.

This listing is not to be interpreted as all-inclusive but is provided to give examples of the types of issues that may be addressed in such an agreement. The MOU is not intended to be used to negotiate "as bid" unit prices/quantities or to renegotiate bid requirements with the apparent lowest responsive and responsible Bidder, but merely to address intent, clarify points of confusion or limit the possible future effects of such issues on project budget. If the terms of the MOU are acceptable to both parties, the Owner and the apparent lowest responsive and responsible Bidder will document their acceptance of the terms of the MOU by both parties'

signatures. In the case of Federal Oversight projects, FHWA concurrence is also required. The MOU will be added to and become part of the executed Contract.

103.02 – Award of Contract

- (a) The award date will not be later than midnight on the 90th day after the opening of bids. If the Contract is awarded, the contract shall be awarded to the responsible and responsive Bidder with the lowest Base Bid without discrimination on the grounds of race, color, gender, or national origin. In the event of tie bids, preference will be given to the lowest responsive and responsible Bidder who is a resident of Virginia otherwise the tie will be decided by lot.
- (b) If the bid contains alternative pricing items, the low bidder shall be determined by the total bid price, which is the base bid plus all of the alternative pricing items. The ability of Owner to execute a contract that includes one or more of the alternative pricing items will depend upon available funding. In accordance with Virginia Code §2.2-4318, the Owner may negotiate with the apparent low bidder to obtain a contract price within available funding, and such negotiation may include one or more of the alternate pricing items.
- (c) The Owner reserves the right to negotiate with the lowest responsive and responsible Bidder without discrimination on the grounds of race, color, gender, or national origin to obtain a contract price within available funds. 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.
- (d) 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.

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

103.03 – Cancellation of Award

The Owner, where permitted by law, may cancel the award of any contract at any time before the execution of the Contract by all parties without liability to the City.

103.04 – Forfeiture of Proposal Guaranty

The apparent low Bidder's proposal guaranty shall be subject to forfeiture if the apparent low Bidder withdraws their bid prior to award or fails to sign and return the Contract. The proposal

guaranty shall be forfeited according to the forfeiture provisions in Code of Virginia (§ 2.2-4336) and the proposal guaranty. The apparent low Bidder's refusal to sign a Memorandum of Understanding shall not be grounds for proposal guaranty forfeiture.

103.05—Requirements of Contract Bond

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. The successful Bidder shall also submit a statement from the surety agent(s) of their total current bonding capacity and total currently available bonding capacity.

Within ten (10) calendar days after notification of award of the Contract the successful Bidder shall furnish the following bonds for contracts:

- (a) A performance bond in the sum of the Contract amount, conditioned upon the faithful performance of the Contract in strict conformity with the plans, Specifications and conditions of the Contract, and.
- (b) A payment bond in the sum of the Contract amount, conditioned upon the prompt payment for all labor, materials, public utility services and rental of equipment used in the prosecution of the work for the Contract.

CITY OF VIRGINIA BEACH
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
_____,
202__, 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 thirty (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 202__.

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

(CORPORATE SEAL)

By _____

SURETY

(Mailing Address)

Phone No: _____

By _____

ATTORNEY-IN-FACT

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

CITY OF VIRGINIA BEACH
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
_____ 202____, 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 202__.

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 _____

ATTORNEY-IN-FACT

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

The bonds shall be made on official forms furnished by the Owner and shall be executed by the Bidder and a surety company carrying a minimum “Best Rating” of “B +” and authorized to do business in Virginia in accordance with the laws of Virginia and the rules and regulations of the State Corporation Commission. To be considered properly executed, the bonds shall include authorized signatures and titles.

103.06 – Contract Documents

The Contract shall include the following documents unless otherwise specified by the Owner:

- (a) **Contract:** The Contract shall include:
 1. the fully executed Proposal including all addenda or revisions thereto issued prior to the bid date; and attachments issued with the Proposal;
 2. the project manual, and all references therein;
 3. these City’s Amendments;
 4. the project plans, project drawings;

Sheet No.	Title	Date

Cont. Sheet No.	Title	Date

5. Virginia Department of Transportation 2020 “Road and Bridge Specifications”, Divisions II thru VIII, as amended in the City of Virginia Beach Amendments to the 2020 Virginia Department of Transportation “Road and Bridge Specifications,” Divisions II – VIII, and including all addenda or revisions thereto issued prior to the bid date;
6. City’s Mandatory Specifications in Division X and Supplemental Specifications in Division XI;
7. 2016 edition of the Virginia Department of Transportation “Road and Bridge Standards” and the City of Virginia Beach Amendments to the 2016 Virginia Department of Transportation “Road and Bridge Standards in Division IX;

8. Appendix D of City's ordinance entitled "Erosion and Stormwater Management" and the Virginia Department of Environmental Quality, "Virginia Stormwater Management Handbook" as amended;
 9. City's ordinance entitled "Erosion, Sedimentation Control and Tree Protection" as amended;
 10. "Manual of Uniform Traffic Control Devices for Streets and Highways" published by the U.S. Department of Transportation, Federal Highway Administration as amended;
 11. Virginia Department of Transportation, "Work Area Protection Manual (VWAPM)" and "Virginia Manual of Uniform Traffic Control Devices for Streets and Highways" as amended;
 12. "City of Virginia Beach, Department of Public Utilities, Standard Details", as amended;
 13. "City of Virginia Beach, Department of Public Works, Design Standards Manual", as amended;
 14. any Memoranda of Understanding agreed to between the Owner and the Contractor conforming to Section 103.01;
 15. any change orders that the Owner issues after the Contract execution date.
- (b) **Contract Performance and Payment Bonds:** Contract bonds shall conform to Section 103.05.
- (c) **Affidavits and Documents:** Affidavits and documents shall include those required to be made a part of the Contract by any federal or state law in effect on the date of the Notice of Advertisement.
- (d) **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.

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.

Certificate of Insurance - 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) days 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. The 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.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor or Subcontractor(s) of liability in excess of such coverage, nor shall it preclude the Owner from taking such actions as are available to it under any other provision of this Contract or otherwise in law.

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:

1. Products and Completed Operations Insurance:

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.

2. Workers' Compensation Insurance:

Minimum Limits - \$1,000,000 Each Occurrence.

The Contractor shall procure and continue to maintain for the duration of the Work until final acceptance, Workers' Compensation and Employers' Liability Insurance for all of its employees engaged in the Work in an amount not less than the minimum required by Code of Virginia (§ 2.2-4332), and the Virginia Workers' Compensation Act, Code of Virginia §65.2-100 et seq. When any of the Work is sublet, the Contractor shall require each Subcontractor to provide similar Workers' Compensation and Employers' Liability Insurance for all of the Subcontractor's employees engaged in the Work.

Within ten (10) days after the date of the notice of award of the Contract, the Bidder shall submit a Certificate of Insurance verifying Workers' Compensation. The certificate shall be executed by an approved and authorized insurance company as required by state law and shall cover the Contract. The Contractor shall likewise obtain a Certificate of Insurance for Workers' Compensation coverage from each Subcontractor prior to performance of work and shall provide a copy to the Owner.

The Contractor shall notify the Owner in writing at least thirty (30) days prior to the cancellation or reduction of the bonds or insurance required under this Section. The Contractor shall cease all operations on the effective date of the cancellation or reduction unless and until new bonds or insurance are in force and the same evidence of bonds or insurance are provided to the Owner.

3. Employers Liability Insurance:

Minimum Limits - \$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

4. Commercial General Liability Insurance:

Minimum Limits - \$1,000,000 Each Occurrence
\$2,000,000 General Aggregate per Project
\$2,000,000 Completed Operations/Products Aggregate
\$1,000,000 Personal Injury
\$ 5,000 Medical Payments

Requirements: Contractual Liability
XCU Perils Coverage
Completed Operations Extended to the five (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.

5. Business Automobile Liability Insurance:

Minimum Limits - \$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

6. Excess Liability Insurance:

Minimum Limits - 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.

7. 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.

8. Contractor's Insurance Certificate:

The Contractor shall procure and maintain at their own expense, for the duration of the Work until final acceptance, insurance of the kinds and in the amounts specified herein. The minimum limits of liability for this insurance shall be as follows:

A Combined Single Limit for Bodily Injury Liability and Property Damage Liability

\$1,000,000	Each Occurrence
\$2,000,000	Aggregate

Within fifteen (15) days after the date of the notice of award of the Contract, the Bidder shall submit Certificates of Insurance showing compliance with the above using the Owner’s form. The certificates shall be executed by an approved and authorized insurance company authorized to do business in Virginia and with a minimum “*Best Rating*” of “*B +*”, and shall cover the Contract it accompanies.

The Contractor’s Bodily Injury and Property Damage Liability Insurance shall cover liability of the Contractor for damage because of bodily injury to, or death of persons and damage to, or destruction of property, that may be suffered by persons other than the Contractor’s own employees as a result of the negligence of the Contractor in performing the Work.

Insurance provided in compliance with this Section shall include liability of the Contractor for damage to or destruction of property that may be suffered by persons other than the Contractor’s own employees as a result of blasting operations of the Contractor in performing the work covered by the Contract.

If any part of the Work is sublet, insurance meeting the same requirements shall be provided by or on behalf of the Subcontractors and evidence of such insurance shall be submitted with the sublet request.

- (e) **Progress Schedule:** The Contractor shall submit a progress schedule in accordance with Section 108.03 or as specified in the Contract.

103.07 – Failure to Furnish Bonds or Certificate of Insurance

The successful Bidder’s failure to furnish to the Owner acceptable bonds or workers’ compensation insurance certificates within ten (10) days after the date of Notice of Intent to Award letter shall be considered just cause for cancellation of the award and forfeiture of the proposal guaranty. In such event, the proposal guaranty shall become the property of the City, not as a penalty but in liquidation of damages sustained. The Contract may then be awarded to the next lowest responsive and responsible Bidder, or the Work may be re-advertised or constructed otherwise, as determined by the Owner.

103.08 – Contract Audit

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 all maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this Contract and for at least five (5) years following the completion of the Contract, including any and all renewals thereof, or the date the Contractor is declared in default of Contract, or the date of termination of the Contract.

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.

The documents and records shall include, but not be limited to:

- (a) Those that were used to prepare and compute the bid, prepare all schedules used on the project, record the progress of work on the project, accounting records, purchasing records, personnel payments, or records necessary to determine employee credentials, vendor payments, and written policies and procedures used to record, compute, and analyze all costs incurred on the project, including those used in the preparation or presentation of claims to the Owner.
- (b) Records pertaining to the project as the Owner may deem necessary in order to permit adequate evaluation and verification of Contractor's compliance with Contract requirements, compliance with the Owner's business policies, and compliance with provisions for pricing change orders or claims submitted by the Contractor or the Contractor's Subcontractors, insurance agents, surety bond agents, and material suppliers shall be made available to the auditor(s) at the Owner's request. The Contractor shall make their personnel available for interviews when requested by the Owner.
- (c) Upon request, the Contractor shall provide the Owner with data files on data disks or other suitable alternative computer data exchange format. Data furnished by the Contractor that cannot be verified will be subject to a complete audit by the Owner.

The Contractor shall ensure that the requirements of this provision are made applicable to their Subcontractors, insurance agents, surety bond agents, and material suppliers. The Contractor shall cooperate and shall cause all related parties to furnish or make available in an expeditious manner all such information, materials, and data.

The Contractor shall provide immediate access to records for the audit and provide immediate acceptable facilities for the audit. Failure on the part of the Contractor to afford the Owner

immediate access or proper facilities for the audit will be considered failure to cooperate and will result in disqualification as a Bidder in accordance with Section 102.08.

Upon completion of the Contract audit, any adjustments, or payments the Contractor owes to the Owner as a result of the audit shall be made to the Owner within sixty (60) days from presentation of the Owner's findings to the Contractor. Failure on the part of the Contractor to make such payment may result in disqualification as a Bidder in accordance with Section 102.08.

If the Contractor disagrees with the findings of the Owner's audit, the Contractor may dispute the findings in accordance Section 105.19 or the Code of Virginia as amended and as applicable, except that if the time provided for the Contractor to submit a claim within sixty (60) days after final payment has expired, the Contractor shall instead submit a written claim to dispute the findings to the Owner within sixty (60) days from the date the Contractor received the findings. Failure on the part of the Contractor to submit a claim disputing the Owner findings within such 60-day period shall constitute a waiver and release of any claim disputing the Owner's findings.

103.09 – Execution of Contract

- (a) The bid as submitted, including the Contract Documents specified in Section 103.06 shall constitute the Contract upon submittal of the Contract bond, Contractor's bodily injury and property damage liability insurance certificates, and workers' compensation insurance certificate and the Owner's final execution of the Contract. If the Contract is not awarded within the time limit specified in Section 103.02(a), the Bidder may withdraw their bid without penalty or prejudice unless the time limit is extended by mutual consent. The Owner will execute the Contract upon receipt of the Contractor's signed Contract. The Contract shall be considered binding and effective only when it has been fully executed by all parties.

Upon full execution of the Contract, Owner will issue the Notice to Proceed in accordance with Section 105.01.

- (b) **Notice of Contract execution.** The Owner will notify the Contractor of the date that the Owner has executed the Contract. The Owner or their designee will confirm the Contract execution date in such notice. The notice will identify the Owner's authorized representative responsible for written directives and changes to the Contract, who will contact the Contractor to arrange a pre-construction and scheduling conference.

- (c) **Unbonded Contracts**

In the event the successful Bidder on an unbonded contract is unwilling or unable to fulfill the Contract and fails to notify the Owner prior to the Owner's execution of the Contract, the Bidder will be declared in default in accordance with Section 108.07.

In the event the Bidder, on an unbonded contract, notifies the Owner prior to the Owner's execution of the Contract of such unwillingness or inability to fulfill the Contract, the

Bidder will be enjoined from bidding on unbonded contracts for a period of no less than 90 days from the date of notice by the Owner.

A Bidder who has never been enjoined or defaulted on an unbonded contract and who notifies the Owner prior to the Owner's execution of the Contract of such unwillingness or inability to fulfill the Contract will not be enjoined for the first occurrence; however, said Bidder will not be permitted to rebid or perform work on that specific Contract.

103.10 – Assignments, Transfers, or Assumptions of the Contract

The Contractor shall not assign, transfer, convey, or allow any person or business to assume or take over, in whole or in part, the Contract, the Contractor's duties, or performance obligations, arising under, from or relating to the Contract, except for subcontracting as provided in Section 105.06 or the rights of a surety issuing a performance bond for the Contract, without the Owner's specific written authorization. Any such unauthorized assignment, transfer, conveyance, assumption, or take over agreement shall be void and shall constitute a material breach of the Contract. No assignment, transfer, conveyance, assumption, or take over agreement shall relieve the Contractor from its duties and obligations under the Contract or release the Contractor of any liability under the Contract bonds.

103.11 – 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 (3) 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 _____, 202__.

By _____

STATE OF _____

CITY/COUNTY OF _____

_____, being duly sworn deposes and says that they are _____ 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 _____ 202__.

[AFFIX NOTARY SEAL] Notary Public

Notary Registration Number:

My Commission Expires: _____

SECTION 104 – SCOPE OF WORK

104.01 – Intent of Contract

The intent of the Contract is to provide for completion of the Work specified therein in accordance with the Contract for the Contract amount and within the Contract Time Limit. Further, it is understood that the Contractor shall perform the Work under the Contract as an independent Contractor and not as an agent of the Owner.

104.02 - Changes in Quantities or Alterations in the Work

(a) General

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 complete the project satisfactorily. Such changes in quantities and alterations shall not invalidate the Contract or release the surety, and the Contractor shall agree to perform the Work as altered. No change alteration or modification in or deviations from the Contract, or the giving by the Owner of any extension of time for the performance of the Contract, or the forbearance on the part of the Owner shall release or exonerate in whole or in part either the Contractor or any surety on the obligations of any bond given in connection with the Contract. Neither the Owner nor the Contractor shall be under any obligation to notify the surety or sureties of any such alteration, change, extension, or forbearance, notice thereof being expressly waived. Any increase in the Contract amount shall automatically result in a corresponding increase in the penal amount of the bonds without notice to or consent from the surety, such notice and consent being hereby waived. Decreases in the Contract amount shall not, however, reduce the penal amount of the bonds unless specifically provided in any change order as authorized in accordance with Section 109.05 decreasing the scope of the work.

(b) Significant Changes in the Character of Work

The work or changes in quantities, significantly change the character of the work under the Contract, an adjustment, excluding anticipated profits for reduced or eliminated work, may be made to the Contract. The basis for the adjustment shall be agreed upon prior to the performance of the affected Work. If a basis cannot be agreed upon, an adjustment will be made either for or against the Contractor in such amount as the Owner may determine to be fair and equitable.

The Owner may, at their option, direct the Contractor to accomplish the change or alteration on a force account basis when the circumstances meet the requirements for force account work under Section 109.05.

If the Owner's changes or alterations do not result in a significant change in the character of the Work, the changed or altered work will be paid for at the Contract price for the actual quantities of work performed.

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

1. When the character of the Work, as changed or altered, differs materially in kind or nature from that involved or included in the original proposed construction.
2. When the actual quantity of a Major Item of work, as defined elsewhere in the Contract, increases, or decreases more than fifty percent (50%) of the original Contract quantity. Any adjustment for an increase or decrease in cost due to an increase in quantity of more than fifty percent (50%) shall be calculated only on that quantity in excess of one hundred and fifty percent (150%) of the original pay item quantity. Any adjustment for an increase or decrease in cost due to a decrease in quantity to less than fifty percent (50%) of the original pay item quantity shall apply to the actual amount of work performed.

(c) Value Engineering Contractor Proposals

The Contractor may submit to the Owner written Value Engineering Contractor Proposals (VECP) for modifying the plans, Specifications, or other Contract requirements for the purpose of reducing the total cost and/or Contract Time without reducing the design capacity or quality of the finished product. If the Owner accepts the VECP, the Owner and the Contractor will equally divide the net savings or Contract time, or both. When an accepted VECP includes Contract Time savings, one-half of such time savings shall be used to reduce the Contract Time and the remaining one-half of such time savings shall be used exclusively by the Contractor as extra time. The Contractor shall identify in the SOR, a VECP Contractor float activity for each accepted VECP that includes Contract Time savings. The VECP extra time may be used by the Contractor to mitigate its delays on the project.

Each VECP shall result in a net savings over the Contract cost, or both, 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. At least the following information shall be submitted with each VECP:

1. Statement that the proposal is submitted as a VECP.
2. Statement concerning the basis for the VECP benefits to the Owner and an itemization of the pay items and requirements affected by the VECP.
3. Detailed estimate of the cost under the existing Contract and under the VECP.
4. Proposed specifications and recommendations as to the manner in which the VECP changes are to be accomplished.

5. Statement as to the time by which a Contract change order adopting the VECP must be issued so as to obtain the maximum cost-effectiveness.
6. A life cycle cost analysis (LCCA) detailing the life cycle cost (LCC) and changes to the LCC imposed by the VECP.

The Owner will process the VECP in the same manner as prescribed for any other proposal that would necessitate issuance of a change order. The Owner may accept a VECP in whole or part by issuing a change order that will identify the VECP on which it is based. The Owner will not be liable to the Contractor for failure to accept or act on any VECP submitted pursuant to these requirements or for delays in the work attributable to any VECP. Until a VECP is put into effect by a 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 on which the Contractor's proposal specifies that a decision should be made or such other date as the Contractor may subsequently have specified in writing, the VECP shall be deemed rejected.

The change order effecting the necessary modification of the Contract will establish the net savings agreed on and provide for adjustment of the Contract prices. The Contractor shall absorb all costs incurred in preparing a VECP. Costs for reviewing and administering a VECP will be borne by the Owner. The Owner may include in the agreement any conditions it deems appropriate for consideration, approval, and implementation of the VECP. The Contractor's fifty percent (50%) share of the net savings or Contract time, or both, shall constitute full compensation to him for effecting all changes pursuant to the VECP change order.

Unless specifically provided for in the change order authorizing the VECP, acceptance of the VECP and performance of the work thereunder will not change the Contract Time Limit.

The Owner may adopt a VECP for general use in contracts the Owner administers if it determines that the VECP is suitable for application to other contracts. VECPs identical with or similar to previously submitted VECPs will be eligible for consideration and compensation under these provisions if the Owner has not previously adopted the VECPs for general application to other contracts the Owner administers. When a VECP is adopted for general use, compensation pursuant to these requirements will be applied only to those awarded contracts for which the VECP was submitted prior to the date of adoption of the VECP.

Proposed changes in the basic design of a bridge or pavement type or those changes that require different right of way limits will not normally be considered an acceptable VECP. If a VECP is based on or is similar to a change in the plans, Specifications, or Special Provisions the Owner has adopted prior to submission of the VECP, the Owner will not accept the VECP.

The Owner will be the sole judge of the acceptability of a VECP. The requirements herein apply to each VECP initiated, developed, and 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 approve a VECP.

Subject to the provisions herein, the Owner or any other public agency shall have the right to use all or part of an accepted VECP without obligation or compensation of any kind to the Contractor.

If the Owner accepts a VECP, Section 104.02(c) herein, which pertains to the adjustment of Contract unit prices attributable to alterations of Contract quantities, will not apply to the items adjusted or deleted as a result of putting the VECP into effect by a 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 (3) days by written Notice of:

(a) Type I:

During the progress of the Work, if subsurface or latent physical conditions differing materially from those indicated in the Contract are encountered at the site, the Contractor shall promptly notify the Owner in writing of the specific differing conditions before the site is disturbed further and before the affected work is performed.

(b) Type II:

During the progress of the Work, if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract, are encountered at the site the Contractor shall promptly notify the Owner in writing of the specific differing conditions before the site is disturbed further and before the affected work is performed.

Upon receipt of such written notification, the Owner will acknowledge receipt and investigate the conditions. If it is determined by the Owner that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment, excluding anticipated profits, will be made and the Contract may be modified in writing accordingly. The Owner will notify the Contractor of the determination whether or not an adjustment of the Contract is warranted.

No adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice. 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 105 – CONTROL OF WORK

105.01 – Notice to Proceed

The Owner will issue a Notice to Proceed after execution of the Contract. The Contractor shall notify the Owner at least three (3) days prior to the date on which work will begin.

Contract Time will commence on the date of the Notice to Proceed. The Letter of Contract Execution will identify the Owner's authorized representative, hereafter referred to as the Owner, who is responsible for written directives and changes to the Contract. The Owner will contact the Contractor after notice of award to arrange a pre-construction conference.

In no case shall work begin before the Owner executes the Contract or prior to the Notice to Proceed date unless otherwise permitted by the Contract or authorized by the Owner. The Contractor shall notify the Owner at least three (3) days prior to the date on which they will begin the work.

105.02 – Pre-Construction Conference

After notification of award and prior to the Notice to Proceed date the Contractor shall attend a pre-construction conference scheduled by the Owner to discuss the Contractor's planned operations for prosecuting and completing the Work in accordance with the Contract. At the pre-construction conference the Owner and the Contractor will identify in writing the authorities and responsibilities of project personnel for each party. The Contractor and the Owner shall also come prepared to discuss key issues and project specific requirements necessary for preparation and submittal of the baseline progress schedule; unless a separate Scheduling Conference is otherwise scheduled as mutually agreed to by the Owner and the Contractor, in accordance with Section 108.03 and other applicable Contract provisions.

The Owner will be responsible for setting the conference agenda, conducting discussions, and ensuring that minutes of the conference are taken and later timely distributed to all attendees. The pre-construction conference will be the time to review the Contract plans and documents. To that end, the conference agenda may include but not be limited to discussions on the general sequence of work, including the expected primary work tasks as defined by the Contractor, and proposed means and methods for the entire scope of work, potential problems or impacts, constructability issues, special considerations such as limitations and access issues, agreements with local agencies or governments, utility impacts or relocations including railroads, coordination with schedules of the utilities and subcontractors and associated work, sources and delivery of critical materials, submittals required by Contract including shop drawings, location of field office, labs, etc., environmental concerns including permits and erosion and siltation efforts, maintenance of traffic issues, and EEO/DBE/SWaM requirements. A discussion of the CPE process shall be held with the Contractor at the Pre-Construction Conference. The prime Contractor is responsible to ensure all staff, Subcontractors and suppliers performing work on the project are informed of, and understand, the purpose of the CPE process and its possible effects on future bidding opportunities with the City of Virginia Beach.

The Contractor shall provide the Owner with a list of all equipment available for use in the prosecution of the Work on the Contract at the pre-construction conference or no later than one (1) week prior to the first monthly progress estimate. The make, model, size, capacity, and year of manufacture shall be listed for each piece of equipment. Where possible the Contractor shall provide this list in an electronic format. This list may take the form of the Contractor's fleet list of equipment. The Contractor shall provide the Owner an updated list of equipment as changes occur.

105.03—Authorities of Project Personnel, Communication and Decision Making

(a) Authority of Owner's Project Manager

During prosecution of the Work, the Owner's Project Manager will answer all questions that may arise as to the quantity, quality, and acceptability of materials furnished and work performed; rate of progress of the Work; interpretation of the plans and Specifications; the Contractor's acceptable fulfillment of the Contract; disputes and mutual rights between Contractors; and the Contractor's compensation.

The Owner's Project Manager has the authority to suspend the Work wholly or in part if the Contractor has created conditions that are unsafe or fails to correct conditions that are unsafe for workers or the general public or fails to carry out the provisions of the Contract. The Owner's Project Manager may also suspend the Work for such periods as they may deem necessary because of catastrophic or extraordinary weather as defined in Section 108.04, conditions considered unsuitable for prosecution of the Work, or any other condition or reason deemed to be in the public interest.

The Owner's Project Manager may issue written clarifications or directives that either enhance or alter the Contract. The Owner's Project Manager may issue written orders for such work as may be necessary to complete the Contract satisfactorily.

(b) Authority 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 withhold payment and/or 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 they 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.

Inspectors representing the Owner are authorized to inspect all work performed and materials furnished. Inspection may extend to all or any part of the Work and to the preparation, fabrication, and manufacture of the materials to be used. The Inspectors are not authorized to alter or waive the provisions of these Specifications or make changes in the plans.

The Inspectors are not authorized to make final acceptance of the project, approve any operation or item, or act as foreman for the Contractor. However, the Inspectors will have the authority to reject defective work and material and suspend work that is being improperly performed. Such inspections shall not relieve the Contractor of any obligation to furnish acceptable materials or provide completed construction that is in accordance with the Contracts requirements.

(c) The Contractor

The Contractor shall not construe reviews, approvals, or inspections by the Owner, or the Owner's inspectors, agents, and employees as a waiver, release, warranty, or assumption of liability on the part of the Owner. The Contractor understands and agrees that reviews, approvals, and inspections are for the Owner sole use and benefit. Any such reviews, approvals, and inspections shall not relieve the Contractor of its contractual duties and obligations or be conclusive as to the acceptability of the Contractor's performance.

(d) Communication and Decision Making

1. Description

The intent of this provision is to establish procedures, processes and guidelines for making decisions and managing communications regarding the Work. The information contained herein is not meant to be all inclusive but to serve as a minimal general framework for promoting efficient and effective communication and decision making at both the project and, if needed, executive administrative level. It is also not meant to override the decision-making processes or timeframes of specific Contract requirements.

2. Definitions

For the purposes of this provision the following terms will apply and be defined as follows:

- a. Submittals** - Documents required by the Contract that the Contractor must submit for the Owner's review, acceptance, or approval. Submittals may include shop drawings, working drawings, material test reports, material certifications, project progress schedules, and schedule updates. The Contractor shall provide submittals as early as practicable so as not to delay review, acceptance, or approval of the Work.

- b. **Confirmation Of Verbal Instructions (COVI)** - Contractor-requested written confirmation of the Owner's instructions concerning the Work. When time and/or costs are or will be impacted, the Contractor must comply with the requirements applicable to requests for adjustments of the Contract amount or Contract time.
- c. **Requests For Information (RFI)** - Requests where either the Contractor or the Owner asks that the other party supply information to provide better understanding of or to clarify a certain aspect of the Work.
- d. **Requests for Owner Action (ROA)** - Requests where the Contractor asks the Owner to take certain action that the Contractor feels is required for proper completion of all or a portion of the Work.
- e. **Contractor Change Requests (CCR)** - Requests where the Contractor asks the Owner to make an adjustment to the Contract because of excusable and/or compensable events, instructions that have or have not been given, or other work requiring time and/or cost beyond that specified or envisioned within the Contract.
- f. **Requests for Contractor Action (RCA)** - Requests where the Owner asks the Contractor to take certain action that is in the best interests of the project and/or is required for proper completion of all or a portion of the Work.
- g. **Responsible Person** - The individual in the normal or escalated resolution process, for either the Contractor or the Owner, having the direct authority, responsibility, and accountability to formulate and respond to each category of information request.

3. **Process for Decision Making**

- a. Project teams composed of the Contractor's and the Owner's representatives, who are directly responsible for the administration, prosecution, and inspection of the Work, shall define and agree upon the field decision-making process during the pre-construction conference. This process may be written down and distributed to all affected parties once it is established. Where there are responsibilities, authority or personnel changes associated with this process, such changes shall be distributed to all affected parties as quickly as practicable after they are effective so as not to delay or impede this process.

The process for making field decisions with respect to the Work detailed in the Contract requires the following basic steps:

- (1) The Contractor and the Owner's agree on the decision-making process, the identity, authority, and accountability of the individuals involved, and on the cycle times for responses required for each category of decision.
 - (2) The requesting party requiring a decision generates the appropriate request documents and calls for a decision from the individual who is accountable for the particular facet of the Work under consideration within the agreed period.
 - (3) The responding party has an internal decision-making process that supports the individual who is accountable and provides the information required within the agreed period for each category of decision.
 - (4) The party receiving the decision has an internal process for accepting the decision or for rejecting the decision and initiating further action according to the decision-making process within an agreed period of time.
- b.** The process also requires that clear and well-understood mechanisms be in place to log and track requests; document the age and status of outstanding requests and actions to be taken on requests that have not been answered within the agreed period.
- c.** Both the Owner and the Contractor shall agree on the following:
- (1) The documentation and perhaps format to be developed for each category of information requested.
 - (2) The name (as opposed to organizational position) of all individuals with the responsibility, authority, and accountability to formulate and respond to each category of information requested. The Owner or representative of the Contractor who signed this contract may delegate the responsibility and authority for formulating and responding to requests, however, the accountability for meeting the established response time(s) remains with the Owner and representative of the Contractor who signed this contract.
 - (3) The cycle times for each stage in the decision-making process.
 - (4) The performance measures to be used to manage the process.
 - (5) The action to be taken if cycle times are not achieved and information is not provided in a timely manner.

- d.** The general guideline and timeframe matrix in Tables I-2A and I-2B will apply. These guidelines, however, are general in scope and may not apply to specific Contract time frames for response identified within the Contract requirements. In such cases, specific Contract time frames shall apply.

TABLE I-2A

PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE CONTRACTOR

Process	Situation	Normal resolution process		Escalated process		Process if no resolution
		By	Within (calendar days)	By	Within	
Submittal	Contractor requests the Owner’ s review, acceptance or approval of shop drawings, materials data, test reports, project progress schedules, or other submittals required by Specifications or other Contract	Owner’ s Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Final Determination\Approve: 30 days or as outlined in Contract. 	Owner or their designee*	7 days	Submit ROA or CCR
Confirmation of Verbal Instruction (COVI)	Routine field issues, within the framework of the Contract, Contractor resolves through negotiation with the Owner’ s field personnel.	Owner’ s Appropriate field personnel	<ul style="list-style-type: none"> • Confirmation: 1 day² 	Owner or their designee	7 days	Submit Request for ROA
Request for Information (RFI)	Contractor needs the Owner to supply information to provide better understanding of or to clarify a certain aspect of the work.	Owner’ s Designated Project Manager	<ul style="list-style-type: none"> • Action: 14 days (or appropriate Action Plan) 	Owner or their designee*	7 days	Submit ROA or CCR
Request for Owner Action (ROA)	Contractor needs the Owner to take certain action Contractor feels is required for proper completion of a portion of the Work or the project.	Owner’ s Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Action: 14 days (or appropriate Action Plan) 	Owner or their designee*	7 days	Submit CCR
Contract Change Request (CCR)	Contractor needs the Owner to make an adjustment to the Contract because of excusable and/or compensable events, instructions that have or have not been given or other work that will require time and/or cost beyond that specified	Owner’ s Designated Project Manager	<ul style="list-style-type: none"> • Acknowledge: 3 days¹ • Action: 30 days (45 days if federal oversight project) 	Owner or their designee*	7 days	Claims process

¹ Process initiated on the last business day of a week shall be acknowledged before 5 pm on the next business day.

² The absence of a written confirmation from the Owner to a Contractor’ s written request for confirmation of a verbal instruction within the time required shall constitute confirmation of the verbal instruction.

TABLE I-2B

PROCESS GUIDELINES FOR REQUESTS GENERATED BY THE OWNER

Process	Situation	Normal resolution process		Escalated process		Process if no resolution
		By	Within (calendar days)	By	Within	
1. RFI	Owner requests the Contractor to supply information to provide better understanding of or to clarify a certain aspect of the work. (RFI)	Contractor' s Project Superintendent	<ul style="list-style-type: none"> Action: 14 days (or appropriate written Action Plan) 	Contractor' s Project Manager	7 days	Submit RCA or Issue Unilateral Change order
2. RCA	Owner requests the Contractor to take certain action(s) that is/are in the best interests of the project and/or is/are required for proper completion of a portion of the work or the project. (RCA)	Contractor' s Project Superintendent	<ul style="list-style-type: none"> Response or Action to safety and environmental issues: 1 day Otherwise acknowledge: 3 days ¹ Action: 14 days (or appropriate Action Plan) 	Contractor' s Project Manager	7 days	Issue Unilateral Change order
3. Unilateral Change order	Owner orders the Contractor to perform work beyond that specified or envisioned in the original Contract and undertakes action(s) to make an adjustment to the Contract.	Contractor' s Project Superintendent	<ul style="list-style-type: none"> Acknowledge: 3 days ¹ Action: 30 days 	Contractor' s representative or their designee**	7 days	Claims or termination process

¹ Process initiated on the last business day of a week shall be acknowledged before 5 p m on next project business day.

4. Software

Unless requested otherwise by the Owner, the Contractor shall use Aurigo Masterworks for electronic project management. Invoices shall be submitted in the City's Oracle Financial System. Licensing costs for the use of this system shall be paid by the Owner. The following activities may be managed within these systems:

- Payment Invoices
- Request for Information
- Change Orders
- Formal Notifications
- Shop Drawings
- Progress Schedules
- Progress Schedule Revisions
- Progress Reports
- Daily Reports

105.04 – Gratuities

The Contractor and its Subcontractors and suppliers shall not offer, give or confer upon any of the Owner's employees, consultants, representatives, or personnel any gifts, gratuities, payments, loans, subscriptions, advances, deposits of money, services, favors, or anything present or promised, unless consideration of substantially equal or greater value is exchanged.

- (a) No Contractor or Subcontractor shall demand or receive from any of their suppliers or their 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.
- (b) 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.
- (c) 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.

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.

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

If the Owner determines after investigation that the Contractor or the Contractor's employees, representatives, or agents of any person acting in their behalf have violated this Section, the Owner may, at their discretion, disqualify the Contractor from bidding on future contracts with the Owner for a period of six (6) months from the date of the Owner's determination of such violation. Any implicated employees, agents, or representatives of the Contractor may be prohibited from working on any contract with the Owner for the period of the Contractor's disqualification.

105.05 – Character of Workers, Work Methods, and Equipment

(a) Workers

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. The term "workers" means the Contractor's employees, its Subcontractors at any tier, or any of their respective employees.

The Contractor shall immediately remove from the Project any workers who, in the Owner's opinion, do not perform their work in a proper, skillful, and satisfactory manner or are intemperate or disorderly. The Owner shall direct the Contractor to do so in writing and such workers shall not be employed again on any portion of the Work without the Owner's written approval. If the Contractor fails to immediately remove the workers or furnish suitable and sufficient workers for satisfactory prosecution of the Work, the Owner may withhold all monies that are or may become due the Contractor and may suspend the Work until the Contractor has complied with the Owner's directive.

(b) Equipment

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

(c) Work Methods

When methods and equipment to be used by the Contractor are not prescribed in the Contract, the Contractor is free to use whatever methods or equipment they feels will accomplish the Work in conformity with the Contract requirements.

When the Contract specifies that construction be performed by the use of particular methods and equipment, they shall be used unless others are authorized by the Owner. If

the Contractor desires to use a different method or type of equipment, they may request permission from the Owner to do so. The request shall be in writing and shall include a full description of the methods and equipment they propose to use and an explanation of the reasons for desiring to make the change. If permission is not given, the Contractor shall use the specified methods and equipment. If permission is given, it will be on the condition that the Contractor shall be fully responsible for producing construction work in conformity with Contract requirements. If, after trial use of the substituted methods or equipment, the Owner determines that the work produced does not strictly conform to the Contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of the specified quality or take such other corrective action as the Owner may direct. No change will be made in the basis of payment for the construction items involved or the Contract Time Limit as the result of authorizing or denying a change in methods or equipment under these provisions.

105.06 – Subcontracting

- (a)** No portion of the Contract shall be subcontracted or otherwise disposed of without the written consent of the Owner. The Contractor shall notify the Owner of the name of the firm to whom the work will be subcontracted, and the amount and items of work involved. Such notification shall be made, and verbal approval given by the Owner prior to the Subcontractor beginning work.
- (b)** The Contractor shall perform with their own organization work amounting to not less than thirty percent (30%) of the total original Contract amount, excluding any specialty items designated by the Owner. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original Contract amount before computing the amount of work required to be performed by the Contractor's own organization.

The term “perform work with its own organization” refers to workers employed or leased by the Contractor, and equipment owned or rented by the Contractor, with or without operators. Such term does not include employees or equipment of a Subcontractor or lower tier Subcontractor, agents of the Contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the Contractor meets all of the following conditions:

1. The Contractor maintains control over the supervision of the day-to-day activities of the leased employees; and
2. The Contractor remains responsible for the quality of the work of the leased employees; and

3. The Contractor retains all power to accept or exclude individual employees from work on the project; and
 4. The Contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- (c) The Contractor shall not subcontract any part of the Contract work to a Contractor who is debarred from bidding by the Owner in accordance with Section 102.05 and/or City Purchasing Department policy, unless otherwise indicated in the Contract. Consent to subcontract or otherwise dispose of any portion of the Contract work shall not relieve the Contractor of any responsibility for the satisfactory fulfillment of the entire Contract. All subcontracts shall be evidenced by written binding agreements that shall be available to the Owner upon request, before, during, and after their approval.

105.07 – 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 in accordance with Section 105.02.
- (c) **Progress Meetings:** Meetings to review progress to date upcoming work, schedules updates, schedule issues, 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 may be responsible for preparing the meeting agenda and moderating the Progress Meetings. If outside meeting facilities are not available, the meeting will be held at a mutually agreeable location. Absent a mutually agreeable location, the Progress Meetings will be held at the City’s Municipal Center.

The Contractor shall give the Work the constant attention necessary to facilitate quality and progress, and shall fully cooperate with the Owner, Inspector, and other Contractors involved in the prosecution of the Work. If any portion of a project is located within the limits of another municipality, military installation, State or federally owned property, the Contractor shall cooperate with the appropriate officials and their agents in the prosecution of the Work to the same extent as with the Owner.

The Contractor shall have on the project at all times during prosecution of the Work a competent Superintendent who is capable of reading and understanding the Contract Documents, experienced in the type of work being performed, and who shall receive instructions from the Owner or their authorized representatives. The Superintendent shall have full authority to execute the orders and directions of the Owner without delay and supply promptly such materials, equipment, tools, labor, and incidentals as may be required. Such superintendent shall be furnished irrespective of the amount of work sublet. The Superintendent shall attend and be named at the preconstruction meeting.

The Contractor's Superintendent shall be the Owner's primary point of contact for project communications, schedules, payment applications, contract changes, claims and all other actions related to contract administration, unless the Contractor elects, in writing, to also name a Contractor's Project Manager. If the contractor names a Contractor's Project Manager, the Superintendent shall report directly to, and be supervised by, the Contractor's Project Manager. The Contractor's Project Manager shall have full and direct control of the work and all field personnel. Electing to assign a Contractor's Project Manager to the project does not preclude the above requirement to assign of a Superintendent. Nor does naming a Contractor's Project Manager preclude the Superintendent's above responsibilities. If the Contractor elects to utilize such a Project Manager from the outset of the Work, such Project Manager shall attend, and be named at, the preconstruction meeting.

105.08 – Cooperation With Regard to Utilities

The adjustment of utilities consists of the relocation, removal, replacement, rearrangement, reconstruction, improvement, disconnection, connection, shifting, or altering of an existing utility in any manner.

Existing utilities within the Owner's knowledge at the design stage of the project will be indicated on the plans. Where possible, the Owner will make arrangements for adjusting these utilities prior to project construction. The utility owner will adjust existing private and public utilities that require adjustment unless the Contract requires the Contractor to perform such adjustment as a pay item. The new location of such utilities will not normally be shown on the plans. Some utilities may remain or be adjusted within the construction limits simultaneously with project construction operations.

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 all 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.

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 said 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 sixty (60) days prior to need for service.

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

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.

The Contractor shall coordinate their 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.

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. The Contractor shall perform their work in a manner which will cause the least inconvenience to the utility owner or those being served by the utility.

The Contractor shall protect existing, adjusted, or new utilities that are shown on the plans, marked by Miss Utility, or otherwise known to the Contractor that are to remain within the right of way so as to prevent disturbance or damage resulting from construction operations. If during prosecution of the work the Contractor encounters an existing utility that requires adjustment, they shall not interfere with the utility but shall take the proper precautions to protect the utility and shall promptly notify the Owner of the need for adjustment.

If the Contractor desires the temporary or permanent adjustment of utilities for their own benefit, they shall conduct all negotiations with the utility owners and pay all costs in connection with the adjustment.

The Contractor shall promptly notify the Owner in writing if the Contractor encounters utilities that are not shown on the plans, whether marked by Miss Utility, or not, or otherwise known to the Contractor before the site is disturbed further and before the affected work is performed. Upon receipt of the Contractor's written notification, the Owner will acknowledge receipt and investigate the conditions. The Owner will notify the Contractor whether or not an adjustment to the Contract is warranted. Adjustments will be made according to Sections 108.04 and 109.05, as applicable.

No adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

105.09 – Cooperation among Contractors

The Owner may at any time Contract or approve concurrent Contracts for performance of other work on, near, or within the same geographical area of the work specified in an existing Contract. Contractors shall not impede or limit access to such work by others.

When separate Contracts are awarded within the limits of one (1) project, Contractors shall not hinder the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other. In the case of dispute, all Contractors shall proceed as directed by the Owner.

When Contracts are awarded to separate Contractors for known concurrent construction in a common area, the Contractors, in conference with the Owner, shall establish a written joint schedule of operations. The schedule shall be based on the limitations of the individual Contracts and the joining of the work of one (1) Contract with the others. The schedule shall set forth the approximate dates and sequences for the several items of work to be performed and shall ensure completion within the respective Contract Time Limit. The schedule shall be submitted to the Owner for review and approval no later than thirty (30) days after the award date of the later Contract and prior to the first monthly progress estimate. The schedule shall be agreeable to, signed by, and binding on each Contractor. The Owner may allow modifications of the schedule when benefit to the Contractors and the City will result.

Any modification of the schedule shall be in writing, mutually agreed to and signed by the Contractors, and shall be binding on the Contractors in the same manner as the original agreement.

If the Contractors fail to agree on a joint schedule of operations, they shall submit their individual schedules to the Owner, who will prepare a schedule that will be binding on each Contractor.

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

Each Contractor shall assume all liability, financial or otherwise, in connection with their Contract and shall protect and save harmless the Owner from any and all damages and claims that may arise because of any inconvenience, delay, or loss they experienced as a result of the presence and operations of other Contractors working in or near the work covered by their Contract. They shall also assume all responsibility for any of their work not completed because of the presence or operation 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 to inspect and report unsuitable work shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of their work, except as to defects which may develop in the other Contractor's work after the execution of their work. To ensure the proper execution of their 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 that delay the work of another except as provided herein.

105.10 – Plans and Shop Drawings

(a) General

The Contractor will be supplied with one (1) copy of the executed Contract. VDOT's Road and Bridge Specifications and VDOT's Road and Bridge Standards are available on VDOT's website.

(b) Plans

Plans will be furnished to the Contractor electronically without charge.

Plan revisions issued while the project is under construction will be furnished to the Contractor electronically.

The Contractor shall keep one (1) complete set of plans, standard drawings, Contract assemblies, and Specifications available on the project at all times. For maintenance projects, certain sign projects, and other projects having no field office or on which the Contractor has no office, the Contractor shall keep one complete set of plans, Contract assemblies, and Specifications with him while prosecuting the Work. In the event items of Work are required as per the Standard Drawings, the Contractor shall also keep the appropriate Standard Drawings on the project during the performance of that work.

Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified will be furnished by the Owner. Except as otherwise shown on the plans, dimensions shown on the Plans are measured in the respective horizontal or vertical planes. Dimensions that are affected by gradients or vertical curvatures shall be adjusted as necessary by the Contractor to accommodate actual field conditions and shall be specifically denoted as "field adjusted" on the As-Built Drawings. As-Built Drawings shall be prepared in accordance with Section 105.10 (e). Failure on the part of the Contractor to so denote field adjustments on the As-Built Drawings shall not relieve the Contractor of the responsibility to accommodate and incorporate such existing conditions into the finished work.

(c) Shop Drawing Submittals

The Contractor shall furnish shop drawings as may be required. The Contractor shall submit to the Owner for review five (5) sets of any required shop drawings except that seven (7) sets are required if the submittal involves water, sewer, or traffic items. All shop drawings and certifications shall be identified by the complete City and state project and job designation numbers and federal project number if applicable. Items or component materials shall be identified by the specific Contract item number and the specification reference indicated in the Contract Documents. Any changes from the requirements of the Contract Documents shall be specifically denoted, together with justification, and submitted to the Owner for review. Shop drawings shall be submitted in sufficient time to allow for review, discussion, and correction prior to the beginning of the

work they reference to avoid causing any delay to the Work. Comments will be returned within thirty (30) working days. If required, a resubmittal of corrected drawings may be necessary. Work shall not be performed, nor materials ordered prior to acceptance of shop drawings associated with the related portion of the work except at the Contractor's own risk.

The shop drawing is accepted when the Owner has reviewed and stamped the shop drawing that were submitted by the Contractor. The Contractor will receive one (1) set of approved shop drawings and the remaining sets continue to be the property of the Owner.

If the shop drawings are not returned by the time specified, no additional compensation will be allowed except that an extension of time in accordance with Section 108.04 will be considered if the work element detailed by the working drawings is on the project's critical path or involves a controlling item of work. If this is the case, such shop drawings shall be submitted separately from other shop drawings and labeled as, "Critical Path Shop Drawings".

The Owner's review of the Contractor's shop drawings will be limited to evaluation for conformance with the Contract requirements. The Owner's review will not relieve the Contractor from responsibility for errors in the shop drawings or from complying with the Contract requirements for a fully functional finished work item as specified or designed.

Deviations from the Contract requirements initiated by the Contractor shall be requested in writing and clearly identified on the shop drawings. Explicit supporting justification shall be furnished specifically describing the reason for the requested deviations, as well as any impact such deviations shall have on the schedule of work. Failure to address time or other impacts associated with the Contractor's request will be cause for rejection of the Contractor's request. Deviations from the Contract requirements shall not be made unless authorized by the Owner. Such authorization shall not relieve the Contractor from the responsibility for complying with the Contract requirements for a fully functional finished work item as specified or designed.

If shop drawings detailing change(s) initiated by the Contractor require more than two (2) resubmissions or revisions, the cost of additional reviews by the Owner or its designated representative(s) will be assessed to the Contractor.

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

The Contractor may authorize the fabricator in writing to act for him in matters relating to shop drawings. Such authorization shall have the force and effect of any other representative of the Contractor's organization.

Contractor's Responsibility:

1. Representation:

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

2. Submittals:

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. All Traffic Signal Equipment items to include, but not limited to: controller units, signal heads, loop detector amplifiers, pedestrian push button and signs, hanger assemblies.
- i. Street Signs, Sign Post and Fasteners
- j. All Street Lighting items to include, but not limited to: 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. Streetlight, 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.** All Pavement Marking items to include, but not limited to: Line and Message Markings Material, Pavement Primer, Markers and Epoxy Adhesives
- cc.** Precast Virginia Power Manholes, Splice Boxes, Hand holes
- 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

3. Certifications:

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
- w.** Fire Hydrants
- x.** Air Vent/Blow Off Assembly
- y.** Sanitary Sewer Manholes, Frames, Covers and Steps
- z.** Vacuum Valves
- aa.** Corporation Stops
- bb.** Meter Valve
- cc.** Retainer Glands

dd. Mortar Connection of Pipe and Manhole

4. Method of Measurement:

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

5. Basis of Payment:

All associated cost of implementing Contractor Quality Control shall be included in other pay items.

6. Contractor's Stamp:

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:

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 their 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.

(d) Shop Drawing Requirements

Provide shop drawings according to the following:

1. Steel Structures

Shop drawings for steel structures, including metal railings, shall consist of shop detail, erection, and other working drawings showing details, dimensions, sizes of units, and all information necessary for the fabrication and erection of metal work.

2. Falsework

Working drawings for falsework supporting a bridge superstructure shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

3. Concrete Structures and Prestressed Concrete Members

Shop drawings for concrete structures post-tensioned and prestressed concrete members shall provide such details as required for the successful prosecution of the work and which are not included in the plans furnished by the Owner. Drawings shall include plans for items such as prestressing or post-tensioned strand details and elongation calculations, location of lift points, falsework, bracing, centering, form work, masonry, layout diagrams, camber management plan for prestressed members, and bending diagrams for reinforcing steel when necessary or when requested. Such drawings shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

4. Lighting, signal, and pedestal poles, overhead and bridge mounted sign structures, breakaway support systems, anchor bolts, framing units, panels, and foundations

Prior to fabrication or construction, the Contractor shall submit for review one (1) original and six (6) copies of each working drawing and design calculation for lighting, signal, and pedestal poles, overhead and bridge mounted sign structures, breakaway support systems, anchor bolts, framing units, panels, and foundations. All sheets of these submittals shall include the Professional Engineer's signature and seal. 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 designs shall be in accordance with the specific editions of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals as required in Section 700. Such designs shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

5. Reinforced Concrete Pipe

When specified, and prior to 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 that has been signed and sealed by a Professional Engineer holding a valid license to practice engineering 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.

6. Concrete 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 five (5) years' experiences in structural design of the type of precast structures or components proposed. The concrete shall have a design minimum strength at twenty-eight (28) days of 4000 psi with six percent (6%) (plus or minus two percent (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 eighty-five percent (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 one and half percent (1.5%), the grade on the invert of the throat section of the inlet shall be at least one and half percent (1.5%). Precast throats having flat inverts will be permitted in sag locations provided the total length of the required throat opening does not exceed six (6) feet.
- c. The pipe opening in precast units shall be at least four (4) inches, but not more than eight (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 geotextile fabric, 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 for (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 to the normal slope of the finished grade and may be canted up to a maximum grade of ten percent (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 (1) contact point; however, a maximum of four (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, precast arches, or any non-standard VDOT drainage structures, 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, reinforcing steel, 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.

(e) As-Built Drawings

Any deviations from the Contract requirements approved by the Owner shall be clearly identified and shown on the As-Built drawings. On the As-Built drawings, the Contractor shall show in red ink on-site changes to the original construction documents upon completion of the Work.

The cost of As-Built drawings furnished by the Contractor shall be included in the cost of appropriate Contract items. For additional information and requirements, see Mandatory Specifications for Public Works As-Built Drawings and Supplemental Specifications for Public Utilities As-Built Drawings.

105.11 – Conformity with Plans and Specifications

All materials to be used in the Work shall conform to the qualities, technical requirements, values, or range of values specified in the Contract. Less than complete conformity may be permitted if obtaining exact or complete conformity would not be feasible and if authorized in writing by the Owner. In this instance, an adjustment may be made to the contract price.

Permissible tolerances for the elevation of subgrade and finished grade and for the thickness of the various courses of pavement structure, subbase and base structure are specified in the Contract. If permissive tolerances are exceeded, or if consistent deviations from the plans or abrupt changes in grade occur, even though within the tolerances, the affected areas shall be reconstructed 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 or adjusted in accordance with Section 105.18.

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

105.12 – Coordination of Contract Documents

The plans, Shop Drawings, 2016 VDOT's Road and Bridge Standard Drawings, City's Amendments to the 2016 VDOT's Road and Bridge Standards, 2020 VDOT's Road and Bridge Specifications, City's Mandatory Specifications, City's Supplemental Specifications, City's Amendments to the 2020 VDOT's Road and Bridge Specifications, Project Manual, Formal Notifications and Change Orders issued after notice to proceed, Addenda issued prior to bid date, VDOT's Special Provisions, VDOT's Special Provisions Copied Notes and other Contract Documents defined in Section 103.06 are parts of the Contract. A requirement occurring in one (1) Contract Document shall be as binding as though occurring in all. The Contract Documents are intended to be complementary, and to include, describe and provide all items necessary for the Contractor's proper and complete performance of the Work. Documents defined in Section 103.06 are parts of the Contract.

In case of a discrepancy, the following order of priority will apply, with the highest governing item appearing first and the least governing item appearing last:

- (a) Formal Notifications and Change Orders issued after notice to proceed
- (b) Addenda issued prior to bid date
- (c) Shop Drawings
- (d) Plans/Project Drawings
- (e) City's Mandatory Specifications
- (f) City's Supplemental Specifications
- (g) Project Manual/City's Amendments to 2020 VDOT's Road and Bridge Specifications
- (h) 2020 VDOT's Road and Bridge Specifications, VDOT's Supplemental Specifications, VDOT's Special Provisions and VDOT's Special Provisions Copied Notes
- (i) City's Amendments to 2016 VDOT's Road and Bridge Standards
- (j) 2016 VDOT's Road and Bridge Standards/Standard Drawings (including all revisions issued through the date of Advertisement)

Calculated dimensions, unless obviously incorrect, will govern over scaled dimensions.

The Contractor shall not take advantage of any obvious or apparent ambiguity, conflict, error or omission in the plans or the Contract. If after beginning work the Contractor discovers an ambiguity, conflict, error, or omission in the Contract, they shall immediately notify the Owner and before proceeding further with the affected work. The Owner will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract.

105.13 – Construction Stakes, Lines and Grades

Upon request, the Owner shall furnish initial surveying consisting of centerline and/or baseline stakes at 500-foot intervals and at PI, PC and PT points. Benchmarks will be set at 1,000-foot intervals along the project. For pump stations, the Owner will establish the temporary construction benchmark, the property boundaries, and the four (4) corners of the below ground structure. The Contractor shall preserve all controls the Owner provides. All other staking is the Contractor's responsibility including replacement of damaged control and stakes.

Additional surveying work and supplemental layout work shall be performed by the Contractor as needed to successfully complete the Work.

105.14 – Maintenance during Construction

- (a) **Traffic Control**

1. The Contractor shall have at least one (1) person on the project site during all work operations who is currently verified either by VDOT's Intermediate Work Zone Traffic Control training or by the American Traffic Safety Services Association (ATSSA) Virginia Intermediate Traffic Control Supervisor (TCS) training by a VDOT approved training provider. This person must have their proof of certification with them while on the project site. This person shall be responsible for the oversight of work zone traffic control within the project limits in compliance with the Contract requirements, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance, and removal when no longer required, of all work zone traffic control devices on the project.
2. The Contractor shall have at least one (1) person on site who is, at a minimum, verified in VDOT's Basic Work Zone Traffic Control for each construction and/or maintenance operation that involves installing, maintaining, or removing work zone traffic control devices. This person shall be responsible for the placement, maintenance, and removal of work zone traffic control devices.

In the event none of the Contractor's on-site personnel for any construction and/or maintenance operation have, at a minimum, the required verification in VDOT's Basic Work Zone Traffic Control, the Owner will suspend that construction/maintenance operation until that operation is appropriately staffed in accordance with the requirements herein.

3. **Flagging Traffic:** Certified flaggers shall be provided in sufficient number and locations as necessary for control and protection of vehicular and pedestrian traffic, and minimally as in accordance with the VWAPM. Flaggers shall be able to communicate to the traveling public in English while performing the job duty as a flagger at the flagger station. Flaggers shall use sign paddles to regulate traffic in accordance with the VWAPM.

Flaggers will be certified by VDOT. Certification for flaggers will be awarded upon a candidate's satisfactory completion of an examination. Proof of certification shall be carried by flaggers while performing flagging duties. Flaggers found not to be in possession of their proof of certification shall be removed from the flagging site and operations requiring flagging will be suspended by the Owner until a certified flagger is on-site to perform flagging duties in accordance with the requirements herein. Further, flaggers performing duties improperly will have their certifications revoked.

(b) Maintenance of Traffic

1. The Contractor shall prosecute the Work so as to avoid obstructions to traffic and pedestrians to the greatest extent practicable. The Contractor shall provide for the safety and convenience of the general public and residents along the roadway, and for the protection of persons and property.

Roadways closed to traffic shall be protected by barricades, lights and other warning devices as required by the Contract, the VWAPM, and the MUTCD. Barricades and warning devices shall be illuminated where required during periods of darkness and low visibility. The Contractor shall erect warning devices in advance of a location on the project where operations or obstructions may interfere with the use of the road by traffic and at all intermediate points where the new work crosses or coincides with an existing roadway. The Contractor shall maintain traffic devices in a clean and visible condition as defined by ATSSA. The Contractor shall cover or remove signs when the messages thereon are not applicable. Barricades, warning signs, lights, temporary signals, and other protective devices shall conform to Section 512.

2. The road shall be kept open to all traffic while undergoing improvements, unless otherwise permitted in the Contract. The Contractor shall keep the portion of the project being used by public, pedestrian, and vehicular traffic in such condition that all such traffic will be safely and adequately accommodated. However, removal of snow and control of ice on travel ways open to public travel will be performed by the Owner.

The Contractor shall keep the portions of the road and pedestrian walkways being used by the public free from irregularities and obstructions that could present a hazard or annoyance to traffic, except snow and ice removal, which might represent a hazard or annoyance to traffic and in such condition that traffic will be adequately accommodated. When directed by the Owner, allaying of dust shall be performed and paid for in accordance with Section 511. Holes in hard surface pavements shall be filled with approved asphalt patching material. Where such work is not specified in the Contract and determined to be required by the Owner, and not the result of any failure or fault of the Contractor and due to causes beyond the Contractor's control, the cost to remedy such hazards will be handled according to Section 109.05. Within the project limits potholes repair are incidental to the contract and is responsibility of the contractor to make all repairs as directed by the Owner.

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

3. **Detours:** Detours may be indicated on the plans or in the special provisions or may be used with the Owner's approval. Unless otherwise designated in the Contract, the Contractor shall furnish, install, and maintain all directional markings, for through-traffic on off-project detours authorized or requested by the Owner.

The Owner will furnish the right of way for temporary roadways, vehicular watercourse crossings, diversion channels, sediment and erosion control features or bridges required by the Contract.

4. **Maintenance of Traffic during Suspension of Work:** During any suspension of work, the Contractor shall temporarily open to traffic such portions of the project and temporary roadways as may be agreed upon by the Contractor and Owner.
5. **Minimizing Traffic Delays:** Two-way traffic shall be maintained at all times unless the Contract or the Owner permits one-lane, two-way traffic. The Contractor shall not stop traffic without the Owner's permission.

If one-lane, two-way traffic is permitted, the Contractor shall provide certified flaggers to direct the traffic. When specified in the Contract as a pay item, pilot vehicles shall be furnished in accordance with Section 512. Upon the Contractor's request and where deemed appropriate by the Owner, the Contractor will install, maintain, service including electrical service and remove traffic signals that may be used for control of one-lane, two-way traffic.

6. **Connections and Entrances:** Connections with other roads and with public and private entrances shall be kept in a reasonably smooth condition for the safe passage of traffic and pedestrians at all times.

Stabilization and/or surfacing material shall be applied to connections and entrances when directed by the Owner. When specified in the Contract, such material will be paid for at the Contract unit price for the specific material. Where such material is not specified in the Contract and determined to be required by the Owner, the cost for stabilization or surfacing material will be handled in accordance with Section 109.05.

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

The Contractor shall not disturb connections or entrances until necessary. Once disturbed, the Contractor shall maintain, and complete connections or entrances as follows:

- a. **Connections:** Connections that had an original paved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using temporary pavement as soon as practicable after connections 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.

If there are delays in prosecution of work for connections, connections that were originally paved shall have at least two (2) lanes maintained with a temporary paved surface. Those that were not originally paved shall be maintained with a temporary aggregate stabilization course.

b. 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 is practicable, including placing the required base and surface course or stabilization. If the entrance must be constructed in stages, such as when 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 suitable salvaged material until the entrance can be completed and the required base and surface or stabilization course can be placed.

- 7. Obstruction Crossing Roadways:** Where the Contractor places obstructions such as suction or discharge pipes, pump hoses, steel plates, or any other obstruction that must be crossed by vehicular traffic, they shall be bridged as directed by the Owner at the Contractor's expense. Traffic shall be protected by the display of warning devices per VWAPM both day and night. If operations or obstructions placed by the Contractor damage an existing traveled roadway, the Contractor shall cease operations and repair damages to the roadway at no additional cost to the Owner.
- 8. 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 700 feet. Patching shall be coordinated with excavating so that an area of not more than 350 feet 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.
- 9. Temporary Structures:** The Contractor shall construct, maintain, and remove temporary structures and approaches necessary for use by traffic. Unless otherwise specified in the Contract, 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 105.10.

10. 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 to the Owner, for review, their plan for the haul route and for minimizing the adverse effects of hauling operations on persons who reside adjacent to the haul route or persons who otherwise use a portion of the haul route for ingress or egress to their residential or work area. The Owner may select alternate haul routes, divide the hauling traffic over several routes, and impose other restrictions deemed necessary to minimize the impact of the hauling operation on local residents.

11. Opening Sections of Projects to Traffic

Certain sections of the Work may be opened to traffic when specified in the Contract or when directed by the Owner. Such opening shall not constitute acceptance of the Work or any part thereof or a waiver of any provision of the Contract.

On any section of the Work opened by order of the Owner where the Contract does not provide for traffic to be carried through the Work, the Contractor will not be required to assume any expense entailed in maintaining the road for traffic. The Owner will pay such expense or will compensate the Contractor 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 order of the Owner where the Contract does not provide for traffic to be carried through the Work, any additional cost incurred to complete other items of work solely because of the changed working conditions will be compensated according to Section 109.05.

If the Contractor is not continuously prosecuting the Work to the Owner's satisfaction as determined by the Schedule of Record, the Contractor shall not be relieved of the responsibility for maintenance of the completed work during the period that the Section of the Work is opened to traffic prior to final acceptance. The Contractor shall be responsible for any expense resulting from the opening of such portions of the Work under these circumstances, except for slides. The Contractor shall conduct the remainder of the construction operations so as to cause the least obstruction to traffic.

(c) Maintenance of Work

1. The Contractor shall maintain the Work, the project site, construction area, roadways and sidewalks from the beginning of construction operations until final acceptance with adequate equipment and forces to keep the roadway, sidewalk, structures and other associated assets in a safe and satisfactory condition at all

times and to ensure the continuous and effective day by day prosecution of the Work. The Contractor shall at all times provide for positive drainage of all disturbed areas. The Owner will perform maintenance of items outside of the scope of work of this Contract. As determined by the Owner, where maintenance is necessary within the project limits but does not affect Contract work, and not the result of any failure or fault of the Contractor and due to causes beyond the Contractor's control, the cost to perform such maintenance will be handled according to Section 109.05.

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

2. Where the Contract specifies placing a course on another course or subgrade of embankment, base, subgrade, concrete, asphalt pavement, or other courses previously constructed, the Contractor shall maintain the courses or subgrades previously constructed in accordance with the Contract requirements when placing such course. This maintenance includes, but is not limited to draining, re-compacting, re-grading, or, if unacceptable or destroyed, the removal of work the Owner previously accepted.
3. During grading operations, if the 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.

If possible, the Contractor shall salvage materials in pavements being removed 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 the rough grading operations for the entire project or to exceed the length of one (1) full day's surfacing operations, the rough grade shall be machined to a uniform slope from the top edge of the existing pavement to the ditch line. The Contractor shall not create any undrained area on any surface of the project. At all times during execution of this contract, the Contractor is to grade all disturbed areas in a way as to not impound, or cause to be impounded, surface water, with exception of impoundments required by SWPPP and E&S requirements of the contract documents or permits.

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 grading and/or paving shall not be conducted simultaneously on sections directly opposite each other unless specifically authorized in advance.

The surface of pavement shall be kept free from soil and other materials that might be hazardous to traffic. Prior to opening of new pavement to traffic, shoulders shall be roughly dressed for a distance of three (3) feet from the edge of the paved surface.

(d) Maintenance Cost

The Contractor shall bear all costs of performing maintenance work before final acceptance, and of constructing and maintaining necessary approaches, crossings, intersections, and other features without direct compensation except as provided for herein. When the Contractor confines their operation to the surface of the roadway and reasonable width of the shoulder and the surface is disturbed or damaged by their operations or equipment, they shall be responsible for the restoration and maintenance of the surface that is disturbed or damaged. 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 105.14.

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.

(e) 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 twenty-five percent (25%) for supervisory and administrative personnel, will be deducted from monies due the Contractor for the project.

105.15 – 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 construction 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, with the exception of those materials to be stored or delivered to the Owner or others as designated in the Contract.

(a) Signs:

The Contractor shall relocate all signs within the construction limits that conflict with construction work as approved by the Owner. Signs that are not needed for the safe and orderly control of traffic during construction as determined by the Owner shall be removed and stored at a designated location within the project limits. The removed signs shall be stored above ground in a manner that will preclude damage and shall be reinstalled in their permanent locations prior to final acceptance. If any of the removed signs are not to be reinstalled, the Contractor shall notify the Owner at the time the signs have been properly stored. Such signs will be removed from the storage area by the Owner. Any sign that is damaged or lost because of the fault of the Contractor shall be repaired or replaced at their expense. Costs for removing, storing, protecting, and reinstalling such signs shall be included in the price bid for other items in the Contract, and no additional compensation will be made.

(b) Mailboxes and Newspaper Boxes:

When removal of existing mailboxes and newspaper boxes is made necessary by construction operations, the Contractor shall place them in temporary locations so that access to them will not be impaired. Prior to final acceptance, boxes shall be placed in their permanent locations as designated by the Owner and left in the same condition as when found. Boxes or their supports that are damaged through negligence on the part of the Contractor shall be replaced at their expense. The cost of removing and resetting existing boxes shall be included in other pay Contract items. New mailboxes designated in the plans shall be paid for in accordance with Section 521.

105.16 – Cleanup

Removal from the project of rubbish, scrap material, and debris caused by the Contractor's personnel or construction operations shall be a continuing process throughout the course of the Work. The work site shall be kept in a neat, safe, and orderly condition at all times.

Before final acceptance, the roadway, borrow pits, quarries, disposal areas, storage areas, and all ground occupied by the Contractor in connection with the Work shall be cleaned of rubbish, surplus materials, and temporary structures, except where the Contractor owns or controls the property. All parts of the Work shall be left in a neat, safe, and orderly condition.

Within 30 days after final acceptance, the Contractor shall remove their equipment, materials, and debris from the right of way and from property adjacent to the project that they do not own or control.

105.17 – Inspection of Work

Inspection will be performed at critical stages. However, all stages, materials, and details of the Work are subject to inspection. The Contractor shall provide the Owner's Inspectors full and safe access to all parts of the Work. The Contractor shall furnish the Inspectors such information and assistance as required to make complete, timely and detailed inspections. The Owner's

Inspectors and their appointed representatives shall have ready access to machines, plants and plant equipment used in processing or placing materials.

Prior to the beginning of operations, the Owner will meet with the Contractor to establish an understanding of the critical stages of work that shall be performed in the presence of the Owner's Inspector. In order for the Owner to schedule inspection of the critical stages of work, the Contractor shall keep the Owner's Inspector informed of planned operations and furnish a progress schedule in accordance with Section 108.03. The Contractor shall advise the Inspector at least twenty-four (24) hours in advance of any changes in the Contractor's planned operations or critical stage work requiring inspection by the Owner.

If the Owner's Inspector requests it, the Contractor shall remove or uncover such portions of the finished work as may be directed at any time before final acceptance. The Contractor shall restore such portions of the finished work to comply with the appropriate Contract specification requirements. If the work exposed does not contain a defect, the uncovering or removing and replacing the covering or making good the parts removed will be paid for as extra work in accordance with Section 104.02 of the Specifications. If the uncovered work contains a defect, the cost of uncovering or removing and replacing the covering or making good the parts removed shall be borne by the Contractor whether or not the Owner directs the Contractor to mitigate the defective work. Acceptance of substandard work does not negate the presence of the defect. For the purposes of this section, a defect shall mean any part of the Work that does not conform to the Contract.

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

When any unit of government, political subdivision, or public or private corporation is to pay a portion of the cost of work specified in the Contract, its representatives shall have the right to inspect such work. The exercise of this right shall not be construed as making them a party or parties to the Contract or conferring on them the right to issue instructions or orders to the Contractor.

If materials are used or work is performed without inspection by an authorized representative of the Owner, the Contractor may be ordered to remove and replace such work or material at their own expense unless the Owner's representative failed to inspect the work or material after having been given reasonable notice in writing that the material was to be used or the work was to be performed.

If an inspection reveals that work has not been properly performed, or materials used are unacceptable, the Contractor will be so advised and they shall immediately inform the Owner's Inspector of their schedule for correcting such work and materials, and the time when a reinspection can be made.

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 any work not in accordance with the Contract Documents.

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 its 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 those hours forty-eight (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 nights and on Sundays if it is necessary to work at such time. The Contractor shall comply to §23-71 of the City Code, Pertaining to Noise.

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

105.18 – Removal of Unacceptable and Unauthorized Work

Work that does not conform to the Contract requirements, whether the result of unacceptable workmanship, use of unacceptable materials, damage through carelessness, or any other cause within the Contractor's control, will be considered unacceptable work.

Unacceptable work shall be remedied or removed as determined by the Owner and replaced in an acceptable manner at the Contractor's expense. The Owner may accept the unacceptable work at a reduced price when acceptance is considered to be in the best interest of the public.

Work that is done contrary to the instructions of the Owner, contrary to the requirements of the Contract, beyond the lines shown on the plans or as designated by the Owner except as specified herein, or without authority will be considered unauthorized and will not be paid for. The Owner may order the Contractor to remove or replace unauthorized work at the Contractor's expense.

The Contractor shall not perform destructive sampling or testing of the work without written authorization of the Owner. Unauthorized destructive sampling or testing will cause the work to be considered unacceptable.

In the event the Contractor is granted authorization to perform destructive sampling or testing, the Contractor shall obtain the approval of the Owner for the method and location of each test prior to beginning such sampling or testing. In addition, destructive sampling and testing shall be performed in the presence of the Owner.

If the Contractor fails to comply immediately with any order of the Owner made under this Section, the Owner will have the authority to cause unacceptable or unauthorized work to be

removed and replaced and to deduct the cost of such removal and replacement, plus twenty-five percent (25%) for supervisory and administrative personnel, from any monies due or to become due the Contractor.

105.19—Submission and Disposition of Claims

(a) Notice of Intent to File a Claim

Early or prior knowledge by the Owner of an existing or impending claim for damages could alter the plans, scheduling, or other Owner action or result in mitigation or elimination of the basis for the claim. Therefore, the Contractor shall submit a written statement describing the act of omission or commission by the Owner or its agents that allegedly caused damage to the Contractor and the nature of the claimed damage to the Owner at the time of each and every occurrence that the Contractor believes to be the basis of a claim or prior to the beginning of the work upon which a claim and any subsequent action will be based. Such written statement shall be submitted to the Owner within twenty (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. The written statement shall clearly inform the Owner that it is a “Notice of Intent to File a Claim”. 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. Oral statements recorded in meeting minutes also will not be sufficient.

“Occurrence” includes but is not limited to the Owner’s denial of the Contractor’s timely request for time extension, additional compensation, change order, adjustment, or other request under the Contract, or any other decision, instruction, directive, or order that the Contractor believes will result in a claim.

In addition, at the time of each and every occurrence that the Contractor believes to be the basis of a claim or prior to beginning the work upon which a claim and any subsequent action will be based, the Contractor shall furnish the Owner an itemized list of materials, equipment, and labor for which additional compensation will be claimed. Only actual cost for materials, labor and equipment will be considered. The Contractor shall afford the Owner every facility for keeping an actual cost record of the work. The Contractor and the Owner shall compare records and bring them into agreement at the end of each day. Failure on the part of the Contractor to afford the Owner proper facilities for keeping a record of actual costs will constitute a waiver of a claim for such extra compensation except to the extent that it is substantiated by the Owner’s records. The filing of such notice of intent by the Contractor and the keeping of cost records by the Owner shall in no way establish the validity of a claim.

(b) Time for Submittal of Claim

Upon completion or termination of the Contract, the Contractor may, within sixty (60) days after the final estimate date established by the Owner pursuant to Code of Virginia § 33.2-1101, deliver to the Owner a certified written claim, which must be a signed original claim document, along with an electronic copy of the claim document as a Portable Document Format (PDF) file, for the amount they deemed they are entitled to under the Contract. For the purpose of this Section, the final estimate date shall be that date set forth in a letter from the Owner to the Contractor sent by certified mail and shall be considered as the date of notification of the Owner's final estimate. Regardless of the manner of delivery of the claim, the Owner must receive and have physical possession of the Contractor's written claim within the 60-day period that commences with the final estimate date. Submittals received by the Owner either before the final estimate date or after the 60-day period shall not have standing as a claim.

(c) Content of Claim

The Contractor's certified written claim shall set forth in detail the facts upon which the claim is based including, but not limited to, the following:

1. A detailed statement of the facts upon which the claim is based providing items of work affected and included in each claim, and the date(s) on which actions or events resulting in the claim occurred or conditions resulting in the claim became evident; and
2. All pertinent data, documents, and correspondence that may substantiate the claim. The Owner shall have the right, at its expense, to review and copy all of the Contractor's non-privileged project files and documents, both electronic and paper, for use in analyzing the claim; and
3. Identification of the provisions of the Contract that the Owner allegedly breached, and the acts or omissions constituting such breach.
4. A detailed statement of the amount of the actual cost for materials, labor and equipment sought in the claim.
5. A copy of the notice(s) of intent to file a claim that the Contractor submitted to the Owner for the claim(s).

(d) Certification of Claim.

Claims submitted by the Contractor for itself or its Subcontractors or suppliers during the statutory period for submitting Contract claims that are submitted without the Contractor's certification described below shall not have standing as a claim and shall not be considered by the Owner.

The Contractor shall submit with the claim a written certification of the claim in the following form:

Pursuant to the Code of Virginia, I hereby certify that this Contract claim submission for City of Virginia Beach, CIP No. _____ in City of Virginia Beach, Virginia, is a true and accurate representation of additional costs, expenses, damages and/or delays incurred by _____ (Contractor) or its Subcontractors or suppliers in the performance of the required Contract work. Any statements, representations, writings, or documents, made or used and known to be false, shall be considered a violation of the Virginia Governmental Frauds Act, punishable as allowed by the Code of Virginia for a Class 6 Felony, and shall be considered a violation of the Virginia Fraud Against Taxpayers Act, subject to the civil penalties allowed by the Code of Virginia.

_____ (Contractor)

By: _____

As officer or duly appointed agent of _____ (Contractor)

Title: _____

Date: _____

State Of: _____

City/County of _____, To-Wit:

I, the undersigned, a Notary Public in and for the City/County and State aforesaid, do hereby certify that _____, whose name is signed to the foregoing instrument, bearing date of the _____ day of _____, 202__, has this day acknowledged the same before me in my City/County and State aforesaid.

Given under my hand this _____ day of _____, 202__.

Notary Public: _____

Notary Registration No.: _____

My commission expires: _____

(e) Review of Claim

Within ninety (90) days from the receipt of the written claim, the Owner will make an investigation and notify the Contractor by certified mail of the final decision. However, by mutual agreement, the Owner and Contractor may extend the 90-day period for another ninety (90) days. The Owner's decision is final.

Any monies that become payable as the result of claim settlement after payment of the final estimate will not be subject to payment of interest unless such payment is specified as a condition of the claim settlement.

(f) Compensation for Claims

The Owner will determine time extension according to Section 108.04 and compensation according to Section 109.05 if the Owner concludes that the Contractor has established entitlement to compensation or a time extension for the claim.

SECTION 106 – CONTROL OF MATERIAL

106.01 – Source of Supply and Quality Requirements

The materials used throughout the Work shall conform to the requirements of the Contract. The Contractor shall regulate their 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 that are to be incorporated into the finished Work shall be new and fit for their intended purpose. Within thirty (30) days after notification of award of the Contract, but not later than seven (7) days prior to the beginning of construction operations under the Contract, the Contractor shall submit a statement of the known origin, composition and manufacture of all materials to be used in the work, including optional or alternate items. Material requirements not previously reported shall be submitted at least sixty (60) days prior to their use on the project, but not less than two (2) weeks prior to delivery. The Contractor's statement shall be electronically submitted and 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.

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 (1) set of complete instructions at the job site during installation and until completion.

At the option of the Owner, materials may be approved at the source of supply. If it is found during the life of the Contract that previously approved sources of supply do not supply materials or equipment conforming to the Contract requirements, do not furnish the valid test data required to document the quality of the material or equipment, or do not furnish documentation to validate quantities to document payment, the Contractor shall change the source of supply and furnish material or equipment from other approved sources. The Contractor shall notify the Owner of this change, and provide the same identifying information noted in this Section, at least sixty (60) days prior to their use on the project, but not less than two (2) weeks prior to delivery.

Materials shall not contain toxic, hazardous, or regulated solid wastes or be furnished from a source containing toxic, hazardous or regulated solid wastes.

When optional materials are included in the Contract, the Contractor shall advise the Owner in writing of the specific materials selected. Thereafter, the Contractor shall use the selected materials throughout the project unless a change is authorized in writing by the Owner. However, when the Contractor has an option as to the type of pipe that may be used, they may use any of the approved types for each size of pipe, but they shall use the same type for a particular line. The Owner may authorize other types and sources in an emergency that will not unreasonably delay delivery of the selected material.

Equipment and material guaranties or warranties that are normally given by a manufacturer or supplier, or are otherwise required in the Contract, shall be obtained by the Contractor and

assigned to the Owner in writing. The Contractor shall also provide an in-service operation guaranty on all mechanical and electrical equipment and related components for a period of at least six (6) months, beginning on the date of partial acceptance of that specific item(s) or final acceptance of the project.

106.02 – Material Delivery

The Contractor shall advise the Owner at least two (2) weeks prior to the delivery of any material from a commercial source. Upon delivery of any such material to the project, the Contractor shall provide the Owner with one (1) copy of all invoices (prices are not required). The following materials shall also comply with Section 109.01: 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 furnished 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 (1) 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.

106.03 – Local Material Sources (Pits and Quarries)

The requirements set forth herein apply exclusively to non-commercial pits and quarries from which materials are obtained for use on contracts awarded by the Owner.

Local material sources shall be concealed from view from the completed roadway and any existing public roadway. Concealment shall be accomplished by selectively locating the pit or quarry and spoil pile, providing environmentally compatible screening between the pit or quarry site and the roadway, or using the site for another purpose after removal of the material, or restoration equivalent to the original use (such as farmland, pasture, turf, etc.). The foregoing requirements shall also apply to any pit or quarry opened or reopened by a Subcontractor or supplier. However, the requirements will not apply to commercial sand and gravel and quarry operations actively processing material at the site prior to the date of the Notice of Advertisement.

The Contractor shall furnish the Owner a statement signed by the property owner in which the property owner agrees to the use of their property as a source of material for the project. Upon completion of the use of the property as a material source and before Final Acceptance, the Contractor shall furnish the Owner a release signed by the property owner indicating that the property has been satisfactorily restored. The requirements for a signed statement and release will not apply to commercial sources, sources owned by the Contractor, or sources furnished by the Owner.

Local material pits and quarries that are not operated under a local or State permit shall not be opened or reopened without authorization by the Owner.

Topsoil on Owner's or furnished borrow sites shall be stripped and stockpiled as directed by the Owner for use as needed within the construction limits of the project or in the reclamation of borrow and disposal areas.

If payment is to be made for material measured in its original position, material shall not be removed until Digital Terrain Model (DTM) or cross-sections have been taken. The material shall be reserved exclusively for use on the project until completion of the project or until final DTM or cross-sections have been taken.

If the Contractor fails to provide necessary controls to prevent erosion and siltation, the Owner may direct the Contractor to cease all other operations and direct their efforts toward corrective action in accordance with Section 105.03 (a) or may perform the work with state forces or other means determined by the Owner using the same procedure as Section 105.14 (e).

Costs for applying seed, fertilizer, lime, mulch, and for restoration of drainage, erosion and siltation control, regrading haul roads, and screening for this work will not be paid for under those Pay Items but shall be included in the Contract price for the type of excavation or other appropriate Contract items.

The Contractor shall be liable for penalties, fines, or the Owner's costs or damages that result from their failure to prevent erosion or siltation and take restorative action.

After removing all the material needed from the local material sources, the Contractor shall remove metal, lumber, and other debris resulting from their operations and shall shape and landscape the area in accordance with the Contractor's agreement with the property owner.

- (a) **Sources Furnished by the Owner:** The Owner will be made available to the Contractor together with the right to use such property as may be required for a plant site, stockpiles, or haul roads. The Contractor shall confine their excavation operations to those areas of the property specified in the Contract. The Contractor shall be responsible for excavation that shall be performed in order to furnish the specified material.
- (b) **Sources Furnished by the Contractor:** The use of material from sources other than those furnished by the Owner will not be permitted until test results have been approved by the Owner and written authority for its use has been issued by the appropriate agency, organization or individual.

The Contractor shall acquire the necessary rights to take material from sources they located and shall pay all related costs, including costs that may result from an increase in the length of the haul. Costs of exploring, sampling, testing, and developing such sources shall be borne by the Contractor. The Contractor shall obtain representative samples from at least two (2) borings in parcels of ten (10) acres or less and at least three (3) additional

borings per increment of five (5) acres or portion thereof to ensure that lateral changes in material are recorded. Drill logs for each test shall include a soil description and the moisture content at intervals where a soil change is observed or at least every five (5) feet of depth for consistent material. Samples obtained from the boring shall be tested by an approved laboratory for grading, Atterberg limits, CBR, maximum density, and optimum moisture. The Owner will review and evaluate the material based on test results provided by the Contractor. The Owner will reject any material from a previously approved source that fails a visual examination or whose test results show that it does not conform to the specific Contract requirements.

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 use within the project limits shall be deposited on a site located outside the project limits in compliance with this Contract and all federal, state, and local laws and regulations. The Contractor shall obtain the necessary rights to property to be used as a disposal area.

Design, use, maintenance, and restoration of disposal sites, 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 Section 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.

The Contractor shall handle and dispose of the materials specified in this Section in accordance with the following requirements.

(a) Disposal Areas

The Contractor shall dispose of materials not used on the project off the right of way. The Contractor's selection and use of off-right-of-way disposal areas shall comply with the Contract requirements and federal, state, and local laws and regulations.

If an approved disposal area is not designated in the Contract, the Contractor shall obtain the necessary rights to property to be used as an approved disposal area. If the Contractor, having shown reasonable effort, is unsuccessful in obtaining the necessary rights to property to be used as an approved disposal area, the Owner will obtain rights for a disposal area. Compensation will be in accordance with Sections 104.02 and 109.05.

Disposal areas shall be cleared without damaging the grass, shrubs, or vegetation outside the limits of the approved area and haul roads thereto but do not need to be grubbed. After the material has been deposited, the area shall be shaped to minimize erosion and siltation of nearby streams and landscaped in accordance with Contractor's agreement with the property owner.

If the Contractor fails to provide and maintain necessary controls to prevent erosion and siltation, the Owner may directly notify the Contractor to cease all other operations and direct their efforts toward corrective action in accordance with Section 105.03 (a) or may perform the work with state forces or other means as determined by the Owner using the same procedure as Section 105.14(e).

The Contractor shall furnish the Owner a statement signed by the property owner in which the owner agrees to the use of their property for the deposit of material from the project. Upon completion of the use of the property as an approved disposal area and before Final Acceptance, the Contractor shall furnish the Owner a release signed by the property owner indicating that the property has been satisfactorily restored. Payments over ninety-five percent (95%) of the total contract value will not be approved until this release has been received by the Owner. This requirement will not apply to commercial sources, sources owned by the Contractor, or sources furnished by the Owner.

(b) Materials encountered by the Contractor shall be handled and disposed of as follows:

Unsuitable material for the purpose of this Specification is defined as material having poor bearing capacity, excessive moisture content, extreme plasticity or other characteristics as defined by the Owner that makes it unacceptable for use in the Work and shall be disposed of at an approved disposal area, landfill licensed to receive such material, or as the Owner directs in writing.

Surplus material as shown on the plans shall be disposed of by flattening slopes, used to fill in ramp gores and medians, or if not needed, disposed of at an approved disposal area, a landfill licensed to receive such material, or as the Owner directs in writing. Surplus material stockpile areas on the right of way shall be cleared but need not be grubbed. The clearing work shall not damage grass, shrubs, or vegetation outside the limits of the approved area and the haul roads thereto. Placement of fill material shall not adversely affect existing drainage structures. If necessary, modified existing drainage structures, as approved by the Owner, shall be paid for in accordance with Section 109.05. Within seven (7) days after the material has been deposited, the area shall be shaped and stabilized to minimize erosion and siltation.

Organic materials such as, but not limited to, tree stumps and limbs (not considered merchantable timber), roots, root mat, leaves, grass cuttings, or other similar materials shall be chipped or shredded and used on the project as mulch, given away, sold as firewood or mulch, burned at the Contractor's option if permitted by local ordinance, or disposed of at a facility licensed to receive such materials. Organic material shall not be buried in state rights-of-way or in an approved disposal area.

Inorganic materials such as brick, cinder block, broken concrete without exposed reinforcing steel, or other such material may be used in accordance with Section 303.04 or shall be disposed of at an approved disposal area or landfill licensed to receive such materials. If disposed of in an approved disposal area, the material shall have enough cover to promote soil stabilization in accordance with Section 303 and shall be restored in accordance with other provisions of this Section.

Concrete without exposed reinforcing steel, may be crushed, and used as rock in accordance with Section 303. If approved by the Owner, these materials may be blended with soils that meet AASHTO M57 requirements and deposited in fill areas within the right of way in accordance with the requirements of Section 303 as applicable.

Excavated rock in excess of that used within the project site in accordance with Section 303 shall be treated as surplus material.

Other materials such as, but not limited to, antifreeze, asphalt (liquid), building forms, concrete with reinforcing steel exposed, curing compound, fuel, hazardous materials, lubricants, metal, metal pipe, oil, paint, wood or metal from building demolition, or similar materials shall not be disposed of at an approved disposal area but shall be disposed of at a landfill licensed to receive such material.

Coal or other valuable materials uncovered during prosecution of the Work that are not specifically addressed by the Contract shall be disposed of as the Owner directs in writing.

106.05 – Rights For and Use of Materials Found on Project

With the approval of the Owner, the Contractor may use in the project any materials found in the excavation that comply with the requirements of 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 Contract item for which the excavated material is used. However, the Contractor shall replace at their 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, indicated by the typical section, slope and grade lines shown in the plans without written authorization by the Owner. The Contractor shall not own and shall not have the right to sell, trade or exchange, any coal or other valuable materials uncovered during the prosecution of the work without the Owner's specific written authorization.

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 the Notice of Advertisement. Unless otherwise indicated, tests for compliance with specification requirements will be made by and at the Owner's expense except that the cost of retests, exclusive of the first retest, shall be borne by the Contractor. Samples shall be furnished by the Contractor at their expense, and those that are not tested by the Contractor will be tested by a representative of the Owner.

The inspection cost of items fabricated outside the continental United States shall be borne by the Contractor. Inspection of fabrication shall be performed in accordance with the appropriate VTM by a commercial laboratory approved by the Owner. Additional cleaning, inspection, testing, 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 the manufacturer's certification furnished by the Contractor. However, furnishing the certificate shall not relieve the Contractor of the responsibility for furnishing materials that conform to the Specifications or the Contract requirements.

Materials requiring an MSDS will not be accepted at the project site for sampling, at VDOT's laboratories, or at any other laboratory or testing facility for testing without the document.

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) For materials accepted under a Quality Assurance Plan, the Contractor or producer shall furnish equipment and maintain a plant laboratory at locations approved for plant processing of materials. The Contractor or producer shall use the laboratory and equipment to perform quality control testing.
- (d) The laboratory shall be of weatherproof construction, tightly floored and roofed, and shall have adequate lighting, heating, running water, ventilation, and electrical service. The ambient temperature shall be maintained between 68 degrees F and 86 degrees F and thermostatically controlled. The laboratory shall be equipped with a telephone, intercom,

or other electronic communication system connecting the laboratory and scale house if the facilities are not in close proximity to each other. The laboratory shall be constructed in accordance with the requirements of local building codes.

The Contractor or producer shall furnish, install, maintain, and replace, as conditions necessitate, testing equipment specified by the appropriate ASTM, AASHTO method or VTM being used and provide necessary office equipment and supplies to facilitate keeping records and generating test reports. The Contractor or producer's technician shall maintain current copies of test procedures performed in the laboratory. The Contractor shall calibrate or verify all balances, scales and weights associated with testing performed as specified in AASHTO R18. The Contractor or producer shall also provide and maintain an approved test stand for accessing truck beds for the purpose of sampling and inspection. The Owner may approve a single laboratory to service more than one (1) plant belonging to the same Contractor or producer.

- (e) Adequate safety measures shall be provided and maintained.

106.08 – Storing Materials

Products are to be delivered in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.

Contractor shall inspect material immediately upon delivery to ensure compliance with requirements of Contract Documents and approved submittals, and those 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.

The Contractor shall provide additional required storage space at their expense. Private property shall not be used for storage purposes without the written permission of the private property owner or lessee. The Contractor shall furnish copies of the written permission to the Owner. Upon completion of the use of the property, and prior to issuance of final acceptance and payment over ninety-five (95%) of the total contract value, the Contractor shall furnish the Owner a notarized release signed by the property owner indicating that the property has been satisfactorily restored.

Chemicals, fuels, lubricants, bitumen, paints, raw sewage, and other potential pollutant-generating materials as determined by the Owner or defined in the *VPDES General Permit For Discharge of Stormwater from Construction Activities* shall not be stored within or above any

flood-prone area unless no other location is available. A flood-prone area is defined as the area adjacent to a main channel of river, stream or other waterbody that is susceptible to being inundated by water during storm events and includes, but not limited to, the floodplain, the flood fringe, wetlands, riparian buffers or other such areas adjacent to the main channel. If stored in a flood-prone area, the material shall be stored in one or more secondary containment structures with an impervious liner and be removed entirely from the flood-prone area at least twenty-four (24) hours prior to an anticipated storm event that could potentially inundate the storage area. Any storage of these materials outside of a flood-prone area that is in proximity to natural or man-made drainage conveyances where the materials could potentially reach a river, stream or other waterway if a release or spill were to occur, must be stored in a bermed or diked area or inside a secondary containment structure capable of preventing a release. Any spills, leaks or releases of such materials shall be addressed according to Sections 107.16 (b) and (e) of the Specifications. Accumulated rainwater shall be pumped out of the impoundment or containment areas into approved filtering devices. All proposed pollution prevention measures and practices must be identified by the Contractor in their Pollution Prevention Plan as required by the Specifications, other Contract documents or the *VDPES General Permit for Discharge of Stormwater from Construction Activities*.

106.09 – Handling Materials

Materials shall be handled in a manner that will preserve their quality, integrity, and fitness for the work. Aggregates shall be transported in vehicles constructed to prevent loss or segregation of materials. Watertight conveyances will be employed at any time when transporting dredge spoils over roadways or anywhere outside of established ESC's or outside the project limits.

Contractor shall provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

106.10 – Unacceptable Materials

Materials that do not conform to the Contract requirements shall be considered unacceptable. Such materials, whether in place or not, will be rejected, and shall be removed from the site of the work and replaced at no cost to the Owner. If it is not practical for the Contractor to remove rejected material immediately, the Owner will mark the rejected material for identification. Rejected material whose defects have been corrected shall not be used until the Owner gives written approval for its use. Upon the Contractor's failure to comply promptly with any order of the Owner made under this Section, the Owner may, in addition to other rights and remedies, have the unacceptable material removed and replaced, and deduct the cost of such removal and replacement from monies due or to become due the Contractor.

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 locations specified in the Contract. The cost of handling and placing materials after delivery to the Contractor shall be included in the Contract price for the Contract item with which they are used.

After receipt of the materials, the Contractor shall be responsible for material delivered to him, including shortages, deficiencies, and damages that occur after delivery, and any demurrage charges.

106.12 – Critical Materials

Raw or manufactured materials or supplies that are necessary for the fabrication, construction, installation, or completion of any item of work that is or becomes in extremely short supply regionally or nationally as substantiated by recognized public reports such as news media, trade association journals, or government reports, due to catastrophic events of nature, needs of national defense, or industrial conditions beyond the control of the Owner or Contractor, will be declared critical materials by the Owner.

When the supply of materials becomes critical, 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 critical materials or methods by means of a change order. Contractors, via their manufacturers or suppliers, that request relief due to critical shortage of materials as specified in this Section shall immediately supply information and other supporting data to permit the Owner an opportunity to assess possible alternatives or methods to avoid undue delay or expenditure.

SECTION 107 – LEGAL RESPONSIBILITIES

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 defend, indemnify, and hold harmless the Owner and its agents, officers, or employees from and against any claim for liability, fine, penalty, or cost, including attorney's fees, arising from, or based on their violation, whether by himself, their agents, employees, or Subcontractors. If the Contractor observes that the contract documents are at variance therewith, they shall promptly notify the Owner in writing. The Contractor shall execute and file the documents, statements, certifications, and affidavits required under any applicable federal or state law or regulation required by or affecting their bid, or the 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.

Where the Specifications require the Contractor to interact with government agencies other than the Owner, that agency's contact information can be found at the following email:
Boris.Solomonov@VDOT.Virginia.gov.

(a) **Hold Harmless - Indemnification:**

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, suppliers, 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.

(b) **Modification:**

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

(c) Applicable Law/Compliance with all Laws/Venue:

1. Applicable Law

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.
- c. The Virginia Human Rights Act, as amended, includes protections against discrimination based on an individual's race, color, religion, sex, sexual orientation, gender identity, marital status, pregnancy, childbirth, or related medical conditions, age, status as a veteran, or national origin. During the performance of this Agreement, Contractor shall comply with the Virginia Human Rights Act, as amended.

3. Venue

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.

107.02 – Permits, Certificates, and Licenses

(a) **General**

The Contractor shall procure all necessary permits for this project unless the permit or permits were obtained by the Owner and included in the Contract Documents. 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.

The Contractor shall conform to the permit conditions as shown in the Contract. Construction methods shall conform to the stipulations of the permit or certification conditions, or both. The Contractor shall assume all obligations and costs incurred as a result of complying with the terms and conditions of the permits and certificates.

If any of the permits listed below are applicable to the project, the Contract will indicate such and the applicable permit stipulations or conditions will be considered a part of the Contract.

1. **Department of the Army, Corps of Engineers Nationwide Permits:** A nationwide permit is issued to the Owner by the U.S. Army Corps of Engineers to place fill or dredge material in waters of the United States including wetlands.
2. **The State Program General Permit for Linear Transportation Projects (SPGP- 01 2A & B):** The SPGP-01 2A & B is a permit issued to the Owner by the U.S. Army 75 Corps of Engineers to proceed with linear transportation projects involving work, structures and filling both temporary and permanent, in waters of the United States including wetlands.
3. **Letter of Permission (LOP-1):** The LOP-1 is a regional permit issued to the Owner by the U.S. Army Corps of Engineers to proceed with roadway projects involving work, structures, and filling, both temporary and permanent, in waters of the United States including wetlands.
4. **Virginia Marine Resources Commission – Virginia General Permit (VGP-1):** A VGP-1 permit is issued to the Owner by the Virginia Marine Resources Commission and is required on projects that cross in, on, or over state-owned land which is submerged below low water (channel-ward of the mean low water line), in tidal areas, including tidal wetlands, or below ordinary high water anywhere in the Commonwealth of Virginia.
5. **Virginia Water Protection Permit (VWPP):** The VWPP is issued to the Owner by the Virginia Department of Environmental Quality, Water Division and is required for activities that result in a discharge to surface waters and wetlands. The VWPP is issued as an individual or general permit.
6. **Virginia Department of Environmental Quality – VPDES General Permit for Discharge of Stormwater from Construction Activities (VPDES Construction Permit):** All construction activities undertaken by or for Owner involving land

disturbances equal to or exceeding one (1) acre must be covered by the VPDES Construction Permit. According to City's ordinances, **VESMP** Regulations and Section 107.16, the Contractor is responsible for securing VPDES Construction Permit coverage for all applicable land disturbing activities performed on Owner rights of way or easements, including off-site support facilities that are located on Owner rights of way or easements that directly relate to the construction site activity. Also, the Contractor shall be responsible for securing VPDES Construction Permit coverage for support facilities that are not located on Owner rights of way or easements.

The Contractor shall be responsible for all costs to obtain VPDES Construction Permit coverage for all support facilities (both on-site and off-site) not included in the construction plans or Contract for the project. The Owner will not be responsible for any inconvenience, delay, or loss experienced by the Contractor as a result of their failure to gain access to any support facility areas at the time contemplated.

7. **Coastal Zone Management (CZM) Consistency Concurrence:** This clearance is issued to the Owner by the Virginia Department of Environmental Quality for projects in navigable waters requiring a U.S. Coast Guard bridge permit.
 8. **U.S. Coast Guard Bridge Permit:** This permit is required for bridge projects over navigable waters. The Owner is responsible for acquiring these permits.
 9. **Other Permits, Certificates and Licenses:** Except as otherwise specified herein, the Contractor shall procure all necessary permits, certificates or licenses that have not been obtained by the Owner or not included in the Contract Documents. 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. The Contractor shall comply with all conditions of the permits, certificates or licenses and give notices necessary and incidental to the due and lawful prosecution of the work.
- (b) The Contractor shall not stockpile materials (including fill, construction debris, and excavated and woody materials) within the waterway or wetlands. The Contractor shall construct cofferdams, stream channel retaining structures, and all necessary dikes using non-erodible materials or, if specified in the permit(s), faced with coarse non-erodible materials. If faced with non-erodible material, filter cloth shall be placed between the granular fill and riprap in accordance with Sections 204, 245, 303.03, and 414. Temporary structures shall be removed from the waterway with minimal disturbance of the streambed. Discharge of dredge or fill material shall be placed in accordance with the best management practice, project permits, and all applicable laws and regulations. Dredged or fill material shall be removed to an approved, contained, upland location in accordance with Section 106.04. The disposal area will be of sufficient size and capacity to properly contain the dredge material, to allow for adequate dewatering and settling of sediment, and to prevent overtopping. The disposal area shall be stabilized prior to placement of dredge material.

- (c) The Contractor's activities shall not substantially disrupt the movement of those species of aquatic life indigenous to the water body including those species that normally migrate through the area. The Contractor, to the maximum extent practicable, shall not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water. The Contractor shall avoid and minimize all temporary disturbances to surface waters during construction. The Contractor shall remove any temporary fill in its entirety and return the affected areas to their preexisting elevation conditions within thirty (30) days of completing work, which shall include re-establishing pre-construction contours and planting or seeding with appropriate wetland vegetation according to cover type (emergent, scrub/shrub, or forested). The Contractor shall perform all work activities during low-flow conditions and shall isolate the construction area via the implementation of non-erodible cofferdams, sheet piling, stream diversions, or similar structures.
- (d) The Contractor shall accomplish all construction, construction access (e.g., cofferdams, sheet piling, and causeways) and demolition activities associated with this project in a manner that minimizes construction or waste materials from entering surface waters. Access roads and associated bridges or culverts shall be constructed to minimize the adverse effects on surface waters. Access roads constructed above preconstruction contours and elevations in surface waters must be bridged or culverted to maintain surface flows. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area shall be returned to its original contours and restored within thirty (30) days of completing work in the area.
- (e) The Contractor shall 1) stockpile excavated material in a manner that prevents reentry into the stream, 2) restore original streambed and streambank contours, 3) revegetate barren areas, and 4) implement strict erosion and sediment control measures throughout the project period.
- (f) The Contractor shall provide fill material that is clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations. The Contractor shall comply with all applicable FEMA-approved state or local floodplain management requirements.
- (g) The Contractor shall adhere to any time-of-year restriction conditions as required by state and federal permitting agencies. No in-stream work shall be permitted during in-stream time-of-year restriction.
- (h) The Contractor shall prohibit wet or uncured concrete from entry into surface waters. The Contractor shall not dispose of excess or waste concrete in surface waters and prevent wash water from discharging into surface waters. The Contractor shall employ measures to prevent spills of fuels or lubricants into state waters. All pollution prevention measures and practices proposed by the Contractor shall be identified in the Contractor's Pollution Prevention Plan as required by the Specifications, other Contract documents and/or the *VPDES General Permit for Discharge of Stormwater from Construction Activities*.

- (i) The Contractor shall not violate the water standards or VESMP recognitions as a result of the construction activities. The Contractor shall not alter the physical, chemical, or biological properties of surface waters and wetlands or make them detrimental to the public health, to animal or aquatic life, to the uses of such waters for domestic or industrial consumption, for recreation, or for other uses.
- (j) The Contractor shall not proceed with work covered by a permit until the work is released in writing by the Owner.
- (k) If the Owner has not released work covered by a U.S. Army Corps of Engineers permit and the Contractor has completed all other work within the limits of the project, the Contractor shall so advise the Owner in writing. Upon receipt of the notification, the Owner will evaluate the status of the project and advise the Contractor within forty-five (45) days of the portion of the project that is acceptable under Section 108.09. If the Owner determines that all of the work except that encumbered by the permit application is acceptable under Section 108.09, the Contractor will be notified accordingly. The Owner or the Contractor may then elect to continue or terminate the remaining portion of the Contract.
- (l) The party electing to terminate the Contract shall so advise the other party in writing after the 45-day period. The terms of Contract termination will be in accordance with Section 108.08. No compensation will be made for delays encountered or for work not performed except for an extension of time as determined in accordance with Section 108.04.
- (m) The Contractor shall submit a request to the Owner in writing if they want to deviate from the plans or change their proposed method(s) regarding any proposed work located in waterways or wetlands. Such work may require additional environmental permits. If the Owner determines that the activities are necessary for completion of the work, the Contractor shall furnish the Owner all necessary information pertaining to the activity. The Contractor shall be responsible for designing and supplying all plans, sketches and notes necessary to acquire any permit modification required for changes in the proposed construction methods. Such information shall be furnished at least one hundred and eighty (180) days prior to the date the proposed changed activity is to begin. For other than the *VPDES General Permit for Discharge of Stormwater from Construction Activities*, the Owner will apply for the necessary permits modifications to the permits obtained by the Owner. The Contractor shall not begin the activity until directed to do so by the Owner. Additional compensation will not be made for delay to the work or change in the Contractor's proposed methods that result from jurisdiction agency review or disapproval of the Contractor's proposed methods.
- (n) If additional permits are required to perform dredging for flotation of construction equipment or for other permanent or temporary work as indicated in the Contractor's accepted plan of operation, but have not been obtained by the Owner, the Contractor shall furnish the Owner, at least seventy-five (75) days prior to the proposed activity, all necessary information pertaining to the proposed activity in order for the Owner to apply

for the permits. The Contractor shall not begin the proposed activity until the additional permits have been secured and the Owner has advised the Contractor 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 seventy-five (75) days.

- (o) The Contractor shall permit representatives of state and federal environmental regulatory agencies to make inspections at any time in order to insure that the activity being performed under authority of the permit(s) is in accordance with the terms and conditions prescribed herein.

107.03 – Federal-Aid Provisions

When the U.S. government pays all or any portion of the cost of a project, the Contractor shall comply with the federal laws and rules and regulations made pursuant to such laws applicable to the project. The Work shall be subject to inspection by the appropriate federal agency. Such inspection shall in no sense make the federal government a party of the Contract and will in no way interfere with the rights of either party to the Contract. For Federally-aided projects, the provisions contained in Form FHWA-1273 and other federal provisions incorporated into the Contract must be made a part of, and physically incorporated into all subcontracts so as to be binding in those agreements.

107.04 – Furnishing Right of Way

The Owner may secure necessary rights of way and easements in advance of construction. The Owner will not be responsible for any delay in the acquisition of a right of way other than consideration of an extension of time. The Owner will provide notification of known delays in the proposal for work to assist Bidders in planning the work and composing their bids. 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.

If applicable, see Supplemental Specification for status of right-of-way acquisition.

107.05 – Patented Devices, Materials, and Processes

If the Contractor employs any design, device, material, or process covered by a patent or copyright outside the Contract requirements they shall provide for its use by obtaining a legal agreement with the patentee or owner. The Contractor and the surety shall defend, indemnify, and save harmless the City, any affected third party, or political subdivision from and against any and all claims, lawsuits, or legal actions for infringement because of such use. The Contractor shall indemnify the City for costs, expenses, or damages, including attorneys' fees, resulting from infringement during prosecution or after completion of the Work.

107.06 – 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.

107.07 – No Waiver of Legal Rights

The Owner shall not be precluded or estopped by any measurement, estimate, approval, acceptance, or certificate made either before or after final acceptance of the Work, or payment therefor, from showing (1) the true amount and character of the work performed and materials furnished by the Contractor, (2) that any such measurement, estimate, acceptance, certificate or payment is untrue or incorrectly made, or (3) that the work or materials do not comply with the Contract requirements. The Owner shall not be precluded or estopped, notwithstanding any such measurement, estimate, approval, acceptance, certificate, or payment in accordance therewith, from recovering from the Contractor or their surety, or both, such cost or damage as the Owner may sustain by reason of the Contractor's failure to comply with the Contract requirements. The Owner's acceptance of the whole or any part of the Work, or the Owner's payment for the whole or any part of the Work, or the Owner's granting of any extension of time, or the Owner's taking any possession of any part of the Work, shall not operate as a waiver of any portion of the Contract or of any right or power herein reserved, or of any right to costs or damages. The Owner's express written waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.

107.08 – Protecting and Restoring Property and Landscape

Protection of work and property. In an emergency affecting the safety of life, the Work, the Project, or of the adjoining property, the Contractor, without special instruction or authorization from the Owner, shall act to prevent 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, stockpiled earth, foreign matter, and waste materials resulting from their operations. The site of the work shall be restored to the conditions existing before the work was started, to the satisfaction of the Owner.

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 (3) 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 boundary lines of and adjacent to the Work unless their removal or destruction is specified in the Contract. The Contractor shall use suitable precautions to prevent damage to such property.

When the Contractor finds it necessary to enter on private property, beyond the limits of the construction easement shown on the plans, they shall secure from the 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 any damage or injury to property during the prosecution of the work resulting from any act, omission, neglect, or misconduct in the Contractor's method of executing the work or attributable to defective work or materials. This responsibility shall not be released until final acceptance of the project and a written release from the owner or lessee of the property is obtained.

When direct or indirect damage is done to property by or on account of any act, omission, neglect, or misconduct in the Contractor's 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 shall make a settlement with the property owner for such property damage. The Contractor shall secure from the owner a written release from any claim against the Owner without additional compensation therefor. A copy of this release shall be furnished the Owner.

107.09 – Contractor's Responsibility for Utility Property and Services

At points where the Contractor's operations are on or adjacent to the properties of any utility, including railroads, and damage to which might result in 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 utilities so that removal and adjustment operations may progress in a timely, responsible, and 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 fully with the authority in the restoration of service. If utility service is interrupted, repair work shall be continuous until service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the Department of Public Utilities and the Fire Marshall. When the Contractor's work operations require the disconnection of "in service" fire hydrants, the Contractor shall notify the Department of Public Utilities and Fire Marshall at least twenty-four (24) hours prior to disconnection. In addition, the Contractor shall notify the Department of Public Utilities and Fire Marshall no later than twenty-four (24) hours after reconnection of such hydrants. The Contractor shall be responsible for any damage to

utilities that, in the investigation and determination of the Owner, is found to be attributable to the Contractor's neglect, means or methods of performing the work.

Nothing in this Section shall be construed to be in conflict with Section 107.08.

The Contractor shall comply with all requirements of the Virginia Underground Utility Damage Prevention Act (the Miss Utility law). The Contractor shall not make or begin any excavation or demolition without first notifying the Miss Utility notification center for the area where the project is located. The Contractor shall wait to begin its excavation or demolition until the third working day following the Contractor's notice to the notification center, unless the underground utilities cannot be marked within that time due to extraordinary circumstances. The Contractor may commence excavation or demolition work only if confirmed through the Ticket Information Exchange (TIE) System, or the Contractor is notified directly, that all applicable utilities have either marked their underground line locations or reported that no lines are present in the work vicinity.

107.10 – Restoration of Work Performed by Others

The Owner may construct or reconstruct any utility service within the construction limits 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, unless the Contractor's Work is damaged, altered or impeded by the condition.

When authorized by the Owner, the Contractor shall allow any person, firm, or corporation to make an opening in the roadway within the limits of the project upon presentation of a duly executed permit from the Owner or any municipality for sections within its corporate limits. When directed by the Owner, the Contractor shall satisfactorily repair portions of the work disturbed by the openings. The work for such repairs as authorized and directed by the Owner will be paid for in accordance with Section 109.05 and shall be subject to the same conditions as the original work performed.

107.11 – Use of Explosives

The use of explosives will not be allowed.

107.12 – Responsibility for Damage Claims

- (a) The Contractor shall defend, indemnify, and save harmless the City, its respective officers, agents, and employees, from and against any suits, actions, or claims for costs, expenses or damages, including attorneys' fees, brought for or on account of any injuries or damages received or sustained by any persons or property resulting from or arising out of the following:
1. the Work performed by the Contractor;
 2. by or in consequence of any neglect in safeguarding the Work by the Contractor;

3. through the use of unacceptable materials in the construction or the improvement;
or
4. resulting from any act, omission, neglect, or misconduct of the Contractor.

The Owner may retain as much of the monies due or to become due the Contractor under and by virtue of their Contract as the Owner considers necessary to ensure that a fund will be available to pay a settlement or judgment of such suits, actions, or claims. If no monies are due, the Contractor's surety and insurers will be held accountable until all such suits, claims and actions have been settled and suitable evidence to that effect has been furnished the Owner. Any extension of time granted the Contractor, in which to complete the Contract shall not relieve him or their surety of this responsibility.

- (b) It is not intended by any of the provisions of any part of the Contract to establish the public or any member thereof as a third-party beneficiary of the Contract, or to authorize anyone not a party to the Contract to enter into a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.
- (c) The Contractor shall comply with all requirements, conditions, and terms of the Contract including, but not limited to, permits, commitments identified in the Contract, and applicable laws and regulations. The Contractor shall not cause damage, except as allowed under the terms of the Contract, or as allowed under applicable permits or laws, to the air, water, soil, or other natural resources, or cause damage to adjacent or off-site property.

When any act, omission, or work performed or neglected by other action of the Contractor occurs, that violates the requirements, conditions, or terms of the Contract, and affects the health, safety, or welfare of the public or natural resources, the Owner will direct the Contractor to take prompt action to repair, replace, or restore the damage or injury within a time frame established by the Owner, and to comply with Section 107.01. If the Contractor fails to make such repair, replacement, or restoration within the established time frame, the Owner will have the damage or injury repaired, replaced, or restored and will deduct the cost of such repair, replacement, or restoration from monies due or to become due the Contractor.

- (d) If the Owner determines by its own investigation that injury or damage has occurred as a result of an act, omission, or work performed or neglected by the Contractor, the Owner may suspend the Contractor from future bidding for a period of time commensurate with the severity of the injury or damage as determined by the Owner. Injury is defined as harm or impairment to persons, property or natural resources. Damage is defined as the loss or harm resulting from an injury. In addition, the Owner may recover either (i) the loss or damage that the Owner suffers as a result of such act, omission or other action or (ii) any liquidated damages established in such Contract; plus (iii) reasonable attorney's fees, expert witness fees, staff salaries, incidental and equipment charges associated with any investigation.

Upon the Owner's determination that injury or damage has occurred as a result of an act, omission, or work performed or neglected by the Contractor, the Contractor shall be responsible for and shall reimburse the Owner for all expenses associated with the injury or damage. Expenses include but are not limited to: costs for investigating the injury or damage, financial penalties incurred by the Owner as a result of the injury or damage, salary and expenses incurred by employees or consultants of the City, road user expenses as determined by the Owner due to damage or loss of use of the project area, attorneys' fees, and expert witness fees. The Owner may deduct the reimbursement of expenses from any payments due or to become due the Contractor.

Upon determination by the Owner of willful, flagrant, or repetitious acts, omissions, or work performed or neglected by the Contractor related to injury or damage as provided in this Section, the Contractor shall in addition to reimbursing the Owner for all expenses as provided herein, be subject to other appropriate sanctions, as permitted by law, policy, and Specifications including, but not limited to, suspension of work, termination for default, and removal from the Bidders' list.

If the Contractor disputes the Owner's determination in any respect, the Contractor, may submit a claim in accordance with Section 105.19.

107.13 – Labor and Wages

The Contractor shall comply with the provisions and requirements of the workers' compensation law and public statutes that regulate hours of employment on public work.

- (a) **Predetermined Minimum Wages:** The provisions of laws requiring the payment of a minimum wage of a predetermined minimum wage scale for the various classes of laborers and mechanics, when such a scale is incorporated in the Contract, shall be expressly made a part of any Contract hereunder. The Contractor and their agents shall promptly comply with all such applicable provisions.

Any classification not listed and subsequently required shall be classified or reclassified in accordance with the wage determination. If other classifications are used, omission of classifications shall not be cause for additional compensation. The Contractor shall be responsible for determining local practices with regard to the application of the various labor classifications.

- (b) **Job Service Offices:** In advance of the Contract starting date, the Contractor may contact the Job Services of Virginia Employment Commission at the nearest location to secure referral of available qualified workers in all occupational categories. The closest office may be obtained by accessing the VEC website at <https://www.vec.virginia.gov> and "clicking" on "VEC Local Offices" to access "VEC Workforce Centers".

107.14 – Equal Employment Opportunity

The Contractor shall comply with the applicable provisions of presidential executive orders and the rules, regulations, and orders of the President's Committee on Equal Employment Opportunity.

The Contractor shall maintain the following records and reports as required by the Contract EEO provisions:

- Record of all applicants for employment
- New hires by race, work classification, hourly rate, and date employed
- Minority and non-minority employees employed in each work classification
- Changes in work classifications
- Employees enrolled in approved training programs and the status of each
- Minority subcontractor or subcontractors with meaningful minority group representation
- Copies of Form C-57 submitted by subcontractors

If the Contract has a stipulation or requirement for trainees, the Contractor shall submit semi-annual training reports in accordance with the instructions shown on the forms furnished by VDOT. If the Contractor fails to submit such reports in accordance with the instructions, his monthly progress estimate for payment may be delayed.

The Contractor shall cooperate with Owner and VDOT in carrying out EEO obligations and in the Owner's and VDOT's reviews of activities under the Contract. The Contractor shall comply with the specific EEO requirements specified herein and shall include these requirements in every subcontract of \$10,000 or more with such modification of language as may be necessary to make them binding on the subcontractor.

(a) Required contract provisions:

1. **Required by §2.2-4201 of the Code of Virginia:** During the performance of this Contract, the Contractor agrees as follows:
 - a. The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex, or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause, including the names of all contracting agencies with which the Contractor has contracts of over \$10,000.
 - b. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that such contractor is an equal opportunity employer. However,

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

- c. If the Contractor employs more than five employees, the Contractor shall (i) provide annual training on the Contractor's sexual harassment policy to all supervisors and employees providing services in the Commonwealth, except such supervisors or employees that are required to complete sexual harassment training provided by the Department of Human Resource Management, and (ii) post the Contractor's sexual harassment policy in (a) a conspicuous public place in each building located in the Commonwealth that the Contractor owns or leases for business purposes and (b) the Contractor's employee handbook.

The Contractor shall include the provisions of subdivisions a, b, and c in every subcontract or purchase order of over \$10,000, so that such provisions shall be binding upon each subcontractor or vendor.

Nothing contained in this chapter shall be deemed to empower any agency to require any contractor to grant preferential treatment to, or discriminate against, any individual or any group because of race, color, religion, sex, or national origin on account of an imbalance that may exist with respect to the total number or percentage of persons of any race, color, religion, sex, or national origin employed by such contractor in comparison with the total number or percentage of persons of such race, color, religion, sex, or national origin in any community or in the Commonwealth.

- 2. **Required by Virginia Executive Order 61-2017:** The Contractor shall not discriminate, in employment practices, subcontracting practices, and delivery of goods or services, on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, disability, or veteran status. The Contractor shall include this paragraph in every subcontract or purchase order over \$10,000, so that the same provisions will be binding upon each subcontractor or vendor providing labor or materials to the Project.
 - (b) **EEO Officer:** The Contractor shall designate and make known to the Owner an EEO Officer who can effectively administer and promote an active Contractor EEO program and who shall be assigned adequate authority and responsibility to do so.
 - (c) **Dissemination of Policy:**

1. Members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees or recommend such action or are substantially involved in such action shall be made fully aware of and shall implement the Contractor's EEO policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. The following actions shall be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees shall be conducted before the start of work and at least once every 6 months thereafter, at which time the Contractor's EEO policy and its implementation shall be reviewed and explained. The meetings shall be conducted by the EEO Officer or another knowledgeable company official.
 - b. New supervisory or personnel office employees shall be given a thorough indoctrination by the EEO Officer or another knowledgeable company official covering all major aspects of the Contractor's EEO obligations within 30 days following their reporting for duty with the Contractor.
 - c. The EEO Officer or appropriate company official shall instruct employees engaged in the direct recruitment of employees for the project relative to the methods followed by the Contractor in locating and hiring minority group employees.
2. In order to make the Contractor's EEO policy known to all employees, prospective employees, and potential sources of employees such as, but not limited to, schools, employment agencies, labor unions where appropriate, and college placement officers, the Contractor shall take the following actions:
 - a. Notices and posters setting forth the Contractor's EEO policy shall be placed in areas readily accessible to employees, applicants for employment, and potential employees.

The Contractor shall furnish, erect, and maintain at least two bulletin boards having dimensions of at least 48 inches in width and 36 inches in height at locations readily accessible to all personnel concerned with the project. The boards shall be erected immediately upon initiation of the Contract work and shall be maintained until the completion of such work, at which time they shall be removed from the project. Each bulletin board shall be equipped with a removable glass or plastic cover that, when in place, will protect posters from weather or damage. The Contractor shall promptly post official notices on the bulletin boards. The costs for such work shall be included in the price bid for other Contract items.

- b. The Contractor's EEO policy and the procedures to implement such

policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

(d) Recruitment:

1. Advertisements for employment shall conform to Section 107.14(a)1.
2. Unless precluded by a valid bargaining agreement, the Contractor shall conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, state employment agencies, schools, colleges, and minority group organizations. The Contractor shall identify sources of potential minority group employees and shall establish procedures with such sources whereby minority group applicants may be referred to him for employment consideration.
3. The Contractor shall encourage his employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all employees. In addition, information and procedures with regard to referring minority group applicants shall be discussed with employees.

(e) Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel action of any type shall be taken without regard to race, color, religion, sex, or national origin.

1. The Contractor shall conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of personnel.
2. The Contractor shall periodically evaluate the spread of wages paid within each classification to determine whether there is evidence of discriminatory wage practices.
3. The Contractor shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, corrective action shall include all affected persons.
4. The Contractor shall investigate all complaints of alleged discrimination made to him in connection with obligations under the Contract, attempt to resolve such complaints, and take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, corrective action shall include those persons. Upon completion of each investigation, the Contractor shall inform every complainant of all

avenues of appeal.

(f) Training:

1. The Contractor shall assist in locating, qualifying, and increasing the skills of minority group and women employees and applicants for employment.
2. Consistent with work force requirements and as permissible under federal and state regulations, the Contractor shall make full use of training programs, i.e., apprenticeship and on the job training programs for the geographical area of Contract performance. Where feasible, twenty-five percent (25%) of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.
3. The Contractor shall advise employees and applicants for employment of available training programs and the entrance requirements for each.
4. The Contractor shall periodically review the training and promotion potential of minority group employees and shall encourage eligible employees to apply for such training and promotion.
5. If the Contract provides a pay item for trainees, training shall be in accordance with Section 518.

(g) Unions: If the Contractor relies in whole or in part on unions as a source of employees, best efforts shall be made to obtain the cooperation of such unions to increase opportunities for minority groups and women in the unions and to effect referrals by such unions of minority and women employees. Actions by the Contractor, either directly or through his Contractor's Association acting as agent, shall include the following procedures:

1. In cooperation with the unions, best efforts shall be used to develop joint training programs aimed toward qualifying more minority group members and women for membership in the unions and to increase the skills of minority group employees and women so that they may qualify for higher-paying employment.
2. Best efforts shall be used to incorporate an EEO clause into union agreements to the end that unions shall be contractually bound to refer applicants without regard to race, color, religion, sex, or national origin.
3. Information shall be obtained concerning referral practices and policies of the labor union except that to the extent the information is within the exclusive possession of the union. If the labor union refuses to furnish the information to the Contractor, the Contractor shall so certify to the Owner and shall set forth what efforts he made to obtain the information.

4. If a union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the union agreement, the Contractor shall, through his recruitment procedures, fill the employment vacancies without regard to race, color, religion, sex, or national origin, making full efforts to obtain qualified or qualifiable minority group persons and women. If union referral practice prevents the Contractor from complying with the EEO requirements, the Contractor shall immediately notify the Owner.

(h) **Subcontracting:** The Contractor shall use best efforts to use minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of SWaM and DBE construction firms from VDOT. If SWaM and DBE goals are established in the proposal, the Contractor shall comply with Section 107.15.

The Contractor shall use best efforts to ensure subcontractor compliance with his EEO obligations.

(i) **Records and Reports:** The Contractor shall keep such records as are necessary to determine compliance with his EEO obligations. The records shall be designed to indicate the following:

1. the number of minority and nonminority group members and females employed in each work classification on the project.
2. the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and females if unions are used as a source of the work force.
3. the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.
4. the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees.

Records shall be retained for a period of 3 years following the Completion Date of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of either the Owner or VDOT.

Each month for the first three months after construction begins and every month of July thereafter for the duration of the project, Form C-57 shall be completed to indicate the number of minority, nonminority, and female employees currently engaged in each work classification shown on the form. The completed Form C-57 shall be submitted within three (3) weeks after the reporting period. Failure to do so

may result in delay of approval of the Contractor's monthly progress estimate for payment.

107.15 – Use of Small, Women-Owned, and Minority-Owned Businesses (SWaMs)

It is the policy of VDOT that Small, Women-Owned, and Minority-Owned Businesses (SWaMs) shall have the maximum opportunity to participate in the performance of the Contract. The Contractor is encouraged to take necessary and reasonable steps to ensure that SWaMs have the maximum opportunity to compete for and perform work on the Contract, including participation in any subsequent subcontracts. Any SWaMs used by the Contractor, including the Contractor himself, shall perform a commercially useful function, as defined in 7VAC10-21-220.

A SWaM firm shall mean a small business concern (as defined pursuant to the Code of Virginia, Title 2.2 -1401) for the purpose of reporting small, women-owned, and minority-owned business participation in state contracts and purchases pursuant to §§ 2.2-1404 and 2.2-1405. To that end, the following terms shall apply:

- (a) **Small business** means a business that is at least 51 percent independently owned and controlled by one or more individuals who are U.S. citizens or legal resident aliens and together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three (3) years. One or more of the individual owners shall control both the management and daily business operations of the small business.
- (b) **Women-owned business** means a business concern that is at least 51 percent owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51 percent of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U.S. citizens or legal resident aliens.
- (c) **Minority-owned business** means a business concern that is at least 51 percent owned by one or more minority individuals or in the case of a corporation, partnership, or limited liability company or other entity, at least 51 percent of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.
- (d) **Minority individual** means an individual who is a citizen of the United States or a non-citizen who is in full compliance with United States immigration law and who satisfies one or more of the following definitions:
 - 1. African American means a person having origins in any of the original peoples of Africa and who is regarded as such by the community of which this person claims to be a part.

2. Asian American means a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands including, but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Mariana, the Philippines, a U.S. territory of the Pacific, India, Pakistan, Bangladesh, or Sri Lanka and who is regarded as such by the community of which this person claims to be a part.
 3. Hispanic American means a person having origins in any of the Spanish-speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who is regarded as such by the community of which this person claims to be a part.
 4. Native American means a person having origins in any of the original peoples of North America and who is regarded as such by the community of which this person claims to be a part or who is recognized by a tribal organization.
 5. a member of another group, or other individual, found to be economically and socially disadvantaged by the Small Business Administration under 8(a) of the Small Business Act as amended (15 U.S.C. 637[a]).
- (e) **State agency** means any authority, board, department, instrumentality, institution, agency, or other unit of state government. “State agency” shall not include any county, city, or town.

A list of Virginia Department of Small Business and Supplier Diversity certified SWaM firms is maintained on the SBSB website (<https://www.sbsd.virginia.gov/>) under the **SWaM and DBE Directory** link.

SWaM certification entitles firms to participate in VDOT’s SWaM program; however, this certification does not guarantee that the firm will obtain work nor does it attest to the firm’s abilities to perform any particular work.

The Contractor is encouraged to use the services of banks owned or controlled by minorities or females; however, use of such services will not be credited toward participation achievement for the Contract. VDOT has on file, and will make available on request, the names and addresses of known minority and female owned banks in the Commonwealth of Virginia.

The Contractor shall designate and make known to VDOT a liaison officer who is assigned the responsibility of actively and effectively administering, encouraging and promoting a responsive program for the use of SWaMs.

The performance of the Contract for the purpose of this specification shall be interpreted to include, but not necessarily be limited to, subcontracting; furnishing materials, supplies, and services; and leasing equipment or, where applicable, any combination thereof.

If the Contractor intends to sublet a portion of the work on the project in accordance with Section 105.06, the Contractor is encouraged to seek out and consider SWaMs as potential subcontractors. The Contractor is encouraged to contact SWaMs to solicit their interest, capability, and prices and shall retain on file the proper documentation to substantiate such contacts.

By signing the bid, the bidder certifies to the following:

- That on the work proposed to be sublet and shown on Form C-31 for *Contractors Proposal to Sublet*, the bidder has taken reasonable steps to seek out and consider SWaMs as potential subcontractors.
- That, if awarded the project, any work proposed to be sublet and not shown on the form for *Contractors Proposal to Sublet*, the same reasonable steps certified herein will be taken.

If the Owner has determined that specific opportunities for participation by SWaMs are available on a particular Contract and the bidder chooses to claim credit for SWaM participation, the extent of such participation will be shown as a percentage of the Contract amount and will be indicated in the proposal on Form C-61, *SWaM Participation*.

If the bidder is a SWaM that is owned and controlled by a minority female(s), participation achievement may be shown as either minority or female, but not both, as the certification indicates. Further, each bidder shall comply with Section 102.01.

If the apparent low bidder is a currently certified SWaM firm, the SWaM requirements of this provision will not be applicable except for those referring to the reporting of participation achievement.

The following are examples of efforts VDOT encourages bidders and Contractors to make in soliciting SWaM participation. Other factors or types of efforts may be relevant in appropriate cases. The Contractor is encouraged to:

- attend any pre-solicitation or pre-bid meetings at which SWaMs could be present and/or informed of contracting and subcontracting opportunities;
- advertise in general circulation, trade association and minority-focus media concerning the subcontracting opportunities;
- provide written notice to a reasonable number of specific SWaMs that their interest in the Contract is being solicited in sufficient time to allow the SWaMs to participate effectively;
- follow-up initial solicitations of interest by contacting SWaMs to determine with certainty whether the SWaMs are interested;
- select portions of the work to be performed by SWaMs in order to increase the likelihood of obtaining SWaM participation (including, where appropriate, breaking down proposed contract work into economically feasible units to facilitate SWaM participation);
- provide interested SWaMs with adequate information about the plans, Specifications, and Contract requirements;

- negotiate in good faith with interested SWaMs, not rejecting SWaMs as unqualified without sound reasons based on a thorough investigation of their capabilities;
- make efforts to assist interested SWaMs in obtaining bonding, lines of credit, or insurance required by VDOT or Contractor;
- make efforts to assist interested SWaMs in obtaining necessary equipment, supplies, materials, or other necessary or related assistance or services; and
- effectively use the services of available minority, woman and small business community organizations; minority, woman and small business contractors' groups; local, state and federal minority, woman and small business assistance offices; and other organizations that provide assistance in the recruitment and placement of SWaMs.

Any agreement between a bidder and a SWaM whereby the SWaM agrees not to provide quotations for performance of work to other bidders is prohibited.

No later than fourteen (14) days after the date stated in the bid proposal, in accordance with Section 102.12, if the apparent low bidder as read at the bid opening, is reporting participation commitment on the Contract, he shall submit by fax to the Owner a fully executed Form C-61 showing the name(s) and certification numbers of the currently certified SWaMs who will perform work to be reported as said participation credit.

The signatures on Form C-61 shall be those of the bidder or authorized representatives of the bidder as shown on Forms C-37 and C-38A or as authorized by letter from the bidder.

Any award made by the Owner prior to receipt of the information required will be conditional, pending receipt of such information.

The Contractor shall furnish, and require each subcontractor to furnish, on a quarterly basis, information relative to all SWaM involvement on the project. The information shall be indicated on Form C-63, DBE and SWaM Payment Compliance Report or by copies of canceled checks with appropriate identifying notations. If participation achievement is to be fulfilled with a SWaM whose name has not been previously furnished to the Owner for the Contract in question, an initial or revised Form C-61, whichever is appropriate, shall be submitted prior to such SWaM beginning the work. Failure to provide the Owner the forms by the fifth of the month following each quarterly reporting period may result in delay of the Contractor's estimate for payment.

If a SWaM, through no fault of the Contractor, is unable or unwilling to fulfill his agreement with the Contractor, the Contractor shall immediately notify the Owner and provide all relevant facts. If any subcontractor is relieved of the responsibility to perform work under their subcontract, the Contractor is encouraged to take the appropriate steps to obtain a SWaM to perform an equal or greater dollar value of the remaining subcontracted work. The substitute SWaM's name, description of the work, and dollar value of the work shall be submitted to the Owner on Form C-61 prior to such SWaM beginning the work, if such work is to be counted for participation achievement.

107.16 – Environmental Stipulations

By signing the bid, the Bidder certifies (unless the Contract is exempt under 42 USC 7606, 33 USC 1368, Executive Order 11738, and 2 CFR 1532.1140) that any facility to be used in the performance of the Contract (unless the Contract is exempt under the Clean Air Act as amended [42 U.S.C. 1857, et seq., as amended by P.L. 91-604], the Federal Water Pollution Control Act as amended [33 U.S.C. 1251 et seq. as amended by P.L. 92-500], and Executive Order 11738 and regulations in implementation thereof [40 C.F.R., Part 15]) is not listed on the Federal System for Award Management (SAM) Exclusions Public Extract according to 2 CFR 1532.1125; and that the Bidder shall promptly notify the Owner prior to the award of the Contract if the Bidder receives any communication from the EPA indicating that a facility to be used for the Contract is under consideration to be listed on the Federal SAM Exclusion Public Extract.

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 cleanup activities, removals, remediation, 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.

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, suppliers, 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 result in all payments being withheld and Owner shall not accept any further payment applications until all violations are brought into compliance.

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. In either case, payment for all contract items can be withheld for noncompliance with this section.

(a) Erosion and Siltation:

The Contractor shall exercise every reasonable precaution, including temporary and permanent soil stabilization measures, throughout the duration of the project to control erosion and prevent siltation of adjacent lands, rivers, streams, wetlands, lakes, and impoundments. Soil stabilization and/or erosion control measures shall be applied to erodible soil or ground materials exposed by any activity associated with construction, including clearing, grubbing, and grading, but not limited to, local or on-site sources of materials, stockpiles, disposal areas, and haul roads.

The Contractor shall comply with Sections 301.02 and 303.03. Should the Contractor as a result of negligence or noncompliance, fail to provide soil stabilization in accordance with these specifications, the cost of temporary soil stabilization in accordance with Section 303 shall be at the Contractor's expense. If the delay in stabilizing an exposed area of land is due to circumstances beyond the Contractor's control, the Owner will be responsible for the expense.

Temporary measures shall be coordinated with the work to ensure effective and continuous erosion and sediment control. Permanent erosion control measures and drainage facilities shall be installed as the work progresses.

For projects that disturb 2,500 square feet or greater, the Contractor shall have within the limits of the project during land disturbance activities, an employee who holds a Qualified Personal certification (as defined by the DEQ). The Certified Contractor shall inspect erosion and sediment control and pollution prevention practices, devices and measures for proper installation and operation and promptly document and report all findings to the Inspector and repair/replace practices, devices, and measures as deemed necessary according to the regulations. Failure on the part of the Contractor to maintain appropriate erosion and sediment control or pollution prevention devices in a functioning condition may result in the Owner notifying the Contractor in writing of specific deficiencies. Deficiencies shall be corrected immediately or as otherwise directed by the Owner. If the Contractor fails to correct or take appropriate actions to correct the specified deficiencies within twenty-four (24) hours (or as otherwise directed), or fails to begin to take corrective actions within twelve (12) hours after receipt of such notification, the Owner may do one (1) or more of the following: require the Contractor to suspend work in other areas and concentrate efforts towards correcting the specified deficiencies, withhold payment of monthly progress estimates, decline to accept monthly payments estimates, or proceed to correct the specified deficiencies and deduct the entire cost of such work from monies due the Contractor. Failure on the part of the Contractor to maintain a DEQ certified erosion and sediment control inspector or QP within the project limits when land disturbance activities are being performed will result in the Owner suspending work related to any land disturbance activity until such time as the Contractor is in compliance with this requirement.

(b) 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, but not limited to, chemicals, fuels, lubricants, bitumen, 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. The Contractor shall provide the Owner a contingency plan according to the SWPPP requirements.

Construction discharge water shall be filtered to remove deleterious materials prior to discharge into state waters. Filtering shall be accomplished by the use of a standard dewatering basin, or an effective dewatering bag or other measures approved by the Owner. Dewatering bags shall conform to Section 245. 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. 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, chemical, or other deleterious material that reaches or has the potential to reach a waterway, they shall immediately notify all appropriate jurisdictional state and federal agencies in accordance with Sections 107.01 and 107.16 (e) and the VPDES *General Permit for Discharge of Stormwater From Construction Activities* and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical.

Solids, sludge, or other pollutants removed in the course of the treatment or management of pollutants shall be disposed of in a manner that prevents any pollutant from such materials from entering surface waters in compliance with all applicable state and federal laws and regulations.

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 identified 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. Stabilization of the stream bed and banks shall occur immediately upon completion of work or if work is suspended for more than fourteen (14) days.

The Contractor shall prevent stream constriction that would reduce stream flows below the minimum, as defined by the State Water Control Board, 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, unless specifically provided for under another Pay Item. Stabilization of the streambed and banks shall occur immediately upon completion of, or during the work or if the work is suspended for more than fourteen (14) days. All required Environmental Permits due to the stream or drainage relocation must be attained accordingly.

Temporary bridges or other minimally invasive structures shall be used wherever the Contractor finds it necessary to cross a stream more than twice in a 6-month period, unless otherwise authorized by water quality permits issued by the U. S. Army Corps of Engineers, Virginia Marine Resources Commission, or the Virginia Department of Environmental Quality for the Contract.

The Contractor shall cover all dumpsters at the end of each work shift and when not in use during a rain event.

2. Air:

The Contractor shall comply with Section 107.01 and the State Air Pollution Control Law and Rules of the State Air Pollution Control Board, including notifications required therein. Precautions shall be taken at all times to prevent particulate matter from becoming airborne according with the State Air Pollution Control Board regulation 9 VAC 5-50-80 and 9 VAC 5-50-90.

Burning shall be performed in accordance with all applicable local laws and ordinances and under the constant surveillance of watchpersons. 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 State Air Pollution Control Board.

- a. VOC Emission Control Areas** - The Contractor is advised that the project is located in Virginia Beach, a volatile organic compound (VOC) emissions control area as identified in 9 VAC 5-20-206 and the following limitations shall apply:
- (1) Open burning is prohibited when restricted by City or State Codes or the City's Fire Chief.
 - (2) Cutback asphalt is prohibited April through October except when use or application as a penetrating prime coat or tack is necessary. See 9 VAC 5 45-760 et seq. (Emission Standards for Asphalt Paving Operations) and 9 VAC 5-20- 206 (Regulations for the Control and Abatement of Air Pollution) for further clarification.
 - (3) 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 or where the Contractor's methods for such actions will produce friable asbestos.
- b.** Emission standards for asbestos incorporated in the EPA's National Emission Standards for Hazardous Air Pollutants apply to:
- The demolition or renovation of any facility including, but not limited to, institutional, commercial, public, or industrial buildings; bridge structures; or portions thereof that contain regulated asbestos containing materials (RACM).
 - Activities where the Contractor's method for such actions will produce RACM.
- c.** The Contractor shall submit demolition notification to the EPA and the Virginia Department of Labor and Industry, in accordance with Section 107.01 regardless of whether RACM are present or not, a minimum of ten (10) business days before starting work on the following activities:
- (1) Demolishing or dismantling and removing existing building or bridge structures
 - (2) Moving an entire building or bridge structure

- (3) Reconstructing, repairing, or replacing any load-bearing component of a bridge structure

The Contractor shall provide written notification to the Owner a minimum of three (3) full business days prior to work being performed.

3. Noise:

The Contractor's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall be in accordance with City of Virginia Beach's ordinances. Such noise level measurements shall be taken at a point on the perimeter of the construction limits that is closest to the adjoining property on which a noise sensitive activity is occurring. A noise-sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose and not present an unreasonable public nuisance. Such activities include, but are not limited to, those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.

The Owner may monitor construction-related noise. If construction noise levels exceed levels noted in City of Virginia Beach's ordinances during noise sensitive activities, 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.

The Owner may prohibit or restrict to certain portions of the project any work that produces objectionable noise between 9:00 PM and 7:00 AM. If other hours are established by City's ordinance or bid document, the City's ordinance and bid document 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 their vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

These requirements shall not be 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.

Stationary Noise

Noise produced by stationary, engine driven, continuously operating construction equipment (such as generators, pumps, dewatering equipment, etc.) shall be kept at a maximum level of sixty (60) decibels at a distance of fifty (50) feet.

The equipment to be furnished for noise control shall include one (1) portable sound reducing enclosure for each unit of stationary, engine driven, continuously operating equipment on the project.

- a. The enclosure shall have a roof and be enclosed on all sides. The enclosure shall be sized such that there is a minimum of three (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.
- b. Under no circumstances are fuel tanks or drums to be housed within the enclosure.
- c. Should the enclosure be locked after working hours, the Owner is to be provided a key for use during emergency operations.
- d. 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.
- e. 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.
- f. Sound absorbing material shall be a minimum of 32-inch nonflammable insulation, vapor barrier away from equipment, or equal.
- g. Any required piping, fuel line or utility access shall be extended through the sides of the enclosure and the annular space around the pipe shall be filled with a flexible, nonflammable material rated for such temperatures and environmental conditions.

(c) Forest Fires:

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 the request of 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 City unless they are located on federal lands, in which event they shall become the property of the U.S. government.

When such findings delay the progress or performance of the work, the Contractor shall notify the Owner in accordance with Sections 108.03 and 109.05.

(e) Stormwater Pollution Prevention Plan and General VPDES Permit for the Discharge of Stormwater from Construction Activities

A Stormwater Pollution Prevention Plan (SWPPP) identifies potential sources of pollutants which may reasonably be expected to affect the stormwater discharges from the construction site and any on-site or off-site support facilities located on rights of way and easements. The SWPPP also describes and ensures implementation of practices which will be used to minimize or prevent pollutants in such discharges.

The SWPPP shall include, but not be limited to, the approved Erosion and Sediment Control (ESC) Plan, the approved Stormwater Management (SWM) Plan (if applicable), the approved Pollution Prevention Plan and all related Specifications, Standards, and notes contained within all Contract documents and shall be required for all land-disturbing activities that disturb one (1) acre of land in all area for the SWPPP.

Land-disturbing activities that disturb one (1) acre or greater require coverage under the Virginia Department of Environmental Quality's General VPDES Permit for the Discharge of Stormwater from Construction Activities (hereafter referred to as the Construction General Permit). In accordance with the City's ordinances and the VESMP Regulations, the Contractor will apply for and secure Construction General Permit coverage for all applicable land disturbing activities on City's rights of way or easements for which it has contractual control, including off-site (outside the project limits) support facilities on rights of way or easements that directly relate to the construction activity.

The Contractor shall be responsible for securing VPDES Construction Permit coverage and complying with all permit conditions for all support facilities that are not within the project limits as advertised.

The required contents of a SWPPP for those land disturbance activities requiring coverage under the VPDES Construction Permit are found in Part II of the VPDES Construction Permit.

While a SWPPP is an important component of the VPDES Construction Permit, it is only one (1) of the many requirements that must be addressed in order to be in full compliance with the conditions of the permit.

The Contractor and all other persons that oversee or perform activities covered by the VPDES Construction Permit shall be responsible for reading, understanding, and complying with all of the terms, conditions, and requirements of the permit and the project's SWPPP including, but not limited to, the following:

1. Project Implementation Responsibilities

The Contractor shall be responsible for the installation, maintenance, inspection, and, on a daily basis, ensuring the functionality of all erosion and sediment control measures and all other stormwater runoff control and pollution prevention measures identified within or referenced within the SWPPP, the construction plans, the specifications, all applicable permits, and all other Contract documents.

The Contractor shall be solely responsible for the temporary erosion and sediment control protection and permanent stabilization of all borrow areas and soil disposal areas located outside of City right of way or easement.

The Contractor shall prevent or minimize any stormwater or non-stormwater discharge that will have a reasonable likelihood of adversely affecting human health or public and/ or private properties.

2. Certification Requirements

In addition to satisfying the Section 107.16 (a) personnel certification requirements, the Contractor and subcontractor shall certify their activities by completing, signing, and submitting Form C-45 VDOT SWPPP Contractor Certification Statement to the Owner at least seven (7) days prior to commencing any project-related, land-disturbing activities, both within the project limits and any support facilities located on City rights of way or easements outside the project limits.

3. SWPPP Requirements for Support Facilities

The Contractor will secure Construction General Permit coverage for support facilities located on City rights of way or easements according to the contract. The Contractor shall secure separate Construction General Permit coverage for support facilities that are not outlined in the contract.

Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities, and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

The Contractor shall provide Owner evidence of required permit coverage for support facilities that are not located on City rights of way or easements.

The Contractor shall develop and enforce a Spill Prevention Control and Countermeasure (SPCC) Plan conforming to 40 CFR 112 if the aggregated volume of Oil stored within the project limits at any one time is greater than 1320 gallons. Oil, in this context, shall be defined according to 40 CFR 112. The aggregated volume includes that of both stationary and portable storage facilities but does not include individual storage containers with less than a fifty-five (55) gallons capacity. The Contractor shall include the SPCC Plan as a part of his Pollution Prevention Plan for the project.

The Contractor shall develop a SWPPP for support facilities that are not included in the Plans whether they are located within or outside the project limits.

- a.** For those support facilities located within the project limits, the Contractor shall develop a SWPPP that must address all elements of the City's ordinances. The SWPPP contains specific sections that must be reviewed and approved prior to commencement of land disturbance in accordance with Section 1-5 of Appendix D. The plans shall be submitted to the Owner for review and approval prior to any use of the facility. Once approved, the Owner will notify the Contractor in writing that the plans are accepted as a component of the project's SWPPP and Construction General Permit coverage (where applicable). If Construction General Permit is required for the project, the Contractor may incur additional request for payment from DEQ for the support facilities. No land disturbing activities can occur in the support area(s) until written notice to proceed is provided by the Owner.
- b.** For those support facilities located outside the project limits that do not have existing Construction General Permit authorization, the Contractor shall develop a SWPPP that must address all elements of the City's ordinance. The SWPPP that must be reviewed and approved prior to commencement of land disturbance or any other use. Once approved by

the Owner, Owner will execute a new Construction General Permit via DEQ's e-Permitting system or modify existing. The Contractor may incur additional request for payment from DEQ for the support facilities. Once the invoice is paid and DEQ provides an authorization letter, the Owner will notify the Contractor to proceed with the use of the support facility in writing.

All SWPPP plans shall be developed according to Section 105.10, shall be reviewed, and approved by the qualified personnel, and shall be submitted to the Owner for review and approval.

Support facilities shall be subject to all Construction Permit and Contract conditions and requirements. No land disturbing activities can occur in the support areas until written notice to proceed is provided by the Owner.

4. Inspection Procedures

- a. **Inspection Requirements:** The Contractor shall be responsible for conducting site inspections according to the requirements herein. Site inspections shall include erosion, sediment control and pollution prevention practices and facilities; all areas of site disturbed by construction activity; all on-site support facilities; and all off-site support facilities within the City's right-of-way or easements. The Contractor shall document such inspections by completion of Form C107 according to the directions contained within the form. This inspection shall be incorporated into the SWPPP no later than 4 days after the inspection. Inspections shall be conducted using one (1) of the following schedules:
- **Schedule 1** - At least once every four (4) calendar days (equivalent to the once every five (5) business days schedule in the *General VPDES Permit for Discharge of Stormwater from Construction Activities*) and within twenty-four (24) hours following any measurable storm event. If a measurable storm event occurs when there are more than twenty-four (24) hours between business days, the Contractor shall perform his inspection no later than the next business day. The Contractor shall install a rain gauge at a central location on the project site for the purposes of determining the occurrence of a measurable storm event. Where the project is of such a length that one (1) rain gauge may not provide an accurate representation of the occurrence of a measurable storm event over the entire project site, the Contractor shall install as many rain gauges as necessary to accurately reflect the amount of rainfall received over all portions of the project. The Contractor shall observe all rain gauges no less than once each business day at the time prescribed in the SWPPP General Information Sheet notes in the construction plans or other contract documents to determine if a measurable storm event has occurred. The procedures for determining

the occurrence of a measurable storm event are identified in the SWPPP General Information Sheet notes in the construction plans or other contract documents.

- **Schedule 2** - At least each Monday and Thursday (equivalent to the once every four (4) business days schedule in the *General VPDES Permit for Discharge of Stormwater from Construction Activities*). Where Monday or Thursday is a non-business day, the inspection may be performed on the next business day afterward. In no case shall the inspections be performed less than once every four (4) business days. A rain gauge will not be required when using Schedule 2.

The inspection schedule (1 or 2) is to be selected prior to the beginning of land disturbance. Once an inspection schedule is selected, it shall be defined in the appropriate note in the SWPPP General Information Sheets contained in the construction plan set and shall be used for the duration of the project. A business day is defined as Monday through Friday excluding State holidays. A measurable storm event is defined as one producing 0.25 inches of rainfall or greater over a 24-hour time period. For those areas of the site that have been temporarily stabilized or where land disturbing activities have been suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection schedule may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make stormwater discharges likely, the Contractor shall immediately resume the regular inspection schedule. Those definable areas where final stabilization has been achieved will not require further inspections provided such areas have been identified in the project's Stormwater Pollution Prevention Plan.

b. Corrective Actions

If a site inspection identifies an existing control measure that is not being maintained properly or operating effectively; an existing control measure that needs to be modified; locations where an additional control measure is necessary; or any other deficiencies in the erosion and sediment control and pollution prevention plan, corrective action(s) shall be completed as soon as practical and prior to the next anticipated measurable storm event but no later than five (5) days after the date of the site inspection that identified the deficiency or directed by the VESMP Authority.

5. Unauthorized Discharges and Reporting Requirements

The Contractor shall not discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances nor shall they otherwise alter the physical, chemical, or biological properties of such waters that render

such waters detrimental for or to domestic use, industrial consumption, recreational, or other public uses.

a. Notification of non-compliant discharges

The Contractor shall immediately notify the Owner upon the discovery of or the potential of any unauthorized, unusual, extraordinary, or non-compliant discharge from the construction activity or any of support facilities located on City's right of way or easement. Where immediate notification is not possible, such notification shall be not later than twenty-four (24) hours after said discovery.

b. Detailed report requirements for non-compliant discharges

The Contractor shall submit to the Owner within five (5) days of the discovery of any actual or potential non-compliant discharge a written report describing details of the discharge to include a description of the nature and location of the discharge; the cause of the discharge; the date of occurrence; the length of time that the discharge occurred, the volume of the discharge; the expected duration and total volume if the discharge is continuing; a description of any apparent or potential effects on private and/or public properties and state waters or endangerment to public health; and any steps planned or taken to reduce, eliminate, and prevent a recurrence of the discharge. A completed Form C-107 shall be included in such report.

6. Changes and Deficiencies

The Contractor shall report to the Owner when any planned physical alterations or additions are made to the land disturbing activity or deficiencies in the project plans or Contract are discovered that could significantly change the nature of or increase the potential for pollutants discharged from the land disturbing activity to surface waters and that have not previously been addressed in the SWPPP.

7. Amendments, Modifications, Revisions and Updates to the SWPPP

The Contractor shall amend the SWPPP whenever site conditions, construction sequencing or scheduling necessitates revisions or modifications to the erosion and sediment control plan, stormwater management plan, the pollution prevention plan, or any other component of the SWPPP for the land disturbing activity or onsite support facilities,

The Contractor shall amend the SWPPP to identify any additional or modified erosion and sediment control, stormwater management plan, and pollution

prevention measures implemented to correct problems or deficiencies identified through any inspection or investigation process.

The Contractor shall amend the SWPPP to identify any new or additional persons or Contractors not previously identified that will be responsible for implementing and maintaining erosion and sediment control and pollution prevention devices.

The Contractor shall update the SWPPP to include:

- A record of dates when major grading activities occur, construction activities temporarily or permanently cease on a portion of the site, and stabilization measures are initiated.
- Documentation of replaced or modified erosion and sediment control and pollution prevention controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly.
- Identification of areas where final stabilization has occurred and where no further SWPPP or inspection requirements apply.
- The date of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release.
- A description of any measures taken to prevent the reoccurrence of any prohibited discharge.
- A description of any measures taken to address any issues identified by the required erosion and sediment control and pollution prevention inspections.

The Contractor shall update the SWPPP no later than five (5) days after the implementation or the approval of any amendments, modifications, or revisions to the erosion and sediment control plan, the pollution prevention plan, or any other component of the SWPPP.

Revisions or modifications to the SWPPP shall be approved by the Owner and shall be documented by the Contractor on a designated plan set (As-Built Set) and SWPPP Revisions and Amendments Log. All updates to the SWPPP shall be signed by the Contractor's Qualified Personnel (QP).

The SWPPP Revisions and Amendments Log shall be maintained with other SWPPP documents on the project site or at a location convenient to the project site where no onsite facilities are available.

107.17 – Construction Safety and Health Standards

- (a) In the performance of this Contract the Contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The Contractor, Subcontractors at any tier, and their respective employees, agents and invitees, shall at all times while in or around the project site comply with all applicable laws, regulations, provisions, and policies governing safety and health under the Virginia Occupational Safety and Health (VOSH) Standards adopted under the Code of Virginia,

and any laws, regulations, provisions, and policies incorporated by reference including, but not limited to, the Federal Construction Safety Act (Public Law 91-54), 29 CFR 1926 and the Occupational Safety and Health Regulations for Construction, and the Occupational Safety and Health Act (Public Law 91-596), 29 CFR 1910 and subsequent publications updating these regulations.

- (b) The Contractor shall provide all safeguards, safety devices and protective equipment, and take any other needed actions as it determines, or as the Owner may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the Work. The Contractor shall maintain and supervise all safety and health protections and programs to ensure compliance with this Section. The Contractor shall routinely inspect the project site for safety and health violations. The Contractor shall immediately abate any violations of the safety and health requirements or duties at no cost to the Owner.
- (c) It is a condition of this Contract, and shall be made a condition of each subcontract, which the Contractor enters into pursuant to this Contract, that the Contractor and any Subcontractor shall not permit any employees, in performance of the Contract, to work in surroundings or under conditions which are unsanitary, hazardous, or dangerous to their health or safety, as determined by the current Virginia Work Area Protection Manual or under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 USC 3704).
- (d) VOSH personnel, on all Federal-aid construction contracts and related subcontracts, pursuant to 29 CFR 1926.3, the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out their duties.
- (e) The Project shall have a Safety Officer provided by the Contractor and named at the Pre-Construction Conference. For contracts awarded with a value over \$50,000,000 the Contractor shall assign a site-specific Safety Officer on site at all times work is underway.
- (f) The Contractor shall maintain a Jobsite Hazard Assessment in accordance with 29 CFR 1910.132 which shall be provided to the Owner upon request and contain the following requirements, unless otherwise determined unsafe or inappropriate according to OSHA regulations:

 - 1. Hard hats shall be worn while participating in or observing all types of field work when outside of a building or outside of the cab of a vehicle, and exposed to, participating in or supervising construction.

2. Respiratory protective equipment shall be worn whenever an individual is exposed to any item listed in the OSHA Standards as needing such protection unless it is shown that the employee is protected by engineering controls.
3. Adequate eye protection shall be worn in the proximity of grinding, breaking of rock and/or concrete, while using brush chippers, striking metal against metal or when working in situations where the eyesight may be in jeopardy.
4. A safety vest shall be worn by all exposed to vehicular traffic and construction equipment.
5. Standards and guidelines of the current VWAPM shall be used when setting, reviewing maintaining, and removing all traffic controls.
6. No person shall be permitted to position themselves under any raised load or between hinge points of equipment without first taking steps to support the load by the placing of a safety bar or blocking.
7. Explosives shall be purchased, transported, stored, used, and disposed of by a Virginia State Certified Blaster in possession of a current criminal history record check and a commercial driver's license with hazardous materials endorsement and a valid medical examiner's certificate. All Federal, State, and local regulations pertaining to explosives shall be followed.
8. All electrical tools shall be adequately grounded or double insulated. Ground Fault Circuit Interrupter (GFCI) protection must be installed in accordance with the National Electrical Code (NEC) and current VOSH agency. If extension cords are used, they shall be free of defects and designed for their environment and intended use.
9. No person shall enter a confined space without training, permits and authorization.
10. Fall protection shall be used whenever an employee is exposed to a fall six (6) feet or greater.

107.18 – 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.

107.19 – Railway-Highway Provisions

If the Contractor's work requires hauling materials across the tracks of a railway, they shall make arrangements with the railway for any new crossing(s) required. Access to existing rail crossings

with off-road heavy equipment shall also be arranged by the Contractor. Charges made by the railway company for the construction or use of new or existing crossings and their subsequent removal and for watchperson or flagger service at such crossings shall be reimbursed by the Contractor directly to the railway company under the terms of their separate individual arrangements before final acceptance.

Work to be performed by the Contractor in construction on or over the railway right of way shall be performed at times and in a manner that will not unnecessarily interfere with the movement of trains or traffic on the railway track. The Contractor shall use care to avoid accidents, damage, or unnecessary delay or interference with the railway company's trains or other property. If any interruption of railway traffic is required by the Contractor's actions, they shall obtain prior written approval from the railway company.

The Contractor shall conduct operations that occur on or over the right of way of any railway company fully within the rules, regulations, and requirements of the railway company and in accordance with the requirements of any agreements made between the Owner and the railway company that are a part of the Contract. Said agreements are included within the Contract.

(a) Flagger or Watchperson Services:

Flagger or watchperson services required by the railway company for the safety of railroad operations because of work being performed by the Contractor or incidental thereto will be provided by the railway company. The cost for such services as required for work shown on the plans will be borne by the Owner. Any cost of such services resulting from work not shown on the plans or for the Contractor's convenience shall be borne by the Contractor and shall be paid directly to the railway company(s) under the terms of their separate individual agreement.

No work shall be undertaken on or over the railway right of way until the watchpersons or flaggers are present at the project site. The Contractor shall continuously prosecute the affected work to completion to minimize the need for flagger or watchperson services. Costs for such services that the Owner determines to be unnecessary because of the Contractor's failure to give notice as required herein before; initially starting, intermittently continuing, or discontinuing work on or over the railway right of way shall be borne by the Contractor and will be deducted from monies due him.

(b) Approval of Construction Methods on Railway Right of Way:

The Contractor shall submit to the Owner a plan of operations showing the design and method of proposed structural operations and shall obtain its approval before performing any work on the railway company's right of way unless otherwise indicated in the railroad agreement. The plan shall be clear and legible, and details shall be drawn to scale. The plan shall incorporate any stipulations or requirements the railroad may impose for the evaluation of the Contractor's contemplated operations. The plan shall show, but not be limited to, the following:

1. proximity of construction operations to tracks;
2. depth of excavation with respect to tracks;
3. description of structural units;
4. vertical and horizontal clearances to be afforded the railroad during installation and upon completion of excavation;
5. sheeting and bracing;
6. method and sequence of operations.

Approval shall not relieve the Contractor of any liability under the Contract. The Contractor shall arrange the work so as not to interfere with the railway company's operation except by agreement with the railway company.

(c) Insurance:

In addition to insurance or bonds required under the terms of the Contract, the Contractor shall carry insurance covering operations affecting the property of the railway company. The original railroad protective liability insurance policy and certificate of insurance showing insurance carried by the Contractor and any Subcontractors shall be submitted to the railway company for approval and retention.

Neither the Contractor nor any Subcontractor shall begin any work affecting the railway company until the railway company has received the insurance.

Notice of any material change in or cancellation of the required policies shall be furnished the Owner and the railway company at least thirty (30) days prior to the effective date of the change or cancellation. The insurance shall be of the following kinds and amounts:

1. **Contractor's public liability and property damage insurance:** The Contractor shall furnish evidence to the Owner with respect to the operations to be performed that they carry regular Contractor's public liability insurance. The insurance shall provide for a limit of at least the dollar value specified in the Contract for all damages arising out of bodily injuries to or the death of one (1) person, and subject to that limit for each person, a total limit of at least the dollar value specified in the Contract for all damages arising out of bodily injuries to or death of two (2) or more persons in any one (1) occurrence, and regular Contractor's property damage insurance providing for a limit of at least the dollar value specified in the Contract for all damages arising out of bodily injury to or destruction of property in any one (1) occurrence, and subject to that limit per occurrence, a total or aggregate limit of at least the dollar value specified in the Contract for all damages arising out of injury to or destruction of property during

the policy period. The Contractor's public liability and property damage insurance shall include explosion, collapse, and underground damage coverage. If the Contractor subcontracts any portion of the work, they shall secure insurance protection in their own behalf under the Contract's public liability and property damage insurance policies to cover any liability imposed on him by law for damages because of bodily injury to, or death of persons and injury to, or destruction of property as a result of work undertaken by the Subcontractors. In addition, the Contractor shall provide similar insurance protection for and on behalf of any Subcontractors to cover their operation by means of separate and individual Contractor's public liability and property damage policies. As an alternative, they shall require each Subcontractor to provide such insurance in their own behalf.

2. **Railroad protective insurance and public liability and property damage:** The policy furnished the railway company shall include coverage for contamination, pollution, explosion, collapse, and underground damage. The policy shall be of the type specified hereinafter and shall be expressed in standard language that may not be amended. No part shall be omitted except as indicated hereinafter or by an endorsement that states an amendment or exclusion of some provision of the form in accordance with the provisions of a manual rule. The form of the endorsement shall be approved as may be required by the supervising authority of the state in which the policy is issued. A facsimile of the Policy Declarations form as shown in the proposal shall be made a part of the policy and shall be executed by an officer of the insurance company. The several parts of the requirements and stipulations specified or inferred herein may appear in the policy in such sequence as the company may elect.

a. **For a policy issued by one company:**

*(NAME AND LOCATION OF INDEMNITY COMPANY), a _____
(Type of Company) Insurance Company, herein called the Company,
agrees with the insured named in the Policy Declarations made a part
hereof, in consideration of the payment of the premium and in reliance
upon the statements in the Policy Declarations made by the named insured
and subject to all of the terms of their policy.*

For a policy issued by two (2) companies:

*(NAME AND LOCATION OF INDEMNITY COMPANY) and (NAME AND
LOCATION OF INDEMNITY COMPANY), each _____
Insurance Company (Type of Company), herein called the Company,
severally agree with the insured named in the Policy Declarations made a
part hereof, in consideration of the payment of the premium and in
reliance upon the statements in the Policy Declaration made by the named
insured and subject to all of the terms of this policy, provided the named
Indemnity Company shall be the insured with respect to Coverage*

_____ and no other and the named Insurance Company shall be the insurer with respect to Coverage _____ and no other.

b. Insuring agreements:

(1) **Coverages: Coverage A - Bodily injury liability:** To pay on behalf of the insured all sums that the insured shall become legally obligated to pay as damages because of bodily injury, sickness, or disease including death at any time resulting therefrom (hereinafter called bodily injury) either (1) sustained by any person arising out of acts or omissions at the designated job site that are related to or are in connection with the work described in Item 6 of the Policy Declarations; or (2) sustained at the designated job site by the Contractor, any employee of the Contractor, any employee of the governmental authority specified in Item 5 of the Policy Declarations, or any designated employee of the insured, whether or not arising out of such acts or omissions.

Coverage B - Property damage liability: To pay on behalf of the insured all sums the insured shall become legally obligated to pay as damages because of physical injury to or destruction of property, including loss of use of any property because of such injury or destruction (hereinafter called property damage) arising out of acts or omissions at the designated job site that are related to or are in connection with the work described in Item 6 of the Policy Declarations.

Coverage C - Physical damage to property: To pay for direct and accidental loss of or damage to rolling stock and other contents, mechanical construction equipment, or motive power equipment (hereinafter called loss) arising out of acts or omissions at the designated job site that are related to or are in connection with the work described in Item 6 of the Policy Declarations; provided such property is owned by the named insured or is leased or entrusted to the named insured under a lease or trust agreement.

(2) **Definitions:**

Insured means and includes the named insured and any executive officer, director, or stockholder thereof while acting within the scope of their duties as such.

Contractor means the Contractor designated in Item 4 of the Policy Declarations and includes all Subcontractors of the Contractor but not the named insured.

Designated employee of the insured means

- (a) any supervisory employee of the insured at the job site;
- (b) any employee of the insured while operating, attached to, or engaged on work trains or other railroad equipment at the job site that is assigned exclusively to the Contractor; or
- (c) any employee of the insured not within (a) or (b) who is specifically loaned or assigned to the work of the Contractor for prevention of accidents or protection of property, the cost of whose services is borne specifically by the Contractor or governmental authority.

Contract means any contract or agreement to carry a person or property for a consideration or any lease, trust, or interchange contract or agreement respecting motive power, rolling stock, or mechanical construction equipment.

- (3) **Defense and settlement supplementary payments:** With respect to such insurance as is afforded by this policy under Coverages A and B, the Company shall defend any suit against the insured alleging such bodily injury or property damage and seeking damages that are payable under the terms of this policy, even if any of the allegations of the suit are groundless, false, or fraudulent. However, the Company may make such investigation and settlement of any claim or suit as it deems expedient.

In addition to the applicable limits of liability, the Company shall pay:

- (a) all expenses incurred by the company, all costs taxed against the insured in any such suit, and all interest on the entire amount of any judgment therein that accrues after entry of the judgment and before the Company has paid or tendered or deposited in court that part of the judgment that does not exceed the limit of the Company's liability thereon;
- (b) premiums on appeal bonds required in any such suit and premiums on bonds to release attachments for an amount not in excess of the applicable limit of liability of this policy, but without obligation to apply for or furnish any such bonds;

- (c) expenses incurred by the insured for first aid to others that shall be imperative at the time of the occurrence; and
 - (d) all reasonable expenses, other than loss of earnings, incurred by the insured at the Company's request.
- (4) **Policy period and territory:** This policy applies only to occurrences and losses during the policy period and within the United States, its territories or possessions, or Canada.

c. Exclusions: This policy does not apply to the following:

- (1) liability assumed by the insured under any contract or agreement except a contract as defined herein;
- (2) bodily injury or property damage caused intentionally by or at the direction of the insured;
- (3) bodily injury, property damage, or loss that occurs after notification to the named insured of the acceptance of the work by the governmental authority, other than bodily injury, property damage, or loss resulting from the existence or removal of tools, uninstalled equipment, and abandoned or unused materials;
- (4) under Coverage A (1), B, and C, to bodily injury, property damage, or loss, the sole proximate cause of which is an act or omission of any insured;
- (5) under Coverage A, to any obligation for which the insured or any carrier as their insurer may be held liable under any workers' compensation, employment compensation, or disability benefits law or under any similar law; provided that the Federal Employer's Liability Act, U.S. Code (1946) Title 45, Sections 51-60, as amended, shall for the purpose of this insurance be deemed not to be any similar law;
- (6) under Coverage B, to injury to or destruction of property owned by the named insured or leased or entrusted to the named insured under a lease or trust agreement;
- (7) under any liability coverage, to injury, sickness, disease, death, or destruction:
 - (a) with respect to which an insured under the policy is also an insured under a nuclear energy liability policy issued by the Nuclear Energy Liability Insurance Association, Mutual

Atomic Energy Liability Underwriters, or Nuclear Insurance Association of Canada or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or

- (b) resulting from the hazardous properties of nuclear material and with respect to which any person or organization is required to maintain financial protection pursuant to the Atomic Energy Act of 1954 or any law amendatory thereof or the insured is (or had this policy not been issued would be) entitled to indemnity from the United States or any agency thereof under any agreement entered into by the United States, or any agency thereof, with any person or organization.
- (8) under any Medical Payments Coverage or any Supplementary Payments provision relating to immediate medical or surgical relief or to expenses incurred with respect to bodily injury, sickness, disease, or death resulting from the hazardous properties of nuclear material and arising out of the operation of a nuclear facility by any person or organization;
 - (9) under any liability coverage, to injury, sickness, disease, death, or destruction resulting from the hazardous properties of nuclear material if:
 - (a) the nuclear material is at any nuclear facility owned or operated by or on behalf of an insured or has been discharged or dispersed there from;
 - (b) the nuclear material is contained in spent fuel or waste at any time possessed, handled, used, processed, stored, transported, or disposed of by or on behalf of an insured; or
 - (c) the injury, sickness, disease, death, or destruction arises out of the furnishing by an insured of services, materials, or parts for equipment in connection with the planning, construction, maintenance, operation, or use of any nuclear facility; if such facility is located in the United States, its territories or possessions, or Canada, this exclusion applies only to injury to or destruction of property at such nuclear facility.
 - (10) under Coverage C, to loss attributable to nuclear reaction, nuclear radiation, or radioactive contamination or to any act or condition incident to any of the foregoing;

- (11) As used in exclusions (7), (8), and (9), the following definitions apply:

Disposable material means material containing byproduct material and resulting from the operation by any person or organization of any nuclear facility included in the definition of nuclear facility under (i) or (ii) below.

Hazardous properties include radioactive, toxic, or explosive properties.

Injury or destruction with respect to injury to or destruction of property, includes all forms of radioactive contamination of property.

Nuclear facility means:

- (a) any nuclear reactor;
- (b) any equipment or device designed or used for separating the isotopes of uranium or plutonium; processing or utilizing spent fuel; or handling, processing, or packaging waste;
- (c) any equipment or device designed or used for the processing, fabricating, or alloying of special nuclear material if at any time the total amount of such material in the custody of the insured at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 (or any combination thereof) or more than 250 grams of uranium 235;
- (d) any structure, basin, excavation, premises, or place prepared or used for the storage or disposal of waste (includes the site on which any of the foregoing is located, all operation conducted on such site, and all premises used for such operations).

Nuclear material means source material, special nuclear material, or byproduct material.

Nuclear reactor means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material.

Source material, special nuclear material, and byproduct material have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof.

Spent fuel means any fuel element or fuel component (solid or liquid) that has been used or exposed to radiation in a nuclear reaction.

- d. Conditions:** The following conditions, except conditions (3) through (12), apply to all coverages. Conditions (3) through (12) apply only to the coverage noted thereunder.
- (1) **Premium:** The premium bases and rates for the hazards described in the Policy Declarations are stated therein. Premium bases and rates for hazards not so described are those applicable in accordance with the requirements of the manuals used by the Company. The term “Contract cost” means the total cost of all work described in Item 6 of the Policy Declaration. The term “rental cost” means the total cost to the Contractor for rental or work trains or other railroad equipment, including the remuneration of all employees of the insured while operating, attached to, or engaged thereon. The advance premium stated in the Policy Declarations is an estimated premium only. Upon termination of this policy, the earned premium shall be computed in accordance with the Company’s rules, rates, rating plans, premiums, and minimum premiums applicable to this insurance. If the earned premium thus computed exceeds the estimated advance premium paid, the Company shall look to the Contractor specified in the Policy Declarations for any such excess. If the earned premium is less than the estimated advance premium paid, the Company shall return to the Contractor the unearned portion paid. In no event shall payment or premium be an obligation of the named insured.
 - (2) **Inspection:** The named insured shall make available to the Company records of information relating to the subject matter of this insurance. The Company shall be permitted to inspect all operations in connection with the work described in Item 6 of the Policy Declarations.
 - (3) **Limits of liability, Coverage A:** The limit of bodily injury liability stated in the Policy Declarations as applicable to “each person” is the limit of the Company’s liability for all damages (including damages for care and loss of services) arising out of bodily injury sustained by one (1) person as the result of any one

occurrence. The limit of such liability stated in the Policy Declarations as applicable to “each occurrence” is (subject to the provision respecting each person) the total limit of the Company’s liability for all such damage arising out of bodily injury sustained by two (2) or more persons as the result of any one (1) occurrence.

- (4) **Limits of liability, Coverages B and C:** The limit of liability under Coverages B and C stated in the Policy Declarations as applicable to “each occurrence” is the total limit of the Company’s liability for all damages and all loss under Coverages B and C combined arising out of physical injury to, destruction of, or loss of all property of one (1) or more persons or organizations, including the loss or use of any property attributable to such injury or destruction under Coverage B, as the result of any one (1) occurrence. Subject to the provision respecting “each occurrence”, the limit of liability under Coverages B and C stated in the Policy Declaration as “aggregate” is the total limit of the Company’s liability for all damages and all loss under Coverages B and C combined arising out of physical injury to, destruction of, or loss of property, including the loss or use of any property attributable to such injury or destruction under Coverage B.

Under Coverage C, the limit of the Company’s liability for loss shall not exceed the actual cash value of the property, or if the loss is a part thereof, the actual cash value of such part, at time of loss, nor what it would then cost to repair or replace the property of such part thereof with other of like kind and quality.

- (5) **Severability of interests, Coverages A and B:** The term the insured is used severally and not collectively. However, inclusion herein of more than one insured shall not operate to increase the limits of the Company’s liability.
- (6) **Notice:** In the event of an occurrence or loss, written notice containing particulars sufficient to identify the insured and also reasonably obtainable information with respect to the time, place, and circumstances thereof and the names and addresses of the injured and of able witnesses shall be given by or for the insured to the Company or any of its authorized agents as soon as is practicable. If a claim is made or a suit is brought against the insured, they shall immediately forward to the Company every demand, notice, summons, or other process received by him or their representative.
- (7) **Assistance and cooperation of the insured, Coverages A and B:** The insured shall cooperate with the Company and upon the

Company's request attend hearings and trials and assist in making settlements, securing and giving evidence, obtaining the attendance of witnesses, and conducting suits. Except at their own cost, the insured shall not voluntarily make any payment, assume any obligations, or incur any expense other than for first aid to others that shall be imperative at the time of an accident.

- (8) **Action against Company, Coverages A and B:** No action shall lie against the Company unless as a condition precedent thereto the insured shall have fully complied with all the terms of this policy, nor until the amount of the insured's obligation to pay shall have been finally determined either by judgment against the insured after actual trial or by written agreement of the insured, the claimant, and the Company. Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this policy to the extent of the insurance afforded by this policy. No person or organization shall have any right under this policy to join the Company as a part to any action against the insured to determine the insured's liability. Bankruptcy or insolvency of the insured or of the insured's estate shall not relieve the Company of any of its obligations hereunder.
- (9) **Action against Company, Coverage C:** No action shall lie against the Company unless as a condition precedent thereto there shall have been full compliance with all the terms of this policy nor until thirty (30) days after proof of loss is filed and the amount of loss is determined as provided in this policy.
- (10) **Insured's duties in event of loss, Coverage C:** In the event of loss, the insured shall protect the property, whether or not the loss is covered by this policy. Any further loss attributable to the insured's failure to protect shall not be recoverable under this policy. Reasonable expenses incurred in affording such protection shall be deemed incurred at the Company's request.

The insured shall also file with the Company, as soon as practicable after loss, their sworn proof of loss in such form and including such information as the Company may reasonably require and shall, upon the Company's request, exhibit the damaged property.

- (11) **Appraisal, Coverage C:** If the insured and the Company fail to agree as to the amount of loss, either may demand an appraisal of the loss within sixty (60) days after the proof of loss is filed. In such event the insured and the Company shall each select a

competent appraiser, and the appraisers shall select a competent and disinterested umpire. An award in writing or any two (2) shall determine the amount of loss. The insured and the Company shall each pay their chosen appraiser and shall bear equally the other expenses of the appraisal and umpire. The Company shall not be held to have waived any of its rights by any act relating to appraisal.

- (12) **Payment of loss, Coverage C:** The Company may pay for the loss in money, but there shall be no abandonment of the damaged property to the Company.
- (13) **No benefit to bailee coverage:** The insurance afforded by this policy shall not enure directly or indirectly to the benefit of any carrier or bailee (other than the named insured) liable for loss to the property.
- (14) **Subrogation:** In the event of any payment under this policy, the Company shall be subrogated to all of the insured's rights of recovery therefor against any person or organization. The insured shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights. The insured shall do nothing after loss to prejudice such rights.
- (15) **Application of insurance:** The insurance afforded by this policy is primary insurance. If the insured has other primary insurance against a loss covered by this policy, the Company shall not be liable under the policy for a greater proportion of such loss than the applicable limit of liability stated in the Contract bears to the total applicable limit of all valid and equitable insurance against such loss.
- (16) **3-year policy:** A policy period of three (3) years is comprised of three (3) consecutive annual periods. Computation and adjustment of earned premium shall be made at the end of each annual period. Aggregate limits of liability as stated in this policy shall apply separately to each annual period.
- (17) **Changes:** Notice to any agent of knowledge possessed by any agent or by any other person shall not affect a waiver or a change in any part of this policy or stop the Company from asserting any right under the terms except by endorsement issued to form a part of this policy signed by * _____ provided, however, changes may be made in the written portion of the Policy Declaration by * _____ when initialed by such * _____ or by endorsement issued to form a part of this

policy signed by such *_____. [*Insert titles of authorized company representatives.]

- (18) **Assignment:** Assignment of interest under this policy shall not bind the Company until its consent is endorsed hereon.
- (19) **Cancellation:** This policy may be cancelled by the named insured by mailing to the Company written notice stating when the cancellation shall become effective. This policy may be cancelled by the Company by mailing to the named insured, Contractor, and governmental authority at the respective addresses shown in this policy written notice stating when such cancellation shall be effective (not less than thirty (30) days thereafter). The mailing of notice shall be sufficient proof of notice. The effective date and hour of cancellation stated in the notice shall become the end of the policy period. Delivery of such written notice either by the named insured or the Company shall be equivalent to mailing. If the named insured cancels, the earned premium shall be computed in accordance with the customary short rate table and procedure. If the Company cancels, the earned premium shall be computed pro rata. The premium may be adjusted either at the time cancellation is effected or as soon as practicable after the cancellation becomes effective, but payment or tender of unearned premium is not a condition of cancellation.
- (20) **Policy Declarations:** By acceptance of this policy, the named insured agrees that such statements in the Policy Declarations as are made by them are their agreements and representations, that their policy is issued in reliance on the truth of such representations, and that this policy embodies all agreements existing between himself and the Company or any of its agents relating to this insurance.

e. For a policy issued by one company:

In witness whereof, the _____ Indemnity Company has caused this policy to be signed by its president and a secretary at _____ and countersigned on the Policy Declarations page by a duly authorized agent of the Company.

(Facsimile of Signature) (Facsimile of Signature)
Secretary President

For a policy issued by two (2) companies:

In witness whereof, the _____ Indemnity Company has caused this policy with respect to Coverages _____ and such other parts of the policy as are applicable thereto to be signed by its president and a secretary at _____ and countersigned on the Policy Declarations page by a duly authorized agent of the Company.
(Facsimile of Signature) (Facsimile of Signature)
Secretary President

- (d) Submitting Copies of Insurance Policies:** Prior to beginning construction operations on or over the railway right of way, the Contractor shall submit to the Owner evidence of the railway company's approval and a copy of the required insurance policies. The Owner will not be responsible for any claims from the Contractor resulting from delay in the acceptance of any of these policies by the railway company other than consideration of an extension of time. If the delay is caused by the failure of the Contractor or their insurer to file the required insurance policies promptly, an extension of time will not be granted.
- (e) Beginning Construction:** Preliminary contingent work or other work by the railway company may delay the starting or continuous prosecution of the work by the Contractor. The Contractor shall be satisfied as to the probable extent of such work and its effect on the operations prior to submitting a bid for the work. The Owner will not be responsible for any claims by the Contractor resulting from such delays except that an extension of time may be considered.
- (f) Arranging for Tests:**
 - 1. Railroad specifications:** When ordering materials that are to conform to railroad specifications, the Contractor shall notify the railway company, who will arrange for tests. The Contractor shall specify in each order that the materials are to be tested in accordance with the requirements of the railroad specifications and not those of the Owner.
 - 2. Highway Specifications:** When ordering materials that are to conform to highway Specifications, the Contractor shall specify in each order that the materials are to be tested in accordance with the requirements of Section 200.07 of the City's Amendments.

107.20 – Construction Over or Adjacent to Navigable Waters

The Owner will obtain a permit from the U.S. Coast Guard for the anticipated construction and/or demolition activities of structures on Owner projects that cross a waterway(s) under the jurisdiction of the U.S. Coast Guard. As the permit holder, the Owner must apply to the U.S. Coast Guard for approval of permit modifications to the original Owner permit that the Contractor requests.

The Contractor shall conduct work on, or over, 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. 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. The Contractor is responsible to coordinate the schedule of work with the USCG and issue/maintain NTM's as necessary or required.

Prior to starting demolition or construction operations the Contractor shall meet with the Owner and the U.S. Coast Guard (U.S. Coast Guard Coordination Meeting) to present its planned operations and the potential impacts those operations may pose to water traffic. As part of this meeting, the parties shall establish in writing the proper protocol for emergency closures and be governed accordingly.

- (a) **Activities subject to Coast Guard regulation under the Permit.** Following the U.S. Coast Guard Coordination meeting, the Contractor shall submit its proposed schedule of operations in writing to the Owner. The Owner shall review and provide written comments, if applicable, to the Contractor within seven (7) days following receipt of the Contractor's schedule of operations. The Contractor shall incorporate the Owner's comments and submit its notice of scheduled operations to the Owner and to the U.S. Coast Guard at least thirty (30) days prior to commencement of any permitted construction or demolition operations. U.S. Coast Guard acceptance of the Contractor's written schedule of operations is a condition precedent to the Contractor's commencement of those operations.

- (b) **Activities that require channel closures or restrictions.** In addition to the submittal of its proposed schedule of operations as described in (a) above, Contractor shall submit plans that comply with the Permit for falsework, cofferdams, floating equipment and other obstructions to the channel or channels to the Owner. The Contractor's attention is directed to the possibility that advance notification for consideration of approval may vary depending on the type and duration of proposed closures, the time of year for requested closure(s), and location of existing bridge(s) and waterway(s) involved, and the impact to entities served along or through the waterway(s). The Owner shall review and provide written comments, if applicable, to the Contractor within thirty (30) days following receipt of the Contractor's plans. The Contractor shall incorporate the Owner's comments and submit its plans to the Owner and to the U.S. Coast Guard at least thirty (30) days prior to commencement of any permitted construction or demolition operations. The Contractor may not commence activities that require channel closures or restrictions without the prior written approval of the Owner and the U.S. Coast Guard. The Contractor shall be responsible for complying with all operational requirements that the U.S. Coast Guard may place on the Contractor as conditions of approval.

In addition, the Contractor shall request and obtain Owner and U.S. Coast Guard approval in writing before commencing any operations that deviate from the Contractor's schedule of operations when these operations interfere or have the potential to interfere

with navigation of water traffic outside of timeframes previously approved by the Owner and the U.S. Coast Guard.

Notices shall be sent to the U.S. Coast Guard, Fifth District Bridge Office (OBR), 431 Crawford Street, Portsmouth, VA 23704-5004. Payment of any penalty or fine that may be levied by the U.S. Coast Guard for Contractor violations of bridge regulations found in 33 CFR Parts 114, 115, 116, 117 and 118 shall be the responsibility of the Contractor. Further, any delay to the Contract as a result of actions or inaction by the Contractor relative to the requirements herein that are determined by the Owner to be the fault of the Contractor will be a non-compensable and non-excusable delay.

The cost to comply with the requirements of this provision and to provide and maintain temporary navigation lights, signals and other temporary work associated with the Work under this Contract required by the U.S. Coast Guard for the protection of navigation during construction or demolition operations shall be included in the bid price for other appropriate pay items.

107.21 – 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 or areas 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.
- (d) Construction Loading of Structures:** In the construction, reconstruction, widening, or repair of bridge, culvert, retaining wall, and other similar type structures including approaches, the Contractor shall consider construction loads during the planning and

prosecution of the work. If the loading capacity of these type of structure(s) is not shown in the Contract, the Contractor is responsible for contacting the Owner to obtain the loading capacity information. Construction loads include but are not limited to the weight of cranes, trucks, other heavy construction, or material delivery equipment, as well as the delivery or storage of materials placed on or adjacent to the structure or parts thereof during the various stages (phases) of the work in accordance with the Contractor's proposed work plan. The Contractor shall consider the effect(s) of construction loads on the loading capacity of these type of structure(s) in their sequencing of the work and operations, including phase construction. At the Owner's request the Contractor shall be prepared to discuss or review their proposed operations with the Owner with regard to construction loads to demonstrate they have taken such into consideration in the planning and execution of the work.

SECTION 108 – PROSECUTION AND PROGRESS OF WORK

108.01 – Prosecution of Work

The Contractor shall provide sufficient labor, materials, equipment, and tools; and shall prosecute the Work with such means and methods and with such diligence as is required to attain and maintain a rate of progress necessary to ensure completion of the project within the Contract Time Limit in accordance with the plans, specifications, and other requirements of the Contract.

Once the Contractor has begun work, the Contractor shall prosecute the Work continuously and to the fullest extent possible except for suspensions authorized or ordered by the Owner according to Section 108.05. If approval is given to suspend the work temporarily, the Contractor shall notify the Owner at least twenty-four (24) hours in advance of resuming operations.

The Contractor shall notify the Owner at least twenty-four (24) hours in advance of any changes in the Contractor's planned operations or work requiring inspection.

Once the Contractor has begun work on a given schedule or portion thereof the Contractor shall endeavor to prosecute such work fully and continuously according to the details and requirements of the Contract to its completion. In the event the Contractor has to temporarily suspend the work on a given schedule or portion thereof, the Contractor shall notify the Owner at least twenty-four (24) hours in advance of the time and date the Contractor plans to suspend the Work. Prior to leaving the work site, the Contractor shall ensure the work site has been properly and safety secured to protect the traveling public according to the provisions of the Virginia Work Area Protection Manual, the MUTCD, Section 512 of the Specifications, and other requirements included in the Contract.

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

108.02 – Limitation of Operations

(a) General

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.

(b) Holidays

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

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.

In addition to the Sunday or Holiday work limitations, mobile, short duration, short-term stationary, or intermediate-term stationary temporary traffic control zone (as defined in the VWAPM) lane closures on mainline lanes, shoulders, or ramps shall not be performed during the following Holiday time periods without the written permission of the Owner. Additionally, a long-term stationary temporary traffic control zone (as defined in the VWAPM) shall not be initially put in place, adjusted, or removed during the following Holiday time periods without the written permission of the Owner:

- **New Year's Day:** Observed on January 1 from Noon on the preceding day until Noon on the following day, except as indicated below for Holidays occurring on a Friday/Saturday or Sunday/Monday.
- **Martin Luther King (MLK) Jr. Day:** As indicated below for Holidays occurring on the third Monday in January.
- **Easter:** As indicated below for Holidays occurring on a Sunday.
- **Memorial Day:** As indicated below for Holidays occurring on the last Monday in May.
- **Independence Day:** Observed on July 4 from Noon on the preceding day until Noon on the following day, except as indicated below for Holidays occurring on a Friday/Saturday or Sunday/Monday.
- **Labor Day:** As indicated below for Holidays occurring on the first Monday in September.
- **Veteran's Day:** Observed on November 11 as indicated below for Holidays.
- **Thanksgiving Day:** From Noon on the Wednesday preceding Thanksgiving Day until Noon on the Monday following Thanksgiving Day.
- **Christmas Eve & Christmas Day:** From Noon on the preceding day until Noon on the following day, except as indicated below for Holidays occurring on a Friday/Saturday or Sunday/Monday.

If the Holiday occurs on a Friday or Saturday: From Noon on the preceding Thursday to Noon on the following Monday.

If the Holiday occurs on a Sunday or Monday: From Noon on the preceding Friday to Noon on the following Tuesday.

108.03 – Progress Schedule

The Contractor shall submit to the Owner the written Baseline Progress Schedule. The Progress Schedule shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. The Progress Schedule shall include all work including, as applicable, the work to be performed by subcontractors, the Owner, or others. The Progress Schedule submittal shall consist of a written Narrative describing the Contractor's proposed general sequence to accomplish the work.

The Progress Schedule, including the Initial and any subsequent Revised Progress Schedules requested by the Owner or originated by the Contractor, will not be measured, or paid for separately. All associated costs to prepare, update, revise, and/or furnish the Progress Schedule in accordance with the requirements herein shall be considered incidental to the work.

Unless otherwise indicated in the Contract, the Contractor shall, at a minimum, be governed by the following:

(a) General Requirements

The Contractor shall plan and schedule the work and shall submit their overall work plan in the form of a written Progress Schedule, as described herein, for the Owner review and acceptance. The accepted Progress Schedule will be used by the Owner for planning and coordination of the Owner activities, resources, and expenditures, and for evaluation of the Contractor's rate of progress and the effects of time-related impacts on the project.

The Contractor shall submit a Progress Schedule:

- Subject to revision in accordance with Section 105.08
- Satisfactory to the Owner
- Showing the proposed sequences of work
- Indicating the time required to complete the items of work
- Indicating how the Contractor proposes to execute the work to complete the project by the Completion Date

The Contractor shall submit a progress schedule, no later than ten (10) days after the Notice to Proceed 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.

Payment for material stockpiled or stored in accordance with Section 109.08 will not be considered in determining the Contractor's rate of progress.

When preparing the Progress Schedule, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other known or specified limitations to the work.

At the Pre-Construction Conference the Contractor shall be prepared to discuss their planned or contemplated operations relative to the Contract requirements.

Delays resulting from the Contractor's failure to provide the Progress Schedule will not be considered just cause for extension of the Contract Time Limit or for additional compensation.

(b) Progress Schedule Submission Requirements

For projects with a bid under two (2) million dollars, the schedule shall be either a bar-graph schedule or a Linked Gantt Chart schedule. For projects with a bid of two (2) million dollars and above, the schedule shall be a Linked Gantt Chart schedule. 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.

1. Bar-Graph Schedule:

The Contractor shall submit a Bar-Graph schedule no later than ten (10) calendar days after the Notice to Proceed date that includes the following information at a minimum:

- Major components of the Work
- Grading
- Drainage
- Utilities
- Base
- Surface
- Traffic Signalization and Pavement Marking
- Miscellaneous Items
- Calendar time each line-item activity is scheduled

Upon approval, this schedule becomes the Base Schedule and shall not be altered without written consent of the Owner. In the event of a major change in scope, a time extension, or the Contractor's failure to comply with the approved schedule, the Contractor shall submit a revised progress schedule showing how they propose to execute the balance of the work, prior to the next progress estimate date.

2. Linked Gantt Chart:

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

The schedule shall be prepared on paper not exceeding twenty-four (24) inches in width and no more than thirty-six (36) inches in length. It 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 (3) copies of a preliminary schedule at the pre-construction conference. The schedule 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 schedule will be returned to the Contractor either approved or with recommended changes. The Contractor shall resubmit a copy of the finalized schedule within three (3) weeks, but also prior to the onset of major construction activity.

Upon approval, this schedule becomes the Baseline Schedule and shall not be altered without written consent of the Owner. In the event of a major change in scope, 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 progress estimate date.

3. Progress Reports:

Each month, between five (5) and ten (10) days prior to the Progress Estimate, the Contractor shall submit a report reflecting actual progress of the work to date. The reports shall show the percent complete for the total contract (both by time and by total monetary value) 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 their monthly Progress Estimate.

All reports shall be dated and signed by the Contractor.

At the beginning of each workday the Contractor shall submit electronically 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:

- a. Weather, including high and low temperature during the work shift, sky condition, and precipitation,
- b. Important discussions with citizens, business representatives, the Owner or Subcontractors,
- c. Visitors or Inspections,
- d. Hours of work,
- e. Length and cause of any delay,
- f. Arrival/departure of major equipment.

The Contractor shall submit to the Owner three (3) copies of the written Baseline Progress Schedule at least seven (7) calendar days prior to beginning work. The Progress Schedule shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. The Progress Schedule shall include all work including, as applicable, the work to be performed by Subcontractors, the Owner, or others. The Progress Schedule submittal shall consist of a written Narrative to:

- Describe the Contractor's proposed general sequence to accomplish the work;
- Indicate the general schedule of work to be completed each month in terms of the major operations, routes, or segments of work as delineated in the Contract or in the absence of such delineations, as agreed to by the Contractor and the Owner. A bar chart schedule may be substituted at the Contractor's option.

The Progress Schedule, including the Initial and any subsequent Revised Progress Schedules requested by the Owner or originated by the Contractor, will not be measured or paid for separately. All associated costs to prepare, update, revise, and/or furnish the Progress Schedule in accordance with the requirements herein shall be considered incidental to the work.

4. Two (2) Week Look-ahead (TWLA) Progress Schedule:

At least seven (7) calendar days prior to beginning work, the Contractor shall submit to the Owner, an initial written TWLA Progress Schedule for any work planned for the first two (2) weeks. Every week thereafter, on a day agreed to by the Contractor and the Owner, the Contractor shall submit to the Owner, a written TWLA Progress Schedule for the following two-week period. The TWLA schedule shall provide a detailed list of operations to indicate the type of operation, locations of the work, proposed working days and hours, and the start and finish dates for any work planned, started, in progress, or scheduled for completion during the two-week period. The TWLA Progress Schedule shall also indicate any critical stages of work requiring VDOT oversight or inspection. The Contractor shall submit an electronic copy of the TWLA Progress Schedule to the Owner twenty-four (24) hours prior to any planned discussion.

The Contractor may revise their TWLA Progress Schedule at their discretion. However, the Contractor shall notify the Owner at least forty-eight (48) working hours in advance of any changes in the Contractor's planned operations or critical stage work requiring Owner oversight or inspection. In the event of extenuating circumstances deemed by the Owner to be beyond the Contractor's control, the Owner may grant verbal concurrence of changes in the Contractor's planned operations with less advance notice, as the need arises.

- 5. Progress Schedule Revisions.** The Contractor may revise their overall plan of operations at any time; however, the Contractor shall submit a Revised Progress Schedule to reflect any changes in their overall sequence of operations or general schedule. The Contractor may be required, as determined by the Owner, to submit a Revised Progress Schedule. Circumstances that may prompt the Owner's decision to request a Revised Progress Schedule may include deviations from the overall sequence of operations or if the actual progress of work varies by one (1) month or more from the currently accepted Progress Schedule.

When required by the Owner, the Revised Progress Schedule shall be submitted within seven (7) calendar days of receipt of the Owner's written request. The Revised Progress Schedule shall be submitted in the form of the Progress Schedule as defined herein, to reflect the changes in the Contractor's overall work plan. The accepted Revised Progress Schedule will replace any previously accepted Progress Schedule for the remainder of the work.

(c) Submittal and Reporting Format

If requested by the Owner, the Contractor shall submit its progress schedule electronically in a PDF file and electronic data files compatible with MS Project and Primavera P6, if requested. Contractor will also supply, if requested three (3) printed legible paper copies of the progress schedule and progress schedule narrative.

(d) Engineer's Review and Acceptance

The Owner will review the Baseline or subsequent Revised Progress Schedule submittals for acceptance within seven (7) calendar days of receipt of the Contractor's complete submittal. Review and acceptance by the Owner will be based on conformance with the requirements of this provision and the Contract.

Review and acceptance by the Owner will not constitute a waiver of any Contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the work plan or schedule to the Owner. Failure of the Contractor to include in the Progress Schedule any element of work required by the Contract for timely completion of the Contract shall not excuse the Contractor from their contractual obligations.

(e) Failure to Comply with Progress Schedule Submission Requirements

With the exception of project start-up activities approved in writing by the Owner, the Contractor shall not commence work, until seven (7) days after the date the Contractor submits a complete Baseline Progress Schedule, unless otherwise approved by the Owner in writing.

If the Contractor fails to comply with any of the Progress Schedule submissions within the time and in the manner specified, the Owner may withhold approval of the

Contractor’s ensuing monthly progress estimates until the Contractor has satisfied the submission requirements. If the Contractor fails to submit the Final As-Built Schedule in the time and manner required, the Owner may withhold approval of the final payment until the Contractor satisfies the submission requirement.

The Owner shall not be responsible for any delays, costs or damages resulting from the Contractor’s failure to submit the schedule submittals in accordance with the requirements of the Contract.

108.04 – Determination and Extension of Completion Date

The Owner will specify the Completion Date in the Contract. The Owner will not consider any request for an extension of time that is based on a claim that the Completion Date as originally established is insufficient to complete the Work.

When Contract execution is not within sixty (60) calendar days after the opening of bids, or when the Contractor is unable to commence work because of any failure of the Owner, the Contractor will be given an extension of time based on the number of days delayed beyond the sixty (60) calendar days. No time extension will be allowed for a delay in the date of Contract execution when the delay is the fault of the Contractor.

The Owner will determine if an extension of the Contract Time Limit for completion is warranted by additions to the Contract. The Contractor shall inform the Owner, in writing, of a request for time extensions in their Work Order in accordance with the applicable portion(s) of Sections 104 or 109. The Contractor shall provide written supporting data for any request for extension of time due to quantity additions and or additional or altered work.

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 workdays during a calendar month, which number exceeds the number of workdays listed below for that calendar month. Delays will only be allowed for the amount of lost workdays 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 number of allowed workdays per month is exclusive of weekends.

The submittal evidence, for weather claim, shall include a copy of the project schedule, as required under Section 108.03, 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 Section 104 requires the performance of work in greater quantities than those specified in the Contract, the Contract Time Limit will be increased according to one (1) of two (2) 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 they deem to be beyond their control and shall identify the particular construction operations affected, their criticality to project milestones or overall Contract completion, and the significant dates that encompass the periods of delay. The Contractor shall furnish all such information necessary for the Owner to make an adequate evaluation of any request received from the Contractor for an extension of the Contract Time Limit within three (3) days of experiencing such a delay.

(a) Calendar Days

When the Contract Time Limit are 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 (1) 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 (1) 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.

Unless otherwise indicated in the Contract, the Contract Time Limit will be specified as a fixed date for completion. 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 specified Contract Time Limit.

If the Contract identifies a contract-specific Notice to Proceed date and the Contract is not executed by that date, the Contractor will receive an extension of time equal to the number of days between the contract-specific Notice to Proceed date and the eventual date of Contract execution. If the Notice to Proceed date is selected by the Contractor and after prior approval the Owner directs the Contractor not to begin work on that date, the Contractor will receive an extension of time equal to the number of days between the Contractor's selected Notice to Proceed date and the eventual date the Owner informs the Contractor that they may commence the work.

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

For the purposes of this Section normal adverse weather is defined as that which is not considered extraordinary or catastrophic and is not reasonably conducive to the Contractor progressively prosecuting critical path work under the Contract. Weather events considered extraordinary or catastrophic include, but are not limited to tornados, hurricanes, earthquakes, and floods that exceed a 25-year storm event as defined by National Oceanic and Atmospheric Administration (NOAA) for the NOAA data gathering location that is nearest the project site.

The Contractor will have a maximum of twenty (20) calendar days from the occurrence of an event they feel justifies an extension of time to notify the Owner in writing. The Contractor will have a maximum of forty-five (45) calendar days from the occurrence of an event they feel 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.

If there is a delay in the progress of the work due to unforeseen causes described within these Specifications, and the delay extends the Contract Time Limit into the period between November 30 of one (1) year and April 1 of the following year and working conditions during such period are unsuitable for the continuous prosecution or completion of the work, then consideration may only be given to granting an extension of time that will encompass a suitable period during which such work can be expeditiously and acceptably performed.

108.05 – 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 they 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.

- (a) If the Owner orders the Contractor in writing to suspend performance of all or any portion of the Work for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation or Contract Time is due as a result of such suspension, the Contractor shall submit to the Owner a written request for adjustment according to Section 108.04 within seven (7) days after receipt of the notice to resume work. The Contractor's request shall set forth the reasons and support for such adjustment.
- (b) Upon receipt, the Owner will review the Contractor's documentation and evaluate the Contractor's request. If the Owner agrees that the cost or time required for the performance of the Contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, their suppliers, or subcontractors at any tier, and was not caused by weather, the Owner will make an adjustment (excluding profit and consequential damages) and modify the Contract in writing accordingly. The Owner will notify the Contractor of the determination regarding whether or not an adjustment of the Contract is warranted.
- (c) No Contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time and in the manner prescribed.
- (d) No Contract adjustment will be allowed under this Section to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of the Contract.

108.06 – Failure to Complete on Time

(a) General

For each calendar day that any work remains incomplete after the Contract Time Limit specified for the completion of the work, the Owner will assess liquidated damages against the Contractor. Liquidated Damages will be assessed at the rate applicable to the Contract in accordance with the Schedule of Liquidated Damages, Table I-1, or as otherwise specified in the Contract provisions. Liquidated Damages will be deducted from any monies due the Contractor for each calendar day of additional time consumed until Final Completion is achieved, subject to such adjustments as provided in accordance with the requirements of Section 108.04, not as a penalty, but as Liquidated Damages. The Contractor waives any defense as to the validity of any Liquidated Damages stated in the Contract or these Specifications and assessed by the Owner against the Contractor on the grounds that such Liquidated Damages are void as penalties or are not reasonably related to actual damages.

(b) Liquidated Damages

The parties agree that the Owner will be substantially damaged in amounts that will be difficult or impossible to determine if actual Final Completion is not achieved by the Contractor on or before the Contract Final Completion Date set forth herein. The parties therefore agree that if Final Completion does not occur by the Final Completion Date 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 108.06 (b), Table I-1 or actual damages, whichever is higher for each day the Final Completion of the work, or any phase thereof, is delayed beyond the Final Completion Date 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.

The following Schedule of Liquidated Damages, representing the cost of administration, engineering, supervision, inspection and other expenses, will be charged against the Contractor for each calendar day beyond the Final Completion Date that Final Completion is not yet achieved:

**TABLE I-1
Schedule of Liquidated Damages**

Original Contract Amount in Dollars	Daily Charge in Dollars
0.00 - 500,000.00	350
500,000.01 - 2,000,000.00	600
2,000,000.01 - 8,000,000.00	1,350
8,000,000.01 - 15,000,000.00	2,500
15,000,000.01 or more	3,100

108.07 – Default of Contract

The Contractor may be declared in default if they do any one (1) of the following:

- (a)** fails to begin the Work within ten (10) days after the notice to proceed date, except as otherwise permitted by specific Contract language, or the provisions of Sections 105.01 or 108.02;
- (b)** fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure prompt completion of the Work;
- (c)** performs the Work in such manner that it is unacceptable, or fails, neglects or refuses to promptly remove and replace materials or work that are unacceptable;
- (d)** discontinues prosecution of the Work without an order to do so from the Owner;
- (e)** fails to resume work that has been discontinued within a reasonable time after notice to do so;

- (f) becomes insolvent, is declared bankrupt, or commits any act of bankruptcy or insolvency;
- (g) allows any final judgment to stand against him unsatisfied for a period of ten (10) days;
- (h) makes an assignment for the benefit of creditors;
- (i) fails for any other cause whatsoever to carry on the work in accordance with the Contract or to perform contractual obligations in an acceptable manner;
- (j) disregards laws, regulations, ordinances, the Owner's written instructions, or otherwise remains in substantial violation of any provision of the Contract.

If any of these conditions exists, the Owner will give notice in writing to the Contractor and their surety of the delay, neglect, or default. If within ten (10) days after the date of such notice the Contractor or their surety has not taken measures that will, in the judgment of the Owner, ensure satisfactory progress of the work or give assurances satisfactory to the Owner that the provisions of the Contract will be fully carried out and instructions complied with, the Owner may then, or at any time thereafter, declare the Contractor in default. Without violating the Contract, the Owner may call upon the Contractor's surety for the satisfactory and expeditious completion of all work under the Contract, the removal and replacement of any unacceptable or unauthorized work or may otherwise terminate the Contract in accordance with the provisions of Section 108.08. If the Owner declares the Contractor in default, payments to the Contractor will be withheld and may be made directly to the Contractor's surety. Further negotiations regarding the remaining work will be conducted with the Contractor's surety.

If the Contractor's surety fails or refuses to proceed in accordance with the Owner instructions, the Owner will appropriate and use any or all materials and equipment on the project site that are suitable and acceptable and will enter into an agreement with others for the completion of the work, or they will use such other methods as they deem necessary to ensure the completion of the work.

Costs and charges incurred by the Owner, including the cost of completing the Work under the Contractor the cost of removal and replacement of any unacceptable or unauthorized work, will be deducted from any monies due or that will become due the Contractor and their surety. If the expense incurred by the Owner is less than the sum that would have been payable under the Contract had the work been completed by the Contractor, the Contractor and their surety will be entitled to receive the difference. If the expenses exceed the sum that would have been payable under the Contract, the Contractor and their surety shall be liable for and shall pay to the City the amount of the excess.

108.08 – Termination of Contract

- (a) **Conditions for Termination:**

The Owner may terminate the Contract or any portion thereof because of any of the following conditions:

1. Default.
2. National emergency.
3. Action by the City, U.S. government, or court order.
4. Conditions beyond the control of the Owner.
5. For the convenience of the Owner.

Termination of the Contract or a portion thereof shall not relieve the Contractor of their responsibilities for completed Work, nor shall it relieve their surety of its obligation for and concerning any just claims arising out of the Work performed or remaining to be performed.

(b) Termination for Convenience:

The Owner will deliver to the Contractor and surety written notice of termination for convenience specifying the extent of the termination and the effective date. A termination for convenience may be directed at any time after the notice of award of the Contract. Termination for convenience will be accomplished in accordance with the following:

1. Procedure:

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

The Contractor shall immediately upon receipt of the notice of termination do the following:

- a. Stop work as directed in the notice.
- b. Promptly place disturbed areas in an acceptable condition as directed by the Owner.
- c. Place no further subcontracts or orders for materials, services, or equipment, unless necessary for any part of the Work not terminated or to protect any part of the Work completed.
- d. Terminate all subcontracts or orders to the extent related to the terminated work, unless instructed otherwise by the Owner.

- e. Settle all outstanding liabilities with Subcontractors and suppliers arising from the termination.
- f. Transfer title and deliver to the Owner any work in progress, completed work, materials, supplies, equipment, drawings, plans, information, warranties, or other property that were purchased, acquired, fabricated, produced, supplied, or constructed for the Work, whether completed or terminated, and would be required to be furnished to the Owner on completion of the Contract.
- g. Complete performance of Work not terminated, if any.
- h. Inventory along with the Owner any acceptable materials obtained, but not incorporated into the Work.
- i. Take any action necessary or that the Owner may direct for the protection and preservation of the site or other property that is in the Contractor's possession or control in which the Owner has or may acquire an interest.

2. Payment:

Within thirty (30) days after the Contractor receives the Owner's notice of termination for convenience, or within such time as the Contractor and the Owner mutually agree, the Contractor shall submit a request for payment due for work performed through the effective date of termination and as a result of the termination for convenience. The Contractor shall submit with the request sufficient cost records to substantiate the payment amount requested.

The Owner shall pay and the Contractor shall accept, as full payment for all work and materials provided, a sum mutually agreed to by the Contractor and the Owner determined as follows:

- a. Work on Contract pay items performed prior to termination for which the Contractor has not been paid will be paid at the Contract price according to Section 109.03, or in the absence of Contract unit prices, in accordance with the requirements of Section 109.05. Items eliminated entirely by termination will be paid for as provided in Section 109.07. No claim for loss of anticipated profits will be considered, and the provisions of Section 104.02 will not apply for costs that are then incurred as a result of the termination.
- b. Reimbursement for organizing the Work when not specified in the Contract and moving equipment to and from the project site will be considered where the volume of work completed is too small to compensate the Contractor for these expenses under the Contract unit prices.

- c. At the option of the Owner, materials the Contractor obtains for the Work that have been inspected, tested, and accepted by the Owner and that have not been incorporated in the Work may be purchased from the Contractor at actual costs as shown by receipted bills, purchase orders, bills of lading, paid invoices, or other similar actual cost records at such points of delivery as will be designated by the Owner.
 - d. The Contractor shall be reimbursed for any actual costs incurred to terminate subcontracts or purchase orders, as shown by receipted bills, bills of lading, paid invoices, or other similar actual cost records at such points of delivery as will be designated by the Owner.
 - e. If a sum cannot be agreed upon, the Contractor shall be paid by unilateral change order and may seek recourse for the disputed amount in accordance with Section 105.19.
 - f. When requested by the Owner, the Contractor shall furnish itemized statements of the cost of the work performed and shall give the Owner (and/or the Owner's Auditors) access to any and all financial and/or project records and documents, relating thereto. Unless the Contractor, when requested to do so, furnishes such itemized statements and access to any and all financial and/or project records and documents, the Contractor shall not be entitled to payment for work for which such information is sought by the Owner.
3. The Contractor shall incorporate the provisions of this Section as provisions in its contracts with each of their Subcontractors.

(c) Termination for Default:

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.

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.

If the City declares the Contractor in default as provided in Section 108.07, the Owner may terminate the Contract in accordance with the following:

- 1. Upon such termination becoming effective, the Owner shall provide written notice to the surety confirming that the Contract is terminated, and that the Owner is proceeding to finish the Work as set forth in the Contract performance bond, Form C-18A, and the terms and conditions therein if the Surety declines to

complete the project. The Owner will also take possession of the project site and of all materials purchased for the project thereon. If the expense of completing the Work, including compensation for additional managerial and administrative services, exceeds the unpaid balance of the Contract amount and the penal amount of the Contract performance bond, the Contractor shall pay the difference to the Owner, together with any other costs and expenses of terminating the Contract and having it completed by others.

2. If it should be judicially determined that the Owner's termination for default was improper or in error, then the termination shall be deemed to be a termination for convenience and the Contractor's rights and remedies shall be limited exclusively to those provided under Section 108.08 (b).
3. Termination for default as provided herein is in addition to and without prejudice to the Owner's other rights or remedies. Any of the Owner's actions permitted herein shall not be deemed a waiver of any other right or remedy of the Owner under the Contract or under the law. The Owner may offset any claims it may have against the Contractor against the amounts due or to become due to the Contractor under any other contract the Contractor may have with the City. The provisions of this Section shall survive termination of the Contract.
4. When the Contractor is terminated for default, any claims timely identified in a written notice of intent may be submitted in accordance with provisions of Section 105.19 or the Code of Virginia as amended and as applicable, except that the Contractor shall submit the required claim within sixty (60) days after the Owner's notice of termination for default to the Contractor. Failure on the part of the Contractor to submit a claim within such 60-day period shall constitute a waiver and release of such claim.
5. 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.

108.09 – Acceptance

Only specific written notification from the Owner will constitute acceptance of any work.

(a) Contractor's Responsibility for Work:

Until Final Acceptance of the work by the Owner in accordance with the requirements of this Section, 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 on 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 as determined by the Owner.

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 as determined by the Owner. During the suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seeding, and sodding furnished under the Contract and shall take adequate precautions to protect new tree growth and other important vegetation against damage.

(b) Partial Acceptance:

If at any time during the prosecution of the project the Contractor completes a unit or portion of the project, such as a structure, a traffic signal, slopes, pavement, or a section of a roadway in its entirety, they 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 and that acceptance is in the best 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. Partial acceptance shall in no way void or alter any terms of the Contract.

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.

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

(c) *DELETED.*

(d) Final Acceptance:

Within ten (10) working days of 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 has been completed, this inspection will constitute the final inspection and the Owner will make the Final Acceptance. The Contractor will be notified in writing, of the determination of Final Acceptance within ten (10) working days of the date of the Owner's Final Acceptance.

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

If the Owner's inspection discloses that any work, in whole or in part, is incomplete or unacceptable, the Contractor shall immediately correct the deficiency. A written list of deficiencies will be provided to the Contractor by the Owner. Upon completion or correction of the work, another inspection will be made of the deficient work. If the work is then satisfactory, the Owner will notify the Contractor in writing within ten (10) working days of the Owner's Final Acceptance. In any event, the Contractor shall be responsible for and maintain the project until Final Acceptance except under conditions that may be specifically exempted by the Specifications or other Contract documents.

108.10 - Termination of Contractor's Responsibilities:

The Contract will be considered complete upon final acceptance by the Owner as detailed in Section 109.10. The Contractor's responsibility will then cease one (1) year from the date of final acceptance except as noted in the bid document.

The Contractor's responsibility for the Work will then cease except as set forth in their bonds, and Sections 107.12, 109.08, 109.10, and other provisions of the Contract that extend the Contractor's responsibility beyond final acceptance.

SECTION 109 – MEASUREMENT AND PAYMENT

109.01 – Measurement of Quantities

(a) General:

Work specified in the Contract will be measured by the Owner in accordance with 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.

Specific methods of measurement shall be as indicated in the specific Section for the Contract item.

Longitudinal measurements for surface area computations will be made along the surface, and transverse measurements will be the surface measure shown on the plans or ordered in writing by the Owner. Individual areas of obstructions with a surface area of nine (9) square feet or less will not be deducted from surface areas measured for payment.

Structures will be measured in accordance with the 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 an area greater than that 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.

(b) Measurement by Weight:

Materials that are measured or proportioned by weight shall be weighed on accurate scales as specified in this Section. When material is paid for on a tonnage basis, personnel performing the weighing shall be certified by the Owner and shall be bonded to the City of Virginia Beach in the amount of \$10,000 for the faithful observance and performance of the duties of the weigh person required herein. The bond shall be executed on a form having the exact wording as the Weighpersons Surety Bond Form furnished by the Owner and shall be submitted to the Owner prior to the furnishing of the tonnage material. No payment will be made for materials delivered in excess of the legal load limits for each truck.

The Contractor shall have the weigh person perform the following:

1. Furnish a signed weigh ticket for each load that shows the date, truck number, load number, plant name, size and type of material, project number, schedule or purchase order number, and the weights specified herein.
2. Maintain sufficient documentation so that the accumulative tonnage and distribution of each lot of material, by Contract, can be readily identified.
3. 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.
4. Post and furnish a weekly tare weight of each truck used and keep a record of them for twelve (12) months.

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 permanent on each side of the truck and plainly visible to the weigh person from the normal position at the scales.

Trucks used to haul material shall be equipped with a cover suitable to protect the material and to protect the traveling public. Such cover shall be securely placed over the material prior to entering any area open to the public.

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 twenty (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 as set forth in the National Institute of Standards and Technology Handbook No. 44 for Specification Tolerances and Requirements for Commercial and Weighing Devices. Scales used in the weighing of materials paid for on a tonnage basis shall be approved and sealed in accordance with the requirements of the policies of the Bureau of Weights and Measures of the Department of Agriculture and Consumer Services, or other approved agencies, at least once every six (6) months and upon being moved. Hopper and truck scales shall be serviced and tested by a scale service representative at least once every six (6) months. Hopper scales shall be checked with a minimum 500 pounds of test weights and truck scales shall be checked with a minimum 20,000 pounds of test weights. Copies of scale test reports shall be maintained on file at the scale location for at least eighteen (18) months, and copies of all scale service representative test reports shall be forwarded to the Owner.

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 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.

Only weigh tickets printed on the automatic printer will be accepted. If the automatic printer becomes inoperative, the weighing operation may continue for forty-eight (48) hours provided satisfactory visual verification of weights can be made. Written verification from, and signed by, the certified weigh person operating the affected scale, documenting the automatic printer is inoperative, must be presented prior to handwritten tickets being accepted. The written permission of the Owner will be required for the operation of scales after forty-eight (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 and unit weights determined by the Owner or by other methods deemed appropriate to protect the interests of the City.

(c) 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 streambed gravel, silt cleanout, or other self-consolidating material will be allowed at the rate of 2/3 the volume of the vehicle. The full volume of the vehicle will be allowed for streambed gravel. Such vehicles may be of any size or type acceptable to 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.

(d) Measurement by Lump Sum:

When used as an item of payment, the term lump sum will mean full payment for completion of the corresponding item of work described in the Contract. When a complete structure or structural unit is specified as a Contract item, the unit of measurement will be lump sum, and shall include all necessary fittings and accessories. The quantities may be shown on the plans for items for which lump sum is the method of measurement. If shown, the quantities are approximate and are shown for estimating

purposes only and no measurement of quantities will be made for payment. Items that are to be measured as complete units will be counted by the Inspector in the presence of a representative of the Contractor.

(e) Measurement for Specific Materials:

1. Concrete (Measured by Volume Measure):

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

2. Concrete (Measured by Square or Lineal Measure):

Concrete will be measured and computed by dividing the work into simple geometrical figures and adding their areas or measuring linearly along the item's surface.

3. 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.

4. Asphalt:

The standard practice for determining asphalt volume correction to a base temperature shall be performed according ASTM D4311/D4311M -15. However, asphalt can be measured by the gallon, volumetric measurement, based on a temperature of sixty (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 temperatures other than sixty (60) degrees Fahrenheit:

$$VI = V \times [1 - K (T - 60)]$$

Where:

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

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

When specified in the Contract, 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.

5. Timber:

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.

6. Equipment Rental:

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 agreed upon the Owner.

109.02 – Plan Quantities

When specified in the Contract, Contract 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 authorized deviations from the plans. In the case of excavation, only excavation within the roadway prism will be paid for on a plan quantity basis.

If the Contractor believes that any plan quantity is incorrect, they may solicit, at their own expense, the aid of a Professional Engineer licensed to practice engineering in the

Commonwealth of Virginia to check the quantity or they 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 is found to be in error and so verified by the Owner, 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 and will notify the Contractor, in writing, of the rationale for adjustment. Payment will then be based on the measured quantity in lieu of the plan quantity.

109.03 – Scope of Payment

Payments to the Contractor will be made for the actual quantities of Contract items performed in accordance with the plans and the requirements of the Specifications and other Contract documents. If, upon completion of the Work, the actual quantities vary, either by an increase or decrease from the estimated quantities shown in the Contract, the Contract unit prices shall prevail and payment will be made for actual quantities performed at such unit prices, unless the unit prices have been modified by written change orders according to Sections 104 and 109.04, as determined by the Owner.

Quantities appearing on the Proposal are estimated quantities for the basic design shown on the plans. With the Owner's approval, the Contractor may furnish other design(s) that may involve changes in quantities or the use of different materials. However, payment will be made for the original quantities listed in the Contract only and in the units of measure given in the Contract for the basic design unless the dimensions for the basic design are changed by an authorized change order to conform to field conditions encountered. In this event, the original quantities listed will be modified based on the change in dimension, and the modified quantities will be used for pay quantities at Contract unit prices for the items listed on the Proposal.

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

- (a) Furnishing all materials, labor, tools, equipment, and incidentals necessary to complete the Work according to the Contract.
- (b) Performing all work specified in the Contract.
- (c) All loss or damage arising from the nature of the Work or from action of the elements or any other unforeseen difficulties that may be encountered during prosecution of the Work and until its final acceptance.
- (d) Any license, use, or infringement of a patent, trademark, or copyright.
- (e) The completion of the Work in accordance with the Contract requirements.

- (f) All costs associated with risks of every description connected with the prosecution of the work.
- (g) All expenses incurred in consequence of the suspension of the work as herein authorized.

If the payment clause in the Specifications relating to any unit price in the Contract requires 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, the final estimate, or any retainage shall in no way affect the obligation of the Contractor to repair or replace any unacceptable, unauthorized or defective work or materials, or to be responsible for all damages attributable to such unacceptable, unauthorized or defective work or materials.

109.04 – Payment for Non-Significant Changes and Additional Units of In-scope Work

Alterations of plans or character of in scope 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.

When the accepted quantities of work vary from the estimated quantities set forth in the Contract, whether or not there have been any alterations in the plans, the quantities of work, or the character of work, the Contractor shall accept as payment in full, so far as Contract items are concerned, payment at the original Contract unit prices for the accepted quantities of work performed, except where such variance is a significant change as set forth in Section 104.02. No allowance or other adjustment except as provided for a significant change in Section 104.02 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting directly from such variance, or from the Contractor's unbalanced allocation among the Contract items of overhead expense and subsequent loss of expected reimbursements therefor, or from any other cause.

109.05 – Payment for Contract Changes

The Owner will pay the Contractor for adjustments to the Contract amount based on one (1) of the following methods. All adjustments to the Contract under this section shall become part of the Contract Documents.

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 one hundred dollars (\$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.

(a) Payment for Extra Work

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. Extra work performed in accordance with the requirements and provisions of Section 104.03 will be paid for as a Change Order either Bilateral or Unilateral Change Order.

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

The Owner may add any extra work that in the judgment of the Owner is necessary for the satisfactory fulfillment of the Contract within its intended scope. Extra work may be accomplished by change order if the scope is defined as provided in this Section (a), or on a force account basis, if the scope is not defined as provided in Section 109.05 (b). Where possible, the Owner and Contractor will each proceed to secure any information, documentation, or plans to assist in detailing the extent and character of such work, if known, in sufficient detail to define, analyze, and estimate the cost and time required to perform such work. Extra work does not include overruns of Contract items according to Section 104.02.

1. The Owner may notify the Contractor in writing that extra work is necessary. When no such notice is given, but the Contractor believes extra work is necessary, they shall notify the Owner in writing within two (2) days of such a determination or before performing any such work. If the Owner agrees with the Contractor, the Owner will notify the Contractor that extra work is necessary. Within seven (7) days of the Owner notifying the Contractor with a written formal notification that is signed by both the Owner and Contractor acknowledging of extra work, or within such time as mutually decided with the Owner, the Contractor shall submit a proposal that includes a determination of the extent of such work, and the additional compensation and/or time they seek, if any, relative to their determination. The Contractor's request shall be in sufficient detail to enable the Owner to determine the basis for and extent of the Contractor's entitlement to additional compensation or time. Failure on the part of the Contractor to furnish sufficient documentation or to qualify their reason for failure to do so will delay the determination of entitlement for such work. If such delay occurs, it will in no way relieve the Contractor of their obligation to meet the Contract Time Limit or other Contract requirements or constitute basis for a Contractor to make a delay claim.
2. If the Contractor requests a time extension based on extra work, the requested time extension will only be considered if the extra work impacts the critical path, a controlling work item, or an interim milestone established in the Contract to the extent that it extends the Completion Date of the project beyond the lattermost of

the Contract Completion Date or its most recent extension. The Contractor shall submit detailed documents and information showing how the extra work or interim milestone impacted the critical path in accordance with Section 108.04. Any time extension given, including time extensions in accordance with Section 108.04, must be included in the executed change order.

3. Upon receipt and review of the Contractor's costs for the proposed extra work, if it is found that the Contractor's prices or the time differ considerably (greater than 10%) from the Owner's estimate, the Owner may request the Contractor to provide support for their prices or their requested time extension. Where the Owner and the Contractor can determine and agree upon an accurate cost and time estimation for the proposed work, the Owner will issue a Bilateral Change Order to authorize the work. The Contract quantities, Contract Time and change in work may be changed only by Change Order. A Change Order signed by the Contractor indicates their agreement therewith, including the adjustment in the Contract quantities or the Contract time.

When the Contractor and the Owner cannot agree upon the cost or the time estimation for the extra work after the Owner's analysis and subsequent discussion with the Contractor, or where due to issues of emergency, safety, environmental damage, other similar critical factors as determined by the Owner, the Owner will act unilaterally and issue a Unilateral Change Order to authorize the work. The issuance of a Unilateral Change Order by the Owner shall in no way invalidate or relinquish the Contractor's rights under Section 105.19.

Upon receipt of a writing Unilateral Change Order, the Contractor shall promptly proceed with the Work involved.

(b) Payment by Force Account

The Owner will require the Contractor to proceed with extra work on a force account basis when neither the Owner nor the Contractor can firmly establish a reliable estimate for the cost of the extra work because either the scope or the quantity of work is unknown, is of such character that a price cannot be determined to a reasonable degree of accuracy, or the level of effort required to perform and complete the extra work is unknown or not quantifiable at the time of discovery or start of the extra work, and will be determined as work progresses. The compensation provided for in this Section for force account work applies only to extra work the Owner orders in writing to be performed on a force account basis and does not apply to any other work performed under the Contract or to claims.

The Contractor shall be paid for all labor, materials, equipment, services, supplies, taxes, overhead, profit and miscellaneous costs or expenses, for extra work performed on a force account basis in the following manner:

1. Labor:

Unless otherwise approved, the Contractor will receive the rate of wage or scale as set forth in their most recent payroll for each classification of laborers, forepersons, and superintendent(s) who are in direct charge of the specific operation. The time allowed for payment will be the number of hours such workers are actually engaged in performing the extra work. If overtime work is authorized, payment will be at the normal overtime rate set forth in the Contractor's most recent payroll. If workers performing the class of labor needed have not been employed on the project, mutually agreed on rates will be established. However, the rates shall be not less than those predetermined for the project, if applicable. An amount equal to forty-five percent (45%) of the approved force account payroll will be included in the payment for labor to cover administrative costs, profit, and benefits and/or deductions normally paid by the Contractor.

2. Insurance and Tax:

The Contractor will receive an amount equal to twenty-five percent (25%) of the approved force account payroll exclusive of additives of administrative cost as full compensation for property damage and liability, workers' compensation insurance premiums, unemployment insurance contributions, and social security taxes of force account work.

3. Materials:

The Contractor will receive the actual cost of materials accepted by the Owner that are delivered and used for the work including taxes, transportation, and handling charges paid by the Contractor, not including labor and equipment rentals as herein set forth, to which fifteen percent (15%) of the cost will be added for administration and profit. The Contractor shall make every reasonable effort to take advantage of trade discounts offered by material suppliers. Any discount received shall pass through to the Owner. Salvageable temporary construction materials will be retained by the Owner, or their appropriate salvage value shall be credited to the Owner, as agreed on by the Owner and the Contractor.

4. Equipment:

The Contractor shall provide the Owner a list of all equipment to be used in the work. For each piece of equipment, the list shall include the serial number; date of manufacture; location from which equipment will be transported; and, for rental equipment, the rental rate and name of the company from which it is rented. The Contractor will be paid rental rates for pieces of machinery, equipment, and attachments necessary for prosecution of the work that are approved for use by the Owner. Equipment rental will be measured by time in hours of actual time engaged in the performance of the extra work and necessary traveling time of the equipment within the limits of the project or source of supply and the project.

Hourly rates will not exceed 1/176 of the monthly rates of the schedule shown in the Rental Rate Blue Book modified in accordance with the Rental Rate Blue Book rate adjustment tables that are current at the time the force account is authorized. Equipment rental rates not modified by the adjustment factors or rate modifications indicated in the Rental Rate Blue Book will not be considered. Hourly rates for equipment on standby will be at fifty percent (50%) of the rate paid for equipment performing work. Operating costs shall not be included in the standby rate. For the purposes herein “standby time” is defined as the period of time equipment ordered to the jobsite by the Owner that is available on-site for the work but is idle for reasons not the fault of the Contractor or normally associated with the efficient and necessary use of that equipment in the overall operation of the work at hand.

Payment will be made for the total hours the equipment is performing work. When equipment is performing work less than forty (40) hours for any given week and is on standby, payment for standby time will be allowed for up to forty (40) hours, minus hours performing work. Payment will not be made for the time that equipment is on the project in excess of twenty-four (24) hours prior to its actual performance in the force account work. An amount equal to the Rental Rate Blue Book estimated operating cost per hour will be paid for all hours the equipment is performing work. This operating cost shall be full compensation for fuel, lubricants, repairs, greasing, fueling, oiling, small tools, and other incidentals. No compensation will be paid for the use of machinery or equipment not authorized by the Owner.

The Contractor will be paid freight cost covering the moving of equipment to and from the specific force account operation provided such cost is supported by an invoice showing the actual cost to the Contractor. However, such payment will be limited to transportation from the nearest source of available equipment. If equipment is not returned to the nearest equipment storage lot but is moved to another location, the freight cost paid will not exceed the cost of return to the nearest storage lot.

The rates for equipment not listed in the Rental Rate Blue Book schedule shall not exceed the hourly rate being paid for such equipment by the Contractor at the time of the force account authorization. In the absence of such rates, prevailing rates being paid in the area where the authorized work is to be performed shall be used.

If the Contractor does not possess or have readily available equipment necessary for performing the force account work and such equipment is rented from a source other than a company that is an affiliate of the Contractor, payment will be based on actual invoice rates, to which fifteen percent (15%) of the invoice cost will be added for administrative cost and profit. If the invoice rate does not include the furnishing of fuel, lubricants, repairs, and servicing, the invoice rate will be converted to an hourly rate, and an amount equal to the Rental Rate Blue

Book estimated operating cost per hour will be added for each hour the equipment is performing work.

5. Miscellaneous:

No additional allowance will be made for attachments that are common accessories for equipment as defined in the Rental Rate Blue Book, general superintendents, timekeepers, secretaries, the use of small handheld tools or other costs for which no specific allowance is herein provided. The Contractor will receive compensation equal to the cost of the bond, special railroad insurance premiums, and other additional costs necessary for the specific force account work as determined by the Owner. The Contractor shall supply documented evidence of such costs.

6. Compensation:

The compensation as set forth in this Section shall be accepted by the Contractor as payment in full for work performed on a force account basis. At the end of each day, the Contractor's representative and the Owner's Inspector shall compare and reconcile records of the hours of work and equipment, labor and materials used in the work as ordered on a force account basis. Such accounting may not include actual costs or labor rates where these are not available but shall be used to verify quantities, types of materials or labor, and number and types of equipment.

If all or a portion of the force account work is performed by an approved Subcontractor, the Contractor will be paid ten percent (10%) of the subcontract net force account costs to cover the Contractor's profit and administrative cost. The amount resulting will not be subject to any further additives. The itemized statements of costs as required below shall be submitted on a form that separates the subcontracted portions of the force account labor, materials, and equipment from the other force account costs.

7. Statements:

Payments will not be made for work performed on a force account basis until the Contractor has furnished the Owner duplicate itemized statements of the cost of such work detailed as follows:

- a. payroll indicating name, classification, date, daily hours, total hours, rate, and extension of each laborer, foreperson, and superintendent;
- b. designation, dates, daily hours, total hours, rental rate, and extension for each unit of equipment;
- c. quantities of materials, prices, and extensions;

- d. transportation of materials.

Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from their stock; that the quantity claimed was actually used; and that the price, transportation, and handling claimed represented their actual cost.

(c) Payment for Significant Changes

When the Contractor alleges that there is a significant change as defined in Section 104.02, then, within a mutually agreed upon timeframe, they shall submit a request for the additional compensation, excluding anticipated profits for reduced or eliminated work, for such significant change. The Contractor's request shall be in sufficient detail to enable the Owner to determine the basis for and extent of the Contractor's entitlement to additional compensation.

Failure on the part of the Contractor to furnish sufficient documentation or to qualify their reason for failure to do so will delay the determination of entitlement to additional compensation. If such delay occurs, it will in no way relieve the Contractor of their obligation to meet milestone dates, the Contract Time Limit, or other Contract requirements, or constitute the basis for a claim of any kind.

(d) Payment for Differing Site Conditions

When the Contractor encounters a differing site condition as defined in Section 104.03, then, within a mutually agreed upon timeframe, they shall submit a written request for the additional compensation, excluding anticipated profits, they seek as a result of such condition. The Contractor's request shall be in sufficient detail to enable the Owner to determine the basis for and extent of the Contractor's entitlement to additional compensation.

Failure on the part of the Contractor to furnish sufficient documentation or to qualify their reason for failure to do so will delay the determination of entitlement to additional compensation. If such delay occurs, it will in no way relieve the Contractor of their obligation to meet the Contract Time Limit or other Contract requirements or constitute basis for a claim of any kind.

If the Owner determines that the conditions materially differ and cause an increase or decrease in the cost required for the performance of any of the Work, an adjustment, excluding anticipated profits, will be made and the Contract may be modified accordingly.

(e) Payment for Compensable Delay

The Contractor is entitled to compensation for a compensable delay. Compensable delays are critical delays that are not the Contractor's fault or responsibility and are the Owner's fault or responsibility. Compensable delays may include, but are not limited to:

- Delays due to alteration of quantities or character of work according to Section 104.02.
- Delays due to differing site conditions according to Section 104.03.
- Delays due to an Owner ordered suspension according to Section 108.05.
- Delays due to the acts or omissions of the Owner or its failure to act in a timely manner.

The following delays are not compensable:

- Acts or omissions of the Contractor, its agents, employees, Subcontractors, or suppliers or causes within their control; or conditions that the Contractor could reasonably have foreseen or avoided.
- Floods, tidal waves, tornadoes, hurricanes, lightning strikes, earthquakes, fires, epidemics, or similar natural phenomena.
- Normal adverse weather.
- Extraordinary, unforeseen, and unavoidable delays in material deliveries.
- Acts of government entities other than the Owner.
- Unforeseen and unavoidable industry-wide labor strikes affecting the Contractor or its Subcontractors' or suppliers' workforce that are beyond the Contractor's control.
- Actions of third parties that are not the responsibility of the Contractor or within it's or the Owner's control.
- Civil disturbances or sovereign acts of the State, including but are not limited to states of emergency or epidemic or quarantine restrictions.

To request payment for a compensable delay, the Contractor shall within thirty (30) days after the end date of a delay event, unless directed otherwise in writing by the Owner, submit a written request for a change order for the Owner's approval. With the request, the Contractor shall submit a Schedule Impact Analysis (SIA) and all supporting data to objectively substantiate its request. The Owner will evaluate the Contractor's SIA and all

supporting data to determine entitlement and the appropriate amount of compensation, according to the following:

1. Field Office Overhead (FOOH)

- a. FOOH is the extended project field office overhead and site costs and expenses that are not attributable to specific Contract pay items, but are incurred in support of the project as a result of a delay, which include:
 - (1) Extended site supervision costs such as salaries for project field superintendent and administrative staff.
 - (2) Extended site office costs such as utilities, trailers, field office, office equipment, and sanitary and toilet facilities.
 - (3) Extended site equipment and tool costs for support equipment and tools that are not used for specific Contract pay items.
- b. The Contractor is entitled to FOOH only for compensable delays for which the Owner has granted a Contract time extension. The Contractor is not entitled to additional compensation for FOOH for delays that are caused by extra work performed on a Force Account basis or for increased quantities.
- c. The Contractor’s agreed amount of compensation for FOOH shall be based on the project daily FOOH rate derived from the Contractor’s Itemized Project FOOH Costs set out on the Owner’s form or other format acceptable to the Owner. The Contractor shall submit the form to the Owner no later than thirty (30) days after the Notice to Proceed date or on a date approved by the Owner. On the form, the Contractor shall list each project FOOH item, the total estimated costs, or expenses for each FOOH item for the original Contract time, the total project FOOH, and the project daily FOOH rate based on the total project FOOH divided by the original Contract duration. The compensation for FOOH will be calculated as follows:

$$\text{(Daily FOOH Rate)} \times \text{(No. of Days of Compensable Delay)} = \text{(Amount of FOOH Liquidated Damages)}$$

2. Home Office Overhead (HOOH)

HOOH is the Contractor’s allowable home office overhead costs and expenses that cannot be attributed and are not billed to a particular project but are incurred in support of all of the Contractor’s projects including, but not limited to, rent, office equipment and furnishings, insurance, office supplies, depreciation, taxes,

and utilities, as well as executive salaries, administrative staff salaries, project support staff salaries, and accounting and payroll services.

- a. The Contractor is entitled to payment of HOOH only for compensable delays for which the Owner has granted a Contract time extension and only when the Contractor could not reasonably recoup its HOOH while its workforce was idled by the delay because the Contractor was required to remain on standby, ready to resume work, and unable to perform other work at the project or elsewhere during the delay. The Contractor is not entitled to compensation for HOOH for delays that are caused by extra work performed on a Force Account basis or by increased quantities.
- b. The agreed amount of compensation for extended or unabsorbed HOOH for a compensable delay will be determined as follows:

$$\frac{A \times C}{B} = D$$

$$D \times E = F$$

Where:

A = Original total Contract amount

B = Original Contract duration (number of calendar days between and inclusive of the Contract Notice to Proceed (NTP) date and the original Contract Completion Date)

C = 6% (Agreed allowable HOOH percentage)

D = Daily allowable HOOH rate

E = Number of days of compensable delay

F = Agreed amount of compensation for HOOH

3. When to Audit to Determine FOOH and HOOH

The Contractor may propose a higher rate determined according to Federal Acquisition Regulations 48 CFR § 31 or other accounting standard if the Contractor determines that the agreed allowable HOOH percentage is insufficient.

The Itemized Project FOOH Costs (IPFC) and FOOH shall be subject to field verification and Owner audit, at any time, as determined by the Owner, if the Owner determines that the rate the Contractor submits is not an accurate representation of the Contractor's actual FOOH at the time of occurrence of the delay. If the Owner determines the daily FOOH rate is not an accurate representation of the Contractor's actual FOOH, the Contractor shall submit its actual project FOOH records at the time of occurrence of the delay, as requested by the Owner. The Owner may perform an audit of the Contractor's records as necessary to verify the Contractor's actual project FOOH. Adjustments to the daily FOOH rate may be made upon verification or Owner audit of the

Contractor's actual project FOOH. The project daily FOOH rate will then be calculated utilizing the rate determined by the audit. The Owner may also elect to perform an audit of the Contractor's actual project FOOH at the completion of the Contract, as determined by the Owner, in which case the project FOOH paid previously by change order may be adjusted based on the rate determined by the audit.

The Contractor's actual extended FOOH are defined to be those costs and expenses incurred from the original Contract Time Limit to the actual final acceptance of the project as documented by timesheets, payroll records, accounting records, contracts, invoices, bills, receipts, tickets, cancelled checks, and similar business records showing the costs and expenses actually incurred for the project field supervision and administrative staff, project field office, and overhead items submitted in accordance with this provision; and the records must be accurate and auditable.

If the total sum of the extended project FOOH and unabsorbed or extended HOOH for all approved change orders exceeds twenty percent (20%) of the original Contract amount, the Owner may at its option calculate the amount of FOOH and HOOH based on an Owner audit of the Contractor's actual project FOOH and HOOH records. In such event, the Owner will perform the audit according to Section 103.08 at the Owner's expense. The Owner audit may begin on ten (10) days' notice to the Contractor, its Subcontractors, and suppliers. The Contractor, Subcontractors, and suppliers shall make a good faith effort to cooperate with the auditors.

4. Other Delay Costs

The Contractor may incur costs attributable to compensable delays in addition to FOOH and HOOH. These costs include, but are not limited to, labor cost escalation, material costs escalation, idle equipment costs, and idle labor costs. These costs shall be determined according to the applicable provisions herein.

109.06 – Common Carrier Rates

The common carrier rates and taxes thereon that are current on the date of the opening of bids shall be considered applicable to all items subject to transportation charges thereunder. If such rates or taxes are thereafter increased by public authority on any materials entering into and forming a part of the Contract, an amount equal to the sum of all such increases, when evidenced by receipted common carrier bills, will be paid the Contractor by the Owner. Requests for such payments shall be made not later than sixty (60) days after final acceptance. If, after the date of the opening of bids, such rates or taxes are reduced by public authority on any materials entering into and forming a part of the Contract, an amount equal to the sum of all such decreases, when evidenced by receipted common carrier bills, will be deducted by the Owner from the monies due the Contractor for the work performed under the Contract.

The carrier rates for petroleum tank truck carriers, as defined in the Code of Virginia, that are in effect on the date of the opening of bids for the project shall be considered effective for at least one (1) year after that date. After one (1) year from that date, the Owner will pay the Contractor additional compensation equal to the cost of any carrier rate increases, subject to a maximum of eight percent (8%) of the original carrier rate for any materials ordered, delivered, and actually incorporated into the work after the one-year period. However, the Contractor shall advise the Owner in writing of their intent to request additional compensation attributable to carrier rate changes at the time of occurrence and shall submit receipted carrier bills and all relative information concerning the original and current carrier rates as they pertain to the project. If carrier rates are decreased after the one-year period, the Owner will deduct from monies due the Contractor an amount equal to the cost of any carrier rate decreases, subject to a maximum of eight percent (8%) of the original carrier rate, for any materials ordered, delivered, and actually incorporated into the work, based on receipted carrier bills that shall be furnished by the Contractor. On each succeeding year of the Contract, a maximum difference of eight percent (8%) of the original rate will be considered for increases or decreases in compensation under these terms and conditions.

Except for the aforementioned carriers, additional compensation attributable to changes in hauling rates of other contract carriers will not be allowed.

109.07 – Eliminated Items

If all or a part of any Contract item is determined to be unnecessary for the proper completion of the Work, the Owner may, upon written notice to the Contractor and issuance of an appropriate change order, eliminate all or part of 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 such item and the net cost of materials purchased, including freight and tax costs, as evidenced by invoice. No additional compensation will be made for overhead or anticipated profit.

109.08 – Partial Payments

(a) General

Partial payments will be based on a monthly progress estimate consisting of approximate quantities and value of work performed as determined by the Owner. The Contractor shall submit a progress estimate monthly on a day of the month to be determined at the pre-construction conference. When the method of measurement for a Contract item is in units of each or lump sum, the value of work accomplished for partial payment will be determined on a pro rata basis. Partial payments will be made once each month for the work performed in accordance with the Contract requirements. The Contractor will be given the opportunity to review the monthly progress estimate prior to each partial payment. Upon final acceptance, one (1) last monthly estimate will be prepared and any additional payment due will be vouchered for payment.

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.

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 percent (5%) 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.

For contracts without a payment bond, the Contractor shall submit to the Owner a letter from each materials supplier and Subcontractor involved stating that the Contractor has paid or made satisfactory arrangements for settling all bills for materials and subcontracted work that was paid on the previous month's progress estimate. The Owner will use the source of supply letter and approved subletting request to verify that certifications have been received for work that was paid on the previous monthly estimate. The Contractor shall furnish these and other certificates as are required as a prerequisite to the issuance of payment for the current monthly estimate.

The Owner may withhold the payment of any partial or final estimate voucher or any sum(s) thereof from such vouchers if the Contractor fails to make payment promptly to all persons supplying equipment, tools, or materials; or for any labor they use in the prosecution of the Contract work. Unless otherwise provided under the terms of the Contract, interest shall accrue at the rate of one percent (1%) per month.

(b) Payment to Subcontractors

In accordance with Title 2.2, 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 seven (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 with the reason for nonpayment. In the event payment is not made as noted, the Contractor shall pay interest at the rate of one percent (1%) per month, unless otherwise provided in the contract, to the subcontractor on all amounts that remain unpaid after seven (7) days except for the amounts withheld as provided herein.

These same requirements shall be included in each subcontract and shall be applicable to each lower-tier subcontractor. The Contractor shall provide the

Owner with its social security number or federal taxpayer identification number prior to any payment being made under this Agreement.

The Contractor's 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.

Notwithstanding the preceding and in accordance with Virginia Code § 2.2-4354(1), the Contractor, in the event that the contractor has not received payment from the Owner for work performed by a subcontractor, shall be liable for the entire amount owed to such subcontractor and to pay such subcontractor within sixty (60) days of the receipt of an invoice following satisfactory completion of the work for which the subcontractor has invoiced. The Contractor shall not be liable for amounts otherwise reducible due to the subcontractor's noncompliance with the terms of the contract. In the event the Contractor withholds all or a part of the amount invoiced by the subcontractor under the terms of the contract, the contractor shall notify the subcontractor within fifty (50) days of the receipt of such invoice, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment, specifically identifying the contractual noncompliance, the dollar amount being withheld, and the lower-tier subcontractor responsible for noncompliance. Payment by the Owner to the Contractor shall not be a condition precedent to payment to any lower-tier subcontractor, regardless of the Contractor's receiving payment for amounts owed to the Contractor. Nothing in this section shall be construed to (i) apply to or prohibit the inclusion of any retainage provision or (ii) apply to contracts with an architectural and engineering firm.

If the Contractor fails to make payment to the Subcontractor within the time frame specified herein, the Subcontractor shall notify the Owner and the Contractor's bonding company in writing. The Contractor's bonding company shall be responsible for insuring payment in accordance with this Section and Section 107.01.

(c) Retainage

The Contractor has two (2) options on how the retainage will be managed. Select one option by marking the corresponding box in Section 100.14:

- Waive the right to interest on such retainage. In this Option, the Owner holds all retainage until the project is accepted by the Owner,
- Set up an interest-bearing escrow account in accordance with Virginia law to hold such retainage. Said account shall be jointly held between the Contractor and the Owner. It is the Contractor's responsibility to set up this account, ensure the Owner's access to such an account and ensure it meets all requirements of the

law. If such account is not set up by the Contractor, Contractor has waived the right to interest on all retainage.

1. Retainage for Unsatisfactory Progress:

If the Owner determines the Contractor's progress is unsatisfactory according to Section 108.03 or other applicable Contract documents, the Owner will send a notice of unsatisfactory progress to the Contractor advising him of such determination. This notification will also advise the Contractor that an additional five percent (5%) retainage of the monthly progress estimate is being withheld for each month the Contractor's progress continues to be unsatisfactory.

When the Owner determines that the Contractor's progress has returned to satisfactory in accordance with the Contract Documents, the retainage withheld for unsatisfactory progress will be released in the next monthly progress estimate.

2. DELETED.

109.09 – Payment for Material on Hand

When requested in writing by the Contractor, payment allowances may be made for materials secured for use on the project and required to complete the project. Such material payments will be made for only those actual quantities of materials identified in the Contract, approved change orders, or otherwise authorized and documented by the Owner based on delivery tickets, bills of lading, or paid invoices. All such payments shall be in accordance with the following terms and conditions:

(a) Structural Steel or Reinforcing Steel:

An allowance of one hundred percent (100%) of the cost to the Contractor for structural steel or reinforcing steel materials secured for fabrication not to exceed sixty percent (60%) of the Contract price line item may be made when such material is delivered to the fabricator and has been adequately identified for exclusive use on the project. The provisions of this Section for steel reinforcement will only apply where the quantity of steel reinforcement is identified as a separate and distinct bid item for payment. An allowance of one hundred percent (100%) of the cost to the Contractor for superstructure units and reinforcing steel, not to exceed ninety percent (90%) of the Contract price line item, may be made when fabrication is complete. Prior to the granting of such allowances, the materials and fabricated units shall have been tested or certified and found acceptable to the Owner and shall have been stored in accordance with the requirements specified herein. Allowances will be based on invoices, bills, or the estimated value as approved by the Owner and will be subject to the retainage requirements of Section 109.08 (c). For the purposes of this Section fabrication is defined as any manufacturing process such as bending, forming, welding, cutting, or coating with paint or anti-corrosive materials which alters, converts, or changes raw material for its use in the permanent finished work.

(b) Other Materials:

For aggregate, pipe, guardrail, signs and sign assemblies, and other nonperishable material, an allowance of one-hundred percent (100%) of the cost to the Contractor for materials, not to exceed ninety percent (90%) of the Contract price line item, may be made when such material is delivered to the project and stockpiled or stored in accordance with the requirements specified herein. Prior to the granting of such allowances, the material shall have been tested and found acceptable to the Owner. Allowances will be based on invoices, bills, or the estimated value of the material as approved by the Owner and will be subject to the retainage provisions of Section 109.08 (c).

(c) Excluded Items:

No allowance will be made for fuels, form lumber, falsework, temporary structures, or other work that will not become an integral part of the finished construction. Additionally, no allowance will be made for perishable material such as cement, seed, plants, or fertilizer.

(d) Storage:

Material for which payment allowance is requested shall be stored in an approved manner in areas where damage is not likely to occur. If any of the stored materials are lost or become damaged, the Contractor shall repair or replace them at no additional cost to the Owner. Repair or replacement of such material will not be considered the basis for any extension of Contract time. If payment allowance has been made prior to such damage or loss, the amount so allowed or a proportionate part thereof will be deducted from the next progress estimate payment and withheld until satisfactory repairs or replacement has been made.

When it is determined to be impractical to store materials within the limits of the project, the Owner may approve storage on private property or, for structural units and reinforcing steel, on the manufacturer's or fabricator's yard. Requests for payment allowance for such stored material shall be accompanied by a release from the owner or tenant of such property or yard agreeing to permit the removal of the materials from the property without cost to the Owner. The Owner must be allowed access to the materials for inspection during normal business hours.

(e) Materials Inventory:

If the Contractor requests a payment allowance for properly stored material, they shall submit a certified and itemized inventory statement to the Owner no earlier than five (5) days and no later than two (2) days prior to the progress estimate date. The statement shall be submitted on forms furnished by the Owner and shall be accompanied by supplier's or manufacturer's invoices or other documents that will verify the material's

cost. Following the initial submission, the Contractor shall submit to the Owner a monthly-certified update of the itemized inventory statement within the same time frame. The updated inventory statement shall show additional materials received and stored with invoices or other documents and shall list materials removed from storage since the last certified inventory statement, with appropriate cost data reflecting the change in the inventory. If the Contractor fails to submit the monthly-certified update within the specified time frame, the Owner will deduct the full amount of the previous statement from the progress estimate.

At the conclusion of the project, the cost of material remaining in storage for which payment allowance has been made will be deducted from the progress estimate.

109.10 – Final Payment

When final acceptance has been duly made by the Owner as provided for in Section 108.09 (c) the Owner will prepare the final statement of the quantities of the items of work performed.

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

For Contracts not requiring a payment bond, the Contractor shall certify to the Owner that they have paid or made satisfactory arrangements for settling all bills for materials, labor, equipment, supplies, and other items entering into or used on the work and shall furnish other certificates as are required by the Owner as a prerequisite to the issuance of final payment.

Failure by the Contractor to provide required information and certifications will extend the 90-day period for final payment by the number of days equivalent to the delay attributable to the Contractor.

Upon review of the final estimate by the Contractor and approval by the Owner, the Contractor will be paid the entire sum due after previous payments are deducted and other amounts are retained or deducted under the provisions of the Contract. Final payment will become due within ninety (90) days after final acceptance. The Owner shall respond within ninety (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.

Interest will accrue on the amount the Owner owes to the Contractor that remains unpaid after seven (7) days following the 90-day payment date. The rate of interest will be the base rate on corporate loans (prime rate) at large U.S. money center commercial banks as reported daily in The Wall Street Journal. When a split rate is published, the lower of the two (2) rates shall be used. The rate effective on the 91st day following final acceptance will be applicable throughout the period of time for which interest is paid. However, in no event shall the rate of interest paid exceed the rate of interest established pursuant to the Code of Virginia. The period subject to payment of interest will begin on the 91st calendar day after final acceptance and will extend through the date of the payment of the final estimate.

When the payment date is delayed beyond the 90-day period by the fault of the Contractor and monies are due the Owner, the Contractor will be assessed annual interest on the balance due the Owner for the time delay attributable to the Contractor. The rate of interest will be determined as specified hereinbefore. All prior partial estimates and payments shall be subject to correction in the final estimate. The Owner may deduct monies owed to the Owner from the final payment. If the final payment is insufficient, monies owed to the Owner will become due and payable within thirty (30) days of Contractor's receipt of a certified letter giving notification of the amount owed. The Contractor will be assessed annual interest at the rate determined as specified within this Section for any balance that remains unpaid after thirty-seven (37) days from receipt of the letter.

After final acceptance and prior to final payment, the Contractor may request reimbursement for additional performance and payment bond premiums, but only to the extent that the final Contract amount exceeds the original Contract amount. If the Contractor requests reimbursement on such additional bond premiums the Contractor shall submit to the Owner a written request for reimbursement, together with a notarized statement from the surety, or its agent that certifies the Contractor's actual bond premium rate for any increase in the amended Contract amount above the original Contract amount. Such request shall also contain the Contractor's calculation of the additional premium requested for reimbursement as verified by the surety or its agent.

Upon submission of such request from the Contractor, the Owner will calculate the additional bond premium payment due the Contractor by multiplying the difference between the final Contract amount, including all change orders, overruns, and adjustments, and the original Contract amount, times the percentage bond premium rate provided by the Contractor and certified by the surety or its agent. The additional premium amount will be paid to the Contractor on the final estimate.

109.11 - Warranty/Guarantee

If any of the work is discovered to be not in accordance with the requirements of the Contract Documents within one (1) 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.