

PART 5

Division I Amendments to the Standard Specifications General Provisions for Design-Build Contracts Between Department and Design-Builder

These Division I Amendments supersede Division I of the 2007 Standard Specifications

SECTION 101—DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS

101.01—Abbreviations and Acronyms

Abbreviations and Acronyms shall be as stated in Section 101.01 of the Standard Specifications.

101.02—Terms

In these Division I Amendments to the Standard Specifications and other Contract Documents, the following terms and pronouns used in place of them shall be interpreted as follows, except that if such terms and pronouns are defined in the Agreement or General Conditions of Contract, such definitions shall govern:

-A-

Advertisement, Notice of. A public announcement, as required by law, inviting in a one-phase procurement, the submission of proposals from interested Offerors in response to a Request for Proposals, or in a two-phase procurement, Statements of Qualifications from interested Offerors in response to a RFQ by the Department for a designated design-build project. The announcement will indicate the general nature and location of the project, and the time and place for submitting the Statements of Qualifications or Proposals.

Affiliate. means: (a) any Person which directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, Design-Builder or any of its members, partners or shareholders holding an interest in Design-Builder; and (b) any Person for which ten percent (10%) or more of the equity interest in such Person is held directly or indirectly, beneficially or of record by: (i) Design-Builder; (ii) any of Design-Builder's members, partners or ten percent (10%) or greater shareholders; or (iii) any Affiliate of Design-Builder under part (a) of this definition. For purposes of this definition the term "control" means the possession, directly or indirectly, of the power to cause the direction of the management of a Person, whether through voting securities, a trust, contract, family relationship or otherwise.

Agreement. As defined in Article 1.2 of the General Conditions of Contract Part 4 ("General Conditions")

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

Award. The decision of the Board to award a contract to an Offeror based on the selection processes identified in the Requests for Proposal. The Award is subject to the execution and approval of a satisfactory Agreement therefore, and such conditions as may be specified or required by law.

Award Date. The date on which the decision is made by the Board or Commissioner to accept the proposal of an Offeror.

-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 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 chance of being exceeded in any given year.

Bid (also referred to as Proposal). The documents submitted by an Offeror in response to a Request for Proposal.

Bidder (also referred to as Offeror). Any individual, partnership, Corporation, or Joint Venture that formally submits a SOQ or proposal for the work contemplated thereunder.

Bids, Invitation for. Used interchangeably with “**Advertisement, Notice of**” defined above.

Board. Commonwealth Transportation Board of Virginia.

Borrow. Suitable material from sources outside the Roadway that is used primarily for Embankments.

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

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

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.

-C-

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.

Change Order (See Work Order).

Channel. A watercourse or drainage way.

Commissioner. Commonwealth Transportation Commissioner.

Commonwealth. Commonwealth of Virginia.

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

Construction Area. The area where authorized construction on this Project occurs.

Construction Limits (On-Site). The disturbed area utilized 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 or described within the Contract Documents.

Contract (also referred to as Contract Documents). The Agreement between the Department and Design-Builder for the Project, inclusive of all Contract Documents as defined in Article 2 of the Agreement. Oral representations or promises shall not be considered a part of the Contract.

Contract Bond(s). Those documents defined in Section 103.05.

Contract Engineer. The Engineer's authorized representative for administering the advertisement, receiving proposals, and awarding contracts for the Department.

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

Contract Times. As defined in **Article 5 of the Agreement.** .

Corporation. A body of Persons granted a charter legally to conduct business recognizing them as a separate entity having its own rights, privileges, and liabilities distinct from those of its members.

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.

Cut Slope. See also Fill Slope. A surface plane generally designated by design, which is formed during Excavation below existing ground elevations that intersects with existing ground at its termini.

-D-

Day. As defined in Article 1.2 of the General Conditions.

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

Department. Virginia Department of Transportation.

Design-Builder. Any individual, partnership, Corporation, or Joint Venture that contracts with the Department to perform the Work as an independent Design-Builder and not as an agent for the Department, Commissioner, or Board.

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

Disincentive. A verifiable monetary deterrent used to discourage the Design-Builder from failing to meet an Interim Milestone or the Contract Time Limit that is identified and defined in the Contract.

Disposable Material. Material generally found to be unsuitable for Roadway construction or material that is surplus.

Disposal Areas. Areas generally located outside of the Construction Limits identified in the Contract Documents where Disposable Material is deposited.

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 Contract Documents. 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 individual working on the Project specified in the Contract who is under the direction or control of or receives compensation from the Design-Builder or a subcontractor.

Engineer. As defined in Article 1.2 of the General Conditions

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. An item of work that was not provided for in the Contract as awarded but that is found to be essential to the satisfactory fulfillment of the Contract within its intended scope and authorized pursuant to Article 9 of the General Conditions.

-F-

Falsework. A temporary framework used to support work while 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 the construction of an Embankment above existing ground elevations that intersects with existing ground at its termini.

Firm. A commercial partnership of two or more Persons formed for the purpose of transacting business.

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

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 Highway 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-

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 500 cubic feet per second.

-I-

Incentive. A verifiable monetary amount used to encourage the Design-Builder to complete work prior to the Interim Milestone Dates or Substantial Completion Date or the Contract Times that are identified and defined by specific Contract.

Inspector. The Engineer'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-K-

Joint Venture. Two or more individuals, partnerships, Corporations, or combinations thereof that join together for the purpose of bidding on and performing a contract.

-L-

Laboratory. The testing laboratory of the Department or any other testing laboratory that may be designated by the Contract or by the Design Builder.

Liquidated Damages. As defined in Article 5 of the Agreement.

-M-

Major Item. Any Pay Item specifically indicated as such in the Contract Documents.

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

Median. The portion of a divided Highway that separates the Traveled Ways.

-N-

Non-Contract Item. An item of work required to permit completion of the specified Work in an acceptable manner, which item of work is located within the Construction Limits but is not included in the Contract Documents as being Design-Builder's responsibility, and which item of work will be completed by others prior to, during, or after the construction of the Project.

No Plan and Minimum Plan Concept Project. Generally a project of a very limited scope and duration requires few details to describe proposed work.

Notice to Proceed. As defined in Article 5.1 of the Agreement.

-O-

Offeror. See the definition for the term "Bidder."

Ordinary High Water. A water elevation based on analysis of all daily high waters that will be exceeded approximately 25 percent of the time during any 12 month period.

Overtopping Flood. The magnitude of flood that just overflows the Traveled Way at a given structure or on the approach Traveled Way of such structure.

-P-Q-

Pavement Structure. The combination of Select or stabilized materials, Subbase, Base, and surface courses, described in the typical pavement section in the Contract Documents that is placed on a Subgrade to support the traffic load and distribute it to the Roadbed.

Pay Item. A specifically described unit of work for which a price is provided in the Contract.

Person. Any individual (including the heirs, beneficiaries, executors, legal representatives or administrators thereof), Corporation, partnership, Joint Venture, trust, limited liability company, limited partnership, joint stock company, unincorporated association, county, district, authority, municipality, political subdivision or other entity of the Commonwealth or the United States of America, or other entity.

Plans. The approved Project plans and profiles, which may include Standard Drawings, 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.

Prequalification. The procedure used by the Department to assure itself of the Design-Builder's ability to perform the Work with attention to quality and safety, including his experience in similar work, and sufficiency of Equipment to accomplish the Work and that the Design-Builder's financial resources will permit financing the cost in accordance with the Rules Governing Prequalification Privileges.

Professional Engineer (PE). An engineer holding a valid license to practice engineering in the State of Virginia.

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.

Project. The total scope of Work specified to be performed in the Contract Documents.

Project Showing. The scheduled event at which the Department's representative meets with prospective Offerors to describe and answer questions regarding the proposed work.

Proposal: As defined in Article 1.2 of the General Conditions.

-R-

Ramp. A connecting Roadway between two Highways or Traveled Ways or between two intersecting Highways at a Grade Separation.

Request for Proposals (RFP). As defined in Article 1.2 of the General Conditions.

RFP Documents. As defined in Article 1.2 of the General Conditions.

Request for Qualifications (RFQ). As defined in Article 1.2 of the General Conditions.

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

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

Roadbed. The graded portion of a Highway within the top and side slopes that is prepared as a foundation for the Pavement Structure and Shoulders.

Roadbed Material. The material below the Subgrade in cuts, Embankments, and Embankment foundations that extends to a depth 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; extensive areas between the Roadways of a divided Highway.

Roadside Development. Items that are necessary to complete a Highway 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, service life and enhance the appearance of the Highway.

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

-S-

Schedule of Record (SOR). The latest accepted Baseline Schedule or Baseline Schedule update in accordance with Part 3, Article 11 of the Contract by which all schedule references will be made and progress evaluated.

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

Select Borrow. Borrow material that has specified physical characteristics.

Select Material. Material obtained from Roadway Cuts, Borrow areas, or commercial sources that is designated or reserved for use as a foundation for the Subbase, Subbase material, Shoulder surfacing, or other specified purposes designated in 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.

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). A document that sets forth specifications or requirements for a particular project that are not covered by the Standard Specifications.

Special Provision Copied Note (SPCN). A document that sets forth specific specifications or requirements, usually limited in scope, for a particular project.

Specialty Item. An item of work designated as "Specialty Item" in the Proposal that is limited to work that requires highly specialized knowledge, craftsmanship, or Equipment that is not ordinarily available in contracting organizations prequalified to submit proposals and is usually limited to minor components of the overall Contract.

Specifications. A general term that includes all directions, provisions, and requirements contained herein and those that may be added or adopted as supplemental specifications, special provisions, or special provision copied notes. All are necessary for the proper fulfillment of the Contract.

Standard Drawings. Unless otherwise specified, applicable drawings in the Standard Specifications and such other standard drawings as are referred to in the Contract Documents.

Standard Specifications. As defined in Article 1.2 of the General Conditions.

State. As defined in Article 1.2 of the General Conditions

Statement of Qualifications (SOQ). The documents submitted by an Offeror in response to an RFQ.

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

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, buildings, steps, fences, sewers, service pipes, underdrains, foundation drains, and other features that may be encountered in the Work and are not otherwise classed herein.

Subbase. A layer(s) of specified or selected material of designed thickness that is placed on a Subgrade to support a Base Course.

Subcontractor. As defined in Article 1.2 of the General Conditions

Subcontracting. Contracting with a Subcontractor for the performance of a portion of the Work without relinquishing any of the responsibility that the Design-Builder has toward the Department for performance of the entire Contract.

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 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.

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.

Successful Offeror. The Offeror that will be recommended for Award of the Contract in accordance with the RFP.

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

Supplemental Specifications. Additions and revisions to the Standard Specifications

Surety. A corporate entity bound with and for the Design-Builder 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 corporate body that engages to be responsible in the execution by the Offeror, within the specified time, of a satisfactory Contract and the furnishing of an acceptable payment and Contract bond.

Surface Course (See Wearing 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.

Surplus Material. Material that is present on the Project as a result of unbalanced Earthwork quantities, excessive swell, slides, undercutting, or other conditions beyond the control of the Design-Builder.

Suspension. A written notice issued by the Engineer to the Design-Builder that orders the work on the 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.

Tidewater, Virginia. Areas within the State as defined in the Department of Conservation and Recreation Erosion and Sediment Control Manual.

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

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

Top of Earthwork. The uppermost surface of the regular or Embankment Excavation, not including Select Material that is shaped to conform to the typical section shown in the Contract Documents.

Traveled Way. The portion of the Roadway for the movement of vehicles, not including Shoulders.

-U-

Unsuitable Material. Any material for use as embankment fill, and in cut areas to a depth of at least 3 ft below subgrade directly beneath pavements and at least 2 ft beneath the bedding of minor structures and laterally at least 2 ft beyond the outside edge of the pavement shoulders and bedding limits of the minor structures that classify as CH, MH, OH and OL in accordance with the Unified Soil Classification System (USCS); that contains more than 5 percent by weight organic matter; that exhibits a swell greater than 5 percent as determined from the California Bearing Ratio (CBR) test using VTM-8; and that exhibits strength, consolidation, durability of rock or any other characteristics that are deemed unsuitable by the Design-Builder's geotechnical engineer or as denoted in the

Contract Documents for use in the Work.. All materials within the uppermost 3 ft of the pavement subgrade that exhibits a CBR value less than that stipulated in the pavement design shall also be considered unsuitable. Saturated or very dry and/or loose or very soft coarse- and fine-grained soils that exhibit excessive pumping, weaving or rutting under the weight of construction equipment are also considered unsuitable unless they can be moisture conditioned through either mechanical or chemical means to an acceptable moisture content that allows adequate compaction to meet project specifications, and classification testing indicates they are not otherwise unsuitable. Topsoil, peat, coal and carbonaceous shale shall also be considered unsuitable material. All unsuitable material shall be disposed of and/or treated as discussed in Section 106.04 at no additional cost to the Department.

Utilities. Private, county, city, municipal or public facilities designed, owned, and maintained for public use such as electricity, water, sanitary sewer, storm sewer, drainage culverts, telecommunications, conduits, gas, oil, fiber optics, and cable television that are not identified as a Pavement Structure, Roadway, Highway, Street, or Traveled Way.

-V-

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

-W-X-Y-Z-

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

Work. As defined in Article 1.2 of the General Conditions

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 Design-Builder is required to submit to the Engineer for review.

Work Order. As defined in Article 9 of the General Conditions

SECTION 102—BIDDING REQUIREMENTS AND CONDITIONS

102.01—Prequalification of Offerors

- (a) Prospective Offerors and Subcontractors shall prequalify in accordance with the instructions in the RFQ or the RFP for each design-build project. When required, prospective Offerors and Subcontractors shall prequalify with the Department and shall have received a certification of qualification in accordance with the rules and regulations adopted by the Board.

The names of individuals authorized to sign proposals shall be on file with the Department. A name will be considered to be on file if it appears as that of an officer, a partner, or an owner on the current Design-Builder's Financial Statement. Requests by the Offeror to revise the list of individuals authorized to sign proposals shall be submitted in writing and approved prior to the date proposals are opened. A proposal signed by someone whose name is not on file may be rejected.

Unless otherwise designated by the Offeror, the proposal amount of a Joint Venture will be divided equally among the Joint Venture members to determine if the maximum capacity rating for each member is within that member's range.

An Offeror who makes a false certification on the proposal will be subject to forfeiture of the proposal bond, disqualification from bidding on future work for a 90-day period, or both.

When an individual is prequalified to submit a proposal jointly only with a specific company, the Joint Venture will be considered a unified entity for qualification purposes.

Offerors seeking new Prequalification must complete and submit the Prequalification package.

Offerors intending to submit proposals consistently shall prequalify at least once each two years using the Prequalification Renewal Application. However, the maximum capacity rating or classification, or both, may be changed by the Department during that period if additional favorable reports are submitted; or upon unsatisfactory performance as determined in accordance with the requirements of Section 108.03; or from the Contractor's performance evaluations; or upon non-performance as determined in accordance with the provisions of Section 108.07. The Department may require a Design-Builder to furnish a current financial and experience statement at any time.

Temporary disqualification of a Design-Builder as provided herein will result in the temporary disqualification of each member of a Joint Venture and any affiliate having substantially the same operational management or drawing from the same equipment or labor resource pool. Temporary disqualification will also result in non-approval of the Design-Builder and each member of a Joint Venture and affiliates as defined herein for performance of Work as Subcontractors, which, in the opinion of the Department, could adversely affect other work under contract to the Department.

- (b) If Prequalification is approved, prospective Offerors will be placed on the Department's List of Prequalified Vendors. Offerors are subject to varying levels of pre-qualification as stated within the Rules Governing Prequalification Privileges. Offerors will be subject to removal from this list based on disqualification in accordance with the Contract Documents and Prequalification rules and regulations.

Unless otherwise stated, consideration for reinstatement to the Department's List of Prequalified Vendors will be made by the Contract Engineer.

102.02—Contents of RFQ and RFP (Not Used)

102.03—Interpretation of Quantities in RFP (Not Used)

102.04—Examination of Site of Work and Proposal

- (a) **Evidence of Examination of Site of Work and Proposal (Refer to General Conditions, Section 4.2)**
- (b) **Subsurface Data**

Subsurface data may be available for review by the Offeror in the office of the District Materials Engineer or State Materials Engineer or as stated elsewhere in the RFP documents. Such data may be reasonably relied upon by Offeror as being accurate with regard to test holes and are made available to the Offeror in good faith in order to apprise him of information in possession of the Department. Any conclusions drawn by the Department concerning subsurface conditions are based solely on the data and are merely indications of what appear to be existing subsurface conditions. The Department does not warrant these conclusions to be correct, either expressly or by implication. Further, the Department does not warrant the condition, amount, or nature of the material that may be encountered or the sufficiency of the data, either expressly or by implication. Prior to submitting a proposal, the Offeror shall make his 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. After the Date of Commencement, the Successful Offeror shall comply with Section 4.2.2 of the General Conditions.

- (c) **Notice of Alleged Ambiguities**

If a word, phrase, clause, or any other portion of the RFQ or RFP is alleged to be ambiguous, the Offeror shall submit written notice of the same in accordance with the requirements of and within the time periods specified in the RFQ or RFP. Responses by the Department will be provided accordingly. The

Department's responsibility for answering the notice will be limited to the processes defined by the RFQ or RFP.

The Department will not be responsible for any other explanations or interpretations of the alleged ambiguities except those brought to the attention of and responded to by the Department point of contact ("POC") as identified in the RFQ or RFP. No employee or agent of the Department shall have the authority to furnish any explanation or interpretation, verbal or written, of alleged ambiguities.

If the Offeror fails to give written notice and request an interpretation of the alleged ambiguity within the specified time, he shall waive any right he may have had to his own interpretation of the alleged ambiguity. The true meaning of the alleged ambiguity will be as interpreted by the Department through the POC.

102.05—Preparation of Proposal

- (a) **General (Refer to RFP)**
- (b) **Design Options (Refer to RFP)**
- (c) **Debarred Suppliers**

The Offeror is cautioned against utilizing price quotes for materials for use in the preparation of proposals from suppliers that are debarred by the Department. The Department will not approve for use any material furnished by a supplier debarred by the Department. The Offeror shall ascertain from the Department's listings which suppliers are debarred. Lists of approved suppliers can be found on the Department's Materials Division web site.

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

- (d) **Required Certifications (Not Used)**
- (e) **Acknowledgement of Receipt of Revisions (Refer to RFP)**
- (f) **Signing the Proposal (Refer to RFP)**
- (g) **Additional Proposal Requirements**

Offeror shall also comply with the requirements as set forth in the following exhibits attached herewith:

- .1 Exhibit 102.05(g.1) *Use of Domestic Material*
- .2 Exhibit 102.05(g.2) *FHWA Required Contract Provisions Federal-Aid Construction Contracts*
- .3 Exhibit 102.05(g.3) *Executive Order 11246*

102.06—Irregular Proposals

Proposals will be considered irregular and may be rejected for *any* of the following reasons:

- (a) if the Offeror fails to comply with the requirements of Sections 102.05 and 102.07;
- (b) if the proposal is not written in ink or typed;

- (c) if the Offeror 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 the RFP;
- (d) if the Price Proposal is not in compliance with the RFP;
- (e) if the proposal is not properly signed;
- (f) if erasures or alterations in the Offeror's entries are not initialed by the Offeror;
- (g) if the Offeror fails to provide a complete Acknowledgment of Revision Sheet (C-78);
- (h) if there are unauthorized additions, conditional or alternate proposals, or irregularities of any kind that may make the proposal incomplete, indefinite, or ambiguous;
- (i) if the unit prices in the proposal are obviously unbalanced, or either in excess or below the cost analysis values as determined by the Department;
- (j) if any papers included in the proposal are detached or altered when the proposal is submitted except as otherwise provided for herein;
- (k) if proposals are submitted in envelopes showing a designation for a project other than the project for which the proposal is made;
- (l) if the Offeror fails to submit a statement concerning collusion;
- (m) if the proposal contains any other deviation from the RFP; or
- (n) failure to be registered with "eVA Internet e-procurement solution" prior to the Award of the Contract.

102.07—Proposal Guaranty

A proposal in excess of \$250,000.00 will not be accepted or considered unless accompanied by a guaranty in the form of a proposal bond made payable to the Treasurer of Virginia. A proposal bond will be accepted only if executed on a form that contains the exact wording as the form furnished by the Department. Any proposal accompanied by a bond having wording that differs in any respect from that furnished by the Department will be rejected. The amount of the proposal guaranty shall be 5 percent of the Proposal Price.

When the principal is a Joint Venture, each party thereof shall be named and shall execute the proposal guaranty. Each surety to the proposal bond shall be named and shall execute the proposal bond. The proposal bond shall be accompanied by a certified copy of the power of attorney for the surety's attorney-in-fact.

102.08—Disqualification of Offeror

Any of the following causes may be considered sufficient for the disqualification of an Offeror and rejection of its proposal:

- (a) more than one proposal for the same work from an individual, partnership, Corporation, or Joint Venture under the same or different name. A proposal submitted by an Affiliate of an individual, partnership, Corporation, or any party of a Joint Venture will be considered as more than one proposal submitted for the same work. *Affiliate* as used herein shall conform to the definition in Section 101.02—Terms, with the term "Offeror" being used in lieu of the term "Design-Builder.";
- (b) evidence of collusion among Offerors in which case the participants in such collusion will not be considered for future bids until re-qualified by the Board;

- (c) incompetency or inadequate machinery, plants, or other Equipment as revealed by the Offeror's financial and experience statements required by the RFP and Contract Documents;
- (d) unsatisfactory workmanship or progress as demonstrated by performance records of current or past work for the Department, other agencies or departments of the Commonwealth, or agencies or departments of other states in the United States or federal government;
- (e) The Design-Builder may be temporarily disqualified from bidding on contracts with the Department when the Budgeted Cost of Work Performed ("BCWP") is more than 10 percent less than the Budgeted Cost of Work Scheduled ("BCWS") on the basis of the Design-Builder's latest approved progress schedule. Progress will be determined at the time of the monthly progress estimate. If the Design-Builder is delinquent by more than 10 percent, he may be notified that if the next monthly progress estimate shows a delinquency of more than 10 percent, his name may be removed from the list of prequalified Offerors unless he can establish that the delinquency was attributable to conditions beyond his control. If his name is removed, the Design-Builder will not be reinstated as a prequalified Offeror until the Department deems that his progress has improved to the extent that the Work can be completed within the Contract Time or until final acceptance of the Project.
- (f) uncompleted work with the Department that in the judgment of the Department might hinder or prevent prompt completion of additional work if awarded;
- (g) failure to pay or settle satisfactorily all bills for Materials, labor, Equipment, supplies, or other items specified in contracts in force at the time the new work comes before the Board for Award;
- (h) failure to comply with any Prequalification regulation of the Department;
- (i) failure to cooperate properly with representatives of the Commonwealth inspecting, monitoring, or administering construction or disorderly conduct toward any such representative in previous contracts;
- (j) default under a previous contract; or
- (k) Failure to pay back amounts owed the Department as specified in Section 103.08

Temporary disqualification of an Offeror as provided herein will result in the temporary disqualification of each member of a Joint Venture and any Affiliate. Temporary disqualification will also result in non-approval of the Offeror, each member of a Joint Venture, and Affiliates as defined herein, for performance of work as subcontractors that in the opinion of the Contract Engineer could adversely affect other work under contract to the Department.

The above listed reasons for possible disqualification are not totally inclusive and disqualification may also occur based on other requirements within the RFP or Contract Documents.

Offerors who are disqualified may be reinstated at the discretion of the Engineer or the Prequalification Panel upon satisfactory compliance with the requirements of the RFP.

102.09—Delivery of Proposal

Proposals shall be delivered in accordance with the instructions in the RFP. Unless clearly stated otherwise, proposals shall be submitted in two separate, sealed parcels containing the Technical Proposal in one and the Price Proposal in the other. Parcels shall be clearly marked to identify the Project and the Offeror, and to identify the contents as Technical Proposal or Price Proposal. Proposals shall be sealed in an envelope and addressed to the Point of Contact identified in the RFP for receipt of proposals, and shall be filed prior to the time and at the place specified in the RFP. Proposals received after that time will be returned to the Offeror unopened. The Department may defer the date for the opening of proposals in which case the Offerors will be notified.

102.10—Withdrawal of Proposal (Not Used)

102.11—Combination or Conditional Proposals

If the Department so elects, RFPs may be issued for projects in combination or separately. Proposals may be submitted for either the combination or separate units of the combination. The Department may make Awards on combination proposals or separate proposals to its best advantage. Combination proposals other than those set up in the RFP by the Department will not be considered.

Conditional proposals will be considered only when so stated in the RFP.

102.12—eVA Business-To-Government Vendor Registration

Offerors are not required to be registered with "eVA Internet e-procurement solution" at the time proposals are submitted, however, prior to Award of a contract, the Successful Offeror must be registered with "eVA Internet e-procurement solution" or the Proposal may be rejected. Registration shall be performed by accessing the eVA website portal www.eva.state.va.us, following the instructions, and complying with the requirements therein.

102.13—Public Opening of Proposals.

Price Proposals will be opened in accordance with the instructions in the RFP. Interested parties are invited to be present.

SECTION 103—AWARD AND EXECUTION OF DESIGN-BUILD CONTRACTS

103.01—Consideration of Proposals

After Price Proposals have been opened and read, they will be evaluated in accordance with the RFP for the design-build contract.

The Board reserves the right to reject any or all proposals, waive technicalities, advertise for new proposals, or proceed to do the work otherwise if it deems that the best interest of the Commonwealth would be promoted thereby.

103.02—Award of Contract (Not Used)

103.03—Cancellation of Award

The Board or the Commissioner, 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 State.

103.04—Return of Proposal Guaranty

Proposal guaranties, except those of the two highest ranked Offerors, will be returned immediately after the evaluation of proposals, if requested. The proposal guaranties of the two highest ranked Offerors will be returned within 5 days after the Contract has been duly executed by both the Successful Offeror and Department, if requested. If the Successful Offeror withdraws his Proposal prior to Award, the proposal guaranty will be forfeited in accordance with the requirements of Section 2.2-4336 of the *Code of Virginia*.

103.05—Requirements of Contract Bond

Within 15 days after notification of Award of a contract, the Successful Offeror shall furnish the following bonds ("Contract Bonds") for contracts in excess of \$250,000.00:

- (a) a performance bond in the sum of one hundred percent (100%) of the Contract Price conditioned upon the faithful performance of the Work in strict conformity with the Contract Documents, and

- (b) a payment bond in the sum of one hundred percent (100%) of the Contract Price conditioned upon the prompt payment for all labor, materials, public utility services, and rental of equipment used in the prosecution of the Work.

Offerors will not be awarded an unbonded contract when their proposal plus the balance of other unbonded contracts exceeds \$250,000.00 or if their current Ability Factor is less than 8.0 as determined by their Prequalification status.

The Contract Bonds shall be made on official forms furnished by the Department and shall be executed by the Offeror and a Surety company 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 Contract Bonds shall include authorized signatures and titles.

In lieu of payment or performance bonds, the Offeror may furnish a certified check or cash escrow in the face amount required for each of the bonds, which will be held for the full statutory period as applicable for each bond.

Upon written request from the Offeror, the Contract Bonds may be reduced on Contracts having planting items with an establishment period after acceptance of all Contract Work and during the establishment period. The amount of Contract Bonds for the duration of the remaining establishment period shall be equal to 35 percent of the total contract price of the planting items.

103.06—Documents Required as a Condition to Award

The portion of the executed Contract submitted by the Successful Offeror shall include the following documents, unless the filing of any of them at a later date is specifically permitted by the RFP or Contract Documents, provided, however notwithstanding anything to the contrary in the Contract Documents, that the submission of an executed Agreement and Contract Bonds shall always be a precondition to Award

- (a) **Contract:** The Agreement executed by the Successful Offeror.
- (b) **Contract Bonds:** Contract Bonds shall conform to the requirements of Section 103.05.
- (c) **Affidavits and Documents:** Affidavits and documents set forth in the RFP and executed by the Successful Offeror.
- (d) **Progress Schedule:** (Not Used)
- (e) **Certificates of Insurance:** The Design-Builder shall file certificates of insurance with the Department evidencing the coverages and limits described below within 15 days after notification of Award of the Contract. The certificates shall be executed by approved insurance companies authorized to do business in Virginia with a minimum “*Best Rating*” or “*B +*” and shall cover the Contract they accompany. The Design-Builder shall file notice with the Department at least 30 days prior to the cancellation or reduction of the required insurance, and shall cease operations on the date of the cancellation or reduction until new insurance is in force and the same evidence of insurance is provided to the Department. Insurance coverage in the minimum amounts set forth below shall not be construed to relieve the Design-Builder or Subcontractor(s) of liability in excess of such coverage, nor shall it preclude the State from taking such actions as are available to it under any other provision of this Contract or otherwise in law. The liability insurance policies required below shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project.

(i) **Contract Value Less Than or Equal to \$50 Million:** For Contracts with a Contract Value less than or equal to \$50 million, the following requirements shall apply:

- (1) Workers’ Compensation and Employer’s Liability Insurance with statutory workers’ compensation (Coverage A) limits and employer’s liability (Coverage B) limits of \$1 million

bodily injury by disease, each employee. If necessary, coverage shall be extended to cover any claims under the United States Longshoreman's Act and Harbor Workers Act and Jones' Act as may be appropriate for the work.

(2) Design-Builder's Bodily Injury and Property Damage Liability Insurance: The Design-Builder shall procure and maintain at his own expense, until Final Acceptance of the Work covered by the Contract, insurance of the kinds and in the amounts specified herein. The minimum limits of liability for this insurance shall be \$1 million each occurrence and \$2 million in the aggregate. The Design-Builder's Bodily Injury and Property Damage Liability Insurance shall cover liability of the Design-Builder 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 Design-Builder's own Employees as a result of the negligence of the Design-Builder 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 for or on behalf of the Subcontractors and evidence of such insurance shall be submitted with the sublet request. Insurance provided in compliance with this Section shall include liability of the Design-Builder for damage to or destruction of property that may be suffered by Persons other than the Design-Builder's own Employees as a result of blasting operations of the Design-Builder in performing the Work covered by the Contract.

(ii) **Contract Value Greater Than \$50 Million:** For Contracts with a Contract Value greater than \$50 million, the following requirements shall apply:

(1) Workers' Compensation and Employer's Liability Insurance with statutory workers' compensation (Coverage A) limits and employer's liability (Coverage B) limits of \$1 million bodily injury by disease, each employee. If necessary, coverage shall be extended to cover any claims under the United States Longshoreman's Act and Harbor Workers Act and Jones' Act as may be appropriate for the work.

(2) Commercial General Liability Insurance including coverage for premises and operations, independent contractors, personal injury, product and completed operations, explosion, collapse and underground, and broad form contractual liability with limits of at least \$2 million per occurrence and \$4 million aggregate.

(3) Automobile Liability Insurance with a limit of at least \$2 million combined single limit for bodily injury and property damage covering all owned (if any), non-owned, hired or borrowed vehicles on-site or off.

(4) Umbrella/Excess Liability Insurance in excess of the underlying limits noted above for employer's liability, commercial general liability, and automobile liability in the amount of \$100 million per occurrence and in the annual aggregate.

(5) Architects/Engineers Professional Liability Insurance covering the lead design engineer for acts, errors or omissions arising in connection with the work for not less than \$15 million any one claim and in the aggregate. Such insurance shall specifically delete any design-build or similar exclusions that could compromise coverage because of the design-build delivery of the Project. Such insurance shall be maintained throughout the duration of any warranty period and for at least three years after the expiration of any warranty period.

(6) Contractor's Pollution Liability Insurance to indemnify for bodily injury or property damage or amounts which the Design-Build Contractor or its agents, Subcontractor(s), or employees are legally obligated to pay for clean up/remediation work arising out of the work undertaken pursuant to the Contract Documents. Such insurance shall have minimum limits of \$10 million any one claim and in the aggregate and shall remain in full force and effect for five years following Final Acceptance.

(7) **Builder's Risk Insurance** to provide coverage for physical loss, destruction or physical damage to the work. Such insurance shall cover the Design-Build Contractor, the Department, and all Subcontractors and shall be maintained at a limit of at least 100% of the Contract Value. Such insurance shall include replacement cost coverage for materials, supplies, equipment, machinery, and fixtures that are or will be part of the Project. Coverages shall include but are not limited to the following: right to partial occupancy, earthquake, earth movement, flood, transit, temporary and permanent works, expediting expenses, debris removal, offsite storage, and commissioning and start-up.

Design-Builder's liability insurance set forth in Sections 103.06 (a) through (e) above shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project.

To the extent Owner requires Design-Builder to provide professional liability insurance for claims arising from the negligent performance of design services by Design-Builder, the coverage limits, duration and other specifics of such insurance shall be as set forth in the Agreement. Any professional liability shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project. Such policies shall be provided prior to the commencement of any design services hereunder.

103.07—Failure to Furnish Bonds or Certificate of Insurance

Failure by the Successful Offeror to furnish the Department acceptable bonds, workers' compensation insurance, the Contractor's Bodily Injury and Property Damage Liability Insurance policy, or other applicable insurance policies within 15 days after being notified of the Award of a contract shall be considered just cause for cancellation of Award and forfeiture of the proposal guaranty. In such event, the proposal guaranty shall become the property of the Commonwealth, not as a penalty but in liquidation of damages sustained. The Contract may then be awarded to the next highest-ranked responsible and responsive Offeror, or the work may be re-advertised or constructed otherwise, as determined by the Board.

No plea of mistake in the proposal shall be available to the Offeror for the recovery of his proposal guaranty or in defense of action taken by the Department as a result of his neglect or refusal to execute a contract.

In the event the Successful Offeror on an unbonded contract is unwilling or unable to fulfill a contract and fails to notify the Department prior to execution of a contract by the Department, the Offeror will be declared in default in accordance with the requirements of Section 108.07.

In the event the Offeror on an unbonded contract notifies the Department prior to execution of a contract by the Department of such unwillingness or inability to fulfill a contract, the Offeror will be enjoined from bidding on any unbonded contracts for a period of no less than 90 days from the date of notice by the Department.

An Offeror who has never been enjoined or defaulted on an unbonded contract and who notifies the Department prior to contract execution of an unwillingness or inability to fulfill a contract will not be enjoined for the first occurrence; however, said Offeror will not be permitted to rebid or perform work on that specific contract.

103.08—Contract Audit

The Design-Builder shall permit the Department to audit, examine, and copy all documents, computerized records, electronic mail, or other records of the Design-Builder during the life of the Contract and for a period of not less than five years after the date of final payment, or the date the Design-Builder is declared in default of Contract, or the date of termination of the Contract. The documents and records shall include, but not be limited to:

- (a) Those that were used to prepare and compute the Proposal, 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 Department.

- (b) Records pertaining to the Project as the Department may deem necessary in order to permit adequate evaluation and verification of Design-Builder's compliance with contract requirements, compliance with the Department's business policies, and compliance with provisions for pricing Work Orders or claims submitted by the Design-Builder or Subcontractors, shall be made available to the auditor(s) at the Department's request. The Design-Builder shall make his personnel available for interviews when requested by the Department.
- (c) Upon request, the Design-Builder shall provide the Department with data files on data disks, or other suitable alternative computer data exchange format. Data furnished by the Design-Builder that cannot be verified will be subject to a complete audit by the Department.

The Design-Builder shall ensure that the requirements of this provision are made applicable to Subcontractors. The Design-Builder shall cooperate and shall cause all related parties to furnish or make available in an expeditious manner all such information, materials, and data. The Design-Builder shall be forthcoming in disclosing all sources and locations of media.

The Design-Builder shall provide immediate access to records for the audit and provide immediate acceptable facilities for the audit. Failure on the part of the Design-Builder to afford the Department immediate access or proper facilities for the audit will be considered failure to cooperate and will result in disqualification as an Offeror in accordance with Section 102.08.

Upon completion of the Contract audit, any adjustments or payments due by the Design-Builder as a result of the audit shall be made within 60 days from presentation of the Department's findings to the Design-Builder. Failure on the part of the Design-Builder to make payment may result in disqualification as an Offeror in accordance with Section 102.08.

If the Design-Builder disagrees with the findings of the Department's audit, the Design-Builder may appeal the decision in accordance with provisions of Section 105.19 or the *Code of Virginia* as amended and as applicable, except that the provision for the Design-Builder to submit a claim within 60 days after final payment shall not apply. If the Design-Builder elects to appeal the decision of the audit he shall within 60 days of the date of the notice of the Department's findings submit a written request to appeal the decision to the Engineer. Failure on the part of the Design-Builder to file a claim disputing the Department's audit within 60 days will be interpreted as a waiver of any claim for dispute of the Department's findings.

103.09—Execution of Contract

The Proposal as submitted, including the documents specified in Section 103.06, shall be deemed accepted by the Department upon submittal of the contract bond, contract bodily injury and property damage liability insurance certificate, and workers' compensation insurance certificate, and the final execution by the Department. After the Department has recommended the Proposal for Award, the Successful Offeror shall be required to sign and return a paper copy of such documents to the Contract Engineer. Failure to sign and return such documents will result in forfeiture of the Proposal bond. If a contract is not awarded within the time limit specified in Section 103.02, the Offeror may withdraw his Proposal without penalty or prejudice unless the time limit is extended by mutual consent. No contract shall be considered effective until it has been fully executed by all parties.

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 within the Contract Price and Contract Times. Further it is understood that the Design-Builder will execute the Work under the Contract as an independent Design-Builder and not as an agent of the Department, the Commissioner, or the Commonwealth Transportation Board.

104.02—Alteration of Quantities or Character of Work

(a) General

The Department 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 shall be administered under Article 9 of the General Conditions, and shall not invalidate the Contract or release the Surety, and the Design-Builder shall agree to perform the Work as altered. No change, alteration, or modification in or deviations from the Contract Documents, or the giving by the Department of any extension of time for the performance of the Work, or the forbearance on the part of the Department shall release or exonerate in whole or in part either the Design-Builder or any Surety on the obligations of any bond given in connection with the Contract. Neither the Department nor the Design-Builder 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 Price 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 Price shall not, however, reduce the penal amount of the bonds unless specifically provided in any Work Order as authorized in accordance with the provisions of Section 109.05 decreasing the scope of the Work.

(b) Value Engineering Proposals

The Design-Builder may submit to the Department written Value Engineering Proposals (“VEP”) for modifying the requirements of Contract Documents for the purpose of reducing the total Contract Price or Contract Times without reducing the design capacity or quality of the finished product. If the VEP is accepted by the Department, the net savings or reduction of Contract Times will be equally divided by the Department and the Design-Builder.

Each VEP shall result in a net savings over the Contract Price or Contract Times 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 VEP:

- Statement that the proposal is submitted as a VEP
- Statement concerning the basis for the VEP benefits to the Department and an itemization of the contract items and requirements affected by the VEP
- Detailed estimate of the cost under the existing Contract and under the VEP
- Proposed specifications and recommendations as to the manner in which the VEP changes are to be accomplished
- Statement as to the time by which a contract Work Order adopting the VEP must be issued so as to obtain the maximum cost-effectiveness

The Department will process the VEP in the same manner as prescribed for any other proposal that would necessitate issuance of a Work Order. The Department may accept a VEP in whole or part by issuing a Work Order that will identify the VEP on which it is based. The Department will not be liable to the Design-Builder for failure to accept or act on any VEP submitted pursuant to these requirements or for delays in the Work attributable to any VEP. Until a VEP is put into effect by a Work Order, the Design-Builder shall remain obligated to the terms and conditions of the existing Contract. If an executed Work Order has not been issued by the date on which the Design-Builder’s proposal specifies that a decision should be made or such other date as the Design-Builder may subsequently have specified in writing, the VEP shall be deemed rejected.

The Work Order effecting the necessary modification of the Contract will establish the net savings agreed on, provide for adjustment of the contract prices, or contract time, and indicate the net savings. The Design-Builder shall absorb all costs incurred in preparing a VEP. Costs for reviewing and administering a VEP will be borne by the Department. The Department may include in the agreement any conditions it deems appropriate for consideration, approval, and implementation of the VEP. The Design-Builder's 50 percent share of the net savings or contract time shall constitute full compensation to him for effecting all changes pursuant to the agreement.

Unless specifically provided for in the Work Order authorizing the VEP, acceptance of the VEP and performance of the work thereunder will not change the Contract Time.

The Department may adopt a VEP for general use in contracts administered by the Department if it determines that the VEP is suitable for application to other contracts. VEPs identical with or similar to previously submitted VEPs will be eligible for consideration and compensation under these provisions if they have not been previously adopted for general application to other contracts administered by the Department. When a VEP is adopted for general use, compensation pursuant to these requirements will be applied only to those awarded contracts for which the VEP was submitted prior to the date of adoption of the VEP.

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 VEP. If a VEP is based on or is similar to a change in the Contract Documents prior to submission of the VEP, the Department will not accept the VEP.

The Department will be the sole judge of the acceptability of a VEP. The requirements herein apply to each VEP initiated, developed, and identified as such by the Design-Builder at the time of its submission to the Department. However, nothing herein shall be construed as requiring the Department to approve a VEP.

Subject to the provisions herein, the Department or any other public agency shall have the right to use all or part of an accepted VEP without obligation or compensation of any kind to the Design-Builder.

104.03—Differing Site Conditions (Refer to Part 4 – General Conditions – Section 4.3, Differing Site Conditions)

SECTION 105—CONTROL OF WORK

105.01—Notice to Proceed

The Department will issue a Notice to Proceed in accordance with the RFP. The commencement of Work and the Contract Time will start as set forth in Part 3. In no case shall work begin before the Contract is executed by the Department. The Design-Builder shall notify the Department at least 3 days prior to the date on which work will begin.

The Letter of Contract Execution will identify the Engineer's authorized representative who is responsible for written directives and changes to the Contract. The Department will contact the Design-Builder after notice of Award to arrange a pre-construction conference.

In the event the Design-Builder, for matters of his convenience, wishes to begin work later than 15 days from the date of Notice to Proceed he shall make such a request in writing to the Engineer promptly after the execution of the Contract. If the Design-Builder's requested start date is acceptable to the Engineer, the Design-Builder will be notified in writing; however, the Contract Time will not be adjusted but will remain binding. The Design-Builder's request to adjust the start date for the Work on the Contract will not be considered as a basis for claim that the time

resulting from Design-Builder's requested start date, if accepted by the Engineer, is insufficient to accomplish the Work nor shall it relieve the Design-Builder of his responsibility to perform the Work in accordance with the scope of work and requirements of the Contract. In no case shall work begin before the Department executes the Contract. The Design-Builder shall notify the Engineer at least 3 days prior to the date on which he plans to begin the Work.

105.02—Pre-Construction Conference (Not Used)

105.03—Authorities of Project Personnel

(a) Authority of Department

During prosecution of the Work, the Department 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 Contract Documents; acceptable fulfillment of the Contract by the Design-Builder; disputes and mutual rights between contractors; and compensation.

The Department has the authority to suspend the Work wholly or in part if the Design-Builder 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 Department may also suspend Work for such periods as it may deem necessary because of catastrophic or extraordinary weather in accordance with the definition of such 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 Department may issue written clarifications or directives that either enhance or alter the Contract Documents. The Department may order such work as may be necessary to complete the Contract satisfactorily.

(b) Authority of Inspector

Inspectors employed by the Department 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 Inspector is not authorized to alter or waive the provisions of the Contract Documents, or make changes to the Contract Documents.

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

The Inspector will exercise only such additional authority as may be delegated by the Engineer. The Engineer will advise the Contractor in writing of delegations of authority that will affect his operations.

105.04—Gratuities

Gifts, gratuities, or favors shall not be given or offered by the Design-Builder to personnel of the Department. A gift, gratuity, or favor of any nature whatsoever or offer of such by the Design-Builder to personnel of the Department shall be a violation of this provision.

The Design-Builder shall not employ any personnel of the Department for any services without the prior written consent of the Department.

If the Department determines after investigation that the Design-Builder or the Design-Builder's Employees, representatives, or agents of any Person acting in his behalf have violated this provision, the Design-Builder may, at the discretion of the Engineer, be disqualified from bidding on future contracts with the Department for a period of six months from the date of the Engineer's determination of such a violation. Any implicated Employees, agents, or representatives of the Design-Builder may be prohibited from working on any contract awarded by the Department for the period of 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.

Any Person employed by the Design-Builder or any Subcontractor who, in the opinion of the Department, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, when directed in writing by the Department, be removed by the Design-Builder or Subcontractor employing the individual and shall not be employed again on any portion of the Work without the written approval of the Department. If the Design-Builder fails to remove the individual or to furnish suitable and sufficient personnel for proper prosecution of the Work, the Department may withhold all monies that are or may become due the Design-Builder and may suspend the Work until the Design-Builder has complied with the Department directive.

(b) Equipment

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

(c) Work Methods

When methods and Equipment to be used by the Design-Builder are not prescribed in the Contract, the Design-Builder is free to use whatever methods or Equipment he feels will accomplish the Work in conformity with the requirements of the Contract.

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

105.06—Subcontracting

The Design-Builder shall perform with his own organization Work amounting to not less than 30 percent (30%) of the original Contract Price unless otherwise specified in the Contract Documents.

The Design-Builder shall not subcontract any part of the Work to a contractor who is not prequalified with the Department in accordance with the requirements of Section 102.01, unless otherwise indicated in the Contract Documents. This restriction does not apply to contract specialty items, consultants, manufacturers, suppliers, or haulers. Consent to subcontract or otherwise dispose of any portion of the Work shall not relieve the Design-Builder of any responsibility for the fulfillment of the entire Contract.

105.07—Cooperation of Design-Builder

The Design-Builder shall give the Work the constant attention necessary to facilitate quality and progress and shall fully cooperate with the Department, and other contractors involved in the prosecution of the Work. If any portion of the Project is located within the limits of a municipality, military installation, or other federally owned property; the Design-Builder shall cooperate with the appropriate officials and agents in the prosecution of the Work to the same extent as with the Department.

The Design-Builder shall have on the Project at all times during prosecution of Work a competent Construction Manager capable of reading and understanding the Contract Documents and experienced in the type of work being performed who shall receive instructions from the Design-Builder or the Department or the Department's authorized representatives. The Construction Manager shall have full authority to execute the orders and directions of the Department without delay and supply promptly such Materials, Equipment, tools, labor, and incidentals as may be required.

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 facility in any manner.

Existing private and public utilities within the Department's knowledge prior to the issuance of the RFP will be indicated in RFP Documents. To the extent such existing utilities require adjustment, they will be adjusted by the utility owner or, if denoted in the Contract as the responsibility of the Design-Builder, then they will be adjusted by the Design-Builder. The location of the adjustment will not normally be shown in the RFP Documents, and Design-Builder is on notice that some of the utilities may be adjusted within the construction limits simultaneously with Project construction operations.

The Design-Builder shall coordinate Project construction with planned utility adjustments and take all necessary precautions to prevent disturbance of the utility facilities. The Design-Builder shall report to the Department any failure on the part of the utility owner to cooperate or proceed with the planned utility adjustments.

The Design-Builder shall perform utility work under the Contract in a manner that will cause the least inconvenience to the utility owner and those being served by the utility owner.

Existing, adjusted, or new utility facilities that are to remain within the Right of Way shall be properly protected by the Design-Builder to prevent disturbance or damage resulting from construction operations. If during prosecution of the Work the Design-Builder encounters an existing utility that requires adjustment, he shall not interfere with the utility but shall take the proper precautions to protect the facility and shall promptly notify the Department of the need for adjustment.

Prior to preparing a Proposal, the Design-Builder shall contact known utility owners to determine the nature, extent, and location of existing, adjusted, or new utility facilities. Any additional cost resulting therefrom shall be reflected in the Proposal.

If the Design-Builder desires the temporary or permanent adjustment of utilities for his own benefit, he shall conduct all negotiations with the utility owners and pay all costs in connection with the adjustment.

Except as provided in the General Conditions, the Department will not be responsible for any claims for additional compensation from the Design-Builder resulting from delays, inconvenience, or damage sustained by him attributable to interference by utility appurtenances or the operation of moving the same.

105.09—Cooperation among Contractors

Section 3.6 of the General Conditions of Contract has precedence.

105.10—Plans and Working Drawings

(a) General

Refer to Article 2 of the General Conditions for Required Submittals.

(b) Plans

Design-Builder shall furnish all plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified. 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 to accommodate actual field conditions and shall be specifically denoted on the Working Drawings.

(c) Working Drawings

The Design-Builder shall furnish Working Drawings and maintain a set for the Department as may be required. Working drawings shall not incorporate any changes from the requirements of the Contract unless the changes are specifically denoted, together with justification, and are approved in writing by the Department. The Design-Builder shall identify Working Drawings and submittals by the complete state project and job designation numbers. Items or component materials shall be identified by the specific Contract Item number and Specification reference in the Contract.

A PE shall certify Working Drawings for Falsework supporting a Bridge superstructure.

The Design-Builder shall provide four sets of any submittal. If a railroad, municipality, or other entity as specified in the Contract Documents is required to review the Working Drawings, the reviewed Working Drawings will be returned within 45 days from the date of receipt by the Department. If the Working Drawings are not returned by the time specified, no additional compensation will be allowed, but Design-Builder may submit, in accordance with the applicable requirements of the Contract Documents, a request for a time extension. Upon completion of the work, the original tracings, if required, shall be supplied to the Department.

Deviations from the Contract requirements initiated by the Design-Builder shall be requested in writing and clearly identified on the Working 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 Design-Builder's request will be cause for rejection of the Design-Builder's request. Deviations from the Contract requirements shall not be made unless authorized by the Engineer. If authorized by the Engineer, such authorization shall not relieve the Design-Builder from the responsibility for complying with the requirements of the Contract for a fully functional finished work item as specified or designed.

Upon completion of the requested work, Working Drawings indicating the actual as-constructed field conditions, if required, shall be supplied to the Department.

The Design-Builder may authorize the fabricator in writing to act for him in matters relating to Working Drawings. Such authorization shall have the force and effect of any other representative of the Design-Builder's organization.

(1) Steel Structures

Working drawings for steel structures, including metal handrails, shall consist of shop detail, erection, and other Working Drawings showing details, dimensions, sizes of units, and other information necessary for the fabrication and erection of metal work. ~~Such drawings shall be signed and sealed by a PE.~~

(2) Falsework

Working drawings for Falsework supporting a Bridge Superstructure shall be signed and sealed by a PE.

(3) Concrete Structures and Prestressed Concrete Members

Working drawings for concrete structures and prestressed concrete members shall provide such details as required for the successful prosecution of the Work and which are not included in the RFP Documents furnished by the Department. Drawings shall include plans for items such as prestressing strand details and elongation calculations, location of lift points, Falsework, bracing, centering, form work, masonry, layout diagrams, and bending diagrams for reinforcing steel when necessary or when requested. Such drawings shall be signed and sealed by a PE.

(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 Design-Builder shall submit for review one original and six 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 PE's signature and seal. Certification for foundations will be required only when the designs are furnished by the Design-Builder. 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 PE.

(5) Reinforced Concrete Pipe

When specified, and prior to manufacture of reinforced concrete pipe, the Design-Builder shall furnish to the Department a certification of the acceptability of the design of such pipe, as determined from a review that has been signed and sealed by a PE. Such certification shall cover all design data, supporting calculations, and materials. Pipe designs previously certified or approved by the Department will not require recertification.

105.11—Conformity with Contract Documents

Values for Materials to be used in the Work shall conform to the specified values or range of values specified in the Contract. Less than complete conformity may be tolerated if obtaining exact or complete conformity would not be feasible and if authorized by the Department.

Permissible tolerances for the elevation of Subgrade and finished grade and for the thickness of the various courses of Pavement Structure are specified in the Contract Documents. If permissive tolerances are exceeded or if consistent deviations from the Contract Documents 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 the Contract Documents 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 Design-Builder shall be responsible for the coordination of the Contract Documents. In the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, such inconsistency, conflict or ambiguity shall be interpreted as set forth in Section 3.1 of the Agreement.

The Design-Builder shall not take advantage of any obvious or apparent error or omission in the Contract Documents. If the Design-Builder discovers an error or omission, he shall immediately notify the Department of the corrections in accordance with the Contract Documents and make such corrections as necessary for fulfilling the intent of the Contract Documents.

105.13—Construction Stakes, Lines, and Grades

The Design-Builder shall perform all construction and other surveying that the Design-Builder deems necessary to construct this Project in accordance with the Contract Documents. The cost for all surveying performed by the Design-Builder is included in the Contract Price. All construction surveys shall be performed under the direct supervision of a land surveyor duly registered and licensed in the State.

105.14—Maintenance during Construction

The Design-Builder shall prosecute his work so as to avoid obstructions to traffic to the greatest extent practicable. The Design-Builder shall provide for the safety and convenience of the general public and residents along the Roadway and the protection of Persons and property.

Highways closed to traffic shall be protected by barricades and other warning devices as required by the Department. Barricades and warning devices shall be illuminated where required during periods of darkness and low visibility. The Design-Builder 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 Design-Builder shall maintain sign faces and reflective surfaces of warning devices in a clean and visible condition. The Design-Builder 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 the requirements of Section 512 of the Standard Specifications.

The Design-Builder shall maintain the Work from the beginning of construction operations until Final Completion Date. Maintenance shall be inherent to the continuous and effective work prosecuted day-by-day with adequate Equipment and forces to such end that the Roadway and structures are sustained in a safe and satisfactory condition at all times.

When a Contract specifies placing a course on another course or Subgrade previously constructed, the Design-Builder shall maintain the previous course or Subgrade in accordance with the Contract requirements during all construction operations.

The Road shall be kept open to all traffic while undergoing improvements unless otherwise permitted in the Contract. The Design-Builder shall keep the portion of the Project being used by public, pedestrian, and vehicular traffic in such condition that traffic will be safely and adequately accommodated. However, removal of snow and control of ice on Roads open to public travel will be performed by the Department.

The Design-Builder 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 Design-Builder confines his operation to the surface of the Roadway and reasonable width of the Shoulder and the surface is disturbed or damaged by his operations or Equipment, he shall be responsible for the restoration and maintenance of the surface that is disturbed or damaged.

The Design-Builder shall keep the portions of the Road being used by the public free from irregularities and obstructions that could present a hazard or annoyance to traffic. Design-Builder shall allay dust whenever required, or whenever directed by the Department, and the cost shall be included in the contract price. Holes in hard surface pavements shall be filled with approved asphalt patching material.

- (a) **Detours:** Detours may be indicated in the Contract Documents or may be used with the approval of the Department. Unless otherwise designated in the Contract, the Design-Builder will furnish and erect all directional markings for through traffic on off-Project detours authorized or requested by the Department. Detours over existing State Roads will be designated, marked, and maintained by the Department. If any part of the Project is located wholly or in part within the corporate limits of a municipality and through traffic is to be detoured at the request of the municipality, the municipality will provide and maintain the detours within the corporate limits and will furnish and erect all directional markings. The provision of detours and marking of alternate routes will not relieve the Design-Builder of the responsibility for ensuring the safety of the public or from complying with any requirements of the Contract Documents affecting the rights of the public within his Contract limits, including those concerning lights and barricades. Maintenance of all other detours shall be the responsibility of the Design-Builder.

Right of Way for temporary Highways, diversion Channels, sediment and erosion control features or Bridges required by these provisions will be furnished by the Department.

- (b) **Maintenance of Traffic during Suspension of Work:** During any suspension of Work, the Design-Builder shall temporarily open to traffic such portions of the Project and temporary Roadways as may be agreed upon by the Design-Builder and Department.
- (c) **Flagging Traffic:** Certified flaggers shall be provided in sufficient number and locations as necessary for control and protection of vehicular and pedestrian traffic in accordance with the requirements of the *Virginia Work Area Protection Manual* ("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 requirements of the *VWAPM*.

Certification for flaggers will be awarded upon a candidate's satisfactory completion of an examination. Certification cards shall be carried by flaggers while performing flagging duties. Flaggers found not to be in possession of their certification card shall be removed from the flagging site and operations requiring flagging will be suspended by the Department. Further, flaggers performing duties improperly will have their certifications revoked.

- (d) **Delays:** Unless indicated in the Contract Documents or otherwise approved by the Department, two-way traffic shall be maintained at all times. The Design-Builder shall not stop traffic without permission of the Department.

If one-way traffic is approved, the Design-Builder shall provide flaggers to direct the traffic. When specified in the Contract as a Pay Item, pilot vehicles shall be furnished in accordance with the requirements of Section 512 of the Standard Specifications. Upon request from the Design-Builder and where deemed appropriate by the Department, the Department will install traffic signals that may be used for the control of one-way traffic. The Design-Builder shall pay the costs of installation, electrical service, maintenance or repair work, and a predetermined rental charge per day for the signals and removal when no longer needed.

- (e) **Connections and Entrances:** Connections with other Roads and public and private entrances shall be kept in a reasonably smooth condition at all times.

Stabilization or surfacing material shall be applied to connections and entrances.

The Design-Builder shall schedule construction operations so that approved continuous access is provided for all property adjacent to the construction when the property is shown in the Contract Documents to require access. When Frontage Roads are shown in the Contract Documents, 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.

Connections or entrances shall not be disturbed by the Design-Builder until necessary. Once connections or entrances have been disturbed, they shall be maintained and completed as follows:

1. **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. Connections that had an original unpaved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using either the required material or a temporary aggregate stabilization course that shall be placed as soon as practicable after connections are disturbed.

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

2. **Entrances:** Entrances shall be graded concurrently with the Roadway with which they intersect. Once an entrance has been disturbed, it shall be completed as soon as 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.

- (f) **Grading Operations:** When the Design-Builder elects to complete the rough grading operations for the entire Project or exceed the length of one 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.

When the surface is to be widened on both sides of the existing pavement, construction operations involving grading or paving shall not be conducted simultaneously on sections directly opposite each other.

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 3 feet from the edge of the paved surface.

- (g) **Obstruction Crossing Roadways:** Where the Design-Builder 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 Department at the Design-Builder's expense. Traffic shall be

protected by the display of warning devices both day and night. If operations or obstructions placed by the Design-Builder damage an existing traveled Roadway, the Design-Builder shall cease operations and repair damages to the Roadway at no additional cost to the Department.

- (h) **Patching Operations:** Where existing hydraulic cement concrete pavement is to be patched, the operation of breaking and excavating old pavement shall extend for a distance of not more than two miles. Patching shall be coordinated with excavating so that an area of not more than one-half mile in which excavated patches are located shall be left at the end of any day's work. Necessary precautions shall be taken to protect traffic during patching operations.
- (i) **Temporary Structures:** The Design-Builder shall construct, maintain, and remove Temporary Structures and approaches necessary for use by traffic. 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 Design-Builder.

The proposed design of Temporary Structures shall be submitted to the Department prior to the beginning of construction in accordance with the requirements of Section 105.10.

- (j) **Failure to Maintain Roadway or Structures:** If the Design-Builder fails to remedy unsatisfactory maintenance immediately after receipt of a notice by the Department, the Department may proceed with adequate forces, Equipment, and Material to maintain the Project. The cost of the maintenance, plus 25 percent for supervisory and administrative personnel, will be deducted from monies due the Design-Builder for the Project.
- (k) **Haul Route:** The Design-Builder shall select haul routes between the Project and Material source(s) that will minimize disturbance to the community. The Design-Builder shall furnish to the Department, for review, his plan for the haul route and for minimizing the adverse effects of hauling operations on Persons who reside adjacent to the haul route or Persons who otherwise use a portion of the haul route for ingress or egress to their residential or work area. The Department 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.
- (l) **Opening Sections of Projects to Traffic**

When specified in the Contract or when directed by the Department, certain sections of the Work may be opened to traffic. 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 Department where the Contract does not provide for traffic to be carried through the Work, the Design-Builder will not be required to assume any expense entailed in maintaining the Road for traffic. Such expense will be borne by the Department or will be compensated for in accordance with the requirements of Section 109.05. Repair of slides and repair of damage attributable to traffic will be compensated for in accordance with the requirements of Section 109.05. Slides shall be removed by the Design-Builder in accordance with the requirements of Section 303.

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

If the Design-Builder is not continuously prosecuting the Work to the satisfaction of the Department, he shall not be relieved of the responsibility for maintenance during the period the section is opened to traffic prior to final acceptance. Any expense resulting from the opening of such portions under these circumstances, except slides, shall be borne by the Design-Builder. The Design-Builder shall conduct the remainder of the construction operations so as to cause the least obstruction to traffic.

105.15—Removing and Disposing of Structures and Obstructions

The Design-Builder shall remove and dispose of or store, as directed by the Department, fences, buildings, structures, or encumbrances within the construction limits. Materials so removed, including existing drains or pipe culverts, shall become the property of the Design-Builder, with the exception of those materials to be stored or delivered to the Department or others as designated in the Contract.

- (a) **Signs:** The Design-Builder shall relocate all signs within the construction limits that conflict with construction work as approved by the Department. Signs that are not needed for the safe and orderly control of traffic during construction as determined by the Department 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 Design-Builder shall notify the Department at the time the signs have been properly stored. Such signs will be removed from the storage area by the Department. Any sign that is damaged or lost because of the fault of the Design-Builder shall be repaired or replaced at his expense. Costs for removing, storing, protecting, and reinstalling such signs shall be included in the Contract Price and no additional compensation will be made.
- (b) **Mailboxes and Newspaper Boxes:** When removal of mailboxes and newspaper boxes is made necessary by construction operations, the Design-Builder 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 Department and left in as good condition as when found. Boxes or their supports that are damaged through negligence on the part of the Design-Builder shall be replaced at his expense. The cost of removing and resetting boxes shall be included in the Contract Price.

105.16—Cleanup

Removal from the Project of rubbish, scrap material, and debris caused by the Design-Builder's personnel or construction operations shall be a continuing process throughout the course of the Work. The work site shall have a neat, safe and orderly appearance at all times.

Before final acceptance, the Highway, Borrow pits, quarries, Disposal Areas, storage areas, and all ground occupied by the Design-Builder in connection with the Work shall be cleaned of rubbish, surplus materials, and Temporary Structures, except in the case where the property is owned or controlled by the Design-Builder. All parts of the Work and the Construction Area shall be left in a neat, safe, and orderly condition.

Within 30 days after final acceptance, the Design-Builder shall remove his Equipment, Materials and debris from the Right of Way and property adjacent to the Project that he does not own or control.

105.17—Inspection of Work

The Design-Builder is responsible for continuous quality control and quality assurance in accordance with the QA/QC Plan. However, all stages, Materials, and details of the work are subject to inspection. The Design-Builder shall provide the Department with full and safe access to all parts of the Work and shall be furnished such information and assistance by the Design-Builder as are required to make a complete, timely, and detailed inspection. The Department and its appointed representatives shall have ready access to machines and plant Equipment used in processing or placing Materials.

Prior to the beginning of operations, the Department will meet with the Design-Builder to establish an understanding of the critical stages of Work that shall be performed in the presence of the Inspector. In order for the Department to schedule inspection of the Work, the Design-Builder shall keep the Department informed of planned operations in accordance with the requirements of Section 108.03.

If the Department requests it, the Design-Builder shall remove or uncover such portions of the finished work as may be directed at any time before final acceptance. The Design-Builder shall restore such portions of the Work to comply with the appropriate requirements of the Contract Documents. If the work exposed is acceptable, the uncovering or removing and replacing the covering or making good the parts removed will be paid for as Extra Work in accordance with the General Conditions of the Contract. If the work is unacceptable, the cost of uncovering or removing and replacing the covering or making good the parts removed shall be borne by the Design-Builder.

When any unit of government, political subdivision, or public or private Corporation is to pay a portion of the cost of the Work specified in the Contract, its representatives shall have the right to inspect the 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 Design-Builder.

If Materials are used or work is performed without inspection by Independent Quality Control staff and certified by the Quality Assurance Manager, the Department may order the Design-Builder to remove and replace the work or Material at his own expense.

If an inspection reveals that work has not been properly performed, the Design-Builder will be so advised and he shall immediately inform the Department of his schedule for correcting such work and the time when a reinspection can be made.

105.18—Removal of Unacceptable Work

Work will be considered as unacceptable if it: (a) does not conform to the requirements of the Contract Documents; (b) is performed contrary to the instructions of the Department; or (c) is performed without the authorization of the Department. Unacceptable work shall be remedied or removed immediately unless otherwise determined by the Department, and replaced in an acceptable manner at the Design-Builder's expense. The Department may elect, in its sole discretion, to accept otherwise unacceptable work at a reduced price and a warranty extended to five (5) years for the subject portion of the work when acceptance is considered to be in the best interest of the public.

The Design-Builder shall not perform destructive sampling or testing of the Work without written authorization of the Department. Unauthorized destructive sampling or testing will cause the Work to be considered unacceptable.

In the event the Design-Builder is granted authorization to perform destructive sampling or testing, the Design-Builder shall obtain the approval of the Department 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 Department.

If the Design-Builder fails to comply immediately with any order of the Engineer made under the provisions of this Section, the Engineer will have the authority to cause unacceptable work to be removed and replaced and to deduct the cost from any monies due or to become due the Design-Builder.

105.19—Submission and Disposition of Claims (Refer to Part 4 – General Conditions – Article 10 Contract Adjustments and Disputes)

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 Design-Builder shall regulate his supplies so that there will be a sufficient quantity of tested Material on hand at all times to prevent any delay of Work. Except as otherwise specified, Materials, Equipment, and components that are to be incorporated into the finished work shall be new.

At the option of the Department, 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

requirements of the Contract, 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 Design-Builder shall change the source of supply and furnish Material or Equipment from other approved sources. The Design-Builder shall notify the Department of this change, and provide the same identifying information noted in this Section, at least 60 days prior to their use on the Project, but not less than two 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 Design-Builder shall advise the Department in writing of the specific Materials selected. Thereafter, the Design-Builder shall use the selected Materials throughout the Project unless a change is authorized in writing by the Department. However, when the Design-Builder has an option as to the type of pipe that may be used, he may use any of the approved types for each size of pipe, but he shall use the same type for a particular line. The Department may authorize other types and sources in an emergency that will not unreasonably delay delivery of the selected Material.

Equipment and Material warranties or guarantees that are normally given by a manufacturer or supplier, or are otherwise required in the Contract, shall be obtained by the Design-Builder and assigned to the Commonwealth in writing. The Design-Builder shall also provide an in-service operation warranty on all mechanical and electrical Equipment and related components for a period of at least six months beginning on the date of partial acceptance of that specific item(s) or final acceptance of the Project.

106.02—Material Delivery

The Design-Builder shall advise the Quality Assurance Manager and the Department at least 2 weeks prior to the delivery of any Material from a commercial source. Upon delivery of any such Material to the Project, the Design-Builder shall provide the Department with one copy of all invoices (prices are not required). The following Materials shall also comply with the requirements of 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.

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 Department.

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 farm land, pasture, turf, etc.). The foregoing requirements shall also apply to any pit or quarry opened or reopened by a Subcontractor. 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 execution of the Contract.

The Design-Builder shall furnish the Department a statement signed by the property owner in which the property owner agrees to the use of his property as a source of Material for the Project. Upon completion of the use of the property as a Material source, the Design-Builder shall furnish the Department a release signed by the property owner indicating that the property has been satisfactorily restored. This requirement will be waived for commercial sources, sources owned by the Design-Builder, and sources furnished by the Department.

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 Department. The Design-Builder shall submit for approval a site plan, including, but not limited to, the following

- (1) the location and approximate boundaries of the Excavation ; with a slope gradient of 3:1 or greater;
- (2) procedures to minimize erosion and siltation;
- (3) provision of environmentally compatible screening;
- (4) restoration;
- (5) cover vegetation;
- (6) other use of the pit or quarry after removal of Material, including the spoil pile;
- (7) the drainage pattern on and away from the area of land affected, including the directional flow of water and a certification with appropriate calculations that verify all receiving Channels are in compliance with Minimum Standard 19 of the Virginia Erosion and Sediment Control Regulations;
- (8) location of haul Roads and stabilized construction entrances if construction Equipment will enter a paved Roadway;
- (9) constructed or natural waterways used for discharge;
- (10) a sequence and schedule to achieve the approved plan and;
- (11) the total drainage area for temporary sediment traps and basins shall be shown. Sediment traps are required if the runoff from a watershed area of less than three acres flows across a disturbed area. Sediment basins are required if the runoff from a watershed area of three acres or more flows across a disturbed area. The Design-Builder shall certify that the sediment trap or basin design is in compliance with the Contract Documents and all Legal Requirements. Once a sediment trap or basin is constructed, the dam and all outfall areas shall be immediately stabilized.

The Design-Builder's design and restoration shall be in accordance with the Contract Documents and all Legal Requirements.

If the approved plan provides for the continued use or other use of the pit or quarry beyond the date of final acceptance, the Design-Builder shall furnish the Department a bond made payable to the Commonwealth of Virginia in an amount equal to the Engineer's estimate of the cost of performing the restoration work. If the pit or quarry is not used in accordance with the approved plan within 8 months after final acceptance, the Design-Builder shall perform restoration work as directed by the Department, forfeit his bond, or furnish the Department with evidence that he has complied with the applicable requirements of the State Mining Law.

Topsoil on Department owned or furnished Borrow sites shall be stripped and stockpiled as directed by the Department 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 Design-Builder fails to provide necessary controls to prevent erosion and siltation, if such efforts are not made in accordance with the approved sequence, or if the efforts are found to be inadequate the Department will withdraw approval for the use of the site and may cause the Design-Builder to cease all contributing operations and direct his efforts toward corrective action or may perform the Work with State forces or other means as determined by the Department. If the Work is not performed by the Design-Builder, the cost of performing the Work plus 25 percent for supervisory and administrative personnel will be deducted from monies due the Design-Builder.

Costs for applying seed, fertilizer, lime, and mulch; restoration; drainage; erosion and siltation control; regrading; haul Roads; and screening shall be included in the Contract price for the type of Excavation or other appropriate items.

If the Design-Builder fails to fulfill the provisions of the approved plan for screening or restoring Material sources, the Department may withhold and use for the purpose of performing such work any monies due the Design-Builder. The Design-Builder shall be held liable for penalties, fines, or damages incurred by the Department as a result of his failure to prevent erosion or siltation and take restorative action.

After removing the Material, the Design-Builder shall remove metal, lumber, and other debris resulting from his operations and shall shape and landscape the area in accordance with the approved plan for such work.

- (a) **Sources Furnished by the Department:** Sources furnished by the Department will be made available to the Design-Builder together with the right to use such property as may be required for a plant site, stockpiles, and haul roads. The Design-Builder shall confine his Excavation operations to those areas of the property specified in the Contract.

The Design-Builder shall be responsible for Excavation that shall be performed in order to furnish the specified Material.

- (b) **Sources Furnished by the Design-Builder:** When the Design-Builder desires to use local Material from sources other than those furnished by the Department, he shall first secure the approval of the Department. The use of Material from such sources will not be permitted until test results have been approved by the Department and written authority for its use has been issued.

The Design-Builder shall acquire the necessary rights to take Material from sources he locates 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 Design-Builder. The Design-Builder shall obtain representative samples from at least two borings in parcels of 10 acres or less and at least three additional borings per increment of 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 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 Department will review and evaluate the Material based on test results provided by the Design-Builder. The Department 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 Contract Documents.

106.04—Disposal Areas

Unsuitable or Surplus Material shown in the Contract Documents shall be disposed of as specified herein. Material not used on the Project shall be disposed of by the Design-Builder off the Right of Way. The Design-Builder shall obtain the necessary rights to property to be used as an approved Disposal Area. For the purpose of these Division I Amendments to the Standard Specifications an approved Disposal Area is defined as that which is owned privately, not operated under a local or State permit, and has been approved by the Department for use in disposing of Material not used on the Project.

The Design-Builder shall furnish the Department a statement signed by the property owner in which the owner agrees to the use of his property for the deposit of Material from the Project. Upon completion of the use of the property as an approved Disposal Area, the Design-Builder shall furnish the Department a release signed by the property owner indicating that the property has been satisfactorily restored. This requirement will be waived for commercial sources, sources owned by the Design-Builder, and sources furnished by the Department.

When neither unsuitable nor surplus Material is shown in the Contract Documents, the Design-Builder shall dispose of it as shown herein. If the Design-Builder, having shown reasonable effort, is unsuccessful in obtaining the

necessary rights to property to be used as an approved Disposal Area, the Department will obtain rights for disposal unless otherwise provided for in the contract. Compensation, if not shown in the Contract, will be in accordance with the requirements of Section 104.02.

Prior to the Department approving a Disposal Area, the Design-Builder shall submit a site plan. The plan shall show:

- (1) the location and approximate boundaries of the Disposal Area;
- (2) procedures to minimize erosion and siltation;
- (3) provision of environmentally compatible screening;
- (4) restoration;
- (5) cover vegetation;
- (6) other use of the Disposal Area;
- (7) the drainage pattern on and away from the area of land affected, including the directional flow of water and a certification with appropriate calculations that verify all receiving Channels are in compliance with Minimum Standard 19 of the Virginia Erosion and Sediment Control Regulations;
- (8) location of haul roads and stabilized construction entrances if construction Equipment will enter a paved Roadway;
- (9) constructed or natural waterways used for discharge;
- (10) a sequence and schedule to achieve the approved plan and;
- (11) the total drainage area for temporary sediment traps and basins shall be shown. Sediment traps are required if the runoff from a watershed area of less than three acres flows across a disturbed area. Sediment basins are required if the runoff from a watershed area of three acres or more flows across a disturbed area. The Design-Builder shall certify that the sediment trap or basin design is in compliance with the Contract Documents and all Legal Requirements. Once a sediment trap or basin is constructed, the dam and all outfall areas shall be immediately stabilized. Costs for the work described herein shall be included in the Contract Price. The Design-Builder shall certify that the sediment basin design is in compliance with the Virginia Erosion and Sediment Control Regulations, all local, state, and federal ordinances, and Section 107.16.

Disposal Areas 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 haul roads thereto. After the Material has been deposited, the area shall be shaped to minimize erosion and siltation of nearby streams and landscaped in accordance with the approved plan for such work or shall be used as approved by the Department. The Design-Builder's design and restoration shall conform to the requirements of the contract and federal, state, and local laws and regulations.

Excavated rock in excess of that used in Embankments in accordance with the requirements of Section 303 shall be deposited off the Right of Way in an approved Disposal Area. Deposits whose surface is composed largely of rock shall be leveled by special arrangement of the Material or reduction of the irregularity of the surface by crushing projections to create a reasonably uniform and neat appearance.

The Design-Builder's design and restoration shall be in accordance with the requirements of the Contract Documents and Legal Requirements.

If the Design-Builder fails to provide and maintain necessary controls to prevent erosion and siltation, if such efforts are not made in accordance with the approved sequence, or if the efforts are found to be inadequate, the Department will withdraw approval for the use of the site and may cause the Design-Builder to cease all contributing operations and direct his efforts toward corrective action or may perform the Work with State forces or other means as determined by the Department. If the Work is not performed by the Design-Builder, the cost of performing the Work plus 25 percent for supervisory and administrative personnel will be deducted from monies due the Design-Builder.

Costs for applying seed, lime, fertilizer, and mulch; reforestation; drainage; erosion and siltation control; regrading; haul roads; and screening shall be included in the Contract Price.

Material encountered by the Design-Builder shall be handled as follows:

- (a) **Unsuitable Material** -. The Design-Builders' geotechnical engineer shall confirm that slopes, earthwork, pavement, and foundation subgrades satisfy the design and Contract Document requirements. The Design-Builders' geotechnical engineer shall perform an inspection of all embankment and pavement subgrades and minor structure excavations immediately prior to placement of embankment fill, aggregate base, subbase or bedding materials to identify excessively soft, loose, dry or saturated soils that exhibit excessive pumping, weaving or rutting under the weight of the construction equipment. Such materials are considered unsuitable and must be removed or modified in place to provide adequate support for embankment, pavement subgrade or minor structures. Materials unsuitable for use in the Work shall be disposed of at an approved Disposal Area or landfill licensed to receive such Material unless the materials can be adequately treated in place through pre-approved methods of chemical and/or mechanically stabilization to satisfy the design and Contract Document requirements. All Unsuitable Materials shall be disposed of off-site and/or treated in place at no cost to the Department. Design-Builder shall identify unsuitable Materials and methods of treatment on the plans and cross sections.

- (b) **Surplus Material** as shown in the Contract Documents that is not classified as unsuitable may be used to flatten slopes, to fill in ramp gores and medians provided the material is placed in accordance with the earthwork specifications. Surplus Material that is not needed shall be disposed of at an approved Disposal Area or a landfill licensed to receive such Material.

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 Department, shall be paid for in accordance with Section 109.05. Within 7 days after the material has been deposited, the area shall be shaped and stabilized to minimize erosion and siltation.

- (c) **Organic materials** such as, but not limited to, tree stumps and limbs (not considered merchantable timber), roots, rootmat, 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 Design-Builder'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.
- (d) **Rootmat** for the purpose of these Division I Amendments to the Standard Specifications is defined as any material that, by volume, contains approximately 60 percent or more roots and shall be disposed of in accordance with (c) herein.
- (e) **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 the requirements of 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 Department, 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.

- (f) **Excavated rock** in excess of that used within the Project site in accordance with the requirements of Section 303 shall be treated as surplus material.
- (g) **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.

If the Design-Builder fails to fulfill the provisions of the approved plan for screening or restoring Disposal Areas, the Department may withhold and use for the purpose of performing such work any moneys due the Design-Builder. The Design-Builder shall be held liable for all penalties, fines, or damages incurred by the Department as a result of his failure to prevent erosion or siltation.

106.05—Rights for and Use of Materials Found on Project

With the approval of the Department, the Design-Builder may use in the Project any materials found in the Excavation that comply with the requirements of the Contract Documents. The Design-Builder shall replace at his own expense with other acceptable material the Excavation material removed and used that is needed for use in Embankments, Backfills, approaches, or otherwise. The Design-Builder shall not excavate or remove any material from within the construction limits that is not within the grading limits, as indicated by the slope and grade lines.

106.06—Samples, Tests, and Cited Specifications

The Design-Builder shall inspect and test materials in accordance with the QA/QC Plan.

Unless reference is made to a specific dated specification or special provision, references in the Contract Documents 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.

The inspection cost of structural steel items, precast concrete items, and prestressed concrete items fabricated in a country other than the continental United States shall be borne by the Design-Builder. Inspection of structural fabrication shall be performed in accordance with the requirements of the appropriate VTM by a commercial Laboratory approved by the Department. Additional cleaning or repair necessary because of environmental conditions in transit shall be at the Design-Builder's expense.

Materials requiring an MSDS will not be accepted at the Project site for sampling without the document.

106.07—Plant Inspection

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

- (a) The Department shall have the cooperation and assistance of the Design-Builder and producer of the Materials.
- (b) The Department 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 Design-Builder or producer shall furnish equipment and maintain a plant laboratory at locations approved for plant processing of Materials. The Design-Builder or producer shall use the laboratory and equipment to perform quality control testing.

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 Design-Builder 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 Design-Builder or producer's technician shall maintain current copies of test procedures performed in the laboratory. The Design-Builder shall calibrate or verify all balances, scales, and weights associated with testing performed as specified in AASHTO R18. The Design-Builder or producer shall also provide and maintain an approved test stand for accessing truck beds for the purpose of sampling and inspection. Cast iron grinding pots and rubber mauls will be furnished by the Department where required. The Department may approve a single laboratory to service more than one plant belonging to the same Design-Builder or producer.

For crushed glass, the plant equipment requirements are waived in lieu of an independent third-party evaluation and certification of crushed glass properties by an AASHTO Materials Reference Laboratory ("AMRL")-accredited commercial soil testing Laboratory demonstrating that the supplied Material conforms to the specified requirements of Section 203. Random triplicate samples will be evaluated and analyzed for every 1,000 tons of Material supplied to the Project. The averaged results will be used for evaluation purposes. Suppliers of crushed glass shall maintain third party certification records for a period of three years.

- (d) Adequate safety measures shall be provided and maintained.
- (e) Design-Builder shall inspect all Materials upon delivery to the site for compliance with Contract requirements. All non-conforming Materials shall be rejected and removed from the site.

106.08—Storing Materials

Materials shall be stored in a manner so as to ensure the preservation of their quality and fitness for the Work. When considered necessary by the Department, 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 Department. Stored Material shall be located so as to facilitate their 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.

Additional required storage space shall be provided by the Design-Builder at his expense. Private property shall not be used for storage purposes without the written permission of the owner or lessee. The Design-Builder shall furnish copies of the owner's written permission to the Department. Upon completion of the use of the property, the Design-Builder shall furnish the Department a release signed by the property owner indicating that the property has been satisfactorily restored.

Chemicals, fuels, lubricants, bitumens, paints, raw sewage, and other harmful materials as determined by the Department shall not be stored within any floodplain unless no other location is available and only then shall the material be stored in a secondary containment structure(s) with an impervious liner. Also, any storage of these materials in proximity to natural or man-made drainage conveyances or otherwise where the materials could potentially reach a waterway if released under adverse weather conditions, must be stored in a bermed or diked area or inside a container capable of preventing a release. Double-walled storage tanks shall meet the berm/dike

containment requirement except for storage within flood plains. Any spills, leaks, or releases of such materials shall be addressed in accordance with Section 107.16(b). Accumulated rain water may also be pumped out of the impoundment area into approved dewatering devices

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.

106.10—Unacceptable Materials

Materials that do not conform to the requirements of the Contract Documents shall be considered unacceptable. Such Materials, whether in place or not, will be rejected and shall be removed from the site of the Work. If it is not practical for the Design-Builder to remove rejected Material immediately, the Department will mark the Material for identification. Rejected Material whose defects have been corrected shall not be used until approval has been given by the Department. The Department shall file documentation of the correction with resolution of the Non-conformance report (“NCR”).

106.11—Material Furnished by the Department

The Design-Builder shall furnish all Materials required to complete the Work except those specified to be furnished by the Department.

Material furnished by the Department will be delivered or made available to the Design-Builder at the points specified in the Contract. The cost of handling and placing Materials after delivery to the Design-Builder shall be included in the Contract Price

After receipt of the Materials, the Design-Builder 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 (Not Used)

SECTION 107—LEGAL RESPONSIBILITIES

107.01—Legal Requirements to Be Observed (Refer to Part 4 - General Conditions – Section 2.5, Legal Requirements)

107.02—Permits, Certificates, and Licenses. (Refer to Part 4 - General Conditions – Section 2.6, Governmental Approvals, and Section 3.5, Governmental Approvals)

107.03—Federal-Aid Provisions

When the U.S. Government pays all or any portion of the cost of a project, the Design-Builder shall comply with all applicable federal Legal Requirements. 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.

107.04—Furnishing Right of Way

The Design-Builder shall secure necessary rights of way and easements in advance of construction, in accordance with the provisions of the Contract. The Department will not be responsible for any delay in the acquisition of a Right of Way other than consideration of an extension of time. Easements for temporary uses and detours requested by the Design-Builder and approved by the Department in lieu of a detour within the Right of Way or Easement area shall be acquired by the Design-Builder without the Department being a party to the agreement, unless otherwise expressly stated in Part 2 of the Contract Documents.

107.05—Patented Devices, Materials, and Processes (Refer to Part 4 - General Conditions – Article 7, Indemnification)

107.06—Personal Liability of Public Officials

In carrying out any of the provisions of the Contract Documents, 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 Board, Commissioner, Department, or their authorized representatives, either personally or as officials of the Commonwealth. In all such matters, they act solely as agents and representatives of the Commonwealth.

107.07—No Waiver of Legal Rights

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

107.08—Protecting and Restoring Property and Landscape

The Design-Builder 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 Documents. The Design-Builder shall use suitable precautions to prevent damage to such property.

When the Design-Builder finds it necessary to enter on private property, beyond the limits of the construction Easement shown in the Contract Documents, he 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 Department.

The Design-Builder 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 Design-Builder'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 Design-Builder's method of executing the Work or in consequence of the non-execution thereof on the part of the Design-Builder, the Design-Builder 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 Department, or making settlement with the property owner. The Design-Builder shall secure from the owner a release from any claim against the Department without additional compensation therefore. A copy of this release shall be furnished the Department.

107.09—Design-Builder's Responsibility for Utility Property and Services

At points where the Design-Builder'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 Design-Builder 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 Design-Builder 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 local fire authority. When the Design-Builder's work operations require the disconnection of "in service" fire hydrants, the Design-Builder shall notify the locality's fire department or communication center at least 24 hours prior to disconnection. In addition, the Design-Builder shall notify the locality's fire department or communications center no later than 24 hours after reconnection of such hydrants. The Design-Builder shall be responsible for any damage to utilities that, in the investigation and determination of the Department, is found to be attributable to the Design-Builder's neglect, means, or methods of performing the Work.

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

The Design-Builder shall comply with all requirements of the *Virginia Underground Utility Damage Prevention Act* (the Miss Utility law). The Design-Builder shall wait a minimum of 48 hours after notifying the Miss Utility notification center before commencing Excavation work. The Design-Builder may commence Excavation work after 48 hours only if confirmed through the Ticket Information Exchange ("TIE") System that all applicable utilities have either marked their underground line locations or reported that no lines are present in the Work vicinity. The Design-Builder shall wait an additional 24 hours before commencing Excavation operations if any utility operators have failed to respond to the TIE within the first 48 hours.

107.10—Restoration of Work Performed by Others

The Department may construct or reconstruct any utility service within the construction limits or grant a permit for the same at any time. The Design-Builder shall not be entitled to any damages occasioned thereby other than a consideration of an extension of time, unless the Design-Builder's Work is damaged, altered or impeded by the condition.

When authorized by the Department, the Design-Builder shall allow any Person to make an opening in the Highway within the limits of the Project upon presentation of a duly executed permit from the Department or any municipality for sections within its corporate limits. When directed by the Department, the Design-Builder shall satisfactorily repair portions of the Work disturbed by the openings. The work for such repairs as authorized and directed by the Department will be paid for in accordance with the requirements of Section 109.05 and shall be subject to the same conditions as the original work performed.

107.11—Use of Explosives

The Design-Builder shall be responsible for damage resulting from the use of explosives. Explosives shall be stored in a secure manner in compliance with federal, state, and local laws and ordinances.

The Design-Builder shall notify each property and utility owner having a building, structure, or other installation above or below ground in proximity to the site of the Work of his intention to use explosives. Notice shall be given sufficiently in advance to enable the owners to take steps to protect their property. The review of the Design-Builder's plan of operations, blasting plan and the notification of property owners shall in no way relieve the Design-Builder of his responsibility for damage resulting from his blasting operations.

107.12—Responsibility for Damage Claims (Refer to General Conditions, Article 7 Indemnification)

107.13—Labor and Wages

The Design-Builder 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 his 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. For additional details of predetermined minimum wage rates, see Exhibit 107.13 attached herewith.

- (b) **Labor Rate Forms:** The Design-Builder shall complete Form C-28, indicating by classification the total number of Employees, excluding executive and administrative Employees, employed on the Project. The Contractor shall also indicate on the form the compensation rate per hour for each classification. The Contractor shall submit an original and two copies of the form prior to the due date of the second estimate for payment and for each 90-day period thereafter until the Work specified in the Contract has been completed.

If at the time of final acceptance the period since the last labor report is 30 days or more, the Contractor shall furnish an additional labor report as outlined herein prior to payment of the final estimate.

107.14—Equal Employment Opportunity

The Design-Builder 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 Design-Builder shall maintain the following records and reports as required by the contract EEO provisions:

- a. record of all applicants for employment
- b. new hires by race, work classification, hourly rate, and date employed
- c. minority and non-minority Employees employed in each work classification
- d. changes in work classifications
- e. Employees enrolled in approved training programs and the status of each
- f. minority Subcontractor or Subcontractors with meaningful minority group representation
- g. copies of Form C-57 submitted by Subcontractors

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

The Design-Builder shall cooperate with the Department in carrying out EEO obligations and in the Department's review of activities under the Contract. The Design-Builder 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) **EEO Policy:** The Design-Builder shall accept as operating policy the following statement:

It is the policy of this Company to assure that applicants are employed and that Employees are treated during employment without regard to their race, religion, sex, color, or national origin. Such action shall include employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship or on-the-job training.

- (b) **EEO Officer:** The Design-Builder shall designate and make known to the Department 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 Design-Builder'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 Design-Builder'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 Design-Builder'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 Design-Builder's EEO obligations within 30 days following their reporting for duty with the Design-Builder.
 - 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 Design-Builder in locating and hiring minority group Employees.
2. In order to make the Design-Builder'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 Design-Builder shall take the following actions:
 - a. Notices and posters setting forth the Design-Builder's EEO policy shall be placed in areas readily accessible to Employees, applicants for employment, and potential employees.

The Design-Builder 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 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 Design-Builder shall promptly post official notices on the bulletin boards.

- b. The Design-Builder'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. When advertising for employees, the Design-Builder shall include in all advertisements for employees the notation "An Equal Opportunity Employer" and shall insert all such advertisements in newspapers or other publications having a large circulation among minority groups in the area from which the Project work force would normally be derived.
2. Unless precluded by a valid bargaining agreement, the Design-Builder 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 Design-Builder 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 Design-Builder 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 Design-Builder shall conduct periodic inspections of the Project sites to ensure that working conditions and Employee facilities do not indicate discriminatory treatment of personnel.
2. The Design-Builder shall periodically evaluate the spread of wages paid within each classification to determine whether there is evidence of discriminatory wage practices.
3. The Design-Builder shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Design-Builder shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, corrective action shall include all affected individuals.
4. The Design-Builder 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 individuals. Upon completion of each investigation, the Design-Builder shall inform every complainant of all avenues of appeal.

(f) Training:

1. The Design-Builder 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 Design-Builder 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, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

3. The Design-Builder shall advise Employees and applicants for employment of available training programs and the entrance requirements for each.
 4. The Design-Builder 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 does not provide a separate Pay Item for trainees, the cost associated with the training specified herein shall be included in the contract price.
 6. If the Contract requires trainees, training shall be in accordance with the requirements of Section 518.
- (g) **Unions:** If the Design-Builder 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 Design-Builder, either directly or through his Design-Builder'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 Design-Builder, the Design-Builder shall so certify to the Department and shall set forth what efforts he made to obtain the information.
 4. If a union is unable to provide the Design-Builder with a reasonable flow of minority and women referrals within the time limit set forth in the union agreement, the Design-Builder 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 individuals and women. If union referral practice prevents the Design-Builder from complying with the EEO requirements, the Design-Builder shall immediately notify the Department.
- (h) **Subcontracting:** The Design-Builder shall use best efforts to use minority group Subcontractors or Subcontractors with meaningful minority group and female representation among their employees. Design-Builders shall obtain lists of MBE, DBE, and WBE construction firms from the Department. If MBE, DBE, or WBE goals are established in the Proposal, the Design-Builder shall comply with the requirements of Section 107.15.

The Design-Builder shall use best efforts to ensure Subcontractor compliance with his EEO obligations.

- (i) **Records and Reports:** The Design-Builder 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 non-minority 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, and
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 three years following completion of the Work and shall be available at reasonable times and places for inspection by authorized representatives of the Department.

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, non-minority, and female Employees currently engaged in each work classification shown on the form. The completed Form C-57 shall be submitted within three weeks after the reporting period. Failure to do so may result in delay of approval of the Design-Builder's monthly progress estimate for payment.

107.15—Use of Minority Business Enterprises (“MBEs”)

Design-Builder shall comply with all requirements of Exhibit 107.15, attached herewith. This Exhibit is a Special Provision from the Department. When the term “Contractor” is used, it is intended to refer to “Design-Builder”.

107.16—Environmental Stipulations

By signing the Proposal, the Offeror shall have stipulated (1) 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 EPA's List of Violating Facilities pursuant to 40 C.F.R. 15.20; and (2) that the Department will be promptly notified prior to the Award of the Contract if the Offeror receives any communication from the Director, Office of Federal Activities, EPA, indicating that a facility to be used for the Contract is under consideration to be listed on the EPA's List of Violating Facilities.

No separate payment will be made for the Work or precautions described herein.

Reference is made in various subsections of this section to Tidewater, Virginia. For the purposes of identifying the affected regions assigned to this designation and the requirements therein Tidewater, Virginia is defined as the Counties of Accomack, Arlington, Caroline, Charles City, Chesterfield, Essex, Fairfax, Gloucester, Hanover, Henrico, Isle of Wight, James City, King George, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northampton, Northumberland, Prince George, Prince William, Richmond, Spotsylvania, Stafford, Surry, Westmoreland and York and the Cities of Alexandria, Chesapeake, Colonial Heights, Fairfax, Falls Church, Fredericksburg, Hampton, Hopewell, Newport News, Norfolk, Petersburg, Poquoson, Portsmouth, Richmond, Suffolk, Virginia Beach and Williamsburg.

- (a) **Erosion and Siltation:** The Design-Builder 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 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 Design-Builder shall comply with the requirements of Sections 301.02 and 303.03. Should the Design-Builder as a result of negligence or noncompliance leave an area exposed more than 15 days, the cost of temporary soil stabilization in accordance with the provisions of Section 303 shall be at the Design-Builder's 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 10,000 square feet or greater of land or 2,500 square feet or greater in Tidewater, Virginia, the Design-Builder shall have within the limits of the Project during land disturbance activities, an Employee certified by the Department in Erosion and Sediment control who shall inspect erosion and siltation control devices and measures for proper installation and operation immediately after each rainfall, at least daily during periods of prolonged rainfall, and weekly when no rainfall event occurs and promptly report their findings to the Inspector. Failure of the Design-Builder to maintain a certified Employee within the limits of the Project will result in the Engineer suspending work related to any land disturbing activity until such time as a certified Employee is present on the Project. Failure on the part of the Design-Builder to maintain appropriate erosion and siltation control devices in a functioning condition may result in the Department notifying the Design-Builder in writing of specific deficiencies. Deficiencies shall be corrected immediately. If the Design-Builder fails to correct or take appropriate actions to correct the specified deficiencies within 24 hours after receipt of such notification, the Department may do one or more of the following: require the Design-Builder to suspend work in other areas and concentrate efforts towards correcting the specified deficiencies, withhold payment of monthly progress estimates, or proceed to correct the specified deficiencies and deduct the entire cost of such work from monies due the Design-Builder.

(b) **Pollution:**

1. **Water:** The Design-Builder 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, bitumens, raw sewage, paints, sedimentation, and other harmful material shall not be discharged into or alongside rivers, streams, or impoundments or into Channels leading to them. The Design-Builder shall provide the Department a contingency plan for reporting and immediate actions to be taken in the event of a dump, discharge, or spill within eight hours after he has mobilized to the Project site.

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 a dewatering bag. Dewatering bags shall conform to the requirements of 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 that are indigenous to the waters. Neither water nor other effluence shall be discharged onto wetlands or breeding or nesting areas of migratory waterfowl. When used extensively in wetlands, heavy Equipment shall be placed on mats. Temporary construction fills and mats in wetlands and flood plains shall be constructed of approved non-erodible materials and shall be removed by the Design-Builder to natural ground when the Department so directs.

If the Design-Builder dumps, discharges, or spills any oil or chemical that reaches or has the potential to reach a waterway, he shall immediately notify all appropriate jurisdictional Governmental Units in accordance with the requirements of the Contract and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical.

Excavation material shall be disposed of in approved areas above the mean high water mark shown in the Contract Documents 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 streambed and banks shall occur immediately upon completion of work if work is suspended for more than 15 days.

The Design-Builder 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 Design-Builder shall design and provide temporary Channels or culverts of adequate size to carry the normal flow of the stream or drainage facility. The Design-Builder shall submit a temporary relocation design to the Department 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. Stabilization of the streambed and banks shall occur immediately upon completion of, or during the Work, if the Work is suspended for more than 15 days.

Temporary Bridges or other minimally invasive structures shall be used wherever the Design-Builder 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.

Conduct all operations near rivers, streams, or impoundments in accordance with applicable water quality permits. Do not conduct clearing or grubbing within 100 feet of the limits of Ordinary High Water or a delineated wetland until authorized by the Department.

2. **Air:** The Design-Builder shall comply with the provisions of the Contract and the State Air Pollution Control Law and Rules of the State Air Pollution Control Board, including notifications required therein.

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 Design-Builder 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.

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 Design-Builder's methods for such actions will produce friable asbestos.

3. **Noise:** The Design-Builder's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall not exceed 80 decibels. Such noise level measurements shall be taken at a point on the perimeter of the construction limit 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 Design-Builder shall monitor construction-related noise. If construction noise levels exceed 80 decibels during noise sensitive activities, the Design-Builder shall take corrective action before proceeding with operations. The Design-Builder shall be responsible for costs associated with the abatement of construction noise and the delay of operations attributable to noncompliance with these requirements.

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

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

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

These requirements shall not be applicable if the noise produced by sources other than the Design-Builder's operation at the point of reception is greater than the noise from the Design-Builder's operation at the same point.

- (c) **Forests:** The Design-Builder 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 Design-Builder shall cooperate with the proper authorities of Governmental Units in reporting, preventing, and suppressing forest fires. Labor, tools, or equipment furnished by the Design-Builder 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 Design-Builder 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 Design-Builder shall act immediately to suspend work at the site of the discovery and notify the Engineer. The Engineer will immediately notify the proper State authority charged with the responsibility of investigating and evaluating such finds. The Design-Builder shall cooperate and, upon the request of the Engineer, assist in protecting, mapping, and removing the findings. Labor, tools, or Equipment furnished by the Design-Builder for such work will be paid for in accordance with the requirements of Section 104.03. Findings shall become the property of the Commonwealth 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 Design-Builder shall notify the Department in accordance with the provisions of Sections 108.03 and Section 109.05.

(e) **Storm Water Pollution Prevention Plan**

The Storm Water Pollution Prevention Plan ("SWPPP") is comprised of, but not limited to, the Erosion and Sediment Control ("ESC") Plan, the Storm Water Management ("SWM") Plan, and related requirements contained within the Contract Documents and shall be required for all land-disturbing activities that disturb 10,000 square feet or greater, or 2,500 square feet or greater in Tidewater, Virginia.

For land-disturbing activities that disturb 1 acre or greater, or 2,500 square feet or greater in an area designated as a Chesapeake Bay Preservation Area, coverage under the Department of Conservation and Recreation's Virginia Storm Water Management Program ("VSMP") General Construction Permit DCR-01 is required. Where applicable, the Department will apply for and retain coverage under this permit for the land disturbing activity. The requirements of this permit will be satisfied by the Design-Builder's compliance with the Project's SWPPP terms and conditions.

The Design-Builder shall be responsible for reading, understanding, and complying with the terms and conditions of the DCR-01 General Permit and the Project's SWPPP as follows:

1. Project Implementation Responsibilities

The Design-Builder shall be responsible for the installation, maintenance, inspection, and ensuring the functionality of all erosion and sediment control measures on a daily basis and all other storm water and pollutant runoff control measures identified within or referenced within the Contract Documents or applicable Governmental Approvals.

The Design-Builder shall take all reasonable steps to prevent or minimize any storm water or non-storm water discharge that will have a reasonable likelihood of adversely affecting human health or public or private properties.

2. Certification Requirements

In addition to satisfying the personnel certification requirements contained herein, the Design-Builder shall certify his activities by completing, signing, and submitting Form C-45 VDOT SWPPP Contractor and Subcontractor Certification Statement to the Engineer at least 7 days prior to commencing any Project-related land-disturbing activities, both on-site and off-site.

3. Off Site (Outside the Construction Limits) Requirements

The Design-Builder shall develop erosion and sediment control plan(s) and storm water pollution prevention plan(s) for submission and acceptance by the Engineer prior to usage of any support facilities, off-site Borrow and Disposal Areas, construction materials or Equipment storage areas, and any other areas that may generate a storm water or non-storm water discharge directly related to the construction process. Such plans, upon acceptance, shall become a part of and subject to the overall Project plan, the VSMP General Construction Permit, and all other contract requirements.

4. Reporting Procedures

a. Inspection Requirements

The Design-Builder shall be responsible for conducting inspections in accordance with the requirements herein. The Design-Builder shall document such inspections by completion of Form C-107 (a) and (b), Construction Runoff Control Inspection Form and Continuation Sheet, in strict accordance with the directions contained within the form.

b. Unauthorized Discharge Requirements

The Design-Builder shall not discharge into State waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances nor shall 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.

(1). Notification of non-compliant discharges

The Design-Builder shall immediately notify the Department upon the discovery of or potential of any unauthorized, unusual, extraordinary, or non-compliant discharge from the land disturbing activity. Where immediate notification is not possible, such notification shall be not later than 24 hours after said discovery.

(2). Detailed report requirements for non-compliant discharges

The Design-Builder shall submit to the Department within 5 days of the discovery of any actual or potential non-compliant discharge a written report describing details of the discharge to include its volume, location, cause, and any apparent or potential effects on private or public properties and State waters or endangerment to public health, as well as steps being taken to eliminate the discharge. A completed Form C-107 (a) and (b) shall be used for such reports.

5. Plans, Changes, Deficiencies, and Revisions

a. Contractor SWPPP

The Design-Builder shall develop and provide a SWPPP that documents the location and description of potential pollutant sources such as vehicle fueling areas, storage areas for fertilizers or chemicals, sanitary waste facilities, construction and waste material storage areas, etc. prior to any such pollutant sources being established on the Project site. Such plans and documentation shall include a description of the controls to reduce, prevent, and control pollutants from these sources including spill prevention and response. The Design-Builder shall submit such plans and documentation as specified herein to the Department and, upon review and approval, they shall immediately become a component of the Project's SWPPP and subject to all corresponding requirements contained therein.

The Design-Builder shall ensure that the SWPPP is kept on the Project site at all times in accordance with the provisions of Section 105.10 and shall be available for review upon request.

b. Changes and Deficiencies

The Design-Builder shall report to the Department when: (a) any planned physical alterations or additions are made to the land disturbing activity; or (b) deficiencies in the Contract Documents are discovered that could significantly change the nature or increase the quantity of the pollutants discharged from the land disturbing activity to surface waters.

c. Revisions to the SWPPP

Where site conditions or construction sequencing or scheduling necessitates revisions or modifications to the erosion and sediment control plan or any other component of the SWPPP for the land disturbing activity, such revisions or modifications shall be approved by the Department and shall be documented by the Design-Builder on a designated plan set (Record Set). Such Plans shall be kept on the Project site at all times and shall be available for review upon request.

107.17—Construction Safety and Health Standards

Compliance with construction safety and health standards is a condition of the Contract, and shall be made a condition of each subcontract entered into pursuant to the Contract, that the Design-Builder and any Subcontractor shall not require any worker employed in performance of the Contract to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to their health or safety as determined under construction safety and health standards promulgated by the U.S. Secretary of Labor in accordance with the requirements of Section 107 of the Contract Work Hours and Safety Standards Act.

The Design-Builder shall comply with the Virginia Occupational Safety and Health Standards adopted under the *Code of Virginia* and the duties imposed under the Code. Any violation of the requirements or duties that is brought to the attention of the Design-Builder by the Department or any other individual shall be immediately abated.

At a minimum, all Design-Builder personnel shall comply with the following unless otherwise determined unsafe or inappropriate in accordance with 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 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 Virginia Work Area Protection Manual shall be used when setting, reviewing, maintaining, and removing traffic controls.
6. Flaggers shall be certified in accordance with the Virginia Flagger Certification Program.
7. No individual 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.
8. 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 strictly followed.
9. 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 Virginia Occupational Safety and Health agency ("VOSH"). If extension cords are used, they shall be free of defects and designed for their environment and intended use.
10. No individual shall enter a confined space without training, permits, and authorization.
11. Fall protection shall be required whenever an Employee is exposed to a fall six feet or greater.

107.18—Sanitary Provisions

The Design-Builder 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 Design-Builder's work requires hauling materials across the tracks of a railway, he 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 Design-Builder. 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 Design-Builder directly to the railway company under the terms of their separate individual arrangements before final acceptance.

Work to be performed by the Design-Builder 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 Design-Builder 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 Design-Builder's actions, he shall obtain prior written approval from the railway company.

The Design-Builder 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 Department and the railway company. The applicable portions of such agreements shall be provided by Department to Design-Builder upon Design-Builder's request, unless the Contract Documents require the Design-Builder to obtain such agreement.

- (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 Design-Builder or incidental thereto will be provided by the railway company. The cost for such services as required for work shown in the Contract Documents will be borne by the Design-Builder. Any cost of such services resulting from work not shown in the Contract Documents or for the Design-Builder's convenience shall be borne by the Design-Builder 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 Design-Builder shall continuously prosecute the affected work to completion to minimize the need for flagger or watchperson services. Costs for such services that the Department determines to be unnecessary because of the Design-Builder'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 Design-Builder and will be deducted from monies due him.

- (b) **Approval of Construction Methods on Railway Right of Way:** The Design-Builder shall submit to the Department 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 Design-Builder'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 Design-Builder of any liability under the Contract. The Design-Builder 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 Design-Builder 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 Design-Builder and any Subcontractors shall be submitted to the railway company for approval and retention.

Neither the Design-Builder 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 Department and the railway company at least 30 days prior to the effective date of the change or cancellation. The insurance shall be of the following kinds and amounts:

1. **Design-Builder's public liability and property damage insurance:** The Design-Builder shall furnish evidence to the Department with respect to the operations to be performed that he carries 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 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 or more persons in any one occurrence, and regular design-builder'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 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 Design-Builder's public liability and property damage insurance shall include explosion, collapse, and underground damage coverage. If the Design-Builder subcontracts any portion of the Work, he shall secure insurance protection in his 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 Design-Builder shall provide similar insurance protection for and on behalf of any Subcontractors to cover their operation by means of separate and individual design-builder's public liability and property damage policies. As an alternative, he shall require each Subcontractor to provide such insurance in his 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 _____ Insurance
(Type of Company)

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 his policy.

For a policy issued by two companies:

(NAME AND LOCATION OF INDEMNITY COMPANY) and
(NAME AND LOCATION OF INDEMNITY COMPANY),
each a _____ Insurance Company, herein called the Company, severally
(Type of Company)

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 Design-Builder, any Employee of the Design-Builder, 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 his duties as such.

Design-Builder means the Design-Builder designated in Item 4 of the Policy Declarations and includes all Subcontractors of the Design-Builder but not the named insured.

Designated employee of the insured means (1) any supervisory employee of the insured at the job site; (2) 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 Design-Builder; or (3) any employee of the insured not within (1) or (2) who is specifically loaned or assigned to the work of the Design-Builder for prevention of accidents or protection of property, the cost of whose services is borne specifically by the Design-Builder 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 (1) 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; (2) 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; (3) expenses incurred by the insured for first aid to others that shall be imperative at the time of the occurrence; and (4) 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 his 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 (1) 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 (2) resulting from the hazardous properties of nuclear material and with respect to which any Person 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;
 - (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;

- (9) under any liability coverage, to injury, sickness, disease, death, or destruction resulting from the hazardous properties of nuclear material if (1) the nuclear material is at any nuclear facility owned or operated by or on behalf of an insured or has been discharged or dispersed therefrom; (2) 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 (3) 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.

As used in exclusions (7), (8), and (9), the following definitions apply: *Hazardous properties* include radioactive, toxic, or explosive properties. *Nuclear material* means source material, special nuclear material, or byproduct 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. *Disposable material* means material containing byproduct material and resulting from the operation by any Person of any nuclear facility included in the definition of nuclear facility under 1 or 2 below. *Nuclear facility* means:

- (1) any nuclear reactor
- (2) 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
- (3) 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
- (4) 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 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. With respect to injury to or destruction of property, *injury* or *destruction* includes all forms of radioactive contamination of property.

- 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 Design-Builder 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 Design-Builder 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 Design-Builder 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 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 or more Persons as the result of any one 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 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 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, he shall immediately forward to the Company every demand, notice, summons, or other process received by him or his 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 its 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 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 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 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, his 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 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 shall determine the amount of loss. The insured and the Company shall each pay his 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 therefore against any Person. 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 3 years is comprised of three 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, Design-Builder, and governmental authority at the respective addresses shown in this policy written notice stating when such cancellation shall be effective (not less than 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 him are his agreements and representations, that his 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)
Secretary

(Facsimile of Signature)
President

For a policy issued by two 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)
Secretary

(Facsimile of Signature)
President

- (d) **Submitting Copies of Insurance Policies:** Prior to beginning construction operations on or over the railway Right of Way, the Design-Builder shall submit to the Department evidence of the railway company's approval and a copy of the required insurance policies. The State will not be responsible for any

claims from the Design-Builder 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 Design-Builder or his 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 Design-Builder. The Design-Builder 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 State will not be responsible for any claims by the Design-Builder 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 Design-Builder shall notify the railway company, who will arrange for tests. The Design-Builder 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 Department.
 2. **Highway Specifications:** When ordering Materials that are to conform to highway specifications, the Design-Builder shall specify in each order that the Materials are to be tested in accordance with the requirements of the Standard Specifications.

107.20—Construction Over or Adjacent to Navigable Waters

The Department will obtain a permit from the U.S. Coast Guard for the anticipated construction or demolition activities of structures on Department projects that cross a waterway(s) under the jurisdiction of the U.S. Coast Guard. As the permit holder, the Department must apply to the U.S. Coast Guard for approval of permit modifications that the Design-Builder requests to the original Department permit.

Prior to starting demolition or construction operations the Design-Builder shall meet with the Department 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 Design-Builder shall submit its proposed schedule of operations in writing to the Department. The Department shall review and provide written comments, if applicable, to the Design-Builder within 7 days following receipt of the Design-Builder's schedule of operations. The Design-Builder shall incorporate the Department's comments and submit its notice of scheduled operations to the Department and to the U.S. Coast Guard at least 30 days prior to commencement of any permitted construction or demolition operations. U.S. Coast Guard acceptance of the Design-Builder's written schedule of operations is a condition precedent to the Design-Builder'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, Design-Builder shall submit Plans that comply with the Permit for Falsework, cofferdams, floating Equipment and other obstructions to the Channel or Channels to the Department. The Design-Builder'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 Department shall review and provide written comments, if applicable, to the Design-Builder within thirty (30) days following receipt of the Design-Builder's Plans. The Design-Builder shall incorporate the Department's comments and submit its Plans to the Department and to the U.S. Coast Guard at least 30 days prior to commencement of any permitted construction or demolition operations. The Design-

Builder may not commence activities that require Channel closures or restrictions without the prior written approval of the Department and the U.S. Coast Guard. The Design-Builder shall be responsible for complying with all operational requirements that the U.S. Coast Guard may place on the Design-Builder as conditions of approval.

In addition, the Design-Builder shall request and obtain Department and U.S. Coast Guard approval in writing before commencing any operations that deviate from the Design-Builder'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 Department 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 Design-Builder violations of Bridge regulations found in 33 CFR Parts 115, 116, 117 and 118 shall be the responsibility of the Design-Builder. Further, any delay to the contract as a result of actions or inaction by the Design-Builder relative to the requirements herein that are determined by the Department to be the fault of the Design-Builder will not be compensable.

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 structure(s) under this contract required by the U.S. Coast Guard for the protection of navigation during construction or demolition operations shall be included in price Proposal for other appropriate items.

107.21—Size and Weight Limitations

- (a) **Hauling or Moving Material and Equipment on Public Roads Open to Traffic:** The Design-Builder 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 Design-Builder 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 Design-Builder shall be liable for damage that results from the hauling or moving of Material and Equipment. The hauling or moving of Material and Equipment on the Pavement Structure or across any structure during various stages of construction shall be subject to additional restrictions as specified or directed by the Department.
- (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 Department prior to fabrication or manufacture of the items. The request shall state the reasons for adjustment and shall be accompanied by supporting data, including Working Drawings where necessary.

SECTION 108—PROSECUTION AND PROGRESS OF WORK

108.01—Prosecution of Work

The Design-Builder shall provide a sufficient force of workers, Materials, Equipment, and tools and shall prosecute the Work with such diligence as is required to attain and maintain a rate of progress necessary to ensure completion of the Project in accordance with the Contract Documents.

Once the Design-Builder has begun work, it shall be prosecuted continuously and to the fullest extent possible except for authorized suspensions ordered by the Department as defined in Section 108.05. If approval is given to

discontinue the Work temporarily, the Design-Builder shall notify the Department at least 24 hours in advance of resuming operations.

At least once every 30 days, or as specified in the Contract Documents, the Design-Builder shall meet with the Department to discuss his current progress relative to his SOR and to establish the approximate date for starting each critical inspection stage during the following 30 days. The Department shall be advised at least 24 hours in advance of any changes in the Design-Builder's planned operations or critical stage work requiring inspection. For the purposes stated herein, the SOR is defined in accordance with the provisions of Section 108.03.

108.02—Limitation of Operations

(a) General.

The Design-Builder 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 Design-Builder shall not open any work to the prejudice or detriment of work already started. The Department may require the Design-Builder 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 Sundays or the following holidays without the permission of the Department: January 1, Easter, Memorial Day, July 4, Labor Day, Thanksgiving Day, and Christmas Day.

If any of these holidays occurs on a Sunday, the following Monday shall be considered the holiday.

108.03—Progress Schedule (Refer to Part 3 - Lump Sum Design-Build Agreement – Article 11 - Other Provisions)

The Design-Builder shall submit a Baseline Schedule and updates in accordance with the requirements of the General Conditions of Contract. Payment for Material stockpiled or stored in accordance with the requirements of Section 109.08 will not be considered in determining the Design-Builder's rate of progress.

108.04—Determination and Extension of Contract Time Limit (Refer to Part 4 - General Conditions – Article 8 Time, Article 9 Changes to the Contract Price and Time, and Article 10 Contract Adjustments and Disputes)

108.05—Suspension of Work Ordered by the Department (Refer to Part 4 - General Conditions – Article 11 Stop Work and Termination for Cause)

108.06—Failure to Complete on Time

For each day that any work remains incomplete after the Contract Times specified for the completion of the Work, the Department will assess liquidated damages against the Design-Builder in accordance with the Contract.

108.07—Default of Contract (Refer to Part 4 - General Conditions – Article 11 Stop Work and Termination for Cause)

108.08—Termination of Contract (Refer to Part 4 - General Conditions – Article 11 Stop Work and Termination for Cause)

108.09—Acceptance

- (a) **Design-Builder's Responsibility for Work:** Until Substantial Completion of the Work by the Department in accordance with the requirements of this Section, the Design-Builder 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 Design-Builder 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.

In case of suspension of work, the Department shall issue instructions and directions to the Design-Builder as to the implementation of the suspension, which may include directing Design-Builder to develop a maintenance and transition plan. Unless specifically directed otherwise by the Department, Design-Builder shall, during the suspension period, continue to have full responsibility for the Project, including but not limited to its obligations to take such precautions as may be necessary to prevent damage to the Work, comply with Governmental Approvals, and ensure public safety. Such obligations include, but are not limited to, erosion control and drainage and erection of any necessary Temporary Structures, signs, or other facilities.

- (b) **Partial Acceptance: (Not Used)**

- (c) **Substantial Completion and Final Acceptance:** Within seven (7) days of Department's receipt of a written notice from the Design-Builder that it believes the Work, or a designated portion of the Work, is substantially complete in accordance with the Contract Documents, along with certification from the Quality Assurance Manager ("QAM") that such Work is substantially complete, the Department and Design-Builder shall conduct a joint inspection to determine whether the Work, or the designated portion thereof, is substantially complete. If the Department concludes that the applicable Work is not substantially complete, it will so advise the Design-Builder, whereupon the preceding process will continue until the Department agrees that the applicable Work is substantially complete.

Once the Work is substantially complete, then the Department will provide to the Design-Builder a written list of remaining items of Work that have to be completed to achieve Final Acceptance. Within seven (7) days of Department's receipt of Design-Builder's notice that it believes the Work is finally complete, the Department and Design-Builder shall conduct a joint inspection to verify that the Work is complete in accordance with the Contract Documents. If all Work specified in the Contract Documents has been completed, the inspection will constitute the final inspection, and the Department will make the final acceptance. The Design-Builder will be notified in writing of the determination of final acceptance within seven (7) days of the date of the Department's final acceptance.

108.10—Termination of Design-Builder's Responsibilities (Refer to Part 4 - General Conditions – Article 11 Stop Work and Termination for Cause)

SECTION 109—MEASUREMENT AND PAYMENT

109.01—Measurement of Quantities

Unless otherwise specifically stated to the contrary in Article 6 of the Agreement, this Section 109.01 will only be applicable to Contract Price adjustments made under Article 9 of the General Conditions.

The methods of measurement and computations to be used to determine quantities of Material furnished and work performed will be those generally recognized as conforming to good engineering practice.

Longitudinal measurements for surface area computations will be made along the surface and transverse measurements will be the surface measure shown in the Contract Documents or ordered in writing by the Department. Individual areas of obstructions with a surface area of 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 in the Contract Documents

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 in the Contract Documents or for any Material moved from outside the area of the cross-section and lines shown in the Contract Documents.

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 the Contract Documents, manufacturing tolerances established by the industries involved will be accepted.

- (a) **Measurement by Weight:** Materials that are measured or proportioned by weight shall be weighed on accurate scales as specified in this Section. When Material is paid for on a tonnage basis, personnel performing the weighing shall be certified by the Department and shall be bonded to the Commonwealth of Virginia in the amount of \$10,000 for the faithful observance and performance of the duties of the weigh Person required herein. The bond shall be executed on a form having the exact wording as the Weigh Persons Surety Bond Form furnished by the Department and shall be submitted to the Department prior to the furnishing of the tonnage Material. No payment will be made for Materials delivered in excess of the legal load limits established for each truck.

The Design-Builder shall have the weigh person perform the following:

1. Post and furnish a weekly tare weight of each truck used and keep a record of them for 12 months.
2. Furnish a signed weigh ticket for each load that shows the date, truck number, load number, plant name, size and type of Material, Project number, schedule or purchase order number, and the weights specified herein.
3. Maintain sufficient documentation so that the accumulative tonnage and distribution of each lot of Material, by contract, can be readily identified.
4. Submit by the end of the next working day a summary of the number of loads and total weights for each type of Material by contract.

Trucks used to haul Material being paid for by weight shall display the truck uniform identification number and legal gross and legal net weight limits. These markings shall be no less than 2 inches high and permanently stenciled on each side of the truck with contrasting color and located as to be clearly visible when the vehicle is positioned on the scales and observed from normal position of the weigh Person at the scale house.

Trucks used to haul Material shall be equipped with a cover suitable to protect the Material and to protect the traveling 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 20 pounds. At the option of the Design-Builder, 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 months and upon being moved. Hopper and truck scales shall be serviced and tested by a scale service representative at least once every six months. 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 18 months, and copies of all scale service representative test reports shall be forwarded to the Department.

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.

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

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

- (b) **Measurement by Cubic Yard:** Material that is measured by the cubic yard, loose measurement or vehicular measurement, shall be hauled in approved vehicles and measured therein at the point of delivery. Material measured in vehicles, except streambed gravel, will be allowed at the rate of $\frac{2}{3}$ 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 Department 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.

When approved by the Department 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 Department and shall be agreed to by the Design-Builder before they are used.

- (c) **Measurement by Lump Sum:** When used as an item of payment, the term *lump sum* will mean full payment for completion of work described in the Contract. When a complete structure or structural unit is specified as a Pay Item, the unit of measurement will be lump sum, and shall include all necessary fittings and accessories. The quantities may be shown in the Contract Documents for items for which lump sum is the method of measurement. If shown, the quantities are approximate and are shown for estimating purposes only. Items that are to be measured as complete units will be counted by the Department in the presence of a representative of the Design-Builder.

- (d) **Specific Items:**

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:** Asphalt will be measured by the gallon, volumetric measurement, based on a temperature of 60 degrees F using the following correction factors:
 - a. 0.00035 per degree F for petroleum oils having a specific gravity 60/60 degrees F above 0.966
 - b. 0.00040 per degree F for petroleum oils having a specific gravity 60/60 degrees F between 0.850 and 0.966
 - c. 0.00025 per degree F 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 60 degrees F:

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

Where:

V = volume of asphalt to be corrected;

V^1 = 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 60 degrees F will be determined by dividing the net weight by the weight per gallon at 60 degrees F.

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 Design-Builder.

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

109.02—Plan Quantities (Not Used)

109.03—Scope of Payment

Payments to the Design-Builder will be made for the Work in accordance with the Agreement.

The Design-Builder 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
- (b) performing all Work contemplated 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) all risks of every description connected with the prosecution of the Work
- (e) all expenses incurred in consequence of the suspension of the Work as herein authorized
- (f) any infringement of patent, trademark, or copyright
- (g) the completion of the Work in accordance with the requirements of the Contract

The payment of any partial estimate prior to final acceptance of the Project as provided for in Section 108.09 shall in no way affect the obligation of the Design-Builder to repair or renew any defective parts of the construction or to be responsible for all damages attributable to such defects.

109.04—Compensation for Altered Quantities [Refer to Agreement (Article 6, Contract Price) and General Conditions (Article 9, Changes to Contract Price and Time)]

109.05—Contract Price Adjustments

Contract Price adjustments shall be made in conformance with the requirements of Article 9 of the General Conditions. In the event the Contract Price adjustment is to be made under Subparagraphs .3 or .4 of Section 9.4.1, or in the event of claims by Design-Builder under Article 10, then the rates for labor, Equipment, Materials and otherwise will be compensated in the following manner:

- (a) **Labor:** Unless otherwise approved, the Design-Builder will receive the rate of wage or scale as set forth in his 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 the work. If overtime work is authorized, payment will be at the normal overtime rate set forth in the Design-Builder'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 45 percent of the approved payroll will be included in the payment for labor to cover administrative costs, profit, and benefits or deductions normally paid by the Design-Builder.
- (b) **Insurance and Tax:** The Design-Builder will receive an amount equal to 25 percent of the approved 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.
- (c) **Materials:** The Design-Builder will receive the actual cost of Materials accepted by the Department that are delivered and used for the work including taxes, transportation, and handling charges paid by the Design-Builder, not including labor and Equipment rentals as herein set forth, to which 15 percent of the cost will be added for administration and profit. The Design-Builder shall make every reasonable effort to take advantage of trade discounts offered by Material suppliers. Any discount received shall pass through to the Department. Salvageable temporary construction Materials will be

retained by the Department, or their appropriate salvage value shall be credited to the Commonwealth, as agreed on by the Department.

- (d) **Equipment:** The Design-Builder shall provide the Department 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 Design-Builder 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 Department. Equipment rental will be measured by time in hours of actual time engaged in the performance of the 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 extra work is performed. Adjustment factors or rate modifications indicated in the *Rental Rate Blue Book* will not be considered when acceptable rates are determined. Hourly rates for Equipment on standby will be at 50 percent 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 Department is available on-site for the work but is idle for reasons not the fault of the Design-Builder 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 40 hours for any given week and is on standby, payment for standby time will be allowed for up to 40 hours, minus hours performing work. Payment will not be made for the time that Equipment is on the Project in excess of 24 hours prior to its actual performance in the 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 Department.

The Design-Builder will be paid freight cost covering the moving of Equipment to and from the specific work operation provided such cost is supported by an invoice showing the actual cost to the Design-Builder. 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 Design-Builder at the time of the performance of the extra work. 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 Design-Builder does not possess or have readily available Equipment necessary for performing the extra work and such Equipment is rented from a source other than a company that is an Affiliate, payment will be based on actual invoice rates, to which 15 percent 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.

- (e) **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 hand held tools or other costs for which no specific allowance is herein provided. The Design-Builder will receive compensation equal to the cost of the bond, special railroad insurance premiums, and other additional costs necessary for the specific work as determined by the Department. The Design-Builder shall supply documented evidence of such costs.

- (f) **Compensation:** The compensation as set forth in this Section shall be accepted by the Design-Builder as payment in full for work performed on the basis described in this Section 109.05. At the end of each day, the Design-Builder's Representative and the Inspector shall compare and reconcile records of the hours of work and Equipment, labor, and Materials used in such work. 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 work is performed by an approved Subcontractor, the Design-Builder will be paid 10 percent of the subcontract net costs to cover the Design-Builder'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 labor, Materials, and Equipment from the other costs.

- (g) **Statements:** Payments will not be made for work performed on the basis described in this Section 109.05 until the Design-Builder has furnished the Department duplicate itemized statements of the cost of such work detailed as follows:
1. payroll indicating name, classification, date, daily hours, total hours, rate, and extension of each laborer, foreperson, and Superintendent
 2. designation, dates, daily hours, total hours, rental rate, and extension for each unit of Equipment
 3. quantities of Materials, prices, and extensions
 4. transportation of Materials

Statements shall be accompanied and supported by invoices for all Materials used and transportation charges. However, if Materials used are not specifically purchased for such work but are taken from the Design-Builder's stock, then in lieu of the invoices, the Design-Builder shall furnish an affidavit certifying that such Materials were taken from his stock; that the quantity claimed was actually used; and that the price, transportation, and handling claimed represented his actual cost.

109.06—Common Carrier Rates (Not Used)

109.07—Eliminated Items

The Department shall have the right to delete any item of Work in the Contract. In such case, the Department shall notify Contractor of such deletion and the parties shall proceed in accordance with Article 9 of the General Conditions.

109.08—Partial Payments

(a) General

Payment will be made in accordance with the Agreement and the General Conditions of the Contract.

(b) Payment To Subcontractors

Upon Department payment of the Subcontractor's portion of the work as shown on the monthly progress estimate and the receipt of payment by the Design-Builder for such work, the Design-Builder shall make compensation in full to the Subcontractor. For the purposes of this Section, payment of the Subcontractor's portion of the work shall mean that payment has been issued for that portion of the work that was identified on the monthly progress estimate for which the Subcontractor has performed service.

The Design-Builder shall make payment in full for the portion of the work identified on the monthly progress estimate to the Subcontractor who performed such work within seven days of the receipt of payment from the Department in accordance with the requirements of this Section. If the Design-Builder withholds any funds as part of his contract with the Subcontractor to ensure satisfactory compliance and completion and the Subcontractor achieves satisfactory compliance and completion as verified by payment from the Department to the Design-Builder, the Design-Builder shall make full payment to the Subcontractor within seven days.

If the Design-Builder fails to make payment to the Subcontractor within the time frame specified herein, the Subcontractor shall notify the Engineer and the Design-Builder's bonding company in writing. The Bonding Company shall be responsible for insuring payment in accordance with the requirements of this Section and Section 107.01.

(c.) Retainage (Not Used)

Retainage will be in accordance with the Agreement and the General Conditions of the Contract.

109.09—Payment for Material on Hand

When requested in writing by the Design-Builder, payment allowances may be made for Material secured for use on the Project. Such Material payments will be for only those actual quantities and cost identified as work packages in the contract, approved Work Orders, or otherwise documented as required to complete the Project and shall be in accordance with the following terms and conditions:

- (a) **Structural Units:** An allowance of 100 percent of the cost to the Design-Builder for structural steel materials for fabrication not to exceed 60 percent of the contract price may be made when such material is delivered to the fabricator and has been adequately identified for exclusive use on the Project. An allowance of 100 percent of the cost to the Design-Builder for superstructure units, not to exceed 90 percent of the contract price, may be made when they have been fabricated. Prior to the granting of such allowances, the structural steel materials and fabricated units shall have been tested or certified and found acceptable to the Department and shall have been stored in accordance with the requirements specified herein.
- (b) **Other Materials:** For reinforcing steel, aggregate, pipe, guardrail, signs and sign assemblies, and other nonperishable Material, an allowance of 100 percent of the cost to the Design-Builder for Materials, not to exceed 90 percent of the contract price, may be made when such Material is delivered 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 Department.
- (c) **Excluded Items:** No allowance will be made for cement, seed, plants, fertilizer, and other perishable material nor for fuels, form lumber, Falsework, Temporary Structures, ITS equipment, computer equipment, or other work that will not become an integral part of the finished construction.
- (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 Design-Builder shall repair or replace them. 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 Department may approve storage on private property or, for structural units, on the manufacturer or fabricator's yard. Requests for payment allowance for such 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 State.

- (e) **Materials Inventory:** If the Design-Builder requests a payment allowance for properly stored Material, he shall submit a certified and itemized inventory statement to the Department no earlier than five days and no later than two days prior to the progress estimate date. The statement shall be submitted on forms furnished by the Department and shall be accompanied by invoices or other documents that will verify the Material's cost. Following the initial submission, the Design-Builder shall submit to the Department 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 Design-Builder fails to submit the monthly-certified update within the specified time frame, the Department 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

Payment will be made in accordance with the Agreement and the General Conditions of Contract.

109.11—Exhibits

The following exhibits are specifically made a part of, and incorporated by reference into, these Division I Amendments to the Standard Specifications:

EXHIBIT 102.05(g.1) -- SPECIAL PROVISION FOR USE OF DOMESTIC MATERIAL

EXHIBIT 102.05(g.2) -- FHWA-1273, REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

EXHIBIT 102.05(g.3) -- NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

EXHIBIT 107.13 -- PREDETERMINED MINIMUM WAGE RATES

EXHIBIT 107.15 -- SPECIAL PROVISION FOR SECTION 107.15

END OF PART 5

DIVISION I AMENDMENTS TO THE STANDARD SPECIFICATIONS