

**EXHIBIT MM**

FORM OF SEMINARY ROAD RAMP CONSTRUCTION CONTRACT

[SEE ATTACHED]

**CONSTRUCTION CONTRACT**  
**RELATING TO**  
**THE 395 EXPRESS LANES SEMINARY ROAD RAMP PROJECT**  
**BY AND BETWEEN**  
**95 EXPRESS LANES LLC,**  
**a Delaware limited liability company**  
**AND**  
**CES CONSULTING, LLC,**  
**a Virginia limited liability company**

**Dated as of August \_\_\_, 2022**

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# CONSTRUCTION CONTRACT TERMS AND CONDITIONS

## LIST OF EXHIBITS

- Exhibit A – Definitions
- Exhibit B – Contract Documents
  - B-1 – Technical Requirements
  - B-2 – Design Plans
- Exhibit C – Federal Requirements and Civil Rights Requirements
- Exhibit D – Special Provisions
- Exhibit E – Safety Requirements
- Exhibit F – Form of Lien Waiver
- Exhibit G – Insurance Requirements
- Exhibit H – Forms of Performance and Payment Bonds
- Exhibit I – Minor Change Request Form
- Exhibit J – Task Order
- Exhibit K – Pricing Details

## CONSTRUCTION CONTRACT

This CONSTRUCTION CONTRACT RELATING TO THE 395 EXPRESS LANES SEMINARY ROAD RAMP PROJECT (this “Contract”) is made and entered into as of August \_\_\_\_, 2022 (the “Contract Date”), by and between 95 EXPRESS LANES LLC (“Concessionaire”) and CES CONSULTING, LLC (“Contractor”) for the purposes of providing construction services. Concessionaire and Contractor may be singularly identified as “Party” and collectively as “Parties”. The Exhibits listed above are attached hereto and fully incorporated herein.

### WITNESSETH:

**WHEREAS**, Concessionaire desires to secure services from Contractor to install signage and pavement markings to convert the existing Seminary Road ramp on Interstate 395 from a High Occupancy Vehicle (HOV) ramp to a High Occupancy Toll (HOT) ramp.

**WHEREAS**, Contractor has represented that it is experienced and capable of performing and willing to perform such services for Concessionaire.

**NOW, THEREFORE**, in consideration of the covenants hereinafter set forth, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

### Section 1 Definitions, Interpretation, and Precedence

- 1.1 Unless the context otherwise requires, capitalized terms and acronyms used in this Contract have the meanings given in **Exhibit A**. Where a term is defined in both the Comprehensive Agreement and this Contract, the definition in this Contract shall govern.
- 1.2 *Order of Precedence*
  - (a) Without limiting the other provisions within this Section 1, if there is any conflict, ambiguity, or inconsistency between the provisions of this Contract (including all Exhibits), the order of precedence will be as follows, from highest to lowest:
    - (i) the main body of this Contract;
    - (ii) **Exhibit C** to this Contract (Federal Requirements and Civil Rights Requirements) and Exhibit E (Safety Requirements);
    - (iii) **Exhibit B-1** to this Contract (Technical Requirements);
    - (iv) Special Provisions – Copied Notes in **Exhibit D** to this Contract;
    - (v) Special Provisions in **Exhibit D** to this Contract;
    - (vi) VDOT Road and Bridge Supplemental Specifications (Divisions II-VII only) contained in **Exhibit D** to this Contract;

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- (vii) VDOT Road and Bridge Supplemental Specifications (Divisions II-VII only) published in the annual supplemental volume;
- (viii) VDOT Road and Bridge Specifications 2020 (Divisions II-VII only);
- (ix) **Exhibit B-2** to this Contract (Design Plans), excluding the specifications listed in clauses (vii) through (ix);
- (x) VDOT Road and Bridge Standard Drawings (including all revisions issued through the date of submission of Contractor's proposal); and
- (xi) all other Exhibits to this Contract;

in each case, as amended or supplemented in accordance with this Contract.

- (b) If there is any conflict, ambiguity, or inconsistency between two or more provisions in this Contract (including all Exhibits) regarding safety, reliability, durability, performance, or service, the provision establishing a higher standard will prevail.
- (c) Good Industry Practice shall be utilized hereunder, among other things, to implement and in no event to displace or lessen the stringency of the standards set forth in this Contract and the Contract Documents.
- (d) Additional or supplemental details or requirements in a provision of this Contract with lower priority will be given effect, except to the extent that they irreconcilably conflict with any provision of this Contract with higher priority.
- (e) An amendment to this Contract or a Work Order shall take precedence over the terms it amends.

### Section 2 General

- 2.1 Contractor will fully perform and timely complete, as an independent contractor, all work ("Work") in accordance with this Contract and as described in the documents identified on **Exhibit B**, the Federal Requirements and Civil Rights Requirements described on **Exhibit C**, the Special Provisions described in **Exhibit D** and the Safety Requirements described on **Exhibit E** (this Contract and the documents identified on such **Exhibits B, C, D and E** are collectively, the "Contract Documents") for the Contract Price as shown on this Contract and as detailed on **Exhibit K**. Contractor shall accept the Contract Price as full payment for the following: (i) all Materials, Equipment, tools, incidentals, bonds, labor, sales and use taxes, supervision, insurance, overhead and profit required to perform the Work, (ii) all loss or damage arising from the nature of the Work or from action of the elements or any unforeseen difficulties that may be encountered during prosecution of the Work and until its final acceptance, except as otherwise

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expressly provided in this Contract, (iii) any license, use, or infringement of a patent, trademark, or copyright, and (iv) the completion of the Work in accordance with the Contract Documents. Time is of the essence in performing all Contract obligations.

2.2 Prior to executing this Contract, Contractor has carefully determined to its satisfaction all requirements of this Contract and the extent and the costs of all aspects of the Work, and has:

- (a) ascertained the conditions and requirements of its Work, including: (a) the location, accessibility and character of the Site and adjacent areas; (b) surface conditions and reasonably ascertainable subsurface conditions (including potential water, Materials, Utilities or obstacles); (c) any errors, omissions or conflicts in the documents set forth in **Exhibit B** that could reasonably be discovered by a Contractor experienced in the Work in the area of the Project; (d) existing facilities at or near the Site; (e) transportation, disposal, handling and storage of Materials or Equipment; (f) labor availability; (g) location and availability of Utilities; (h) needed Equipment and facilities; (i) foreseeable weather conditions; and (j) all laws, treaties, ordinances, judgments, Federal Requirements, decrees, injunctions, writs and orders of any Governmental Authority, and all rules, regulations, orders, formal interpretations and permits of any Governmental Authority having jurisdiction over construction of the Project on the Project Right of Way, performance of the Work, or operation of the Project, or the health, safety or environmental condition of the Project or the Project Right of Way, as the same may be in effect from time to time, including the Code of Virginia and the Uniform Act applicable to any aspect of performance of the Work or to Contractor (“**Law**”); and
- (b) reviewed all information made available by Concessionaire or others, satisfying itself with the correctness and accuracy of the Contract Price in light of all information and required investigations.

2.3 **Safety Requirements.** Contractor acknowledges the critical importance to the Project and to all Project personnel of Concessionaire’s safety requirements. Contractor will comply with the safety requirements in **Exhibit E**, as may be amended, all Laws relating to safety in executing the Work and disposing or handling Materials (including any Hazardous Substances), and all rules of Concessionaire and VDOT regarding the performance of Work and the Site, including compliance with the current Site logistics plan. Contractor at all times maintains primary control of and responsibility for safety for its Work and will meet or exceed all safety requirements of this Contract. Contractor will at no time start, continue, or resume any Work which Contractor or any representative of Concessionaire identifies as unsafe, until Contractor has taken corrective measures satisfactory to Concessionaire. Failure of Concessionaire or others to stop an unsafe practice will not relieve Contractor of its responsibilities. If Contractor or any person for whom Contractor is responsible fails to adhere to or enforce

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Concessionaire's safety requirements or any safety-related Laws, Concessionaire may, in addition to other remedies, bar such party from the Site.

- 2.4 With respect to its Work and this Contract, and in addition to the other duties specified in this Contract, Contractor owes to Concessionaire the duties timely and fully to: (i) comply with all applicable Laws; (ii) provide within 3 Business Days any requested written assurances of complete and timely performance, including assurances prompted by any actual or potential insolvency, bankruptcy or failure to continue as a going concern; (iii) notwithstanding any provisions in this Contract which give Concessionaire the right to direct Contractor as to details of the Work (including safety) or to exercise a measure of control over the Work, Contractor will remain fully responsible for performance of the Work and be solely responsible for the acts or omissions of its laborers, and those of its Subcontractors and suppliers at all tiers (collectively, "Lower Tiers"); (iv) ensure that all obligations of this Contract and the Contract Documents are included in all agreements involving Lower Tiers as respects their performance of any Work; (v) comply with this Contract and the Contract Documents; (vi) promptly provide all financial and performance information required by Concessionaire as part of Concessionaire's program for qualifying subcontractors to work on a Project with Concessionaire; and (vii) allow no bankruptcy or receivership filing to delay or otherwise adversely impact the Work, and consent upon request to any request by Concessionaire to expedite hearings or other actions by the bankruptcy court to minimize impacts on the Work or the Project.

### Section 3 Payments to Contractor

#### 3.1 *Completion.*

- (a) Upon obtaining Final Completion, Contractor will provide Concessionaire with an application for payment ("Application for Payment") in accordance with Section 3.6 below. Concessionaire shall make the payment to Contractor (the "Completion Payment") within thirty (30) days after Concessionaire's receipt of a properly submitted and accurate Application for Payment. At the time of submission of its Application for Payment, Contractor shall provide the following information:
- (i) a final lien waiver, in the form of **Exhibit F**, of all liens that Contractor may have against Concessionaire, the Project and the Project Right of Way, and an affidavit that there are no claims, or obligations or liens outstanding or unsatisfied for labor, services, Material, Equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect Concessionaire's interests;
  - (ii) a general release executed by Contractor waiving, upon receipt of the Completion Payment by Contractor, all claims, except those claims previously made in writing to Concessionaire and remaining

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unsettled at the time of the Completion Payment, which claims shall be specifically listed in an attachment to the general release;

- (iii) consent of Contractor's surety to the Completion Payment;
  - (iv) all operating manuals, warranties and other deliverables required by the Contract Documents, including all project records; and
  - (v) certificates of insurance confirming that required coverages will remain in effect consistent with the requirements of the Contract Documents.
- (b) Upon making the Completion Payment, Concessionaire waives all claims against Contractor except claims relating to: (i) Contractor's failure to satisfy its payment obligations; (ii) Contractor's failure to complete the Work consistent with the Contract Documents, including defects appearing after the date of the Completion Payment; and (iii) warranties and indemnifications as set forth in the Contract Documents. Upon acceptance by Contractor of the Completion Payment, Contractor waives all claims under the Contract Documents, including all Subcontractor claims, for anything done or furnished or relating to the work under the Contract Documents or for any act or neglect of Concessionaire relating to or connected with the Contract Documents. Contractor is warned that the execution by it of a release, in connection with the acceptance of the Completion Payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Section 3.1(b) or those for amounts deducted from the final requisition or from the Completion Payment approved by Concessionaire, shall not be effective to reserve such claims, anything stated to Contractor orally or in writing by any official, agent or employee of Concessionaire to the contrary notwithstanding.
- (c) Contractor agrees that, within seven (7) days following receipt of monies from Concessionaire for work performed by any Subcontractor, Contractor shall either: (a) pay the Subcontractor for the proportionate share of the total payment received from Concessionaire attributable to the work performed by the Subcontractor; or (b) notify Concessionaire and Subcontractor, in writing, of Contractor's intention to withhold all or a part of the Subcontractor's payment, specifying the reason for the non-payment. Contractor also agrees that it shall include in all of its subcontracts a provision that: (a) obligates Contractor to pay interest to Subcontractors on all amounts owed by Contractor that remain unpaid after seven (7) days following receipt of monies from Concessionaire for work performed by any Subcontractor, except for amounts withheld as allowed in the preceding sentence; (b) states, "Unless otherwise provided under the terms of this Contract, interest shall accrue at the rate of one percent per month."; and (c) obligates each Subcontractor to include or otherwise be subject to the same

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payment and interest requirements as specified in this Section (c) with respect to each lower-tier sub-subcontractor.

- (d) Other than damage caused by Concessionaire or other parties not under the Contractor's direction performing maintenance or other work, including snow plowing, Contractor shall have charge and care thereof and shall take every precaution consistent with Good Industry Practice against damage to any part of the Work thereof by action of the elements or from any other cause. Contractor shall rebuild, repair, restore, and make good on damage to any portion of the Work occasioned by any of the foregoing causes and shall bear the expense thereof. Contractor's obligations under this Section 3.1(d) shall cease as of the date Concessionaire has provided a signed certificate of Final Completion to Contractor.
- (e) Contractor agrees to provide Concessionaire, within five (5) days of the date of this Contract, its federal employer identification number.

### 3.2 *[Reserved]*

- 3.3 ***Interest.*** Payments due and unpaid by Concessionaire to Contractor shall bear interest commencing ten (10) days after payment is due at an interest at a variable rate per annum equal to the reference rate announced by Bank of America, N.A., from time-to-time, plus one percent (1%).

- 3.4 ***Record Maintenance and Retention of Records.*** Contractor shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management, using accounting and control systems in accordance with generally accepted accounting principles and as may be provided in the Contract Documents. During the performance of the Work and for a period of five (5) years after the Completion Payment, Concessionaire and Concessionaire's accountants shall be afforded access from time-to-time, upon reasonable notice, to Contractor's records, books, correspondence, receipts, subcontracts, purchase orders, vouchers, memoranda and other data, including but not limited to electronic schedules and other electronic data (all collectively referred to as "Books and Records") relating to: (a) changes in the Work performed on a cost basis; or (b) any request by Contractor for an adjustment in the Contract Price or Contract Time. Contractor shall preserve all of its Books and Records for a period of five (5) years after the Completion Payment. Contractor shall permit Concessionaire to audit, examine, and copy all documents, computerized records, electronic mail, or other records of Contractor during the life of this Contract and for a period for not less than five years after the earliest of: (i) the date of the Completion Payment, (ii) the date Contractor is declared in default of Contract, and (iii) the date of termination of this Contract; provided that the exercise of Concessionaire's right to so audit, examine and copy documents, records, mail and other records of Contractor shall be limited to no more than one time per year (but such limitation shall not apply at any time a Contractor Default has occurred and is continuing or such exercise is in connection with (x) compliance by Concessionaire with applicable Law or any order or

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decision issued by a court or regulatory or other governmental body, or (y) compliance by Concessionaire with any request or requirement by VDOT, or (z) the adjudication or resolution of any dispute under this Contract).

3.5 *Not Used.*

3.6 *Application for Payment.*

- (a) No less than seven (7) days after Final Completion, Contractor shall submit a draft Application for Payment for Concessionaire's concurrence for all Work performed. The final Application for Payment details shall then be submitted formally upon mutual agreement of the parties. The Application for Payment shall be in a form approved by Concessionaire and shall be accompanied by all supporting documentation required by the Contract Documents.
- (b) Contractor shall furnish to Concessionaire such detailed information as Concessionaire may request to assist Concessionaire in the approval of the Application for Payment.
- (c) The Application for Payment shall constitute Contractor's representation that the Work has been performed consistent with the Contract Documents.

3.7 *Not Used.*

3.8 *Withholding of Payments.*

- (a) On or before the date established in this Contract, Concessionaire shall pay Contractor all amounts properly due. If Concessionaire reasonably determines that Contractor is not entitled to all or part of the Application for Payment, it will notify Contractor in writing at least seven (7) days prior to the date payment is due. The notice shall indicate the specific amounts Concessionaire intends to withhold, the reasons and contractual basis for the withholding, and the specific measures Contractor must take to rectify Concessionaire's concerns. Contractor and Concessionaire will attempt to resolve Concessionaire's concerns prior to the date payment is due. If the parties cannot resolve such concerns, Contractor may pursue its rights under the Contract Documents.
- (b) In addition to express provisions elsewhere contained in this Contract, Concessionaire may withhold from any payment otherwise due Contractor such amount as determined necessary to protect Concessionaire's interest, or if it so elects, may withhold or retain all or a portion of any payment on account of:
  - (i) breach or reasonably expected breach of this Contract by Contractor;

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- (ii) to protect VDOT and/or Concessionaire against potential or actual indemnity claim against Concessionaire under this Contract;
  - (iii) unsatisfactory progress of the work not caused by conditions beyond Concessionaire's control;
  - (iv) defective work not corrected;
  - (v) Contractor's failure to carry out instructions or orders of Concessionaire or its representative;
  - (vi) a reasonable doubt that the Work can be completed for the balance then unpaid;
  - (vii) work or execution thereof not in accordance with the Contract Documents;
  - (viii) claim filed against Contractor or Concessionaire or reasonable evidence indicating probable filing of claims;
  - (ix) failure of Contractor to make payments to Subcontractor or for Materials or labor;
  - (x) damage to another contractor, unsafe working conditions allowed to persist by Contractor or failure of Contractor to provide work schedules as required by Concessionaire; or
  - (xi) use of Subcontractors without Concessionaire's approval.
- (c) To the fullest extent permitted by law, Contractor agrees to waive any rights it has under applicable laws, including but not limited to any bond, payment, or trust fund statutes, which would otherwise prevent Concessionaire from exercising these rights.
- (d) [Reserved]
- (e) [Reserved]
- (f) If Concessionaire does not withhold out of any payment (final or otherwise) a sum for any of the circumstances described in Section 3.8(b), even though the circumstance has occurred at the time of Concessionaire's payment to Contractor, Concessionaire will not forfeit its right to exercise such withholding from a future payment or any other rights or remedies it may be entitled to obtain such amount from Contractor.
- (g) Nothing under this Contract (including this Section 3.8) will create any obligation of Concessionaire of any kind to any Subcontractors, architects, mechanics, laborers, engineers, workmen or other third persons.

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- (h) The right of Contractor to any amount to be paid under this Contract (even where any amounts have already been approved or determined as due) will be subject to and subordinate to the rights of Concessionaire under this Section 3.8.
- (i) Without limiting any other provision of this Section 3.8 or any other rights of Concessionaire under this Contract, and subject to Section 3.8(j), if Contractor or any Subcontractor pays wages or supplements in an amount less than required by this Contract or the relevant subcontract, Concessionaire may:
  - (i) withhold out of any payment (final or otherwise and even though a payment has already been approved) due to Contractor under this Contract, an amount that Concessionaire deems sufficient to pay laborers, mechanics, architects, draftsmen, engineers and technical workers, and others employed to perform the Work, the difference between the sums those Persons should have received as wages or supplements from Contractor or Subcontractor and the amounts they actually received; and
  - (ii) pay those sums over to those Persons.

All amounts withheld and paid by Concessionaire under this Section 3.8(i) will be deemed to be payments made to Contractor under this Contract on account of the Contract Price.
- (j) Without limiting any other provision of this Section 3.8 or any other rights of Concessionaire under this Contract, if Concessionaire conducts an investigation and discovers that Contractor or any of its Subcontractors has failed to pay wages or supplements as required by this Contract or the relevant subcontract:
  - (i) Contractor must pay to Concessionaire an amount equal to Concessionaire's cost of conducting that investigation, within fourteen (14) days of receiving a demand from Concessionaire for such payment; and
  - (ii) if Contractor fails or refuses to pay for the cost of any investigation within that 14-day period, Concessionaire may withhold out of any payment (final or otherwise and even though a payment has already been approved) due to Contractor under this Contract, or under any other agreement between Contractor and Concessionaire, an amount equal to the cost of such investigations plus a 15% administrative charge.
- (k) Concessionaire may withhold out of any payment due to Contractor under this Contract, any amounts required or permitted under this Section 3.8. All amounts withheld by Concessionaire under this Section 3.8(k) will be

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deemed to be payments made to Contractor under this Contract on account of the Contract Price.

- 3.9 ***Contractor's Payment Obligations.*** Contractor will pay Subcontractors, in accordance with its contractual obligations to such parties, all the amounts Contractor has received from Concessionaire on account of their work. Contractor will impose similar requirements on Subcontractors to pay those parties with whom they have contracted. Contractor will indemnify and defend Concessionaire against any claims for payment and mechanic's liens as set forth in Section 7.1 hereof.

### Section 4 Operations

- 4.1 Contractor will at all times be thoroughly familiar with all requirements regarding the Work, and promptly notify Concessionaire, in writing and before proceeding with affected Work, of any deficiencies, errors, discrepancies, unanticipated Site conditions, anticipated conflicts or unusual difficulties not specifically addressed in this Contract. Contractor's non-compliance with any notice and claim requirements in the Contract Documents or in this Contract will constitute a waiver of claim. Contractor will coordinate its Work with that of Concessionaire and all other Subcontractors. Concessionaire will upon reasonable request provide shop drawings by other Subcontractors to Contractor.
- 4.2 Each of Concessionaire and Contractor shall designate an individual authorized to make decisions and bind such Party on matters relating to the Contract documents (each individual, an "Authorized Representative"). The initial Authorized Representative for Concessionaire shall be **Samrat Valani, Vice President Operations**, and the initial Authorized Representative for Contractor shall be **Scott C. Hunter, Director of Construction**. Each Party may change its Authorized Representative by a notice delivered to the other Party. An Authorized Representative may, by notice delivered to the other Party, delegate its authority under this Section 4.2 or any other matter to be performed by the Authorized Representative under this Contract, to another individual or individuals to perform those functions, and make binding decisions with respect to those matters, specified in that notice. Contractor's Authorized Representative and Contractor's other pertinent representatives will attend all coordination meetings and project meetings. Contractor's Authorized Representative will represent Contractor and will have full authority to make decisions and commitments regarding Contractor's Work. All communications and notices given to Contractor's Authorized Representative will be binding as if given to Contractor, and Contractor's Authorized Representative is authorized to bind Contractor. Contractor represents that its crew will include one or more supervisor-level employees that qualifies as an expert in the Work and as a competent person as defined by the Occupational Safety and Health Administration, and is knowledgeable of all applicable Laws.
- 4.3 Contractor shall participate in meetings between Concessionaire and VDOT, upon VDOT's reasonable request, concerning matters pertaining to Contractor or its work; provided, that all direction to Contractor will be provided by Concessionaire;

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and provided further, that nothing in this Section 4.3 will limit the authority of VDOT to give such direction or take such action which in the opinion of VDOT is necessary to remove an immediate and present threat to the safety of life or property.

- 4.4 Concessionaire is not responsible for damage to Contractor's Work or stored Materials or Equipment unless directly damaged by Concessionaire's employees, subcontractors (other than Contractor and others under its direction), or others working under Concessionaire's direction, but will cooperate with Contractor to secure payment for such damage from the responsible party or applicable insurance.
- 4.5 Contractor will be responsible for and will use the highest degree of care in regard to all loading/unloading of Materials, tools, and Equipment.
- 4.6 Contractor will employ only laborers who will work in harmony with those employed by Concessionaire or other Subcontractors, or by VDOT in its operations. Subcontracts may be awarded, and labor employed by Contractor or its other Subcontractors without regard to union status. Contractor will not allow labor disputes to delay or hinder its Work, that of any other Subcontractor, or VDOT's operations. If Concessionaire's job site is picketed, and Concessionaire establishes a reserved gate for Contractor's use, Contractor will continue to properly perform the Work without interruption or delay. Contractor will bind and require all of its sub-subcontractors (of every tier) performing job site work to comply with this Section 4.6. Contractor agrees to include this entire Section 4.6 in all lower-tier subcontract and supply agreements.
- 4.7 Contractor will maintain a lien-free and claim-free Project and must immediately secure release of any Lower Tier lien or stop payment notice through payment or release bond. Contractor must timely and fully pay and/or ensure payment of: (i) wages and benefits due to laborers; (ii) taxes, contributions, fees, penalties, and the like in respect of the Work or this Contract; and (iii) all amounts due to all Lower Tiers and their laborers. Concessionaire may require satisfactory evidence as to the status of any payments or payment obligations in connection with this Contract. Notwithstanding the foregoing, Contractor will ensure that no liens or claims of Contractor or any of its subcontractors will attach at any time to any interest of VDOT in the Project or the Project Right of Way.
- 4.8 In performing its Work, and in addition to the other duties specified in this Contract, Contractor owes to Concessionaire the duties timely and fully to: (i) furnish and pay for all permits (except where such permits are provided by Concessionaire), Governmental Approvals, licenses, Equipment, labor, Materials, supervision, required safety measures and employee parking and transportation required for the proper and complete performance of the Work, and provide copies of all permits and permit modifications to the Concessionaire upon receipt; (ii) perform all Work with no unapproved deviations or substitutions; (iii) provide quality control to ensure that Work is performed in strict accordance with this Contract and the Contract Documents and as needed to ensure the required quality; (iv) uncover and

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correct/replace any Work identified as defective during construction; (v) comply with Concessionaire's written directives; (vi) submit proper notices, warranties, Work Order proposals, submittals, parts lists, O&M manuals and other documents or Materials required by the Contract Documents or by Concessionaire; (vii) correct defects in the Work which appear within the guaranty or Warranty Period established in the Contract Documents or by law (if no period is stipulated in the Contract Documents or by law, then the guarantee and/or warranty will be for twenty-four (24) months from date of completion and written acceptance of the Work by Concessionaire); (viii) perform all required lay-out accurately and completely from control lines or benchmarks provided by VDOT or Concessionaire; (ix) execute and deliver, and/or deliver from suppliers, any special guaranty or warranty required by the Contract Documents; (x) clean up daily from its operations as required by VDOT or Concessionaire, and/or if requested contribute reasonably to a composite clean-up crew at no additional cost; (xi) prevent any damage to or trespass on adjoining lands or facilities; (xii) reasonably inspect work of other contractors of Concessionaire to ensure that it has been performed properly to accommodate Contractor's Work, and advise Concessionaire in writing of any deficiencies that would prohibit or interfere with the proper performance of the Work; (xiii) pay all royalties and avoid any infringement of patents or copyrights; (xiv) provide daily reports, safety data sheets (or similar sheets as required), job hazard analyses (or similar documents reflecting safe planning for safety risks in the Work), copies of all subcontracts and purchase orders and other reasonable documentation requested by Concessionaire; (xv) remove any employee for reasonable cause upon written request of Concessionaire; (xvi) protect its Work and stored Materials from damage or destruction until Completion Payment, and avoid damage to the work or Materials of other trades; (xvii) release no Hazardous Substances, and properly document and dispose of any Hazardous Substances discovered or used so as not to violate any applicable Law; (xviii) provide and pay for power, gas, water, trailers, storage, temporary protection, guardrails, overhead protection and other temporary facilities needed for the Work; (xix) subordinate lien rights, to the extent required of Concessionaire by a project lender; (xx) obtain any required waivers or variances as required for the proper and complete performance of the Work from each applicable local government regarding local noise ordinances, adhere to such waivers and variances and pay all costs associated with any violation of such waivers and variances identified by such local government; (xxi) pay all costs associated with compliance with any ordinance or law or any violations of law attributable to the activities of Contractor hereunder; and (xxii) provide such other services, documentation and Materials needed to meet the VDOT's requirements for the Work.

- 4.9 ***Contractor's Warranty.*** Contractor warrants to Concessionaire and VDOT that (x) the Work when complete will conform to Good Industry Practice and (y) the Work, including all Materials and Equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in Materials and workmanship. Contractor's warranty obligation excludes defects caused by abuse,

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damage, alterations, or failure to maintain the Work by persons other than Contractor or anyone for whose acts Contractor may be liable. All warranties received by Contractor from Subcontractors shall be passed through to Concessionaire in full. Nothing in this warranty is intended to limit any manufacturer's warranty which provides Concessionaire with greater warranty rights than set forth in this Section 4.9 or the Contract Documents. Contractor will provide Concessionaire with all manufacturers' warranties prior to the date of Final Completion for all Work.

### 4.10 *Correction of Defective Work.*

- (a) Contractor agrees to promptly and completely correct, at its cost, any Work that is found not to be in conformance with the Contract Documents, including that part of the Work subject to Section 10, within a period of twenty-four (24) months from the date of Final Completion of the Work, as applicable, or within such longer period to the extent required by the Contract Documents or applicable Laws or Governmental Approvals (the "Warranty Period").
- (b) Contractor shall, within seven (7) days, or other time period as mutually agreed, of receipt of written notice from Concessionaire that the Work is not in conformance with the Contract Documents, take meaningful steps to commence correction of such nonconforming Work, including the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If Contractor fails to commence the necessary steps within such time period, Concessionaire, in addition to any other remedies provided under the Contract Documents, may take any steps that it considers necessary to correct the nonconforming Work, including providing Contractor with written notice that Concessionaire will commence correction of such nonconforming Work with its own forces. If Concessionaire does perform such corrective Work, Contractor shall be responsible for all costs and expenses incurred by Concessionaire in performing such correction within fourteen (14) days of Contractor receiving demand from Concessionaire. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) day periods identified herein shall be deemed inapplicable.
- (c) If any item of Work is repaired or replaced, the Warranty Period for that last item of Work will be extended until the later of (x) an additional twelve (12) months from the date the repair or replacement is completed and (y) the end of the Warranty Period, and this Section 4.10 will continue to apply with respect to that Work for the extended Warranty Period.
- (d) The Warranty Period referenced in Section 4.10(a) above applies only to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

Concessionaire may have regarding Contractor's other obligations under the Contract Documents.

4.11 ***Concessionaire's Rights to Direct Contractor.*** When any act, omission, or other action or inaction of Contractor occurs that violates the requirements, conditions, or terms of the Contract Documents or affects the health, safety, or welfare of the public or natural resources, Concessionaire will have the right, but not the obligation, to direct Contractor to take prompt action to repair, replace, or restore the damage or injury within a time frame established by Concessionaire. If Contractor fails to make such repair, replacement, or restoration within the established time frame, Concessionaire will have the damage or injury repaired, replaced, or restored and will deduct the cost of such repair, replacement, or restoration (plus 25% for supervisory and administrative personnel costs) from monies due Contractor.

4.12 ***Site Conditions.***

- (a) ***Inspection of Site Conditions.*** Contractor represents and warrants that it has, as of the Contract Date, using Good Industry Practice, ascertained the nature and location of the Work, the character and accessibility of the Site, the existence of obstacles to construction, the availability of facilities and Utilities, the location and character of existing or adjacent work or structures, the surface and subsurface conditions, and other general and local conditions (including labor) which might affect its performance of the Work or the cost thereof.
- (b) ***Further Investigations and Protection of Utilities.*** Prior to commencing any trenching or excavations, Contractor shall, taking into account the information in **Exhibit B** and in compliance with Good Industry Practice, conduct further Site investigations, including exploratory excavations and further borings, to confirm the location and type of underground structures that could be damaged as a result of the excavations. Such underground structures include all Utilities and other piping, and manholes, chambers, electrical conduits, wires, tunnels and other existing subsurface work located within or adjacent to the Site. As defined in **Exhibit B**, Contractor shall carefully sustain in their places and support or, if necessary, relocate all underground and surface structures and Utilities located within or adjacent to the Site. To the extent any of Contractor's work will or may impact the Utilities and businesses or residents in the area surrounding the Site, Contractor shall notify, at least seven (7) Business Days in advance of such work: (1) Concessionaire of any work that might impact Utilities and businesses or residents in the area surrounding the Site; and (2) such businesses or residents of such work. To the extent that seven (7) Business Days' advance notice is not feasible, Contractor shall provide as much advance notice as is reasonably possible under the circumstances to Concessionaire and to impacted businesses and residents of Contractor's work.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

### 4.13 *Hazardous Environmental Conditions.*

#### (a) *General Obligations*

- (i) Contractor will be responsible for the management, treatment, handling, storage, monitoring, remediation, removal, transport and/or disposal of any Hazardous Environmental Conditions that are encountered on, in or under the Site.
- (ii) If Contractor encounters any Unknown Pre-Existing Hazardous Substances the presence of which constitutes a Hazardous Environmental Condition, then Contractor will promptly notify Concessionaire and, in consultation with Concessionaire, will develop a Remedial Action Plan setting out the scope of the Remedial Actions that Contractor proposes to take in relation to the relevant Hazardous Environmental Condition, such actions to include, but not be limited to: (i) conducting such further investigations as may be necessary or appropriate to determine the nature and extent of the Hazardous Substances and submitting copies of such data and reports to Concessionaire for its review and approval, (ii) taking reasonable steps, including in the case of excavation, construction, reconstruction or rehabilitation, modifications and/or construction techniques, to avoid or minimize excavation or dewatering in areas with Hazardous Substances, (iii) preparing and obtaining Governmental Approvals for remedial action plans, including Concessionaire approval and (iv) carrying out the Remedial Action Plan, including, as necessary, disposal of the Hazardous Substances. Contractor shall keep Concessionaire regularly apprised of its progress in executing any Remedial Action Plan.
- (iii) Before any Remedial Actions for Unknown Pre-Existing Hazardous Substances are taken that would inhibit Concessionaire's ability to ascertain the nature and extent of the Hazardous Environmental Condition, Contractor will afford Concessionaire the opportunity to inspect areas and locations that require Remedial Actions; provided, that in the case of a sudden release of any Unknown Pre-Existing Hazardous Substances, Contractor may take all reasonable actions necessary to stabilize and contain the release without prior notice or inspection, but will promptly notify Concessionaire of the sudden release and its location.
- (iv) Contractor will obtain all Governmental Approvals relating to all Remedial Actions. Contractor will be solely responsible for compliance with such Governmental Approvals and applicable Law concerning or relating to Hazardous Substances.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (v) Unless directed otherwise by Concessionaire, Contractor will seek to recover costs from any available reimbursement program or from any third party responsible for generating or otherwise creating or contributing to conditions that led to the need for Remedial Action. Without limiting the preceding sentence, Contractor will seek pre-approval and pursue reimbursement from the Virginia Petroleum Storage Tank Fund for qualifying expenses incurred during the course of investigation, containment, management, mitigation or remediation activities on petroleum storage tank releases. The Parties will cooperate with and notify each other with respect to activities undertaken pursuant to this Section 4.13(a)(v).
  - (vi) Except as provided in Section 4.13(b) below, Contractor will bear all costs and expenses of preparing and complying with any Remedial Action Plan, of complying with applicable Law and obtaining and complying with Governmental Approvals pertaining to Hazardous Substances, and otherwise of carrying out Remedial Actions.
- (b) *Unknown Pre-Existing Hazardous Substances.*
- (i) Concessionaire will reimburse, to the extent permitted by applicable Law, Contractor for Contractor's costs for Remedial Actions with respect to any Unknown Pre-Existing Hazardous Substances, the presence of which constitutes a Hazardous Environmental Condition.
  - (ii) Concessionaire will assume, to the extent permitted by applicable Law, responsibility for third-party claims against Contractor for personal injury, damages or harm to property or business due to any Unknown Pre-Existing Hazardous Substances, the presence of which constitutes a Hazardous Environmental Condition, and all related penalties, fines and administrative or civil sanctions arising out of or related to such Unknown Pre-Existing Hazardous Substances; except to the extent Contractor is obliged to indemnify Concessionaire pursuant to Section 7 below.
  - (iii) Contractor will provide cost estimates with respect to such Remedial Actions which may be reimbursed by Concessionaire, for Concessionaire's review and approval prior to proceeding with any such Remedial Actions, subject to Section 4.13(a)(ii) above.
  - (iv) Concessionaire reserves the right to perform Remedial Actions for Unknown Pre-Existing Hazardous Substances in lieu of, and as replacement for, Contractor's Remedial Action obligations subject to Section 4.13(a)(ii) above.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (v) Contractor will be entitled to submit a request for a Work Order in accordance with this Contract, to an adjustment in its Contract Price and/or Contract Time to the extent Contractor's cost and/or time of performance meeting the conditions set forth in Section 10.6 have been adversely impacted by the presence, removal or remediation of Unknown Pre-Existing Hazardous Substances that constitute a Hazardous Environmental Condition.
- (c) *Contractor's Indemnification Obligations Regarding Hazardous Substances.*
  - (i) Contractor will indemnify, protect, defend and hold harmless and release each of Concessionaire and its Representatives from and against any and all claims against each of Concessionaire and its Representatives by a person not party to this Contract, including reasonable attorney's fees, expert witness fees and court costs suffered or incurred by Concessionaire or its Representative, as applicable, to the extent caused by:
    - (A) Hazardous Substances introduced to or brought onto the Site by Contractor or its Subcontractors;
    - (B) failure of Contractor or any of its Subcontractors to comply with any requirement of the Contract Documents relating to Hazardous Substances (including any failure to perform any Remedial Action required in accordance with Section 4.13(a) above) or to otherwise comply with applicable Law and Governmental Approvals; or
    - (C) the exacerbation, release, spreading, migration, or toxicity of Hazardous Substances due to the negligence, omission, recklessness, or willful misconduct of Contractor or any of its Subcontractors.
  - (ii) Contractor shall defend such claims in accordance with Section 7 below.
  - (iii) Contractor's indemnification under this Section 4.13(c) will not apply to claims to the extent caused by the negligence, recklessness, or willful misconduct of any of Concessionaire and its Representatives.

### 4.14 *TMS Contractor*

- (a) Contractor acknowledges that as part of the overall Seminary Road Ramp Project under the Comprehensive Agreement, Concessionaire will contract directly with a TMS Contractor to perform the traffic management system software revisions and systems integration scope of work. Contractor

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

further acknowledges that the Project's success is dependent upon the ability of Contractor and the TMS Contractor to perform their respective obligations in a cooperative, collaborative and integrated manner. To help accomplish this, Concessionaire, Contractor and TMS Contractor agree to reasonably cooperate with each other to meet the mutual goals of successful and timely completion of their respective work and the Project as a whole, and Concessionaire may direct the timing of Contractor's work to coordinate with the timing of the deployment and testing of the TMS work.

- (b) For the avoidance of doubt, Contractor shall not have any liability for the acts or omissions of the TMS Contractor, nor shall the TMS Contractor have any liability for the acts or omissions of Contractor.

### 4.15 *Impacts to 395 Express Lanes Facilities and Operations.*

- (a) Contractor shall be responsible for any impact to the existing intelligent transportation system or electronic toll collection roadside equipment and infrastructure within the construction limits. Prompt response is required to any damage caused by Contractor and in the event the repair is not completed two (2) hours prior to the next traffic peak, Concessionaire may restore critical systems and bill Contractor for such restoration.
- (b) Contractor shall reimburse Concessionaire for the damages caused by Contractor, including but not limited to repair or replacement of the existing fiber and electrical network, but not with respect to lost revenue. The cost of the repair work performed will include the actual maintenance Contractor costs plus 25% for supervisory and administrative personnel.

4.16 *Inadequate Maintenance.* If Contractor fails to remedy unsatisfactory maintenance of the Work not complying with the Contract within a mutually agreed upon time after receipt of a written notice by Concessionaire, Concessionaire may proceed with adequate forces, Equipment, and Material to maintain the Project and the Work. Concessionaire will deduct the cost of proceeding with its own forces and Equipment (plus 25% for supervisory and administrative personnel costs) from monies due Contractor. Contractor shall have the right to dispute Concessionaire's determination that maintenance is unsatisfactory.

## Section 5 **Time for Completion.**

5.1 *Notice to Proceed.* Contractor will not commence construction of the Project unless and until the following conditions have been satisfied (or Concessionaire, in its discretion, waives such conditions) and Concessionaire has delivered notice to that effect to Contractor (such notice being referred to as the "Construction Notice to Proceed" or "Construction NTP"):

- (a) Concessionaire has approved the following: (A) Construction Quality Management Plan; and (B) Health, Safety and Security Plan; and

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (b) Contractor certifies to Concessionaire that all Insurance Policies required under Section 9.1 necessary for the Work, have been obtained and will be in full force and effect, and in the case of Project-specific policies, Contractor has delivered to Concessionaire duplicate originals or copies thereof certified by Contractor's insurance broker to be true and correct copies of the originals.

Concessionaire may waive any condition precedent set forth in this Section 5.1; *provided*, that no person or entity will be entitled to assume that Concessionaire will waive any condition precedent. Unless Concessionaire waives in writing (as distinguished from a deemed waiver) a condition precedent that requires action by Contractor to be satisfied, Contractor will remain bound to use diligent efforts to satisfy the condition precedent.

### 5.2 ***Completion Dates.***

- (a) ***Scheduled Final Completion Date.*** The "Scheduled Final Completion Date" shall be the date that is thirty (30) days following the date of issuance of the Construction NTP, as may be extended solely in accordance with this Contract. Contractor shall achieve Final Completion by the Scheduled Final Completion Date.
- (b) Contractor will deliver to Concessionaire a notice of Final Completion ("Notice of Final Completion") after all the Work is complete. After receipt of Contractor's Notice of Final Completion, Concessionaire shall have ten (10) days to inspect the Project and all Work completed by Contractor and either: (a) deliver to Contractor a signed certificate of Final Completion; or (b) if reasonable cause exists for doing so, notify Contractor that Final Completion has not been achieved stating in reasonable detail the reasons therefor. Final Completion shall only be achieved hereunder if Concessionaire has provided a signed certificate of Final Completion to Contractor acknowledging that Contractor has satisfied all conditions of the Contract Documents. The foregoing process shall be repeated until Concessionaire is satisfied that all conditions set forth within Contract Documents have been satisfied.

5.3 ***Adjustments.*** The Scheduled Final Completion Date set forth in Section 5.2 (also referred to as the "Contract Time") shall be subject to adjustment in accordance with Section 10.

5.4 ***Time is of the Essence.*** Concessionaire and Contractor mutually agree that time is of the essence with respect to the Contract Time.

5.5 ***Not Used.***

5.6 ***Lane Closure Damages.***

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- (a) If all lanes are not open to traffic during the times required in the approved request for a temporary lane closure, Contractor shall pay Concessionaire liquidated damages (“Lane Closure Damages”) in the amounts set forth below until all lanes are opened as determined by Concessionaire:

Lane Closure Damages (\$ per minute)			
Elapsed Time (min)	I-395, and all ramps which includes General Purpose Lanes, HOV and HOT Lanes	Major Arterials	All other roads
1-5, or any portion thereof	\$0	\$0	\$0
Every additional minute or any portion thereof after initial 5 minutes stated above	\$1,000 for the sixth minute plus \$1,000 per each additional minute	\$1,000 for the sixth minute plus \$500 per each additional minute	\$500 for the sixth minute plus \$500 per each additional minute

- (b) If a lane closure outside the Technical Requirements that is not approved by the Concessionaire (a “Non-Permitted Closure”) occurs, Concessionaire will notify Contractor thereof and of the amount of associated Lane Closure Damages in writing within 48 hours of the Non-Permitted Closure. If there are no additional Non-Permitted Closures occurring within 90 days, Concessionaire shall refrain charging of the Lane Closure Damages for the prior Non-Permitted Closures. Otherwise, the Contractor shall pay all Lane Closure Damages to the Concessionaire within 30 days of the date on which last written notice of Lane Closure Damages is given to Contractor for violating having two (2) or more Non-Permitted Closure occurrences within 90 days. Once there is a clean period of 90 days without a Non-Permitted Closure occurrence, the new 90 days period will start for future Lane Closure Damages. All liquidated damage charges will be capped at \$5,000 per violated Non-Permitted Closure. For avoidance of doubt, Contractor shall pay all Lane Closure Damages to Concessionaire for Non-Permitted Closures that occur on all roadways except for the Non-Permitted Closures occurring within the 95 Express Lanes. If there are Non-Permitted Closures that occur on the 95 Express Lanes and another adjoining roadway, Contractor shall be responsible for 50% of the resulting Lane Closure Damages.
- (c) In addition to the assessed Lane Closure Damages for failure to restore traffic lanes, Contractor will not be allowed further lane closures until the reason for the failure are evaluated and Contractor can provide assurance that the causes have been corrected. A formal submission as to the reasons for the failure to restore traffic lanes within the contract lane closure restrictions and the proposed corrective measures is to be provided to Concessionaire within two (2) days of the occurrence. Concessionaire will respond to the adequacy of the submission within two (2) working days of receipt. No modification of the Contract Price or Contract Time will be granted or considered for these days.

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- (d) Concessionaire may, at its sole discretion, choose not to assess damage recovery/user fees for failure to open traffic if such cause is not related to or caused by Contractor's operations.
- (e) Concessionaire reserves the right to monitor traffic conditions affected by the Work and to make additional restrictions as may be necessary, such as terminating a lane closure early.

5.7 ***Payment of Lane Closure Damages.*** Any Lane Closure Damages payable by Contractor shall be paid by Contractor or withheld by Concessionaire, as applicable, on the date of the Completion Payment.

5.8 ***Liquidated Damages Not Penalty.*** The parties acknowledge, recognize and agree on the following:

- (a) that because of the unique nature of the Project, it is difficult or impossible to determine with precision the amount of damages that would or might be incurred by Concessionaire as a result of Contractor's failure to complete the Work on or before the applicable Contract Time;
- (b) that any sums which would be payable under Section 5.6 are in the nature of liquidated damages, and not a penalty, and are fair and reasonable and such payment represents a reasonable estimate of fair compensation for the losses that may reasonably be anticipated from such failure; and
- (c) that any sums which would be payable under Section 5.6 shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages, whether special or consequential, and of whatsoever nature incurred by Concessionaire which are occasioned by any non-permitted lane closures, as applicable. Notwithstanding the above, Lane Closure Damages are not intended to excuse Contractor from liability for any other breach of its obligations under the Contract Documents.

5.9 ***Obligation to Achieve the Contract Time.*** Contractor agrees that it will commence performance of the Work and achieve the Contract Time in accordance with this Section 5.

5.10 ***Not Used.***

### Section 6 Electronic Documents

6.1 Contractor will utilize Concessionaire's electronic document management system if it is made available to Contractor for the Project. This system can accept electronic submission of submittals, Applications for Payment, proposed Work Orders and other items. By submitting documents electronically, Contractor is affirming that it has the appropriate license to use the documents, and it is not violating any copyright or other rights of owners of original documents.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- 6.2 Contractor will utilize an electronic plan room to reference drawings if one is provided for its use.

### Section 7 Indemnity

- 7.1 To the fullest extent permitted by law, Contractor will indemnify, protect and hold harmless Concessionaire and its surety (and any other parties as required by Contract Documents) and each of their respective officers, directors, members, managers, agents or employees, (individually, the “Indemnified Party” and collectively the “Indemnified Parties”) from any and all claims, losses, demands, judgments, suits, actions and proceedings, as well as all attorneys’ fees and costs, which may be asserted against any Indemnified Party, with respect to bodily injury, death or property damage to the extent arising out of or occurring in connection with: (i) any default, or failure to timely, properly, or fully perform the Work as required, by Contractor; (ii) any negligence, injury, loss, damage or death to any person or persons (including but not limited to any Indemnified Party) or any destruction of or damage to property; (iii) the use of unacceptable Materials in the Project; and/or (iv) any act or omission in violation of this Contract, or neglect or misconduct of Contractor. In no event may Contractor’s defense or indemnity obligations extend to the negligence of Concessionaire or other indemnitees.
- 7.2 To the fullest extent permitted by law, in addition to the express duties to indemnify, protect and hold harmless, there is a duty, separate from the duties in Section 7.1, to defend each Indemnified Party in connection with a claim, demand or suit described in Section 7.1 (collectively, the “Claims”). The duty to defend includes all costs of litigation, attorneys’ fees, expert and consultant fees, settlement costs and reasonable expenses in connection with the claim or litigation, regardless of whether the Claims are valid or groundless and regardless of whether the defense of an Indemnified Party is maintained by that party or assumed by Contractor, as long as the Claims asserted arise out of or relate to Contractor’s alleged or actual default described in Section 7.1(i), to an alleged or actual negligent act or omission or intentional wrongful act as described in Section 7.1(ii), to an alleged or actual use of unacceptable Materials as described in Section 7.1(iii) or to an act, omission, neglect or misconduct as described in Section 7.1(iv). An Indemnified Party, at its option, may defend any or all of the Claims (at Contractor’s expense) or tender to Contractor the defense of any or all of the Claims. Upon tender to Contractor, Contractor will promptly assume the defense of the Claims. If an Indemnified Party tenders the defense of a Claim to Contractor and Contractor fails to assume the defense, an Indemnified Party facing liability for the Claim may defend, compromise and/or settle any such suit or action, and Contractor will be bound and obligated to reimburse each Indemnified Party for the amount expended in settlement, and/or the amount expended in paying any judgment, together with all reasonable attorneys’ fees and costs of litigation, so long as the Indemnified Party demonstrates that the settlement or compromise was made in Good Faith and the Claim was one for which the duty of defense was owed.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- 7.3 In addition to the foregoing obligations, where the Comprehensive Agreement requires Concessionaire to provide an indemnity or defense of VDOT or any other party, Contractor agrees that, in respect of its Work under this Contract, it will indemnify, defend and hold harmless: (i) VDOT and all applicable parties to the full extent required of Concessionaire under the Comprehensive Agreement to indemnify VDOT or any such parties; and (ii) Concessionaire, to the full extent that Concessionaire is required by the Comprehensive Agreement to indemnify, defend or hold harmless any such party with respect to Contractor's Work.
- 7.4 The obligations of this Section 7 are not limited by insurance limits in policies maintained by Contractor. Nothing in this Section 7 will be interpreted to require Contractor to indemnify, defend or hold harmless any party to the extent such an obligation is prohibited by law. To the extent that applicable law would invalidate any part of the indemnity and defense obligations of this Section 7, then this Section 7 will be interpreted and applied only to the extent legally permitted. To the extent that a claim is made by an employee of Contractor against an Indemnified Party, Contractor must defend, indemnify, and hold harmless the Indemnified Party to the same extent as if the claim was made by a non-employee of Contractor. Contractor waives any defense or immunity it may have under any applicable worker's compensation Laws or any other statute or judicial decision disallowing or limiting such defense and indemnification obligations.
- 7.5 Neither termination for any reason, nor the Completion Payment by Concessionaire, nor acceptance of the Work, will waive any obligations of Contractor under this Section 7.
- 7.6 The cause of action on a claim for indemnity under this Contract or any bond provided by Contractor will accrue on the later of: (i) the date of a written demand for indemnity to Contractor or its surety; or (ii) the date when Contractor or its surety makes the last payment with respect to which indemnity is sought.

### **Section 8      Limitations on Liability**

- 8.1 *Not Used.*
- 8.2 ***Aggregate Liability Cap.*** Subject to Section 8.3, the total, maximum aggregate liability of Contractor to the Concessionaire arising out of this Contract, including, without limitation, for default, breach, negligence, indemnity obligations or otherwise in connection with this Contract claimed breach thereof, or the Work shall be limited to an amount equal to thirty percent (30%) of the Contract Price (the "**Aggregate Liability Cap**") herein, which liability arises under any theory of liability under applicable Law.
- 8.3 ***Exclusions from Liability Cap.*** The limitations of liability in Sections 8.1 and 8.2 do not apply to, nor will the calculation of such limitations include:
- (a) any liabilities or obligations to the extent that:

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (i) the amount of such liabilities or obligations is paid from the proceeds of insurance maintained by VDOT or Concessionaire or required to be maintained by Contractor or Contractor Party under this Contract;
  - (ii) an amount is paid by Contractor but subsequently recovered by Contractor from proceeds of insurance referred to in Section 9.1, or from Concessionaire, VDOT or any third party (other than an entity providing insurance or a Contractor Party); or
  - (iii) the same would have been recovered by Contractor through such insurance if Contractor or any Contractor Party had maintained the coverage required to be maintained by it under this Contract, or if Contractor or such Contractor Party had otherwise complied with its obligations under, and the limitations of, such Insurance Policies and diligently pursued the relevant insurance claim;
- (b) liabilities that arise out of third-party claims (other than from VDOT) associated with the Work or the performance by Contractor or any Contractor Party of any obligations under this Contract (including any third-party claims for any damage or destruction of property, death or personal injury or third-party Intellectual Property);
  - (c) liabilities that arise out of the bad faith, willful misconduct, gross negligence or fraud of Contractor or any Contractor Party or any Contractor Default under Section 12.3(a)(i);
  - (d) any costs paid or incurred by Contractor in connection with its correction of any nonconforming Work or Defect;
  - (e) fines and penalties under any applicable Law or any costs that Contractor or any Contractor Party incurs or is liable for in complying with obligations that arise out of any failure by Contractor or any Contractor Party to comply with any applicable Laws (including workman's compensation, employment or health and safety laws or regulations); or
  - (f) fines and penalties under any applicable Law or any costs incurred by Contractor or any Contractor Party as a result of a failure by Contractor or any Contractor Party to comply with any applicable Laws (including workman's compensation, employment or health and safety laws or regulations).

8.4 **Consequential Loss.** To the maximum extent allowed by law, neither Party shall be liable to the other for any Indirect Losses suffered or incurred by such Party, provided that the following will not be deemed to be Indirect Losses:

- (i) any loss or reduction of the Contract Price received or receivable by Contractor under this Contract;

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (ii) any compensation amount expressly required to be paid by either Party under Section 12;
- (iii) all damages, losses, liabilities and costs arising from any claim by a third party in respect of which Contractor or Concessionaire indemnifies the other Party under this Contract;
- (iv) losses that are covered liability for claims (including defense costs) to the extent (A) they are required to have been covered by insurance pursuant to this Contract and (B)(x) proceeds for which liability have actually been received, or (y) Contractor or Concessionaire, as applicable, failed to properly claim under and/or obtain or maintain such insurance in full force and effect as required in this Contract;
- (v) all losses arising out of the willful misconduct, gross negligence, fraud, criminal conduct, recklessness or bad faith on the part of any Contractor Party or Concessionaire;
- (vi) amounts that Concessionaire is substantially probable to owe or is obligated to pay or reimburse VDOT under the express provisions of the Comprehensive Agreement, or that VDOT sets-off or deducts from payments to Concessionaire, including any liquidated damages thereunder or any other damages owed to VDOT, in each case, of which Concessionaire actually pays to VDOT due to Contractor's performance or non-performance under this Contract; and
- (vii) interest, late charges, fees, transaction fees and charges, penalties and similar charges expressly provided under this Contract and the Contract Documents that arise out of the Work.

8.5 ***Statute of Limitations.*** Notwithstanding anything to the contrary in this Contract, neither Party may bring any action against the other Party in any way arising out of, or relating directly or indirectly to, this Contract, including any action in any way arising out of, or relating (directly or indirectly) to, any breach of contract or negligence in the performance of its obligations or of any indemnity obligation under this Contract, after the expiration of the relevant limitation period under the relevant statute of limitations. Neither Party will be obligated to exhaust its remedies against any insurer before being entitled to claim against the other Party.

### Section 9 Insurance and Bonds

9.1 ***Insurance.*** Contractor shall procure and maintain insurance in accordance with the requirements set forth on **Exhibit G** (the “**Insurance Requirements**” and policies required thereunder, the “**Insurance Policies**”). Evidence of insurance shall be submitted on or before the date of this Contract.

9.2 ***Performance and Payment Bonds.***

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (a) Contractor shall procure and maintain the Performance Bond and Payment Bond substantially in the form of **Exhibit H** executed by a surety that has a then-current policyholder's management and financial size category rating of not less than "A-: VIII" according to A.M. Best's Financial Strength Rating and Financial Size Category and meets any other standard or condition required by VDOT. Each of the Performance Bond and Payment Bond shall have a penal sum in the amount of one hundred percent (100%) of the Contract Price. Receipt of Performance and Payment Bond for the full Contract Price is a condition precedent to the execution and delivery of this Contract.
- (b) All bonds shall be executed by Contractor and a surety company or financial institution 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 Performance and Payment Bonds shall include authorized signatures and titles.
- (c) In lieu of Performance or Payment Bonds, the Contractor 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.
- (d) If Contractor is structured as a limited liability company, partnership or joint venture, the bonding approach used will ensure that the members of such organizations will have joint and several liability for the performance of the Work required for the Project. A single 100% Performance Bond and a single 100% Payment Bond shall be provided regardless of any co-surety relationship.
- (e) Any increase in the Contract Price shall automatically result in a corresponding increase in the penal amount of the Performance Bond and Payment Bond 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 Performance Bond and Payment Bond unless specifically provided in any Work Order decreasing the scope of the Work.

### **Section 10 Changes**

#### **10.1 Work Orders.**

- (a) A "Work Order", is a written instrument, issued after the Contract Date signed by Concessionaire and Contractor, stating their agreement upon all of the following:
  - (i) The scope of the change in the Work;
  - (ii) The amount of the adjustment to the Contract Price; and

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (iii) The extent of the adjustment to the Contract Time.
- (b) All changes in the Work authorized by applicable Work Order shall be performed under the applicable conditions of the Contract Documents. Concessionaire and Contractor shall negotiate in Good Faith and as expeditiously as possible the appropriate adjustments for such changes.
- (c) If Concessionaire requests a proposal for a change in the Work from Contractor and subsequently elects not to proceed with the change, a Work Order shall be issued to reimburse Contractor for reasonable costs incurred for estimating services and services involved in the preparation of proposed revisions to the Contract Documents.

### 10.2 *Contract Change Directive.*

- (a) A “Contract Change Directive” or “CCD” is a written order prepared and signed by Concessionaire, directing a change in the Work prior to agreement on an adjustment in the Contract Price and/or the Contract Time.
- (b) Concessionaire and Contractor shall negotiate in Good Faith and as expeditiously as possible the appropriate adjustments for the Contract Change Directive. Upon reaching an agreement, the parties shall prepare and execute an appropriate Work Order reflecting the terms of the agreement.
- (c) Concessionaire may issue a CCD by unilateral Work Order, subject further to the terms of Section 10.4(a)(iv).

10.3 *Minor Changes in the Work.* Minor changes in the Work do not involve an adjustment in the Contract Price and/or Contract Time and do not materially and adversely affect the Work, including the quality, performance and workmanship required by the Contract Documents (“Minor Changes”). Either party may make a written request to the other party to the Contract in the form attached as **Exhibit I** to make Minor Changes consistent with the intent of the Contract Documents. Any such Minor Change request may only be implemented by Contractor if such Minor Change request form attached as **Exhibit I** is signed in writing by Concessionaire. All Minor Change requests must certify that such Minor Change will not (i) impair or diminish any performance criteria or Work requirements, (ii) cause a delay to achieving the Contract Time and (iii) cause Contractor or Concessionaire to incur any additional cost or expense to complete the Project at the cost of Concessionaire. If either party disputes that such change is a Minor Change, the disputing party shall promptly notify the other party in writing. Upon request by Concessionaire, Contractor may be required to provide further evidence, at its sole cost and expense, to demonstrate that the proposed Minor Change is compliant and conformant with this Section 10.3. Any approved Minor Change requests must be catalogued and recorded as part of this Contract.

### 10.4 *Contract Price Adjustments.*

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- (a) The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:
- (i) Unit prices set forth in this Contract or as subsequently agreed to between the parties;
  - (ii) A mutually accepted, lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by Concessionaire;
  - (iii) Costs, fees and any other markups set forth in accordance with Section 109.05 of the Division 1 Amendments; and
  - (iv) If an increase or decrease cannot be agreed to as set forth in Section 10.4(a)(i) through 10.4(a)(iii) above and Concessionaire issues a Contract Change Directive, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in this Contract. If the net result of both additions and deletions to the Work is an increase in the Contract Price, overhead and profit shall be calculated on the basis of the net increase to the Contract Price. If the net result of both additions and deletions to the Work is a decrease in the Contract Price, there shall be no overhead or profit adjustment to the Contract Price. Contractor shall maintain a documented, itemized accounting evidencing the expenses and savings associated with such changes.
- (b) If unit prices are set forth in the Contractor's proposal or are subsequently agreed to by the parties, but application of such unit prices will cause substantial inequity to Concessionaire or Contractor because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted. Contractor shall bear the burden of proving that there is a substantial inequity in the unit rates.

### 10.5 *Emergencies.*

In any emergency affecting the safety of persons and/or property, Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time on account of emergency work shall be determined as provided in this Section 10. Contractor shall comply with all requirements with respect to Emergency management and response under the Technical Requirements.

### 10.6 *Requests for Contract Adjustments and Relief.*

- (a) If Contractor believes that it is entitled to an adjustment to the Contract Price or Contract Time or other relief for any occurrence arising out of or related

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to the Work or Project, including the acts or omissions of Concessionaire, it shall submit a written request to Concessionaire stating the basis for such Contract Price or Contract Time adjustment or relief.

- (b) Such request shall be submitted: (a) prior to Contractor incurring any cost or expense, or performing any work on which the request is based; and (b) in accordance with any specific requirements contained in applicable sections of this Contract or, absent any specific requirement, then within a reasonable time, not to exceed five (5) days, after the time of the occurrence giving rise to the request for Contract Price or Contract Time adjustment or relief or after Contractor reasonably should have recognized the occurrence giving rise to the request for Contract Price or Contract Time adjustment or relief, whichever is later.
- (c) Such request shall include sufficient information to advise Concessionaire of the facts and circumstances giving rise to the request for Contract Price or Contract Time adjustment or relief, the specific contractual adjustment or relief requested and the basis for Contractor's entitlement to the adjustment or relief.
- (d) If Contractor in Good Faith is unable to provide final price or schedule information at the time of its written request, Contractor shall provide final price and schedule information no later than fifteen (15) days, or other time period as mutually agreed, from the date of submitting its request for contractual adjustment or relief.
- (e) In cases where Contractor does not submit final price and schedule information within fifteen (15) days, or other time period as mutually agreed, of submitting its request, it shall be considered a waiver of any request for contract adjustment or relief for Contract Price or Contract Time, unless otherwise agreed in writing by Concessionaire.

### Section 11 Contract Interpretation and Disputes

- 11.1 For any dispute involving an act or omission of the VDOT or those for whom the VDOT is responsible, Contractor must follow the disputes procedures and requirements in the Comprehensive Agreement, and Contractor agrees it may be joined into any court or arbitration proceedings required by the Contract Documents. Contractor is bound to Concessionaire to the same extent that Concessionaire is bound to the VDOT, by the terms of the Contract Documents, and by any and all preliminary and final decisions or determinations made thereunder by the party, board, arbitrator(s), or court authorized in the Contract Documents or by law, regardless of whether Contractor is a party to the proceedings. Contractor will, as a condition precedent to its right to prosecute any claim, comply with all notice, claim, and dispute resolution provisions of the Contract Documents, including allowing a reasonable time for Concessionaire to analyze and forward to the VDOT any required communications or documentation.

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Contract adjustments will be made only to the extent that Concessionaire is entitled to relief from VDOT. It is expressly understood and agreed in connection with the determination of such disputes pursuant to this Section 11.1 that Concessionaire will not be liable to Contractor to any greater extent than VDOT is liable to Concessionaire. Further, each Contract adjustment will be equal only to Contractor's allocable share of any adjustment in Concessionaire's contract with VDOT. Contractor's allocable share will be determined by Concessionaire, after allowance of Concessionaire's normal overhead and profit on any recovery and Concessionaire's expense of recovery (including without limitation attorneys' fees), by making a reasonable apportionment, if applicable, between Contractor, Concessionaire, and other Subcontractors or persons with interests in the adjustment. Concessionaire's determination of Contractor's allocable share is final and not subject to review unless the determination was made in bad faith. Contractor agrees that it is an express condition precedent to any payment to Contractor for such disputes that Concessionaire receives payment from VDOT. Contractor will timely furnish Concessionaire with any claim certification required by the Contract Documents or by Law, in a form satisfactory to Concessionaire, and agrees to indemnify, defend, and hold Concessionaire harmless from any losses, claims, damages or expenses Concessionaire may incur as a result of Contractor's prosecution of claim and/or failure or inability to support any part of the claim as required by the certification or by Law. Concessionaire is not required to certify a claim when it cannot do so in Good Faith, and may, in its discretion, provide a qualified certification when appropriate.

- 11.2 Disputes between Contractor and Concessionaire not covered by Section 11.1 will at Concessionaire's election, to the extent allowed by law, be arbitrated under the American Arbitration Association's Construction Industry Arbitration Rules (the "Rules") subject to the limitations contained in this Section 11. Arbitration will be in Fairfax County, Virginia and may include other necessary parties.
- 11.3 A written notice to the other Party is required if either Party wishes to initiate a dispute pursuant to Section 11.1 or 11.2. Any such notice shall be provided by Concessionaire to Contractor within 7 Business Days of the occurrence of the event giving rise to such dispute. Any such notice shall be provided by Contractor to Concessionaire within 7 Business Days of either: (a) Concessionaire's denial of a change in the scope of the Work or (b) the occurrence of another event giving rise to a dispute. Failure to provide timely notice shall be considered a waiver of the Contractor's request for dispute resolution, unless otherwise agreed in writing by Concessionaire.
- 11.4 If Concessionaire or its surety notifies Contractor in Good Faith that any arbitration or lawsuit brought under Section 11.2 involves a controversy within the scope of Section 11.1, then the disputes process under Section 11.2 must be stayed until the procedures under Section 11.2 are completed.
- 11.5 If Concessionaire elects not to invoke the arbitration procedures set forth in Section 11.2, then all claims, disputes and other matters in controversy between

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

Concessionaire and Contractor arising out of or relating to this Contract and covered by Section 11.2 will be resolved through litigation in the state court in the County of the Project or in the federal court closest to the location of the Project. EACH PARTY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THIS CONTRACT, UNLESS THE MATTER ARISES UNDER SECTION 11.1 AND THE CONTRACT DOCUMENTS ALLOW THE OWNER A RIGHT TO TRIAL BY JURY.

- 11.6 Unless otherwise agreed in writing by the parties, Contractor will timely and fully perform the Work during any dispute and Concessionaire will make undisputed payments to Contractor. Contractor will make relevant books and records available for inspection and copying if it asserts a claim for additional compensation, or if Concessionaire reasonably contends that Contractor is in default under this Contract, or to the extent otherwise required under the Contract Documents.
- 11.7 This Contract is governed by the laws of the Commonwealth of Virginia, without regard to any contrary conflicts of laws rules of that state. Both parties waive all claims for their own special, indirect, or consequential damages in connection with any dispute or claim related to this Contract or the Project. This waiver does not preclude liability for liquidated damages or consequential damages assessed by VDOT or payable to third parties.

### Section 12 Termination

#### 12.1 *Termination for Convenience.*

- (a) Upon ten (10) days written notice to Contractor, Concessionaire may, for its convenience and without cause, elect to terminate all or part of the Work if Concessionaire, in its sole discretion, determines that such a termination is in Concessionaire's best interests. Concessionaire shall notify Contractor of the decision to terminate by delivering to Contractor a written notice of termination specifying the extent of termination and its effective date (a "Notice of Termination"). Pursuant to this Section 12.1(a), Concessionaire shall have the right to terminate this Contract immediately (and this Contract shall terminate automatically upon delivery of written notice by Concessionaire to Contractor) upon termination of the Comprehensive Agreement for whatever reason.
- (b) After receipt of a Notice of Termination, and except as directed by Concessionaire, Contractor shall immediately proceed as follows, regardless of any delay in determining or adjusting any amounts due under this Section 12.1:
- (i) Stop any Work as specified in the notice;
  - (ii) Enter into no further Subcontracts and place no further orders for Materials, services or facilities, except as necessary to complete the continued portion of the Work, if any, or for mitigation of damages;

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- (iii) Unless instructed otherwise by Concessionaire, terminate all Subcontracts to the extent they relate to the Work terminated and except to the extent that continuation of this Contract is necessary in order to mitigate damages;
- (iv) Assign to Concessionaire or its designee in the manner, at the times, and to the extent directed by Concessionaire, all of the right, title, and interest of Contractor under the Subcontracts so terminated, in which case Concessionaire will have the right, in its sole discretion, to accept performance, settle or pay any or all claims under or arising out of the termination of such Subcontracts;
- (v) Settle outstanding liabilities and claims arising out of such termination of Subcontracts, with the approval or ratification of Concessionaire, to the extent it may require, which approval or ratification shall be final;
- (vi) Transfer and deliver to Concessionaire or its designee, as directed by Concessionaire: (1) possession and control of the Project; and (2) all right, title and interest of Contractor in and to: (i) the Work in process, completed Work, supplies and other Materials produced or acquired for the Work terminated; (ii) the Contract Documents and all other completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, records, reports, books, samples, information and other Work Product that would have been required to be furnished to Concessionaire if the Work had been completed; and (iii) all intellectual property developed specifically for the Project;
- (vii) Complete performance in accordance with the Contract Documents of all Work not terminated;
- (viii) Take all action that may be necessary, or that Concessionaire may direct, for the protection and preservation of the property related to the Contract Documents that is in the possession of Contractor and in which Concessionaire has or may acquire an interest; and
- (ix) As authorized by Concessionaire, use its best efforts to sell at fair market value any property of the types referred to in Section 12.1(c) below; provided, however, that Contractor: (1) shall not take any such action with respect to any items for which title has previously transferred to Concessionaire; (2) is not required to extend credit to any purchaser; and (3) may acquire the property itself, under the conditions prescribed and at prices approved by Concessionaire. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by Concessionaire under the Contract Documents or paid in any other manner directed by Concessionaire.

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- (c) *Inventory.* Contractor shall submit to Concessionaire a list of termination inventory not previously disposed of and excluding items authorized for disposition by Concessionaire; and within thirty (30) days of receipt of the list, Contractor shall deliver such inventory to Concessionaire and Concessionaire shall accept title to such inventory as appropriate.
- (d) *Settlement Proposal.* After termination, Contractor shall submit a final termination settlement proposal to Concessionaire in the form and with the certification prescribed by Concessionaire. Contractor shall submit the proposal promptly, but no later than thirty (30) days from the effective date of termination unless Contractor has requested a time extension in writing within such 30-day period and Concessionaire has agreed to allow such an extension.
- (e) *Amount of Termination Settlement.*
  - (i) Subject to clause (e)(ii) below, Contractor and Concessionaire shall negotiate in Good Faith to reach agreement on the settlement amount to be paid to Contractor by reason of the termination of Work pursuant to this Section 12.1 and any such settlement shall be subject to the dispute resolution provisions of Section 11. Such negotiated settlement shall include a reasonable allowance for profit solely on Work that has been performed as of the termination date. Such amount or amounts payable for the terminated Work, exclusive of demobilization costs, breakage costs and other shut-down costs, shall be the lesser of (x) the total Contract Price as reduced by the Contract Price of Work not performed and (y) any amount or amounts agreed upon by the Parties. Upon determination of the settlement amount, this Contract will be amended accordingly, and Contractor will be paid the agreed amount as described in this Section 12.1(e). Concessionaire's execution and delivery of any settlement agreement shall not be deemed to affect any of its rights with respect to compliance of the Work or any components of the Work which has achieved Final Completion, with all applicable Contract requirements, or any of its rights under payment and performance bonds or any of its rights against Subcontractors.
  - (ii) Notwithstanding clause (e)(i) above, if this Contract is terminated in accordance with applicable provisions of the Comprehensive Agreement providing for termination upon a default by VDOT or other event not arising from a breach by Concessionaire under the Comprehensive Agreement and this Contract is terminated under Section 12.1(e)(i) above, the termination settlement amount payable to Contractor shall be paid by Concessionaire only with proceeds of a termination payment received by Concessionaire from VDOT, in each case subject to Pay-When-Paid Principles.

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- (f) *No Agreement as to Amount of Claim.* In the event of failure of Contractor and Concessionaire to agree upon the amount to be paid Contractor by reason of the termination of Work pursuant to this Section 12.1, the amount payable (exclusive of interest charges) shall be determined in accordance with the Dispute Resolution Procedures.
- (g) *Reduction in Amount of Claim.* The amount otherwise due Contractor under this Section 12.1 shall be reduced by: (a) the amount of any valid claim which Concessionaire may have against Contractor in connection with this Contract; and (b) the agreed price for, or the proceeds of sale of, Materials, supplies or other things previously paid for by Concessionaire and to be retained by Contractor or sold by Contractor (with the proceeds being retained by Contractor), pursuant to the provisions of this Section 12.1.
- (h) *Payment.* Concessionaire may, from time-to-time, under such terms and conditions as it may prescribe and in its sole discretion, make partial payments on account against costs incurred by Contractor in connection with the terminated portion of this Contract, whenever in the opinion of Concessionaire the aggregate of such payments shall be within the amount to which Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this Section 12.1, such excess shall be payable by Contractor to Concessionaire upon demand together with interest at a variable rate per annum equal to the reference rate announced by Bank of America, N.A., from time-to-time, plus one percent (1%).
- (i) *Inclusion in Subcontracts.* Contractor shall insert in all Subcontracts that the Subcontractor shall stop Work on the date of, and to the extent specified in, a Notice of Termination from Concessionaire, and shall require that Subcontractors insert the same provision in each subcontract at all tiers. Contractor shall communicate, immediately upon receipt thereof, any Notice of Termination issued by Concessionaire to all affected Subcontractors.
- (j) *No Consequential Damages.* In the event of a termination for convenience under this Section 12.1, Contractor acknowledges and agrees that it shall not be entitled to any compensation in excess of the value of the Work performed plus its settlement and closeout costs. Under no circumstances shall Contractor or any Subcontractor be entitled to anticipatory or unearned profits, unabsorbed overhead, opportunity costs, or consequential or other damages as a result of a termination for convenience under this Section 12.1. The payment to Contractor determined in accordance with this Section 12.1 constitutes Contractor's exclusive remedy for a termination hereunder.

### 12.2 *Concessionaire's Right to Stop Work.*

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- (a) Concessionaire may, without cause and for its convenience, order Contractor in writing to stop and suspend the Work. Any stoppage or suspension pursuant to this Section 12.2 in excess of sixty (60) days (whether consecutive or in aggregate) shall entitle Contractor to terminate the Contract Documents pursuant to Section 12.1.
- (b) Contractor is entitled to seek an adjustment of the Contract Price and/or Contract Time if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of work by Concessionaire, by requesting a Work Order.
- (c) In case of suspension of work, Concessionaire shall issue instructions and directions to Contractor as to the implementation of the suspension, which may include directing Contractor to develop a maintenance and transition plan. Unless specifically directed otherwise by Concessionaire, Contractor 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 necessary or appropriate for the protection of the Work and the public. During the suspension of the Work, Contractor shall properly and continuously maintain in acceptable growing condition all living material in newly established plantings, seeding, and soddings furnished under the Contract and shall take adequate precautions to protect vegetation against damage.

### 12.3 *Contractor Default; Concessionaire's Right to Perform and Terminate for Cause.*

- (a) *Contractor Default.* The occurrence of any one or more of the following will constitute a "Contractor Default":
  - (i) Contractor Abandons the Project or makes any written repudiation of this Contract or any of its terms;
  - (ii) Contractor fails to commence the Work upon receipt of Concessionaire's NTP or as directed by Concessionaire;
  - (iii) Contractor fails to progress the Work diligently to ensure that Final Completion is likely to be achieved by the Scheduled Final Completion Date;
  - (iv) Contractor fails to complete the Work within seventy-five (75) days of Construction NTP;
  - (v) provide a sufficient number of skilled workers, Equipment, or supply the Materials required by the Contract Documents;

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- (vi) Contractor fails to comply with the third sentence of Section 16.8 (Assignment);
- (vii) an Insolvency Event arises with respect to Contractor or any Contractor Member, as applicable;
- (viii) Contractor fails to pay any amount due to Concessionaire under this Contract when due, except to the extent the payment is being reasonably disputed by Contractor, which failure continues for twenty (20) days after written notice of such non-payment;
- (ix) any representation or warranty made by Contractor in this Contract or any certificate, schedule, report, instrument or other document delivered to Concessionaire in accordance with this Contract is or was false, misleading or inaccurate when made, in each case in any material respect, or omits material information when made;
- (x) Contractor fails to comply with any Governmental Approval or applicable Law in any material respect;
- (xi) Contractor fails to promptly comply with any order to stop and suspend the Work issued by Concessionaire in accordance with Section 12.2;
- (xii) Contractor fails to allow VDOT or Concessionaire to inspect the Site, the Work and any Materials or documents where required under this Contract;
- (xiii) Contractor fails, for any reason other than failure of Concessionaire to make payments to Contractor when obligated in accordance with this Contract, to make prompt payments required to be made by Contractor to any Subcontractor that are not in dispute, which failure continues for ten (10) days after written notice of such non-payment (which notice requirement will be deemed waived if applicable Law prohibits the giving of such notice);
- (xiv) Contractor fails to obtain any Performance Bond or Payment Bond when required under this Contract or any such Performance Bond or Payment Bond is terminated, or is no longer maintained in full force and effect, as applicable;
- (xv) Contractor, at any time, fails to obtain, provide and maintain the insurance in accordance with Section 9.1; and
- (xvi) without limiting Section 12.3(a)(i) through (xv), Contractor materially breaches any other obligation under this Contract or any Contractor Party engages in fraud, criminal conduct, willful misconduct, recklessness or bad faith.

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- (b) If any of the conditions set forth in Section 12.3(a) above exists, Concessionaire will give written notice to Contractor and its surety of the condition (“Contractor Default Notice”).
- (c) Upon receipt of a Contractor Default Notice, the following cure periods will apply:
  - (i) for a Contractor Default under Section 12.3(a)(i) (*Abandonment*), 12.3(a)(i) (*Completion Date*), 12.3(a)(vi) (*Assignment*) and 12.3(a)(vii) (*Insolvency Event*), there is no cure period; or
  - (ii) for each other Contractor Default, unless otherwise noted in Section 12.3(a) for any specific Contractor Default a period of ten (10) days after Contractor receives the Contractor Default Notice.
- (d) If a Contractor Default occurs that has no cure period or if it is not cured within the applicable cure period, Concessionaire may, in its sole discretion:
  - (i) require Contractor to prepare and implement a Remedial Plan in accordance with Section 12.3(e); or
  - (ii) terminate this Contract in accordance with Section 12.3(f).
- (e) *Remedial Plan for Contractor Default.*
  - (i) Without prejudice to any other right or remedy available to Concessionaire, if a Contractor Default occurs (whether or not any cure period has expired), Concessionaire may require Contractor to prepare and submit to Concessionaire, within any period as Concessionaire determines, a plan to remedy or cure the relevant Contractor Default, as applicable (“Remedial Plan”).
  - (ii) Within ten (10) days of receiving a Remedial Plan, Concessionaire must notify Contractor as to whether Concessionaire accepts the Remedial Plan. If Concessionaire determines that the Remedial Plan is not acceptable, Concessionaire may for a Contractor Default terminate this Contract in accordance with Section 12.3(f) or notify Contractor of its deficiency and require correction of the deficiency within five (5) days of the notice.
  - (iii) If Concessionaire notifies Contractor that its Remedial Plan is acceptable, Contractor must diligently implement the Remedial Plan in accordance with its terms.

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(f) *Termination for Contractor Default.*

- (i) If a Contractor Default occurs and:
  - (A) there is no cure period for that Contractor Default under Section 12.3(c);
  - (B) Concessionaire determines that the Contractor Default has not been cured within the relevant cure period under Section 12.3(c); or
  - (C) if Concessionaire requires Contractor to deliver a Remedial Plan under Section 12.3(e), one of the following applies:
    - (1) Contractor fails to deliver the required Remedial Plan within the time required by Concessionaire or Concessionaire rejects any Remedial Plan that is delivered, in each case in accordance with Section 12.3(e); or
    - (2) where a Remedial Plan has been accepted by Concessionaire, Concessionaire determines that Contractor or its sureties have failed to comply with the Remedial Plan or cure the Contractor Default, in each case in accordance with the schedule provided in that Remedial Plan,

Concessionaire may by written notice to Contractor terminate this Contract ("Concessionaire Termination Notice"). A Concessionaire Termination Notice must specify the Contractor Default that has occurred and the date that this Contract will terminate.

(g) *Taking Over the Work*

- (i) If Concessionaire terminates this Contract in accordance with this Section 12.3:
  - (A) in addition to any other right available at law or in equity, Concessionaire may:
    - (1) take possession, for the purpose of completing the Work, of all Materials, completed Work, Subcontracts, Intellectual Property, Work Product, Insurance Policies, and other items that have been purchased or provided for the performance of the Work or that Contractor is able to assign or transfer to Concessionaire;

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (2) employ any Person or Persons to complete the Work and provide all of the required labor, services, Materials, Equipment and other items; and

Contractor must at no cost to Concessionaire transfer and assign the items referred to in this Section 12.3(g) and comply with all requirements in Section 12.1(b), including assigning all Subcontracts to Concessionaire as may be requested by Concessionaire.

(h) *Payments on Termination for Contractor Default.*

- (i) If Concessionaire terminates this Contract in accordance with Section 12.3(f):

(A) Contractor will not be entitled to receive any further payments under Contract; and

(B) Contractor must pay Concessionaire, within thirty (30) days upon demand, an estimated amount equal to the aggregate of:

- (1) all Losses incurred or estimated to be incurred by Concessionaire associated with termination of this Contract and the Contractor Default (the "Concessionaire Estimated Damages"); and

(2) any claims that have accrued up to, and remain unpaid as of, the date of termination of this Contract.

(C) upon Final Completion, Concessionaire will calculate its actual Losses incurred due to such termination of this Contract (the "Concessionaire Actual Damages"), and based on such calculation:

- (1) if Concessionaire Actual Damages are less than the Concessionaire Estimated Damages, then Concessionaire will return any Concessionaire Estimated Damages received in excess of the Concessionaire Actual Damages; or

(2) if Concessionaire Actual Damages are more than the Concessionaire Estimated Damages, Concessionaire may issue a demand to Contractor to pay Concessionaire, within thirty (30) days upon demand, a final amount equal to Concessionaire Actual Damages not otherwise previously received from Contractor.

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- (ii) Without limiting the generality of Section 12.3(h)(i)(B)(1), Concessionaire's Losses associated with termination of this Contract for a Contractor Default will include:
  - (A) Concessionaire's costs and expenses in completing the Work including:
    - (1) all costs and expenses that Concessionaire has incurred or will incur in completing all of the Work, less the remaining balance of the Contract Price;
    - (2) all Losses and expenses (including attorney and other advisor fees and expenses) incurred by Concessionaire in connection with any re-procurement of the Work; and
    - (3) all costs and expenses (including attorney and other advisor fees and expenses) incurred by Concessionaire defending claims arising from the Contractor's performance or non-performance (including any Claims by Concessionaire); and
  - (B) subject to Section 8, losses that have or will be incurred by Concessionaire for any reasonable delay or projected delay to the timely achievement of the Contract Time that remain outstanding on the date of termination of this Contract.
- (i) *Improper Termination for Contractor Default.* If it is finally determined, pursuant to Section 11, that Concessionaire incorrectly terminated this Contract for a Contractor Default:
  - (i) Concessionaire will be deemed to have terminated this Contract for convenience under Section 12.1; and
  - (ii) Contractor's sole relief for such improper termination will be the applicable termination compensation under and in accordance with Section 12.1(e).

**Section 13** Not Used.

### **Section 14** Legal Responsibilities

Contractor shall keep fully informed of federal, state, and local laws, bylaws, ordinances, orders, decrees, and regulations of governing bodies, courts, and agencies having any jurisdiction or that affects those engaged or employed on the Work, the conduct of the Work, or the execution of any documents in connection with the Work. The Contractor shall comply with all Laws applicable to the Project, including the applicable Federal Requirements described on **Exhibit C**. Contractor shall execute and file the documents,

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statements, certifications, and affidavits required under any applicable federal or state law or regulation required by or affecting the Contract or prosecution of the Work thereunder. Contractor shall permit examination of any records made subject to such examination by any federal or state law or by regulations promulgated thereunder by any state or federal agency charged with enforcement of such law.

**Section 15** Not Used.

**Section 16** Miscellaneous

16.1 ***Representations and Warranties of Concessionaire.*** Concessionaire represents and warrants, as of the Contract Date, that:

- (a) *Existence and Powers.* Concessionaire is a limited liability company duly organized, validly existing and in good standing under the laws of the State of Delaware, and has the authority to do business in the Commonwealth of Virginia and in any other state in which it conducts its activities, with the full legal right, power and authority to enter into and perform its obligations under this Contract.
- (b) *Due Authorization and Binding Obligation.* This Contract has been duly authorized, executed and delivered by Concessionaire, and constitutes a legal, valid and binding obligation of Concessionaire, enforceable against Concessionaire in accordance with its terms, except to the extent that its enforceability may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights from time to time in effect and equitable principles of general application.
- (c) *No Conflict.* To the best of its knowledge, neither the execution and delivery by Concessionaire of this Contract nor the performance by Concessionaire of its obligations in connection with the transactions contemplated hereby or the fulfillment by Concessionaire of the terms or conditions hereof:
  - (i) Conflicts with, violates or results in a breach of any constitution, law or governmental regulation, by-laws or certificates of incorporation applicable to Concessionaire; or
  - (ii) Conflicts with, violates or results in a material breach of any term or condition of any order, judgment or decree, or any contract, agreement or instrument, by which Concessionaire's properties or assets are bound, or constitutes a material default under any of the foregoing.
- (d) *No Approvals Required.* No additional approval, authorization, order or consent of, or declaration, registration or filing with, any Governmental Authority is required for the valid execution and delivery by Concessionaire of this Contract except otherwise as such have been duly obtained or made.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (e) *No Litigation Affecting Concessionaire.* Except as disclosed in writing to Contractor, to the best of its knowledge, there is no Legal Proceeding before or by any Governmental Authority pending or, to the best of Concessionaire's knowledge, overtly threatened or publicly announced against Concessionaire, in which an unfavorable decision, ruling or finding could reasonably be expected to have a material and adverse effect on the execution and delivery of this Contract by Concessionaire or the validity, legality or enforceability of this Contract against Concessionaire, or any other agreement or instrument entered into by Concessionaire in connection with the transactions contemplated hereby or on the ability of Concessionaire to perform its obligations hereunder or under any such other agreement or instrument.
- (f) *Intellectual Property.* Concessionaire owns or has express rights to use or can acquire on reasonable terms, all Intellectual Property necessary for the performance of its obligations without any known material conflict with the rights of others.
- (g) *Information Supplied by Concessionaire.* The information supplied and representations and warranties made by Concessionaire in this Contract are true, correct and complete in all material respects.

### 16.2 *Representations and Warranties of Contractor.*

Contractor, and each Contractor Member, solely with respect to itself and Contractor, represents and warrants, as of the date of this Contract, that:

- (a) *Existence and Powers.* Contractor is a limited liability company, validly existing and in good standing under the laws of the Commonwealth of Virginia, and has the authority to do business in Virginia and in any other state in which it conducts its activities, with the full legal right, power and authority to enter into and perform its obligations under the Contract Documents and has or will have when necessary, all required licenses to carry on its present and proposed activities. Contractor affirms that it is properly registered and owes no outstanding reports with the Virginia Secretary of State in accordance with applicable Law.
- (b) *Due Authorization and Binding Obligation.* This Contract has been duly authorized, executed and delivered by all necessary action of Contractor and each Contractor Member and constitutes a legal, valid and binding obligation of Contractor and each of its members, enforceable against Contractor and each Contractor Member in accordance with its terms, except to the extent that its enforceability may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights from time to time in effect and equitable principles of general application.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- (c) *No Conflict.* To the best of Contractor's knowledge and each of its members' knowledge, neither the execution nor delivery by Contractor or each such Contractor Member of this Contract nor the performance by Contractor or each Contractor Member of its obligations in connection with the transactions contemplated hereby or the fulfillment by Contractor or Contractor Member of the terms or conditions hereof:
- (i) Conflicts with, violates or results in a breach of any constitution, law, governmental regulation, by-laws or certificates of incorporation applicable to Contractor or each Contractor Member; or
  - (ii) Conflicts with, violates or results in a material breach of any order, judgment or decree, or any contract, agreement or instrument to which Contractor, each Contractor Member or any of their Affiliates is a party or by which Contractor, each Contractor Member or any of their Affiliates or any of their properties or assets are bound, or constitutes a default under any of the foregoing.
- (d) *No Approvals Required.* No approval, authorization, order or consent of, or declaration, registration or filing with, any Governmental Authority is required for the valid execution and delivery of this Contract by Contractor or any Contractor Member except as such have been duly obtained or made.
- (e) *No Litigation Affecting Contractor.* Except as disclosed in writing to Concessionaire, to the best of their knowledge, there is no Legal Proceeding, at law or in equity, before or by any court or Governmental Authority pending or, to the best of Contractor's and each Contractor Member's knowledge, overtly threatened or publicly announced against the Contractor, each Contractor Member or any of their Affiliates, in which an unfavorable decision, ruling or finding could reasonably be expected to have a material and adverse effect on the execution and delivery of this Contract by Contractor and Contractor Member or the validity, legality or enforceability of this Contract against Contractor and each Contractor Member, or any other agreement or instrument entered into by Contractor or any Contractor Member in connection with the transactions contemplated hereby, or on the ability of Contractor or Contractor Member to perform their obligations hereunder or under any such other agreement or instrument.
- (f) *No Litigation Affecting the Subcontractors.* Except as disclosed in writing to Concessionaire, to the best of its knowledge, there is no Legal Proceeding, at law or in equity, before or by any court or Governmental Authority pending or, to the best of Contractor's knowledge, overtly threatened or publicly announced against Contractor or any Subcontractor, in which an unfavorable decision, ruling or finding could reasonably be expected to have a material and adverse effect on the execution and delivery

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

of the Contractor or any Subcontractor by Contractor or respective Subcontractor or the validity, legality or enforceability of this Contract or any subcontract against the Subcontractor that is party to the subcontract, or on the ability of Contractor or any Subcontractor to perform its obligations under its respective subcontract.

- (g) *Intellectual Property.* Contractor owns, or has express rights to use or can acquire on reasonable terms, all Intellectual Property necessary for the performance of the Work without any known material conflict with the rights of others.
- (h) *Information Supplied by Contractor.* The information supplied and representations and warranties made by Contractor in all submittals made to Concessionaire or VDOT in connection with its proposal and in all post-proposal submittals with respect to Contractor (and to Contractor's knowledge, all information supplied in such submittals with respect to the Subcontractors) are true, correct and complete in all material respects.
- (i) *Contractor Reviews.* Contractor has carefully reviewed the whole of the Contract Documents and has taken all steps it considers reasonably necessary to satisfy itself that nothing contained herein inhibits or prevents Contractor from performing and completing the Work in accordance with the Contract Documents.
- (j) *Compliance with Applicable Law Generally.* Contractor and each Contractor Member are in compliance in all material respects with applicable Laws pertaining to Contractor's and each Contractor Member's business and services.
- (k) *Contractor Members.* The only "Contractor Members" are CES Consulting, LLC and each such member is duly formed under the laws under the state of its organization, is qualified to conduct business in the Commonwealth of Virginia, has the requisite power and all required licenses to carry on its present and proposed activities, and has full power, right and authority to execute and perform each and all of its obligations under this Contract.
- (l) *Ownership of the Site.* Contractor acknowledges VDOT's ownership interest in the Site as described in the Comprehensive Agreement.
- (m) *Environmental Stipulations.* The Contractor hereby stipulates that during the term of this Contract any facility used in the performance of the Contract is not listed on the EPA's List of Violating Facilities pursuant to 40 C.F.R. 1520.

16.3 ***Continuing Accuracy of Contractor Representations and Warranties.*** During the term of this Contract, Contractor and each Contractor Member, as applicable, shall not take any action, or omit to perform any act, that results in a representation and warranty made in Sections 16.2(a), 16.2(b), 16.2(c), 16.2(d), 16.2(g), 16.2(h),

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

16.2(i), 16.2(j), 16.2(k), 16.2(l) and 16.2(m) becoming untrue. Contractor shall promptly notify Concessionaire if any such representation and warranty becomes untrue. From time to time, Contractor shall provide Concessionaire, upon Concessionaire's request, with information reasonably requested by Concessionaire to substantiate the continuing accuracy of these representations and warranties.

- 16.4 Contractor confirms its obligation to comply with all applicable clauses in the Contract Documents, and all applicable Laws. Contractor will ensure that all clauses and obligations of the Contract Documents are included in all Lower Tier subcontracts and purchase orders as required by the Contract Documents. Contractor will comply with the Federal Requirements and Civil Rights Requirements set forth on **Exhibit C** and in addition will comply with all such policies promulgated by any Governmental Authority.

### 16.5 *Administrative Requirements*

- (a) Foreign Professional Corporations and Foreign Professional Limited Liability Companies must possess a Commonwealth of Virginia Certificate of Authority from the State Corporation Commission to render professional services.
- (b) Any business entity other than a professional corporation, professional limited liability company or sole proprietorship must be registered in the Commonwealth of Virginia with the Department of Professional & Occupational Regulation, Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Decorators and Landscape Architects ([http://www.dpor.virginia.gov/dporweb/ape\\_reg.pdf](http://www.dpor.virginia.gov/dporweb/ape_reg.pdf)). Board regulations require that all professional corporations and business entities that have branch offices located in Virginia which offer or render any professional services relating to the professions regulated by the Board be registered with the Board. Registration involves completing the required application and submitting the required registration fee for each and every branch office location in the Commonwealth. All branch offices that offer or render any professional service must have at least one full-time resident professional in responsible charge that is licensed in the profession offered or rendered at each branch. All firms involved that are to provide professional services must meet this criteria prior to a contract being executed by Contractor.
- (c) Concessionaire will not consent to Contractor's subcontracting any portions of the Contract to any subconsultants in violation of the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.
- (d) Contractor must have internal control systems in place that meet federal requirements for accounting. These systems must comply with

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

requirements of 48 CFR 31, "Federal Acquisition Regulations, Contract Cost Principles and Procedures," and 23 CFR 172, "Administration of Engineering and Design Related Service Contracts."

- (e) Contractor assures compliance with Title VI of the Civil Rights Act of 1964, as amended. The Contractor and all Subcontractors shall submit a Title VI Evaluation Report (EEO-D2) when requested by the Concessionaire. This requirement applies to all consulting firms with fifteen (15) or more employees.
  - (f) All subcontractors shall be prequalified by VDOT prior to performing any Work on the Contract.
  - (g) The required services may involve the handling of VDOT Critical Infrastructure Information/Sensitive Security Information (CII/SSI) material. Personnel handling CII/SSI material, visiting Critical Infrastructure (CI) facilities or performing bridge/tunnel inspections are required to sign CII/SSI Non-Disclosure Agreements and pass a fingerprint-based Criminal History Background Check (CHBC). Contractor will be allowed to replace those individuals who fail to successfully pass the fingerprint-based CHBC. VDOT reserves the right to conduct fingerprint-based CHBC on all employees of Contractor's team members, or on any proposed replacements during the term of the contract who will be involved in the Project. All costs associated with the fingerprint-based CHBC are the responsibility of Contractor. A VDOT issued photo-identification badge is required for each employee of the Contractor's team who will need access to VDOT's CI facilities or who will be performing bridge/tunnel inspections. Based upon the results of the fingerprint-based CHBC, VDOT reserves the right to deny access to CII/SSI material and issuance of a VDOT security clearance or a VDOT issued photo-identification badge.
- 16.6 All notices, consents, requests or other communications will be in writing, unless otherwise expressly provided to the contrary and will be deemed to have been made or given on the date sent when e-mailed (to the extent permitted by the Contract Documents), hand-delivered, or transmitted as electronic facsimile to the other party, at the address noted in this Contract. If notice is sent by first class mail or by overnight or similar services, it will be deemed made three (3) Business Days after mailing or upon receipt, whichever is first. Either party may designate a different address by written notice given to the other.
- 16.7 If any provision of this Contract is determined to be illegal, invalid or unenforceable under present or future laws, the parties intend the remainder to be unaffected and enforceable. In place of each clause or provision that may be determined to be illegal, invalid, or unenforceable, and to the full extent permitted by law, the court or arbitrator is authorized to add a legally permissible clause or provision as similar as possible to that found unenforceable.

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

- 16.8 This Contract has been reviewed, negotiated, and accepted voluntarily and after due consideration, with advice from counsel as the parties deemed appropriate, and represents the entire agreement of the parties, except as specifically stated otherwise herein. This Contract may be amended only by Work Order signed by the parties. No part of this Contract may be assigned by Contractor without Concessionaire's written consent. Concessionaire may assign this Contract to VDOT or a non-profit special purpose entity established by the Commonwealth of Virginia to deliver the Project, or any or all of its rights under this Contract and the other Contract Documents without Contractor's consent. If VDOT (or an entity established by the Commonwealth of Virginia) succeeds to Concessionaire's rights under the Contract (by assignment or otherwise), then Contractor agrees that it will (A) maintain usual and customary books and records for the type and scope of operations of business in which it is engaged, (B) permit audit thereof by VDOT and (C) allow VDOT to assume the benefit of the Concessionaire's Contract rights and the work performed thereunder, with liability only for those remaining obligations accruing after the date of assumption, but excluding any monetary claims or obligations that Concessionaire may have against such Contractor that existed prior to VDOT's assumption of this Contract.
- 16.9 Except as required by law, Concessionaire's sureties have no greater or different obligation to pay Contractor than does Concessionaire, and further are entitled to enforce this Contract. Concessionaire's surety is an express third-party beneficiary of this Contract. VDOT is a third party beneficiary to the extent required by the Contract Documents. There are no other third-party beneficiaries.
- 16.10 The persons executing this Contract, and any Work Orders, claims, and lien or claim waivers or releases on behalf of Contractor, have actual authority to execute those documents.
- 16.11 Without limiting any other provision of this Contract, and notwithstanding any provision of this Contract to the contrary, this Contract shall be deemed to incorporate by reference, the contract provisions required under Sections 24.02(f), (g), (h), and (i), and 8.11 (to the extent applicable to the Contractor's Work under this Contract) of the Comprehensive Agreement (including imputation of any required representation or warranty upon Contractor). Contractor shall cause the foregoing provisions to be included in each Subcontract at every tier. VDOT shall be a third party beneficiary of this Section 16.11.
- 16.12 Attached hereto as **Exhibit J** is that certain Task Order No. 1, with a commencement date of April 25, 2022, to that certain Master Services Agreement between Contractor and Transurban (USA) Operations Inc., dated as of March 1, 2022 (the "Master Services Agreement"), and that certain Amendment No. 1 to Task Order No. 1, dated as of July 14, 2022 (such Task Order No. 1 and Amendment No. 1 to Task Order No. 1, collectively, the "Task Order"). The Parties hereby acknowledge and agree that: (i) notwithstanding Section 13.6 (*Entire Agreement*) of the Master Services Agreement, any "Services" (as defined in the Task Order) performed by Contractor under the Task Order shall be deemed to have

## CONSTRUCTION CONTRACT TERMS AND CONDITIONS

been performed under this Contract and governed by the terms and conditions of Work performed hereunder, including but not limited to the terms and conditions set forth in Sections 4.9, 4.10 and 7; (ii) any undertakings, obligations, guarantees, warranties and liabilities of whatsoever nature of Contractor under the Master Services Agreement insofar as they are relevant to the performance of any Services by Contractor under the Task Order shall also be or be deemed to be the undertakings, obligations, guarantees, warranties and liabilities of whatsoever nature of Contractor under this Contract; (iii) the “Period of Performance” (as defined in the Task Order) shall have ended as of the date of this Contract in accordance with the terms of the Task Order; and (iv) any references to the “Company” under the Task Order shall be interpreted to mean either Concessionaire or Transurban (USA) Operations Inc.

*[Signature Page Follows]*

IN WITNESS WHEREOF, the Parties have caused this Contract to be executed by their duly authorized representatives on the day and year first above written.

**95 EXPRESS LANES LLC**

By: \_\_\_\_\_  
Name: Pierce R. Coffee  
Title: President

Address for Notices:

95 Express Lanes LLC  
6440 General Green Way  
Alexandria, VA 22312  
Attention: Group General Manager  
Facsimile: (571) 419-6101

with a copy to:

95 Express Lanes LLC  
6440 General Green Way  
Alexandria, VA 22312  
Attention: Legal Counsel

**CES CONSULTING, LLC**

By: \_\_\_\_\_

Name: Scott C. Hunter

Title: Director of Construction

Address for Notices:

CES Consulting, LLC

23475 Rock Haven Way, Suite 255

Dulles, VA 20166

## Exhibit A

### Definitions

**“Abandon”** means to abandon all or a material part of the Work, which will be deemed to have occurred if:

(a) Contractor demonstrates through statements, acts or omissions an intent not to continue to perform all or a material part of the Work; or

(b) no significant Work on the Project or a material part of the Project is performed for a continuous period of more than 10 days.

**“Affiliate”** means, when used to indicate a relationship with a specified Person, a Person that: (a) directly or indirectly, through one or more intermediaries has a 10% or more voting or economic interest in such specified Person or (b) controls, is controlled by or is under common control with such specified Person, and a Person is deemed to be controlled by another Person, if controlled in any manner whatsoever that results in control in fact by that other Person (or that other Person and any Person or Persons with whom that other Person is acting jointly or in concert), whether directly or indirectly and whether through share ownership, a trust, a contract or otherwise.

**“Aggregate Liability Cap”** is defined in Section 8.2.

**“Application for Payment”** is defined in Section **Error! Reference source not found.**

**“Authorized Representative”** is defined in Section 4.2.

**“Books and Records”** is defined in Section 3.4.

**“Business Day”** means any day on which VDOT is officially open for business.

**“Claim”** is defined in Section 7.2.

**“Completion Payment”** is defined in Section 3.1(a).

**“Comprehensive Agreement”** means the “Third Amended and Restated Comprehensive Agreement Relating to the I-95/395 HOV/HOT Lanes Project”, dated as of August \_\_, 2022, between VDOT and Concessionaire, as amended.

**“Concessionaire”** is defined in the preamble.

**“Concessionaire Actual Damages”** is defined in Section 12.3(h).

**“Concessionaire Estimated Damages”** is defined in Section 12.3(h).

**“Concessionaire Termination Notice”** is defined in Section 12.3(f).

**“Construction Notice to Proceed”** or **“Construction NTP”** is defined in Section 5.1.

**“Construction Quality Management Plan”** means the Construction Quality Management Plan developed by Contractor, as described in more detail in the Technical Requirements.

**“Contract”** is defined in the preamble.

**“Contract Change Directive”** or **“CCD”** is defined in Section 10.2(a).

**“Contract Date”** is defined in the preamble.

**“Contract Documents”** is defined in Section 2.1.

**“Contract Price”** is \$89,458.50.

**“Contract Time”** is defined in Section 5.3.

**“Contractor”** is defined in the preamble.

**“Contractor Default”** is defined in Section 12.3(a).

**“Contractor Default Notice”** is defined in Section 12.3(b).

**“Contractor Member”** is defined in Section 16.2(k).

**“Contractor Party”** means Contractor and any Affiliate and any agents, Representatives, officers, directors, employees, contractors, suppliers and materialmen of Contractor or any Affiliate.

**“Day”** or **“day”** means a calendar day.

**“Defect”** means a deterioration in the condition or performance of an asset, whether by construction, installation, damage or wear, affecting the condition, use, functionality or operation of any Project Asset, which would cause or have the potential to cause one or more of the following:

- (a) a hazard, nuisance or other risk to public or worker health or safety, including the health and safety of road users;
- (b) a structural deterioration of the affected Project Asset;
- (c) damage to a third party’s property or equipment;
- (d) damage to the Environment; or
- (e) failure of the affected Project Asset to meet a performance requirement.

**“Definitions”** means the definitions set forth on this **Exhibit A**.

**“Direct Losses”** means:

(a) any loss, damage, cost, expense, charge, fee, injury, liability, obligation, judgement, penalty or fine, in each case including attorneys', accountants' and expert witnesses' fees and expenses (including reasonable costs for demobilization and re-mobilization of Subcontractors where applicable),

(b) any increase in the cost to Concessionaire to perform its obligations under any Contract Document to the extent such increase is not caused by Concessionaire; and

(c) any reduction in amounts received or receivable by Concessionaire under the Comprehensive Agreement arising out of, related to or in connection with the Project, as may be updated from time to time in accordance with the Comprehensive Agreement, to the extent such reduction is not caused by Concessionaire.

**“Dispute”** means any Claim, dispute, disagreement or controversy between Concessionaire and the Contractor concerning their respective rights and obligations under the Contract Documents, including concerning any alleged breach or failure to perform and remedies.

**“Dispute Resolution Procedures”** means the dispute resolution procedures set forth in Section 11.

**“Emergency”** means any unplanned event within the Project Right of Way that:

(a) presents an immediate or imminent threat to the long term integrity of any part of the infrastructure of the Project, to the Environment, to property adjacent to the Project or to the safety of road users or the traveling public; or

(b) has jeopardized the safety of road users or the traveling public.

**“Environment”** means soil, surface waters, groundwaters, land, stream sediments, surface or subsurface strata and ambient air.

**“Environmental Management Plan”** means the plan developed by the Contractor that sets forth the Contractor's approach to environmental management, as described in more detail in the Technical Requirements.

**“Equipment”** means machinery, tools and other apparatuses, together with the necessary supplies for upkeep and maintenance thereof, that are necessary for the completion of the Work.

**“Federal”** means of or relating to the central government of the United States of America.

**“Federal Requirements”** means the provisions required to be part of federal-aid contracts relating to highway projects and applicable to the Project, including the provisions set forth in **Exhibit C**.

**“Final Completion”** means the “Final Completion” for the Project as set forth in Section 5.2(b).

**“Good Faith”** means the observance of reasonable commercial standards of fair dealing in a given trade or business.

**“Good Industry Practice”** means the industry practices and standards that would be exercised by a prudent and experienced concessionaire, engineer, contractor, operator or maintenance provider engaged in the same kinds of undertakings and under similar circumstances as those applying to the Work.

**“Governmental Approvals”** means all local, regional, state and Federal agreements, studies, findings, permits, approvals, authorizations, certifications, consents, decisions, exemptions, filings, leases, licenses, registrations, rulings and other governmental authorizations required to be obtained or completed under Law prior to undertaking any particular activity contemplated by this Contract, Contract Documents or a Work Order.

**“Governmental Authority”** means any court, Federal, state, or local government, department, commission, board, bureau, agency or other regulatory or governmental authority.

**“Hazardous Environmental Condition”** means the presence of any Hazardous Substances on, in, under or emanating from the Project Right of Way that is present at concentrations or in quantities that: (a) may present an imminent or substantial safety or health hazard for VDOT the Contractor or their respective employees, agents, representatives or independent contractors, the general public or the surrounding Environment or (b) are required to be removed or remediated as a matter of Law or in accordance with the requirements of any Governmental Authority.

**“Hazardous Substances”** means, but is not limited to, any solid, liquid, gas, odor, heat, sound, vibration, radiation or other substance or emission which is or could be considered a contaminant, pollutant, dangerous substance, toxic substance, Hazardous Waste, solid waste, or hazardous material which is or becomes regulated by Laws or which is classified as hazardous or toxic under Laws.

**“Hazardous Waste”** means a waste that is (a) listed as a hazardous waste in 40 CFR Section 261.31 to 261.33, and (b) exhibits one of the following characteristics: ignitability, corrosivity, reactivity or toxicity, or is otherwise defined as a hazardous waste by Law.

**“Health, Safety and Security Plan”** means the plan developed by the Contractor that defines the health, safety and security activities required during the construction of the Project, as described in more detail in **Exhibit E**.

**“Indemnified Party”** and **“Indemnified Parties”** is defined in Section 7.1.

**“Indirect Losses”** means punitive, exemplary, indirect or consequential losses or damages (including loss of profit, future revenue, increased cost of capital or loss of business opportunity), excluding Direct Losses.

**“Insolvency Event”** means:

(a) Contractor or Contractor Member commences a voluntary case seeking liquidation, reorganization, or other relief with respect to Contractor or Contractor’s debts under any U.S. or foreign bankruptcy, insolvency, or other similar law; seeking the appointment of a trustee, receiver, liquidator, custodian, or other similar official of its, or any substantial part of its, assets; becomes insolvent, or generally does not pay its debts as they become due; provides notice of its inability to pay its debts; makes an assignment for the benefit of creditors; or takes any action to authorize any of the foregoing;

(b) an involuntary case is commenced against Contractor or Contractor Member seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to such Contractor or Contractor Member’s debts under any U.S. or foreign bankruptcy, insolvency or other similar law; seeking the appointment of a trustee, receiver, liquidator, custodian, or other similar official of it or any substantial part of its assets; seeking the issuance of a writ of attachment, execution, or similar process; or seeking like relief, and such involuntary case shall not be contested by it in Good Faith or shall remain undismissed and unstayed for a period of 50 days;

(c) in any voluntary or involuntary case seeking liquidation, reorganization or other relief with respect to Contractor or Contractor Member or their debts under any U.S. or foreign bankruptcy, insolvency or other similar law, this Contract is rejected, including a rejection under Title 11 U.S.C. §365 or any successor statute; or

(d) any voluntary or involuntary case or other act or event described in paragraphs (a) or (b) occurs (and in the case of an involuntary case is not contested in Good Faith or remains undismissed and unstayed for a period of 55 days) with respect to any member of Concessionaire.

It shall not be an “Insolvency Event” where a Person owing to Contractor or Contractor Member has fully met all financial obligations owing to Contractor or Contractor Member, as the case may be, in the form of a committed investment and payments or transfers of money or property previously made to or for the benefit of Contractor or Contractor Member are not subject to §544, §547, §548, or §550 of the Bankruptcy Code, or any similar Law respecting the avoidance or recovery of preferences or fraudulent transfers, including any applicable enactment of the Uniform Fraudulent Transfer Act.

**“Insurance Policies”** is defined in Section 9.1.

**“Insurance Requirements”** is defined in Section 9.1.

**“Intellectual Property”** means the electronic toll and traffic management books and records, copyrights (including moral rights), trademarks (registered and unregistered), designs (registered, including applications, and unregistered), patents (including applications), circuit layouts, source code and source code documentation, plant varieties, business and domain names, inventions, trade secrets, proposals, copyrightable works, customer and supplier lists and information, and other results of intellectual activity, copies and tangible embodiments of all of the foregoing (in whatever form or medium) and licenses granting any rights with respect to any of the foregoing (to the extent assignable), in each case, relating to the Project.

**“Lane Closure Damages”** is defined in Section 5.6.

“**Law**” is defined in Section 2.2(a).

“**Legal Proceeding**” means every action, suit, litigation, arbitration, administrative proceeding, and other legal or equitable proceeding having a bearing upon this Contract, and all appeals therefrom.

“**Losses**” means, with respect to any Person, any losses, liabilities, judgments, damages, fees, penalties, fines, sanctions, charges or out-of-pocket and documented costs or expenses actually suffered or incurred by such Person, including as a result of any injury to or death of persons or damage to or loss of property.

“**Lower Tiers**” is defined in Section 2.4.

“**Master Services Agreement**” is defined in Section 16.12.

“**Materials**” means any substance that is used in the Work specified in this Contract.

“**Minor Changes**” is defined in Section 10.3.

“**Non-Permitted Closures**” is defined in Section 5.6(b).

“**Notice of Final Completion**” is defined in Section 5.2(b).

“**Notice of Termination**” is defined in Section 12.1(a).

“**Party**” and “**Parties**” are defined in the preamble.

“**Pay-When-Paid Principles**” means that payment to Contractor is dependent upon Concessionaire’s receipt of a corresponding payment from VDOT, any such payment will only become due and payable under this Contract to Contractor within fifteen (15) Business Days or such other period of time set out in this Contract or otherwise agreed by the Parties following Concessionaire’s actual receipt of any such corresponding payment from VDOT.

“**Payment Bond**” means a payment bond required by the Contract Documents.

“**Performance Bond**” means a performance bond required by the Contract Documents.

“**Person**” means 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 or other entity or a Governmental Authority.

“**Project**” means the development and construction, of the Project Assets, all as more particularly described in the Technical Requirements and in this Contract.

“**Project Assets**” means the Seminary Road Ramp HOT Lanes (as defined in the Comprehensive Agreement) and other assets constructed, maintained or held by Concessionaire as part of the Seminary Road Ramp Project (as defined and further described in the Comprehensive Agreement) (or any applicable portion of such assets).

**“Project Right of Way”** means the real property identified in Exhibit B-2 (Design Plans).

**“Remedial Action”** means any action to manage, treat, handle, store, monitor, remove, transport or dispose of Hazardous Substances.

**“Remedial Action Plan”** means the plan developed by Contractor with respect to Hazardous Substances encountered by Contractor within the Project Right of Way, as described in more detail in the Technical Requirements.

**“Remedial Plan”** is defined in Section 12.3(e)(i).

**“Representative”** means, with respect to any Person, any director, officer, employee, official, lender (or any agent or trustee acting on its behalf), partner, member, owner, agent, lawyer, accountant, auditor, professional advisor, consultant, engineer, contractor, other Person for whom such Person is, under Law, responsible or other representative of such Person and any professional advisor, consultant or engineer designated by such Person as its “Representative.”

**“Rules”** is defined in Section 11.2.

**“Scheduled Final Completion Date”** is defined in Section 5.2(a).

**“Site”** means the geographical area reasonably expected to be a part of the worksite for the Work.

**“Software”** means (a) computer instructions, including programs, routines and databases and applications supplied, procured or developed by Concessionaire, VDOT or Contractor in connection with the operation of the Project or in connection with Reserved Rights (as defined in the Comprehensive Agreement), including but not limited to that which monitors, controls or executes on electronic toll and traffic management equipment or Intelligent Transportation System equipment or hardware, and (b) all modifications, updates and revisions made to the matter described in clause (a) above, including those made to correct errors or to support new models of computer equipment and/or new releases of operating systems.

**“Source Code and Source Code Documentation”** mean Software written in programming languages, such as C and Fortran, including all comments and procedural code, such as job control language statements, in a form intelligible to trained programmers and capable of being translated into object or machine readable code for operation on computer equipment through assembly or compiling, and accompanied by documentation, including flow charts, schematics, statements of principles of operations, architectural standards, and commentary, explanations and instructions for compiling, describing the data flows, data structures, and control logic of the software in sufficient detail to enable a trained programmer through study of such documentation to maintain and/or modify the Software without undue experimentation. Source Code and Source Code Documentation also include all modifications, additions, substitutions, updates, upgrades and corrections made to the foregoing items.

**“Subcontract”** means any contract, subcontract or other form of agreement between Contractor, a Subcontractor and any other Person to perform any part of the Work or provide any Materials, Equipment or supplies for any part of the Work, at all tiers.

**“Subcontractor”** means any Person with whom Contractor has entered into any contract to perform any part of the Work or provide any Materials, Equipment or supplies for the Project, on behalf of Contractor, and any other Person with whom any Subcontractor has further subcontracted any part of the Work, at all tiers.

**“Task Order”** is defined in Section 16.12.

**“Technical Requirements”** means the Technical Requirements included as part of **Exhibit B** (including all Attachments thereto), and as the same may be revised and updated from time to time in accordance with this Contract.

**“TMS Contractor”** means Transurban (USA) Inc., a Delaware corporation.

**“Uniform Act”** means the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

**“Unknown Pre-Existing Hazardous Substances”** means any Hazardous Substances present on the Project Right of Way or portion thereof as of the date that Concessionaire assumes responsibility of such Project Right of Way or portion that was not known, or could not reasonably have been known using Good Industry Practices, to Contractor prior to such date.

**“Utilities”** means any and all utility installations whatsoever (including gas, water, sewer, electricity, telephone, chilled water and telecommunications), and all piping, wiring, conduit, and other fixtures of every kind whatsoever related thereto or used in connection therewith.

**“VDOT”** means the Virginia Department of Transportation, an agency of the Commonwealth of Virginia, and any other state agency succeeding to the powers, authorities and responsibilities of such department invoked by or pursuant to the Comprehensive Agreement.

**“Warranty Period”** is defined in Section 4.10(a).

**“Work”** is defined in Section 2.1.

**“Work Order”** is defined in Section 10.1(a).

**“Work Product”** means all the data, information, documentation and other work product produced, prepared, obtained or deliverable by or on behalf of Contractor for the Project or the Project Right of Way, including but not limited to drawings, plans and specifications, record and as-built plans and specifications, engineering documents, geotechnical soils and soil boring data, analyses, reports and records, property acquisition files, agreements and documents (including records of payment and related correspondence, title policies, parcel diaries and all construction documents relating to the Work), engineers’ and inspectors’ diaries and reports, s, right of way record maps and surveys, traffic and revenue studies, and other feasibility data, analyses, studies and reports, correspondence and memoranda relevant to construction decisions, contracting plans, air quality monitoring data, environmental reviews, studies and reports, mitigation studies and reports, data, assessments, studies and reports regarding Hazardous Substances investigations, testings, borings, monitoring and analyses, manifests regarding handling, storage or transportation of Hazardous Substances, correspondence and agreements relating to Governmental Approvals,

Work Orders, final quantities, pile driving records, records of accidents and traffic management, field test records and reports, concrete pour records, surfacing depth check records, grade and alignment books, cross-section notes, drainage notes, photographs, false work and form plans, records of construction materials, and any other documents which can be reasonably described as technical or engineering documents. Work Product expressly excludes, however, documents and information which the Contractor and VDOT mutually agree in writing, or which a court determines, to be exempted or protected from public disclosure under Section 18.02 of the Comprehensive Agreement and which is not conceived or first reduced to practice for the purposes of the Project, such as proprietary financial and pricing information of Contractor.

# **Seminary Road Ramp Project**

## **Technical Requirements**

Includes:

Section 1: Project Management

Section 2: Construction Requirements

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## **Attachment**

1.0	Authority to Access (ATA) Process
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## TECHNICAL REQUIREMENTS

### ACRONYMS

<b>Acronym</b>	<b>Definition</b>
AACE	American Association of Cost Engineers
AFC	Approved for Construction
AMRL	AASHTO Material Reference Laboratory
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BMS	Building Management System
BPPS	Bridge Pier Protection System
CADD	Computer Aided Drafting and Design
CRM	Customer Relations Management
CTA	Cement Treated Aggregate
DBE	Disadvantaged Business Enterprise
DE	Design Exception
DMS	Dynamic Message Sign
DW	Design Waiver
EDMS	Electronic Document Management System
EPA	Environmental Protection Agency
ETTM	Electronic Tolling and Traffic Management
FDC	Field Design Change
FHWA	Federal Highway Administration
F.O.B.	Free on Board
GCS	Gate Control System
GP	General Purpose
HOT-OC	HOT (Express Lanes) Operations Center
HPC	High Performance Concrete
HPS	High Performance Steel
HSE	Health, Safety and Environment
ICD	Interface Control Document
ID	Asset Identification
IDMS	Incident Detection and Monitoring System
IIM	VDOT Instructional and Informational Memorandum
IPPM	Internal Policy/Procedure Memorandum
IRI	International Roughness Index
JOMP	Joint Operating and Maintenance Protocols
KPI	Key Performance Indicators
LCAMS	Lane Closure Advisory Management System
LDR	Load-related Distress Rating
LPN	License Plate Number
LRFD	Load and Resistance Factor Design
MATOC	Metropolitan Area Transportation Operations Coordination
MLHCC	Modified Latex Hydraulic Cement Concrete

<b>Acronym</b>	<b>Definition</b>
MOMS	Maintenance Online Management System
MOT	Maintenance of Traffic
MPSTOC	McConnell Public Safety and Transportation Operations Center
MRP	Maintenance Rating Program
MSE	Mechanically Stabilized Earth
MUA	Master Utility Contract
NADR	Noise Abatement Design Report
NATR	Noise Analysis Technical Report
NBIS	National Bridge Inspection Standards
NCR	Non-Conformance Report
NDC	Notice of Design Change
NDR	Non Load-related Distress Rating
NRO	Northern Regional Operations
NTCIP	National Transportation Communications for ITS Protocol
O&M	Operations and Maintenance
OCR	Optical Character Recognition
ORT	Open Road Tolling
OSPS	Operating Speed Performance Standard
PDM	Precedence Diagram Method
PDP	Project Development Plan
PE	Professional Engineer
PIP	Public Information Plan
PS&E	Plans, Specifications, and Estimate
PVC	Polyvinyl Chloride
RWIS	Road Weather Information System
SPI	Schedule Performance Index
SWaM	Small, Women- and Minority-owned Business Enterprise
T&DI	Toll and Driver Information
TAMS	Turnkey Asset Maintenance Services
TCRO	Traffic Control Room Officers
TMP	Transportation Management Plan
TOC	Traffic Operations Center
TS&L	Type, Size, and Location
TTC	Temporary Traffic Control
UIT	Ultrasonic Impact Testing
VDEM	Virginia Department of Emergency Management
VECTOR	Virginia Evacuation Coordination Team for Operational Response
VES	Vehicle Enforcement System
VOS	Volume, Occupancy & Speed
VSLs	Variable Speed Limit Signs
WBS	Work Breakdown Structure

# **1 Project Management**

## **1.1 General Requirements**

### **1.1.1 Organization and Key Personnel**

- A. The Contractor's management approach shall provide all components of an effective and efficient management system, including: communication and reporting; documentation of Work; supervision of Work personnel and activities; all tools, facilities, and materials; environmental protection and mitigation; safety of Work personnel; and any other management elements needed to produce and document a quality, safe, efficient, and operable Seminary Project.
- B. The Contractor shall deliver the Seminary Project in a manner consistent with building and maintaining effective working relationships with all stakeholders in the Seminary Project's success. The Concessionaire will serve as the sole source to the news media and community stakeholders on specific lane closures, delays, detours, and other construction-related impacts associated with the Seminary Project.

## **1.2 Project Administration**

### **1.2.1 General Requirements**

- A. The Contractor acknowledges that Concessionaire review, concurrence, approvals, inspections, variations, and acceptance of the Work is subject to VDOT review, concurrence, approvals, inspections, variations, and acceptance of the Work. The Contractor also acknowledges that Concessionaire review, concurrence, approvals, inspections, variations, and acceptance of the Work may be subject to third-party review, concurrence, approvals, inspections, variations, and acceptance. Third-parties may include, but not be limited to FHWA and other appropriate governmental agencies.
- B. All prospective contractors, subcontractors, lower tier subcontractors, and prime contractors of joint ventures shall prequalify with VDOT and shall have received a certification of qualification prior to undertaking Work on the Seminary Project. This restriction does not apply to consultants, manufacturers, suppliers, or haulers.
- C. Subcontracting or otherwise delegating any portion of the Work shall not relieve the Contractor of any responsibility for the fulfilment of the Contract. Further, delegation or subcontracting of the Contractor's responsibilities shall not diminish the Contractor's obligation to report directly to the Concessionaire, unless the Concessionaire expressly agrees to accept reports or communications from third parties.

### **1.2.2 Workers**

- A. Each party shall notify the other party, in writing, if they believe any person employed by VDOT, the Concessionaire, the Contractor, TMS Contractor, or any subcontractor:
  - 1. Is not performing his or her work in a proper or skillful manner;
  - 2. Is intemperate or disorderly; or
  - 3. Is acting in an unsafe manner.
- B. The party receiving the notice will immediately investigate the specifics of the notification and provide a response to the party initiating the notification, within 5 days, detailing a plan of action to resolve the written concerns. If the employees' actions create an unsafe environment for any party's personnel or travelling public, the notified party will immediately stop the operations to resolve safety issues in accordance with the Contract.

### **1.2.3 Working Drawings**

- A. The Contractor shall furnish detailed working drawings to the extent and with the details required by the Contract unless otherwise indicated in the Contract. Working drawings shall be submitted in sufficient time to allow for review, discussion and correction prior to the beginning of the work they reference and avoid causing any delay to the Work.
- B. The Contractor shall provide working drawings according to the VDOT Road and Bridge Specifications, Section 105.10, Items 1-5. The working drawings shall be appropriately signed and sealed by a professional engineer licensed in the Commonwealth, as applicable. The Contractor shall furnish working drawings to the Concessionaire as required or requested.

### **1.2.4 Document Management System**

- A. The Concessionaire shall establish and maintain an Electronic Document Management System (EDMS) to store and record all material documents generated on the Seminary Project, including those records required under Law.
- B. Contractor shall ensure:
  - Upon completion of the Seminary Project, the transfer of files such that the Concessionaire has a complete set of material project documentation in electronic format and written documentation on the contents of the data.

## **1.3 Schedule**

### **1.3.1 Project Schedule**

- A. Schedule Purpose, Format, and Content:
  - 1. The purpose of the Project Schedule is to ensure that adequate planning, and monitoring for Work performed or remaining.
  - 2. The Project Schedule shall consist of a Gantt chart and narrative detailing the work and timeline.
- B. The Contractor shall minimize any delay before requesting any extension of time.

### **1.3.2 Weekly Reporting**

During the performance of the Work, the Contractor shall provide a weekly report, which shall include the following:

- A. Specific construction schedule activities, including locations for the week concluding and the upcoming week;
- B. Rolling 3-week forward-looking inspection notice, which shall include planned construction activities; and
- C. MOT weekly update regarding any scheduled lane closures and identification of work areas for the ensuing two weeks.

## **1.4 Requirements for the Work**

### **1.4.1 General Requirements**

- A. All Work shall comply with the Contract and these Technical Requirements, including all applicable Exhibits and Attachments. Requirements for the Work and order of precedence are as set forth in the Contract. A requirement occurring in one shall be as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete and compliant Seminary Project. Calculated dimensions, unless obviously incorrect, will govern over scaled dimensions. Except when specified in the main body of the Contract or in these Technical Requirements, when a provision of Division I – General Provisions of the Road and Bridge Specifications is applicable, the Contract shall apply. Use of the term “Design-Builder” or “Design-Build Contractor” shall be read to mean Contractor, and any submittals noted in Exhibit D, Supplemental Specifications, Road and Bridge Specifications or Design Plans to be made to the Department or VDOT shall be made to Concessionaire.

- B. The Work shall also be performed in accordance with the following:
1. VDOT's Minimum Requirements for Quality Assurance & Quality Control on Design-Build & Public-Private Transportation Act Projects (July 2018), as applicable in accordance with these Technical Requirements
  2. VDOT Traffic Engineering Division Numbered Memoranda (Traffic Engineering and Mobility Management) including announcements from the Northern Region of the Virginia Department of Transportation
  3. VDOT Virginia Work Area Protection Manual 2011 Edition (Revision 2.1: November 1, 2020)
  4. 2009 Manual of Uniform Traffic Control Devices (MUTCD), Revisions 1 and 2 (May 2012) and 2011 Virginia Supplement to MUTCD, Revision 1 (September 2013)
- C. Each party shall promptly notify the other party if it discovers an obvious and plain error or omission in the text of the Technical Requirements attributable to a word processing, administrative or similar oversight. The parties will then coordinate to make such corrections as are necessary to restore the intent of the language.
- D. The standards and specifications, special provisions, and reference guides, including all supplements, errata, revisions, and interims, applicable for the Construction Period shall be the version of those documents as listed herein or those in effect as of the Proposal submission date for the Seminary Contract.

## **1.5 Work Restrictions**

### **1.5.1 General Requirements**

1. The Contractor is responsible for the safety of the work zone. The Contractor shall be responsible to address traffic control requirements for the work zone in accordance with Section 1.6.
2. The Contractor shall conduct all work necessary to provide safe and efficient traffic operations during construction, including provisions for the movement of people, goods, and services through and around the Seminary Project while minimizing impacts to pedestrians, bicyclists, local residents, businesses, and commuters. In no event shall sidewalks or shared use paths be closed unless first approved by the Concessionaire.

3. The Contractor is responsible for lane closure coordination and notification to all stakeholders.
4. The Contractor shall coordinate construction and traffic control activities that impact transit services with the impacted transit agencies.

### **1.5.2 Work Hours**

- A. The Contractor is advised that its general operations may proceed seven days a week, 24 hours a day, except as may be modified herein.
- B. This is contingent upon the Contractor obtaining a variance or waiver of all applicable noise restrictions, as stated in the Contract.

### **1.5.3 Temporary Roadway Closures**

- A. Anticipated and proposed temporary lane and/or shoulder closures shall be reviewed and approved by the Concessionaire (for the Express Lanes) or VDOT (for the General Purpose lanes and other state roadways). The Contractor shall restore all lanes of traffic per the times specified in this section. Restoration of traffic shall mean the completion of all construction work, the removal of all temporary traffic control devices, signs, workers, materials, and equipment from the roadway. To facilitate construction and minimize inconvenience to the public, the Contractor is advised of the closure limitations listed in the Contract. The Concessionaire reserves the right to modify the closure limitations in the Contract.
- B. Allowable Lane Closure Hours

INTERSTATE 395 & INTERSTATE 95					
WEEKDAY		Northbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14 <sup>th</sup> St. Bridge to Springfield Interchange	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:30AM to 3:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:30AM to 3:30PM	10:00PM to 4:30AM	11:00PM to 4:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:30AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 4:30AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 5:30AM			

All lanes open at 12:00 noon on Friday

WEEKDAY		Southbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14 <sup>th</sup> St. Bridge to Springfield Interchange	10:00AM to 2:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:00AM to 2:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			

All lanes open at 11:00am on Friday

INTERSTATE 395 & INTERSTATE 95			
WEEKEND	Northbound/Southbound*		
	Single-Lane Closures or Shoulder	Multiple-Lane Closures	Complete Road Closure
Friday to Saturday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Saturday to Sunday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Sunday to Monday	10:00PM to 5:00AM	11:00PM to 4:00AM	12:00AM to 4:00AM

\* For special operations, depending on time of year, additional hours may be allowed with proper ADA/ROD approval.

REVERSIBLE LANES (HOV & EXPRESS LANES)*		
WEEKDAY	Single-Lane Closures or Shoulder	Complete Road Closure**
WEEKDAY	9:30PM (Sunday to Thursday) to 4:00AM (Monday to Friday)	11:00PM to 4:00AM
WEEKEND	11:00PM (Friday to Saturday) to 9:00AM (Saturday to Sunday)	11:00PM to 4:00AM

\* Direction of traffic control for all lane closures in reversible lanes will need to be adjusted as necessary to face direction of traffic.

\*\* Complete Road Closure on Express Lanes limited to 30 minutes or less.

Single-Lane Closures* or Shoulder					
ARTERIAL	WEEKDAY		WEEKEND		
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	9:30AM to 3:00PM	9:30AM to 2:00 PM	10:00PM to 9:00AM	10:00PM to 8:00AM	10:00PM to 5:00AM
	10:00PM to 5:00AM				
All Other Roadways	9:00AM to 3:30PM	9:00AM to 2:00 PM	10:00PM to 9:00AM	9:00PM to 9:00AM	10:00PM to 5:00AM
	9:00PM to 5:00AM				

Multiple-Lane Closures					
ARTERIAL	WEEKDAY		WEEKEND		
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	10:00PM to 5:00AM	Not allowed until 11:00PM	11:00PM to 5:00AM	11:00PM to 6:00AM	11:00PM to 5:00AM
All Other Roadways	9:00PM to 5:00AM	Not allowed until 10:00PM	10:00PM to 6:00AM	10:00PM to 6:00AM	10:00PM to 5:00AM

\*Single-lane closures only permitted for multiple-lane roadways.

\*\*Major Arterials defined as Primary Roads, high volume Secondary Roads, and all other routes that connect directly to Interstates.

- C. The allowable hours shall be applicable to both stationary and mobile lane closures, as well as shoulder closures.
- D. Both left and right shoulders on I-395 GP lanes shall not be closed at the same time.
- E. Lane Closure Request Procedure
  1. Multi-lane closures of I-395 for any Work will require coordination with appropriate Governmental Authorities, stakeholders and public notice. The Contractor shall provide a minimum of three (3) weeks advance notice to the Concessionaire. This advance notice will allow the Concessionaire and VDOT to coordinate on a public outreach campaign and/or advertising to reach affected motorists and target audiences. Alternate dates can be advertised in the event of inclement weather.
  2. Total closures of I-395 for any surface, overhead, or underground work will require coordination with appropriate Governmental Authorities, stakeholders and public notice. Total roadway closures shall be limited to no more than 30 minutes maximum. Closures beyond 30 minutes shall require approval by the Concessionaire, subject to review of any required TTC plans and/or detour plans. The Contractor shall provide a minimum of six (6) weeks advance notice to the Concessionaire. This advance notice will allow the Concessionaire and VDOT to coordinate on a public outreach campaign and/or advertising to reach affected motorists and target audiences. Alternate dates can be advertised in the event of inclement weather.
  3. The Contractor shall be responsible for submitting all lane and/or shoulder closures into LCAMS at least ten (10) days in advance of

the proposed lane and/or shoulder closure(s) and no later than close of business Wednesday the week prior to the closure stating the location, purpose, specific lane(s) to be closed, time and duration of closure. Any conflicts generated from LCAMS shall be resolved no later than close of business Thursday the week prior to the closure to avoid cancellation of the lane closure request. The Contractor shall also be responsible for entering lane closure requests in VDOT systems such as VaTraffic, LCAMS, and VA511.

4. The Contractor is responsible for providing advance notification via variable message and required static signing for lane and/or shoulder and complete road closures in accordance with the *Virginia Work Area Protection Manual* and the *Manual on Uniform Traffic Control Devices* (MUTCD). Once a lane or shoulder closure is in place, Work shall commence immediately and shall progress on a continuous basis to completion or to a designated time.
- F. Refer to the Lane Closure Damages in Section 5 of the Contract, for situations where the Contractor is unable to remove the lane and/or shoulder closure by the stipulated time.
- G. The Concessionaire reserves the right to monitor traffic conditions impacted by the Work and to make necessary restrictions as may be warranted or as emergency situations dictate. Additional restrictions for other holidays or special local events may also be necessary, however, in these situations the Concessionaire will endeavor to inform the Contractor of any additional restrictions as early as practicable and in no case less than forty-eight (48) hours prior to the holiday or special local event.
- H. Confirmation shall be made 24 hours before any scheduled lane closure and shall include a written reiteration of the proposed tasks and a listing of materials, labor, and major equipment to be used. Complete road closures require a 72-hour advance confirmation for coordination. The Contractor is responsible for providing adequate advance notification via variable message and required static signing for lane closures in accordance with the *Virginia Work Area Protection Manual* (VWAPM) and the *Manual on Uniform Traffic Control Devices* (MUTCD). Once a closing is in place, Work shall begin immediately and shall progress on a continuous basis to completion or to a designated time. The closure may be delayed if excessive traffic backup or queuing is already present at the scheduled start of Work and will be adjusted in accordance with the Contract.
- I. Traffic backups must dissipate before successive closings can be implemented.
- J. The minimum clear distance between two separate lane closings, that is, from the last traffic cone of the first closing to the first traffic cone of the second closing in the same roadway, shall be two miles.

#### **1.5.4 Reversible Facilities**

##### **A. Hours of Operations**

The existing reversible facility hours of operations shall remain in place during of the Construction Period, unless otherwise specified by the Concessionaire with adequate advance notice to the Contractor. During the Construction Period, Transurban USA Operations Inc. shall be responsible for the operation of the existing reversible facility, including gate operations and reversal of the flow of traffic. The Contractor shall be responsible for scheduling all Work to accommodate the reversal schedule. This shall include adjustment of all temporary traffic controls as necessary to be consistent with the direction of traffic.

#### **1.5.5 Lane Closure Types**

##### **A. All lane closures shall be identified as one of the following types:**

1. Type 1 – A lane closure resulting in a significant impact on traffic, such as stopping traffic completely, closing two or more lanes, any lane closures in the existing reversible facility, closing an exit or entrance ramp at freeway interchanges or changing traffic patterns. This type of closure would require extensive media and stakeholder notification and coordination among various local and state agencies.
2. Type 2 – A lane closure resulting in minor or no impact on the flow of traffic, such as closing one lane on a four-lane roadway during off-peak traffic hours.
3. Type 3 – A lane closure that would close a shoulder (right or left) on a roadway or ramp.

### **1.5.6 Additional Lane Closure Restriction by the Concessionaire and/or Contractor Request for Additional Lane Closures**

- A. At the Concessionaire's reasonable discretion and approval, the Contractor may submit a request to Work outside the stated lane closure hours by providing adequate justification (including traffic analysis) demonstrating the viability of the request.
- B. Closures of longer durations than those specified in the Contract will require a review of plans, implementation of detours, and public outreach.
- C. The Concessionaire reserves the right to monitor traffic conditions affected by the Work and to make additional restrictions as may be necessary, such as terminating a lane closure early or adjusting the Seminary Project's allowable lane closure hours.
- D. General Requirements:
  - 1. The Contractor acknowledges that there will be instances where the Contractor may not be allowed to implement an approved lane closure during events that are beyond the Concessionaire's control.
  - 2. The Concessionaire will track all instances where the Contractor is directed by the Concessionaire not to implement any lane closures for special events such as, but not limited to, the following list:
    - i. Presidential motorcades traveling through project limits
    - ii. Special events with regional impacts
    - iii. Special sport events with regional impacts
    - iv. Major accidents/Incidents with regional impacts
    - v. Seasonal traffic patterns
  - 3. Notwithstanding anything to the contrary, it is agreed that: 1) The Concessionaire will provide the Contractor with as much notice as is possible with respect to any lane closure request by the Contractor which is not approved by the Concessionaire; and 2) The Contractor will provide the Concessionaire with as much notice as is possible with respect to any inability of the Contractor to implement lane closures which are otherwise allowed within the Contract.

### **1.5.7 Night Work**

- A. In areas where Work is to be performed during the hours of dusk or darkness, the Contractor shall furnish, place, and maintain lighting facilities capable of providing light of sufficient intensity to facilitate good workmanship and proper

inspection at all times. The lights shall be arranged so as not to interfere with or impede traffic approaching the work site(s) from either direction or produce undue glare to property owners.

- B. Lighting of work site(s) may be accomplished using any combination of portable floodlights, standard equipment lights, existing street lights, and temporary street lights that will provide the proper illumination.
- C. The Contractor shall furnish and place warning signs to alert approaching motorists of lighted construction area(s). These warning signs shall be four feet (1200 mm) x four feet (1200 mm). The Contractor's vehicles used on the Seminary Project shall be provided with amber flashing lights that shall be in operation while in the work area. The Contractor's equipment shall be provided with a minimum of three square feet of reflective sheeting that is visible to approaching motorists. The Contractor shall provide his personnel with proper Personal Protective Equipment (PPE), which shall be worn at all times while the workers are within the work area. The Contractor shall provide a light meter to demonstrate that the minimum light intensity is being maintained.
- D. The Contractor shall provide sufficient fuel, spare lamps, generators, and other necessary equipment to maintain the lighting of the work site. The Contractor shall utilize padding or shielding or locate mechanical and electrical equipment to minimize noise generated by lighting operations as directed by the Concessionaire. Noise generated by portable generators shall comply with all Law.
- E. For nighttime work zones within the I-395 travel lanes (including 395 Express Lanes and ramps), the Contractor shall provide sufficient Virginia State Police officers with a law enforcement vehicle equipped with a blue flashing light within the work zone in accordance with the VWAPM. For nighttime work on all other roadways, the use of law enforcement shall comply with minimum VWAPM requirements. In the event the Virginia State Police have been given sufficient notice of such request but are unable to provide coverage, the Contractor may utilize other law enforcement agencies.

### **1.5.8 Law Enforcement Utilization**

- A. The Contractor shall be responsible for all costs and for coordinating directly with the Virginia State Police service during temporary traffic control operations involving lane closures and/or rolling lane closures, and any other operation as covered in Appendix C of the *Virginia Work Area Protection Manual*.

### **1.5.9 395 Express Lanes**

- A. For any Work within the 395 Express Lanes, access must be approved by Transurban USA Operations in advance through the Authority to Access (ATA) process using the Permitted platform. The reference guide for this process is

provided in Attachment 1.0. Requests for an ATA (also referred to as a Work Authority Permit, WAP) must be submitted 10 business days in advance of the intended access date.

### 1.5.10 Holidays

A. Moving/mobile, short duration, short-term stationary, or intermediate-term stationary temporary traffic control zone lane closures on mainline lanes, shoulders, or ramps shall not be performed during the following Holiday time periods without the written permission of the Concessionaire. Additionally, a long-term stationary temporary traffic control zone shall not be initially put in place, adjusted, or removed during the following Holiday time periods without the written permission of the Concessionaire:

- **January 1:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.5.10.B below.
- **Inauguration Day:** From noon on the preceding day until noon on the following day.
- **Martin Luther King, Jr. Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Presidents Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Easter:** From noon on the preceding Friday to noon on the following Monday.
- **Memorial Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Juneteenth:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.5.10.B below.
- **July 4:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.5.10.B below.
- **Labor Day:** From noon on the preceding Friday to noon on the following Tuesday
- **September 11:** No daytime closures.
- **Indigenous Peoples' Day:** From noon on the preceding Friday to noon on the following Tuesday.
- **Election Day** (the Tuesday following the first Monday in November): No daytime closures.

- **Veterans Day:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.5.10.B below.
  - **Thanksgiving Day:** From noon on the Wednesday preceding Thanksgiving Day until noon on the following Monday.
  - **Christmas Day:** From noon on the preceding day until noon on the following day, except as indicated in Section 1.5.10.B below.
- B. If the Holiday occurs on a Friday or Saturday, closures shall not be performed from noon on the preceding Thursday to noon on the following Monday. If the Holiday occurs on a Sunday or Monday, closures shall not be performed from noon on the preceding Friday to noon on the following Tuesday.

## **1.6 Maintenance of Traffic/Traffic Control**

- A. Work zone information shall be shared with VDOT's Northern Region Operations Advanced Traffic Management System (ATMS) and any other regional ATMS and shall be approved by the Concessionaire.
- B. Contractor shall have at least one person on the Project site during all work operations who is currently verified either by VDOT's Intermediate Work Zone Traffic Control training or by the American Traffic Safety Services Association (ATSSA) Virginia Intermediate Traffic Control Supervisor (TCS) training by a VDOT approved training provider. This person must have their verification card with them while on the Project site. This person shall be responsible for the oversight of Work zone traffic control within the Project limits in compliance with the Contract requirements, the VWAPM, and the MUTCD. This person's duties shall include the supervision of the installation, adjustment (if necessary), inspection, maintenance, and removal when no longer required, of all Work zone traffic control devices on the Project .
- C. If none of Contractor's on-site personnel responsible for the supervision of such work have the required verification with them or if they have an outdated verification card showing they are not currently verified as a Traffic Control Supervisor (TCS) either by VDOT in Intermediate Work Zone Traffic Control, or by the ATSSA, Concessionaire will suspend all work on the Project until the Work is appropriately supervised in accordance with the requirements herein.

### **1.6.2 Maintenance of Traffic during Construction**

- A. The construction activities will be completed in accordance with with the requirements of the Contract and the Seminary Design Plans.
- B. The Contractor shall conduct daily and weekly MOT/traffic control inspections to ensure all traffic devices and traffic patterns are in compliance with the

VWAPM and MUTCD standards. Provide a weekly MOT report to the Concessionaire to include the following:

1. Date discrepancy was identified
  2. Description of discrepancy
  3. Corrective action required
  4. Date corrective action should be taken
  5. Date corrective action was completed
- C. The Contractor will be required to provide a uniformed law enforcement officer with a marked law enforcement vehicle equipped with a blue flashing light during set-up and take-down of all daytime intersection closures involving two or more lanes of traffic.
- D. Contractor shall prosecute the Work so as to avoid obstructions to traffic to the greatest extent practicable. Contractor shall provide for the safety and convenience of the general public and residents along the roadway, and for the protection of persons and property.
- E. Highways closed to traffic shall be protected by barricades and other warning devices as required by the Contract, the VWAPM, and the MUTCD. Barricades and warning devices shall be illuminated where required during periods of darkness and low visibility. Contractor shall erect warning devices in advance of a location on the Project where operations or obstructions may interfere with the use of the road by traffic and at all intermediate points where the new work crosses or coincides with an existing roadway. Contractor shall maintain sign faces and reflective surfaces of warning devices in a clean and visible condition. Contractor shall cover or remove signs when the messages thereon are not applicable. Barricades, warning signs, lights, temporary signals, and other protective devices shall conform to Section 512 of the Road and Bridge Specifications.
- F. Two-way traffic shall be maintained at all times unless the Contract or Concessionaire permits one-way traffic. Contractor shall not stop traffic without Concessionaire's permission. If one-way traffic is permitted, Contractor shall provide certified flaggers to direct the 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. Flagger 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. Further, flaggers performing duties improperly will have their certifications revoked.

- G. Restrictions on lane closures are defined in the Contract.
- H. Connections with 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.
- I. The Contractor shall schedule construction operations so that approved continuous access is provided for all roads and properties. Connections or entrances shall not be disturbed by the Contractor until necessary. Once connections or entrances have been disturbed, they shall be maintained and completed as follows:
  - 1. Connections that had an original paved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using pavement. 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.
  - 2. Mainline connections shall have all lanes open during construction. If there are delays in prosecution of work for other 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.
  - 3. Mainline access/egress connections shall have all lanes open during construction unless otherwise agreed with the Concessionaire. Other 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.
- J. All stages and phases of construction, including installation and testing of the Electronic Toll and Traffic Management (ETTM) system, shall be covered by an approved TTC plan.

- K. If any sidewalk or shared use path is requested to be closed, the alternative routes considered shall be covered by a TTC plan and/or detour plan and approved by the Concessionaire.

## **1.7 Construction Quality Management**

### **1.7.1 General Requirements**

The Contractor shall have overall responsibility for Quality Control (QC) activities in accordance with the VDOT QA/QC Manual and may self-perform the QC activities in compliance with Section 2.1.6 of the VDOT QA/QC Manual. The Contractor shall develop a Construction Quality Management Plan which addresses all aspects of Quality Control for construction activities, as required in the VDOT QA/QC Manual. All references to Design-Builder as it relates to QC activities and/or requirements in the VDOT QA/QC Manual shall be read to say Contractor. Quality Assurance and QAM activities will be performed by the Concessionaire.

### **1.7.2 Materials Supply and Quality Requirements**

- A. Unless otherwise specified in the Contract, materials, equipment, and components that are to be incorporated into the finished Work shall be new. The Contractor shall submit statements of the known origin, composition, and manufacture of all materials to be used in the Work, including optional or alternate items, using VDOT's Form C-25.
- B. All materials or equipment (excluding the equipment maintained and operated by the Contractor) physically installed, which will become part of the completed Work, whether it is permanent or temporary, must conform to the requirements of the Contract, and shall be furnished with valid test data required to document the quality of the material or equipment at least two (2) weeks prior to delivery. The Contractor shall change the source of supply and furnish material or equipment from other approved sources, if the requirements are not met, and shall notify the Concessionaire of this change, and provide the same identifying information noted in this section, at least two (2) weeks prior to delivery.

### **1.7.3 Inspection of Work**

- A. The responsibility for quality control and ensuring compliance with applicable specifications and testing requirements lies with the Contractor in accordance with the VDOT QA/QC Manual. All stages, materials, and details of the Work, including machines and plant equipment used in processing or placing materials, are subject to independent inspection by the Concessionaire in accordance with the Contract. The Concessionaire will perform the QA and QAM functions for the Project. The Concessionaire and VDOT are authorized to conduct independent inspection and oversight of all Work performed and materials furnished. Inspection by the Concessionaire or VDOT shall not

relieve the Contractor of any obligation to furnish acceptable materials or complete construction in accordance with the Contract.

- B. Unless reference is made to a specific dated specification or special provision, references in the Contract 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 Proposal.
- C. If an inspection reveals that Work has not been properly performed, the Contractor shall promptly inform the Concessionaire of the schedule for correcting such Work and the time when an inspection of the corrected Work can be made.

## **1.8 Third Parties and Permitting**

### **1.8.1 Permitting**

- A. The Contractor shall obtain permits, approvals, and coordinate with any relevant Governmental Authorities and other entities necessary to complete the Seminary Project, with assistance from the Concessionaire as reasonably requested. All Governmental Approvals applicable to construction Work will be the responsibility of the Contractor, with the exception of those Governmental Approvals for which the Concessionaire is responsible per the Contract. The Contractor shall provide copies of all permits and permit modifications to the Concessionaire upon receipt.
- B. The Contractor shall obtain any required waiver or variance from each applicable local government regarding a local noise ordinance, as needed to prosecute the Work. The Concessionaire will make reasonable efforts to assist the Contractor in obtaining any such waiver or variance. The Contractor shall adhere to the requirements of the noise waiver in planning and performing any construction. If the local government identifies a violation all costs associated with any delays or corrective action is the responsibility of the Contractor.
- C. The Contractor will be responsible for all costs associated with compliance with any ordinance and Law or any violations of Law attributed to the activities of the Contractor in accordance with the Contract.

### **1.8.2 Third Parties**

- A. If any portion of the Seminary Project is located within the limits of a municipality or locality, military installation, or other federally owned property, the Contractor shall cooperate with the appropriate officials and agents in the prosecution of the Work to the same extent as with the Concessionaire.

- B. The Contractor shall coordinate its activities with municipalities and localities, and other contractors working in the area. As provided in the Contract, the Contractor's work program and schedule shall consider and coordinate with the work of other contractors involved with adjacent work, including maintenance, in the corridor.
- C. If other separate contracts are awarded by the Concessionaire or by other Governmental Authorities, including projects under the PPTA, that affect the Contractor's work, including work related to abutting roadways and connectors and work associated with a TAMS contract, the Contractor will coordinate its work with the work being performed by the other contractors. The Concessionaire will contractually require its separate contractors to cooperate with, and coordinate their activities with, the Contractor.
- D. The Contractor shall be responsible for contacting other contractors regarding their anticipated schedules to complete the associated projects or key milestones of the associated projects they are/will be working on.
- E. The Contractor shall not impede the access or progress of such work by other contractors, but shall cooperate and coordinate with other contractors for the timely completion of all construction activities. This shall include attendance at coordination meetings deemed necessary or advantageous by the Concessionaire or its contractors.

### **1.8.3 Fire Hydrants**

- A. No Work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.
- B. When the Contractor's Work requires the disconnection of "in service" fire hydrants, the Contractor shall notify the locality's fire department or communications center at least 24 hours prior to disconnection. In addition, the Contractor shall notify the locality's fire department or communications center no later than 24 hours after reconnection of such hydrants.

## **1.9 Emergency Services**

### **1.9.1 Liaison**

The Contractor shall comply with the Concessionaire and VDOT requirements for participation in industry and statutory initiatives regarding Emergency management, where applicable.

### **1.9.2 Emergencies and Extraordinary Circumstances**

- A. Subject to the Contract, the Contractor's response to Emergencies and extraordinary circumstances as part of the Seminary Project will be in accordance with the Contract and not inconsistent with the Concessionaire's

or VDOT's Emergency evacuation plan and shall ensure that:

1. safety of motorists, pedestrians and workforce personnel shall be the primary objective for all decisions and actions;
  2. clearance of a travel lane for Emergency response vehicles shall be by the most expedient route whether GP Lanes or HOT Lanes (in such circumstances, the decision of the Concessionaire or the Emergency services in charge shall govern);
  3. military vehicles acting in an Emergency response capacity or in defense of the sovereign homeland of the United States of America shall be given free and unrestricted access to the HOT Lanes;
  4. if the U.S. Secret Service (USSS), in coordination with the Virginia State Police (VSP), determines movements of the President of the United States require use of the HOT Lanes, the Contractor shall cooperate and comply fully with USSS and VSP instructions with respect to Work activities, lane closures and traffic management;
  5. VDOT reserves the right, by direction of the Fredericksburg and Northern Virginia District Administrators or the NRO Director, to assume and exercise control of the HOT Lanes in part and/or in their entirety, including all applicable systems and field devices via available interfaces, pursuant to the Contract; and
  6. the Contractor will, as needed, participate in Emergency exercises conducted by Governmental Authorities.
- B. During special events that have significant impact on traffic flow, the Contractor shall designate a responsible party in charge to work with the VDOT's NRO Special Events and Incident Management Coordinator to develop traffic management plans for the event.
- C. Should the Contractor fail to respond to an Emergency or extraordinary circumstance in a timely manner in accordance with the requirements of the Contract, the Concessionaire shall have the right to take necessary and appropriate action to handle such Emergency or extraordinary circumstance.

## **1.10 Public Communications**

- A. The Contractor shall deliver the Seminary Project in a manner consistent with building and maintaining effective working relationships with all stakeholders in the Seminary Project's success. The Concessionaire will serve as the sole source to the news media and community stakeholders on specific lane closures, delays, detours, and other construction-related impacts associated with the Seminary Project.

## **2 Construction Requirements**

### **2.1 General**

- A. The Seminary Project shall be constructed pursuant to Contract requirements.
- B. Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified will be furnished by the Concessionaire. Except as otherwise shown on the plans, dimensions shown on the plans are measured in the respective horizontal or vertical planes. Dimensions that are affected by gradients or vertical curvatures shall be adjusted as necessary by the Contractor to accommodate actual field conditions and shall be specifically denoted as “field adjusted” on the working drawings. Failure on the part of the Contractor to so denote field adjustments on the working drawings shall not relieve the Contractor of the responsibility to accommodate and incorporate such existing conditions into the finished work.
- C. All materials used in the Work shall conform to the qualities, technical requirements, values or range of values specified in the Contract. Less than complete conformity may be permitted if obtaining exact or complete conformity would not be feasible and if authorized by the Department. If permissible tolerances are exceeded or if consistent deviations from the plans or abrupt changes in grade occur, even though within the tolerances, the affected areas shall be reconstructed to conform to the specified tolerance such that the Work is fit for its intended purpose. When the Contract requires 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.
- D. The Contractor shall take all reasonable efforts to preserve property and improvements along the boundary lines of and adjacent to the Work unless the removal or destruction is absolutely required and consistent with the Construction Documentation. The Contractor shall use suitable precautions to prevent damage to such property. If property is damaged, the Contractor shall restore property to a condition similar or equal to that existing before such damage was done by repairing, rebuilding, or restoring, or making settlement with the property owner. Where property of third parties has been damaged and repaired by the Contractor, the Contractor shall secure from the owner a release from any claim against the Concessionaire. A copy of this release shall be furnished to the Concessionaire.

## **2.2 Environmental**

### **2.2.1 Water Pollution**

- A. The Contractor shall exercise every reasonable precaution to prevent pollution of rivers, streams, and impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage, paints, sedimentation, and other harmful material shall not be discharged into or alongside rivers, streams, or impoundments or into channels leading to them.
- B. If the Contractor dumps, discharges, or spills any oil or chemical that reaches or has the potential to reach a waterway, it shall immediately notify all appropriate jurisdictional state and federal agencies and shall take immediate actions to contain, remove, and properly dispose of the oil or chemical in accordance with the local, State and federal requirements.

### **2.2.2 Noise Mitigation**

- A. Construction Noise
  - 1. The Contractor's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall be not more than 80 decibels. Noise-sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose. Such activities include those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.
  - 2. Contractor shall monitor its construction-related noise if requested by local agencies, the Concessionaire or neighboring property owners. If construction noise levels exceed 80 decibels during noise-sensitive activities, the Contractor shall take corrective action before proceeding with operations.
  - 3. The Contractor shall be responsible for abatement of construction noise.
  - 4. The Contractor is responsible for obtaining any necessary local noise ordinance variances prior to the scheduling of night time operations
  - 5. Contractor shall determine whether certain portions of the Seminary Project that produce objectionable noise should be restricted or prohibited between 10 PM and 6 AM. If other hours are established by local ordinance, the local ordinance shall govern.
  - 6. Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment. When feasible, the Contractor shall establish haul routes that direct his

vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

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

## **2.3 Materials**

### **2.3.1 Material Delivery**

The Contractor shall advise the Concessionaire at least two weeks prior to the delivery of any material from a commercial source. Upon delivery of any such material to the Seminary Project, the Contractor shall confirm that the material meets the requirements of the Contract and, if so, shall provide the Concessionaire with one copy of all invoices (prices are not required). Materials shall not contain Hazardous Waste or be furnished from a source containing toxic, hazardous or regulated solid wastes.

### **2.3.2 Storing Materials**

- A. 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 QAM or the Concessionaire, 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 Concessionaire. Stored material shall be located so as to facilitate its prompt inspection. Portions of the Seminary Project Right of Way approved by the Concessionaire 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.
- B. Additional required storage space shall be provided by the Contractor. Private property shall not be used for storage purposes without the written permission of the owner. Copies of the written permission shall be furnished to the Concessionaire. Upon completion of the use of the property, the Contractor shall furnish to the Concessionaire a release signed by the property owner indicating that the property has been satisfactorily restored.
- C. Chemicals, fuels, lubricants, bitumens, paints, raw sewage, and other harmful materials as determined by the QAM or the Concessionaire shall not be stored within any floodplain unless no other location is available and only then shall the materials 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 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 the Contract. Accumulated rain water may also be pumped out of the impoundment area into approved dewatering devices.

### **2.3.3 Handling Materials**

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

### **2.3.4 Unacceptable Materials**

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

### **2.3.5 Materials Disposal**

- A. Contractor shall remove, in accordance with the plans, fences, buildings, structures, or encumbrances within the construction limits. Materials so removed, including existing drains or pipe culverts, shall become the property of Contractor, with the exception of those materials to be stored or delivered to Concessionaire or others as designated in the Contract.
- B. Unsuitable or surplus material for disposal shall be disposed of by the Contractor off the Seminary Project Right of Way. The Contractor shall obtain the necessary rights to property to be used as an approved disposal area. 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 Concessionaire for use in disposing unsuitable or surplus material.
- C. The Contractor shall furnish the Concessionaire a statement signed by the property owner in which the owner agrees to the use of their property for the deposit of material from the Seminary Project. The property owner will hold harmless the Concessionaire, their officers, their agents, and their employees. Upon completion of the use of the property as an approved disposal area, the Contractor shall furnish the Concessionaire a release signed by the property owner indicating that the property has been satisfactorily restored. This requirement will be waived for commercial sources and sources owned by the Contractor.

## **2.4 Traffic Engineering**

### **2.4.1 Pavement Markings**

- A. The Contractor shall provide and maintain pavement markings and reflective pavement markers meeting the applicable standards and specifications set forth in the Contract.
- B. Permanent pavement markings (lane division lines, edge lines, ramp and gore markings) on the 395 Express Lanes and ramps and the I-395 General Purpose lanes and ramps shall be Type B, Class VI, patterned pre-formed tape. All other pavement markings shall conform to the Road and Bridge Specifications.
- C. High-Contrast Pavement Markings shall be used on all bridge decks and concrete pavements.
- D. The use of thermoplastic pavement markings and pavement marking tape shall conform to the applicable standards and specifications in the Contract.
- E. For “E-ZPass” logo pavement markings, Type B Class II markings may be used in lieu of Type B Class VI provided a primer/sealer is applied to the concrete surface as described in the VDOT Standard Specifications Section 704.03a(2)b.

### **2.4.2 Static Signs**

- A. The Contractor shall relocate all signs within the construction limits that conflict with construction work. Signs that are not needed for the safe and orderly control of traffic during construction may be removed and stored in a manner that will preclude damage and reinstalled in their permanent locations prior to Service Commencement.
- B. The Contractor shall maintain all existing signs during construction, unless they are to be removed permanently or have been replaced as required by the Seminary Project. For any existing signs that require relocation due to construction, the Contractor shall present pertinent details, such as sign designs, mounting details, locations, and existing condition, for the Concessionaire’s review and comment, prior to relocation.

## **2.5 Maintenance During Construction**

- A. The Contractor shall prosecute the Work so as to avoid obstructions to traffic to the greatest extent practicable. The Contractor shall provide for the safety and convenience of the general public and residents along the roadway and the protection of persons and property.
- B. The Contractor shall maintain the Work from the beginning of construction operations until Final Completion.

- C. The Contractor 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.
- D. Existing VDOT Transportation Management System (TMS) devices in the general purpose lanes shall remain operational during construction unless otherwise approved by the Concessionaire and VDOT. These TMS devices include, but are not limited to: (i) closed-circuit television (CCTV) cameras; (ii) dynamic message signs (DMS); (iii) ramp metering; (iv) detection; (v) mile markers; (vi) the reversible gate system; (vii) roadway lighting; and (viii) weather stations.
- E. The Concessionaire, or VDOT as applicable, will maintain all roadways and structures used by public, pedestrian and vehicular traffic at its expense, until such time as the paved surface and roadside appurtenances in the active construction work area are significantly impacted by the Contractor's construction activities. (Significant impacts include pavement marking eradication, traffic lane shifts, surface paving, placement of temporary traffic barrier service, or similar activities). The highway trucks hauling material on the paved surface are not considered significant impacts. Once the Contractor significantly impacts the active construction work area, the Contractor shall be responsible for that active construction work area until its Final Completion. The Contractor shall be responsible for all maintenance in significant impacted active construction work areas including repairs to the roadway surfaces (fixing holes in the hard surface, patching the potholes and providing smooth surface).
- F. The Contractor shall be responsible for the maintenance of the significant impacted assets in accordance with standard Concessionaire maintenance requirements. Significant impacted assets for which the owning authority is other than the Concessionaire shall be maintained by the Contractor until such time as they are no longer impacted by construction and accepted back by the owning authority.
- G. Where traffic will operate on surfaces other than final surface or final alignment, the Contractor shall be responsible for maintenance of these roadways, including repair of any damage caused by its operations or use by public traffic.
- H. At no time shall the lights in GP Lanes and other roadways be put out of service, unless mutually agreed between the Parties for the purposes of cutover, testing or integration into the ETTM System or NRO PSTOC ATMS.
- I. The existing signal, lighting, and ITS systems will be maintained by the Concessionaire, or VDOT as applicable, until the Contractor or any of the Contractor's subcontractors begin impacting these assets, at which time impacted signal, lighting and impacted ITS assets within the Seminary Project limits will become the Contractor's responsibility. If there is an existing asset the Contractor desires to tie in or connect to, but is prevented from doing so

because of physical damage to such existing asset the Contractor may perform the repair work at its sole cost and expense. Once the Contractor has completed the work, and the work is accepted by the Concessionaire, the maintenance activities will revert to the Concessionaire's responsibility.

- J. VDOT will perform snow and ice removal on all travel ways.
- K. The Contractor's maintenance of the active construction work area shall be to the level of quality condition existing in the relevant active construction work area at the time Contractor takes control of the active construction work area.

## **2.6 Security**

### **2.6.1 General Requirements**

- A. Subject to the requirements of the Contract, the Contractor shall adhere to the intent of the VDOT's policy on critical infrastructure information and sensitive security information (CII/SSI) to the extent such information is directly related to the Contractor's performance of its obligations under the Contract. The Contractor shall ensure that relevant CII/SSI is protected and not disclosed to unauthorized persons. The Contractor shall ensure that all personnel having access to CII/SSI for the Contractor and all subcontractors have met the requirements of IIM-LD-236 Critical Infrastructure (CII) / Sensitive Security Information (SSI).
- B. The Concessionaire may request fingerprint-based criminal history background checks on contractors working on specific structures or functions.
- C. The Contractor shall review with the Concessionaire any information that should be designated as CII/SSI as specific design details become available. Any requirements for security review or other inspections will be mutually agreed to with the Concessionaire.

**EXHIBIT B-2**

**DESIGN PLANS**



STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.		395	SEMINARY ROAD SIGNING RETROFIT	1

INDEX OF SHEETS:

- 1 - TITLE SHEET
- 1A - KEY MAP
- 2 - GENERAL NOTES AND LEGEND
- 2A - SIGN DETAILS
- 2B - SIGN SCHEDULE
- 3 THRU 12 - SIGNING PLAN & ELEVATION

# PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

## SEMINARY ROAD SIGNING RETROFIT S&S SUBMITTAL

FAIRFAX COUNTY AND CITY OF ALEXANDRIA  
395 EXPRESS LANES  
From: 0.3 Mi. North of Interstate 495  
To: Seminary Road



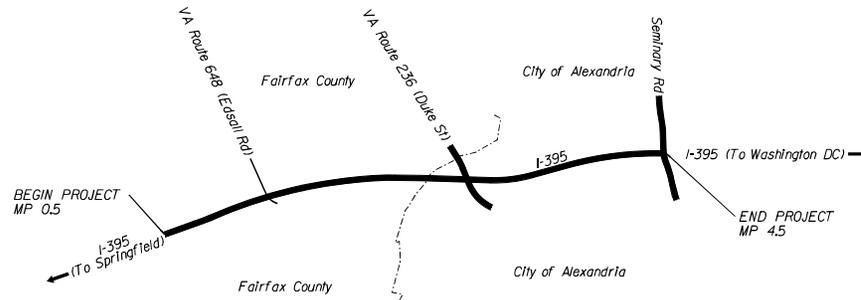
THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).  
GEOPAK Computer Identification No. \_\_\_\_\_

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL REV. 2 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CONSTRUCTION IS TO BE PERFORMED WITHIN EXISTING RIGHT OF WAY.

PROJECT MANAGER: Jordan Pitt, Transurban  
SURVEYED BY: DATE N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY: DATE N/A



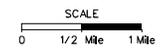
CONVENTIONAL SIGNS

STATE LINE	----
COUNTY LINE	-----
CITY, TOWN OR VILLAGE	-----
RIGHT OF WAY LINE	-----
FENCE LINE	-----
UNFENCED PROPERTY LINE	-----
FENCED PROPERTY LINE	-----
WATER LINE	-----
SANITARY SEWER LINE	-----
GAS LINE	-----
ELECTRIC UNDERGROUND CABLE	-----
TRAVELER WAY	-----
GUARD RAIL	-----
RETAINING WALL	-----
RAILROADS	-----
BASE OR SURVEY LINE	-----
LEVEE OR EMBANKMENT	
BRIDGES	-----
CULVERTS	-----
DROP INLET	-----
POWER POLES	-----
TELEPHONE OR TELEGRAPH POLES	-----
TELEPHONE OR TELEGRAPH LINES	-----
HEDGE	-----
TREES	-----
HEAVY WOODS	-----
GROUND ELEVATION	-----
GRADE ELEVATION	-----

Fairfax County Population 1,150,309 (2020 Census)  
City of Alexandria Population 159,467 (2020 Census)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PLAN NO.	TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES			
XXXX-XXX-XXX				XXXXXX	21,500	4.07	20,370	3.86			From: 0.3 Mi. North of Interstate 495 To: Seminary Road

Project Lengths are based on 395 Express Lanes Construction Baseline



Copyright 2020, Transurban Holdings Limited, LLC

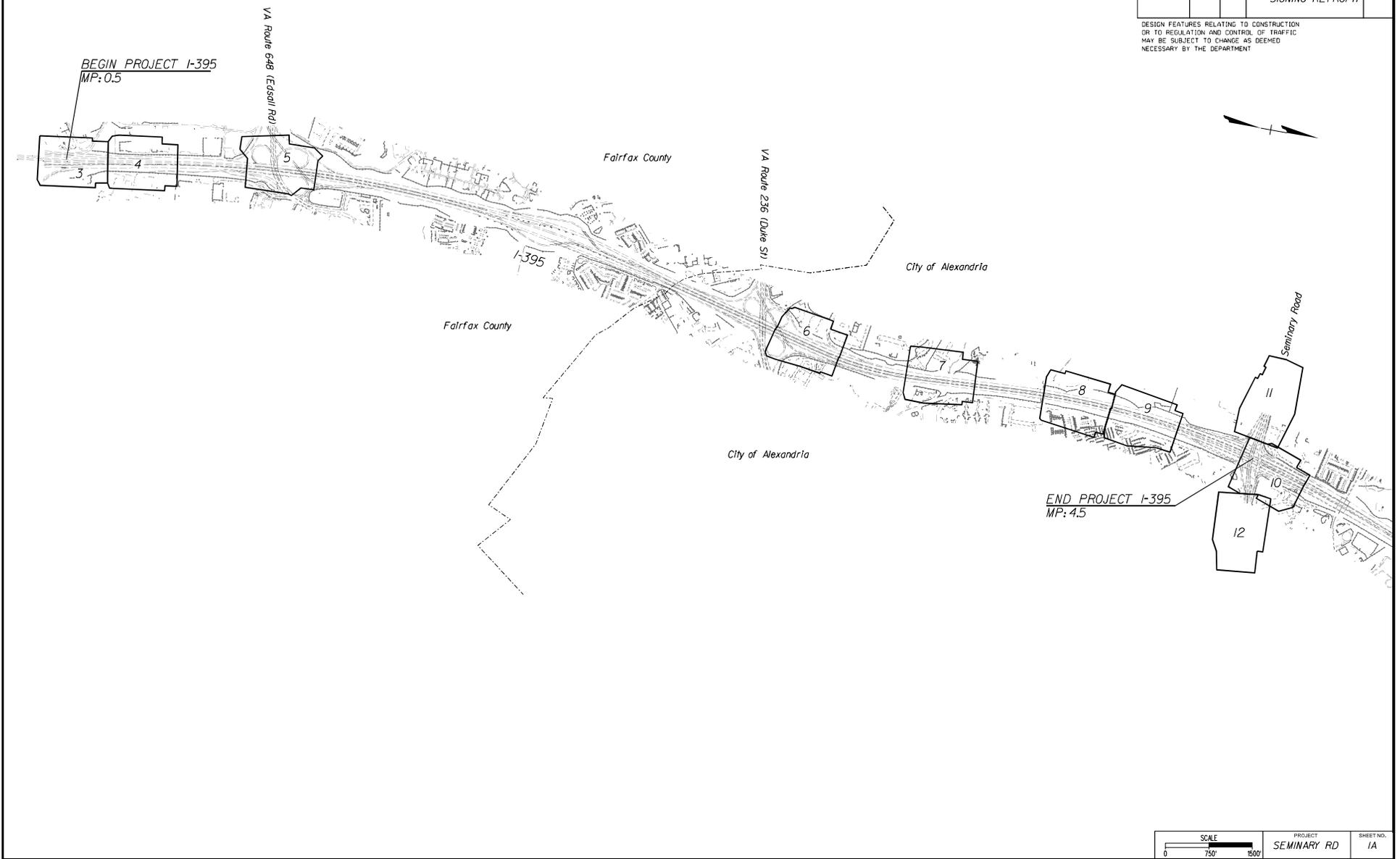
PROJECT	SHEET NO.
SEMINARY RD	1

PROJECT MANAGER: Jordan Pitt, TransUrban  
 SURVEYED BY, DATE: N/A  
 DESIGN BY: HDR Engineering, Inc.  
 SUBSURFACE UTILITY BY, DATE: N/A

# KEY MAP

REMSRD	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	1A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

REVISION	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2

# GENERAL NOTES AND LEGEND

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

## GENERAL NOTES - SIGNING

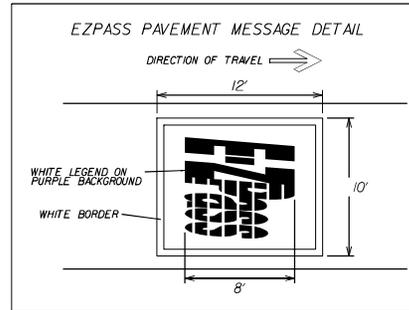
1. ALL SIGNING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS AND REVISIONS OF THE 2009 MUTCD, THE 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, AND VDOT SPECIFICATIONS AND STANDARDS.
2. THIS PROJECT IS TYPE A, CATEGORY M BASED UPON VDOT'S IIM-LD-2417.
3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2019 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 1.
4. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO THE INSTALLATION OF ANY CLOSURE MEASURES.
5. A 42' CLEAR ZONE SHALL BE MAINTAINED FREE OF PARKED EQUIPMENT AND STORED MATERIAL PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL.
6. TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS SHALL BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
7. UPON COMPLETION OF CONSTRUCTION, REMOVE TEMPORARY SIGNAGE.
8. SIGN SPACING DISTANCE SHOULD BE 1300-1500' ALONG LIMITED ACCESS HIGHWAYS AND RAMPS.
9. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL STAKE ALL PROPOSED SIGN LOCATIONS FOR REVIEW AND APPROVAL BY TRANSURBAN PRIOR TO ANY INSTALLATION OR RELOCATION.
10. REMOVAL OF EXISTING OVERHEAD SIGN LUMINAIRES SHALL BE PERFORMED PER SPECIAL PROVISION INCLUDED IN THE CONTRACT DOCUMENTS, AND SHALL BE CONSIDERED INCIDENTAL TO OVERHEAD SIGN PANEL REMOVAL. ELECTRICAL SERVICE FOR SIGN LIGHTING SHALL BE DISENGAGED AT NEAREST JUNCTION BOX AND ALL CONDUCTORS CAPPED AND SEALED IN PLACE. LOCATIONS OF SIGN LUMINAIRE REMOVAL ARE IDENTIFIED IN THE PLANS.

### TRANSPORTATION OPERATIONS PLAN:

1. THE COMMUNICATION SECTION AND TRANSPORTATION OPERATIONS CENTER SHALL BE NOTIFIED BY THE CONSTRUCTION PROJECT MANAGER OF ROAD CLOSURE AND DETOUR INFORMATION FOR DISTRIBUTION ON THE 511 SYSTEM AND VOIS. EMERGENCY RESPONSE PROFESSIONALS SHALL RESPOND TO TRAFFIC INCIDENTS IN THE WORK ZONE AS SOON AS POSSIBLE.
  2. THE FOLLOWING IS THE CONTACT LIST OF EMERGENCY RESPONSE AGENCIES IN CASE AN INCIDENT OCCURS IN THE WORK ZONE:  
POLICE / AMBULANCE / FIRE SAFETY / HAZMAT SPILLS - 911  
TRANSURBAN TRAFFIC CONTROL ROOM - (571) 419-6046
  3. FOLLOWING ANY TRAFFIC INCIDENTS, THE SITE SHALL BE CLEARED AND RESTORED FOR NORMAL TRAFFIC OPERATIONS AS SOON AS POSSIBLE.
  4. TRAFFIC INCIDENTS WILL BE INVESTIGATED AND MEASURES INTRODUCED TO REDUCE OCCURRENCES. IF NECESSARY THE MAINTENANCE OF TRAFFIC PLANS MAY BE REVISED IN CONSULTATION WITH THE ENGINEER.
- PUBLIC COMMUNICATIONS PLAN:**
1. THE PUBLIC SHALL BE NOTIFIED OF THE EXPECTED SCHEDULE ON VDOT'S WEB SITE FOR THIS PROJECT. INFORMATION OF THE POTENTIAL FOR BACKUPS DURING THE PEAK HOURS OF OPERATION SHALL BE PROVIDED TO THE COMMUNICATIONS SECTION AND TRANSPORTATION OPERATIONS CENTER BY THE CONSTRUCTION PROJECT MANAGER.

## PAVEMENT MARKING CALLOUT LEGEND

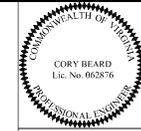
- (A) ERADICATION OF EXISTING PAVEMENT MARKING SYMBOL, "HOV" DIAMOND
- (B) TYPE B, CLASS VI, PAVEMENT MARKING SYMBOL, "E-Z PASS" LOGO



## SIGNING AND PAVEMENT MARKING LEGEND

EXISTING	PROPOSED	DESCRIPTION
<p>TO BE REMOVED</p>	<p>TO REMAIN</p>	SIGN PANEL
		SIGN PANEL
		SIGN PANEL OVERLAY
		OVERHEAD SPAN SIGN STRUCTURE
		OVERHEAD CANTILEVER SIGN STRUCTURE
		OVERHEAD BUTTERFLY SIGN STRUCTURE
		GROUND MOUNTED MULTI-POST STRUCTURE
		GROUND MOUNTED SINGLE POST STRUCTURE
		PAVEMENT MESSAGE (TYPICAL)

PROJECT MANAGER: Jordan Pitt, TransUrban  
 SURVEYED BY, DATE: N/A  
 DESIGN BY: HDR Engineering, Inc.  
 SUBSURFACE UTILITY BY, DATE: N/A



Cory Beard  
 2021-12-05  
 09:23:34-0500  
 HDR Engineering, Inc.  
 Vienna, Virginia  
 (TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

# SIGN DETAILS

**SIGN DETAIL**  
tab

TEXT NO. 1, 2, 3

Panel Style: tab1.bai  
M.U.T.C.D.: 2009 Edition

ITEM NUMBER	REV	TO DATE
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**SIGN DETAIL**  
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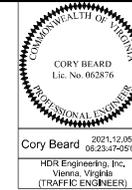
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M.U.T.C.D.: 2009 Edition

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**NOTES:**

- ALL SIGN PANELS SHALL BE FABRICATED USING ASTM D4956 TYPE XI REFLECTIVE SHEETING

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A



REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Cory Beard  
2021-12-05  
09:23:47-0550  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

# SIGN SCHEDULE

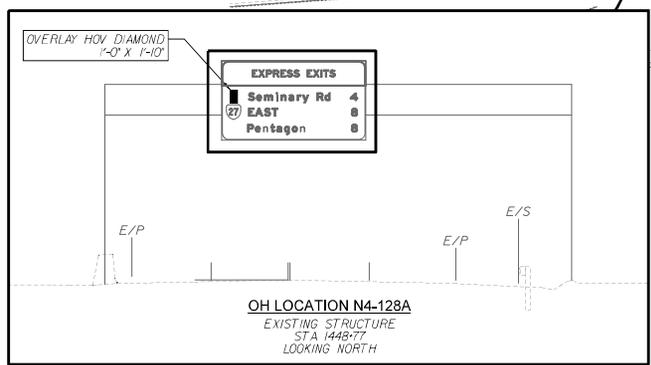
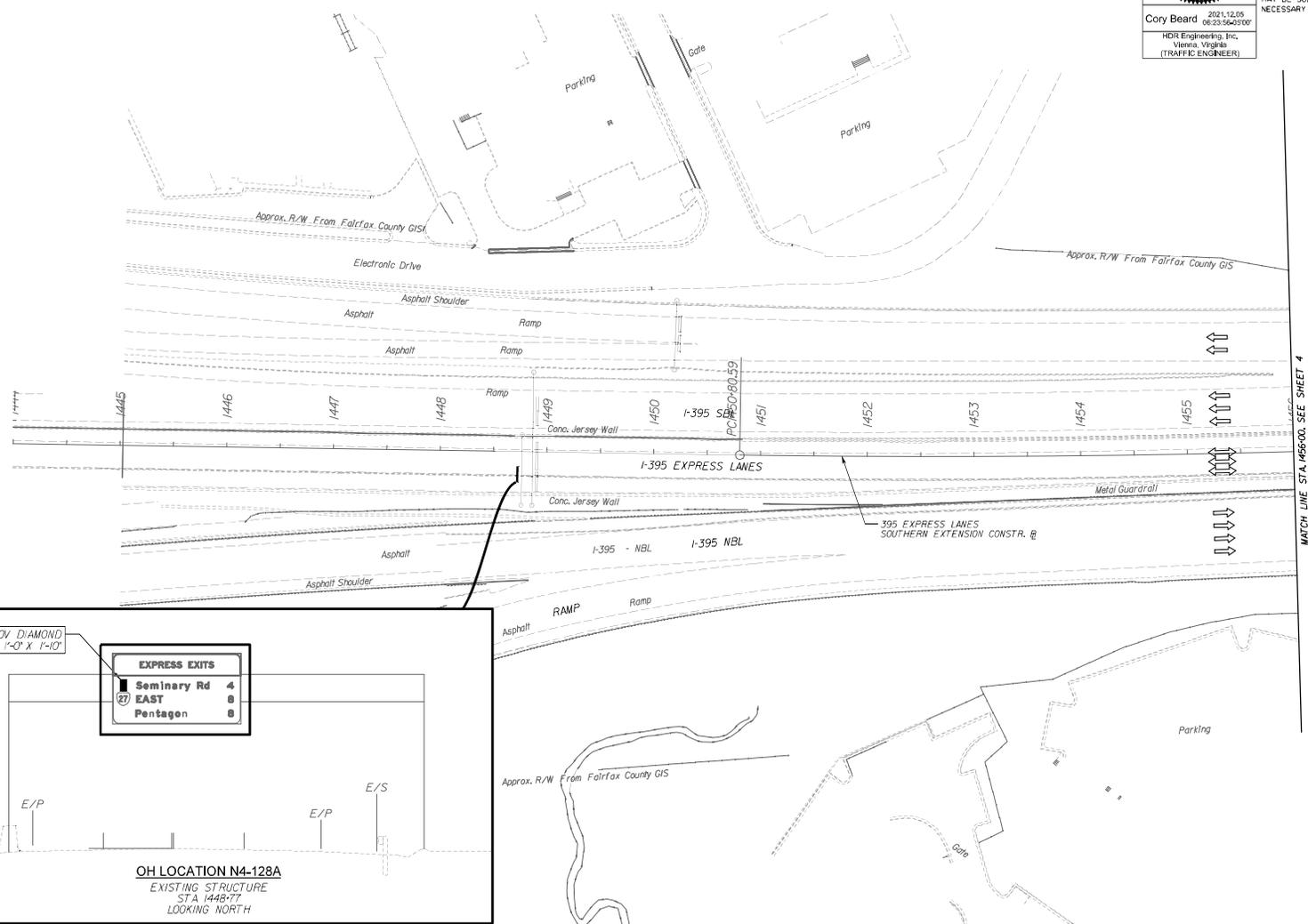
TEXT NO.	SIGN ASSEMBLY NO(S)	TEXT	MUTCD ST'D.	SIGN ASSEMBLY COMPONENTS		QTY.	SIGN PANEL AREA (sf.)		PROP. SIGN STRUCTURE ST'D.	REMARKS
				W	H		PER ASSEMBLY	ALL ASSEMBLIES		
1	601		SPECIAL	156'	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 029-1267	SEE DETAIL SHEET 2A
2	701		SPECIAL	156'	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 000-0233	SEE DETAIL SHEET 2A
3	801		SPECIAL	156'	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE	SEE DETAIL SHEET 2A
4	1001,1002		SPECIAL	156'	24"	2	26	52	EXIST. SIGNAL MAST ARMS NO. 02903593 & 02903594	SEE DETAIL SHEET 2A

PROJECT MANAGER: Jordan Pitt, TransUrban  
 SURVEYED BY, DATE: N/A  
 DESIGN BY: HDR Engineering, Inc.  
 SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
2021.12.05  
08:23:56-0500'  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



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6:20:15 AM

7043-4\_Signing & Sign Elevation Sheet.dgn

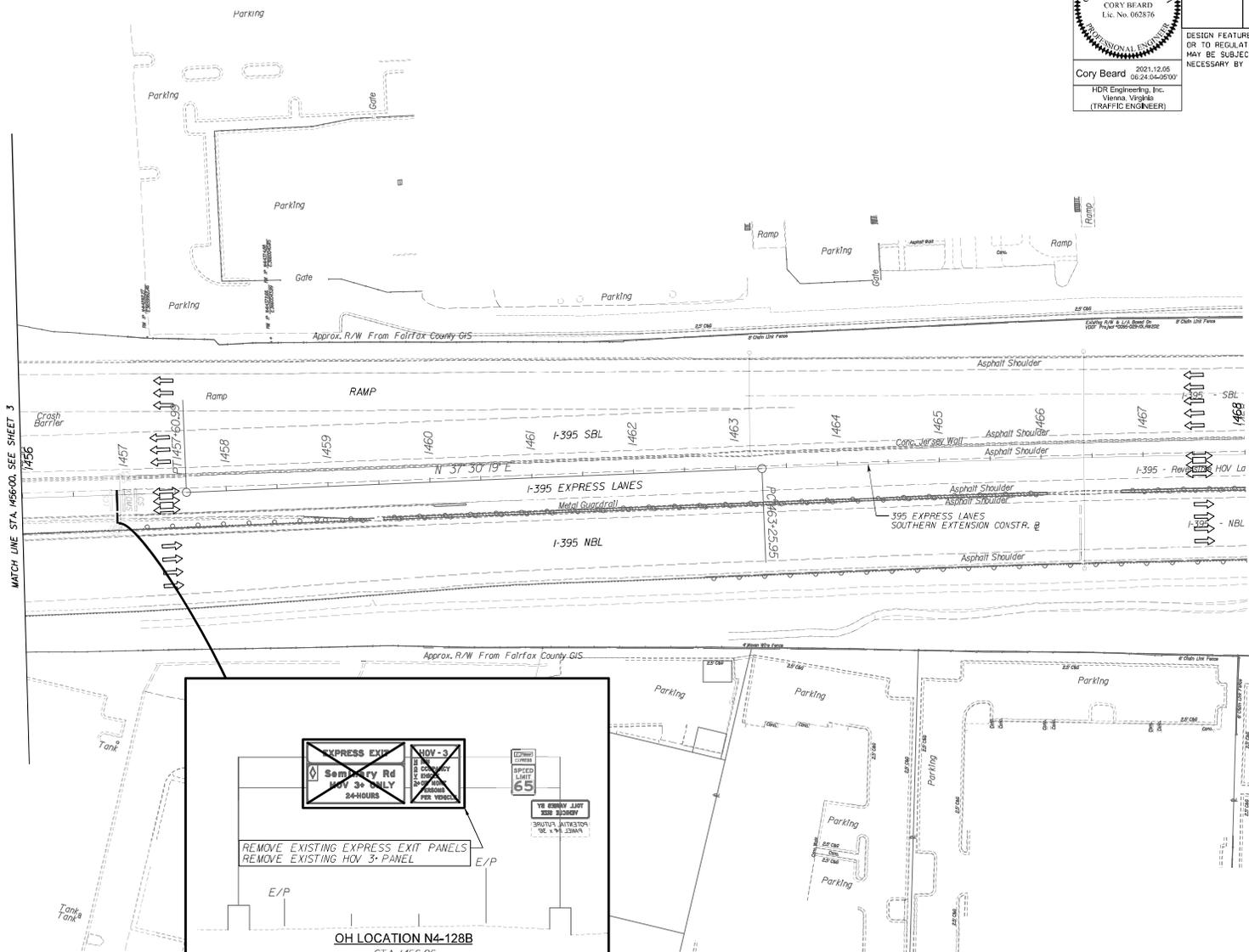
LIMITED ACCESS HIGHWAY  
 Planned By CBEARD  
 By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
 SURVEYED BY, DATE: N/A  
 DESIGN BY: HDR Engineering, Inc.  
 SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
 2021.12.05  
 09:24:04-202007  
 HDR Engineering, Inc.  
 Vienna, Virginia  
 (TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



**OH LOCATION N4-128B**  
 STA 1456+96  
 LOOKING SOUTH  
 EXISTING STRUCTURE

SCALE: 0 50' 100'

PROJECT: SEMINARY RD  
 SHEET NO.: 4



Sunday, December 05, 2021 06:20:22 AM  
6:20:22 AM

7043-6\_Signing & Sign Elevation Sheet.dgn

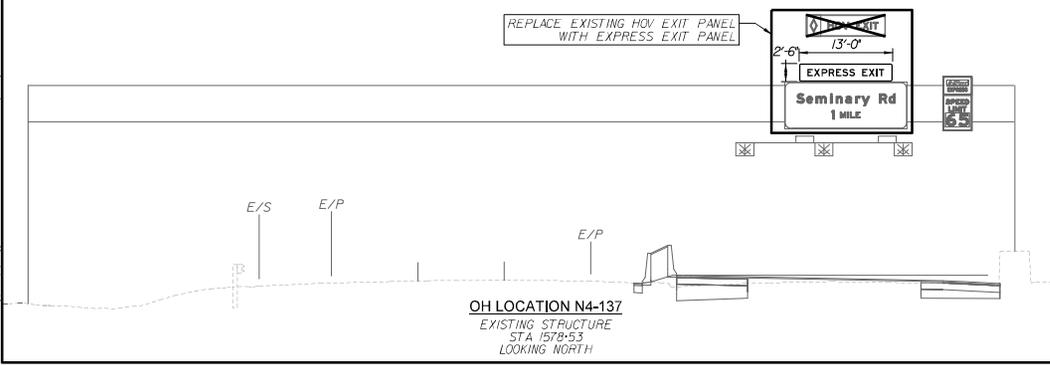
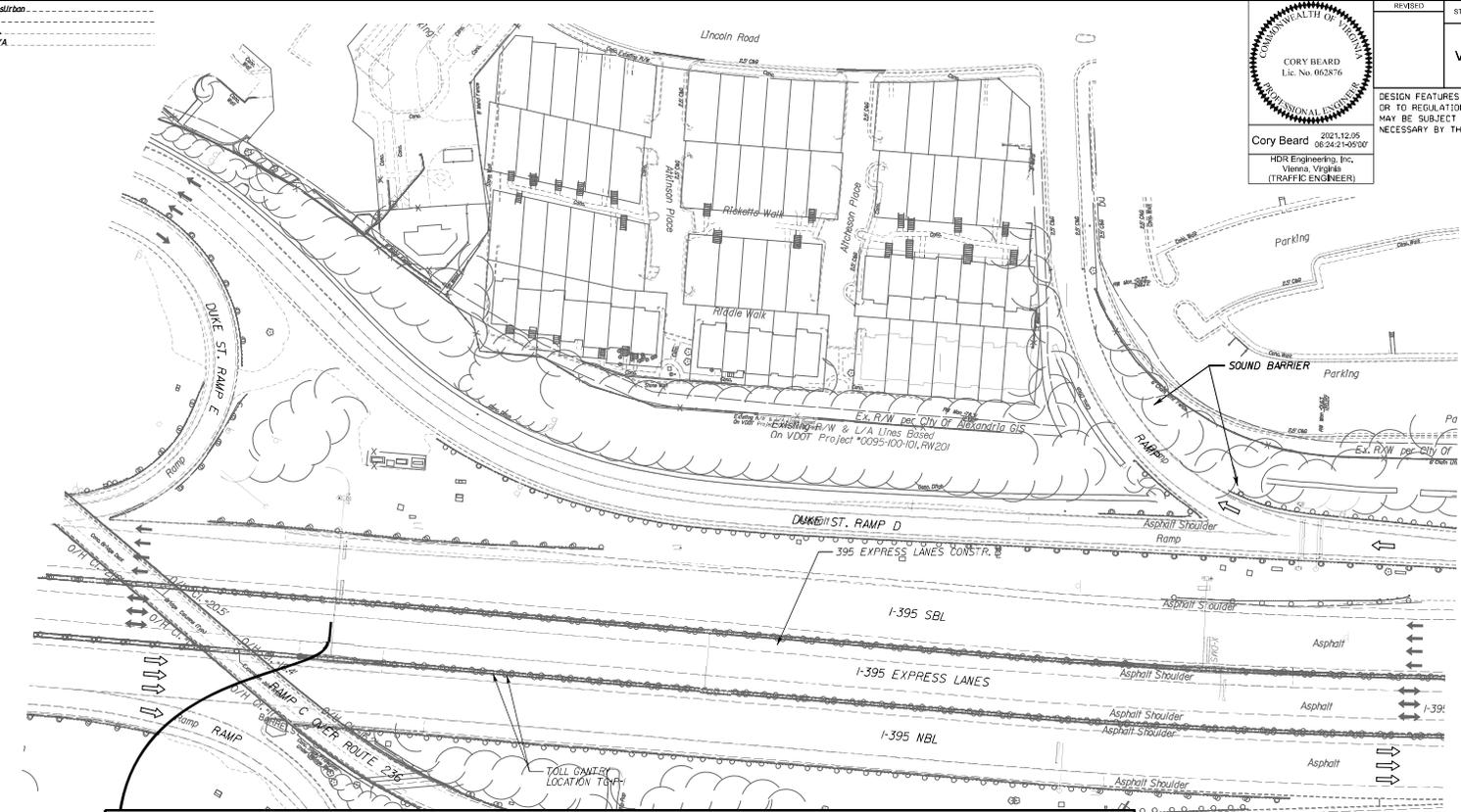
Plotted By: CBEARD  
LIMITED ACCESS HIGHWAY  
By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
2021.12.05  
08/24/21-09/30/21  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	6

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



SCALE 0 50 100'	PROJECT SEMINARY RD	SHEET NO. 6
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7043-7\_Signing & Sign Elevation Sheet.dgn

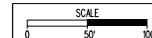
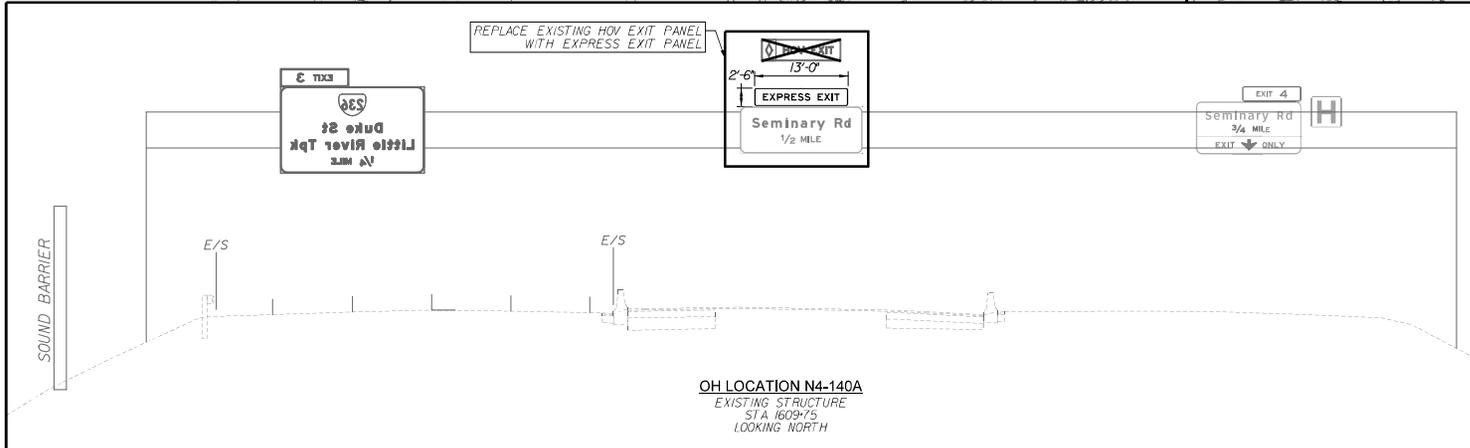
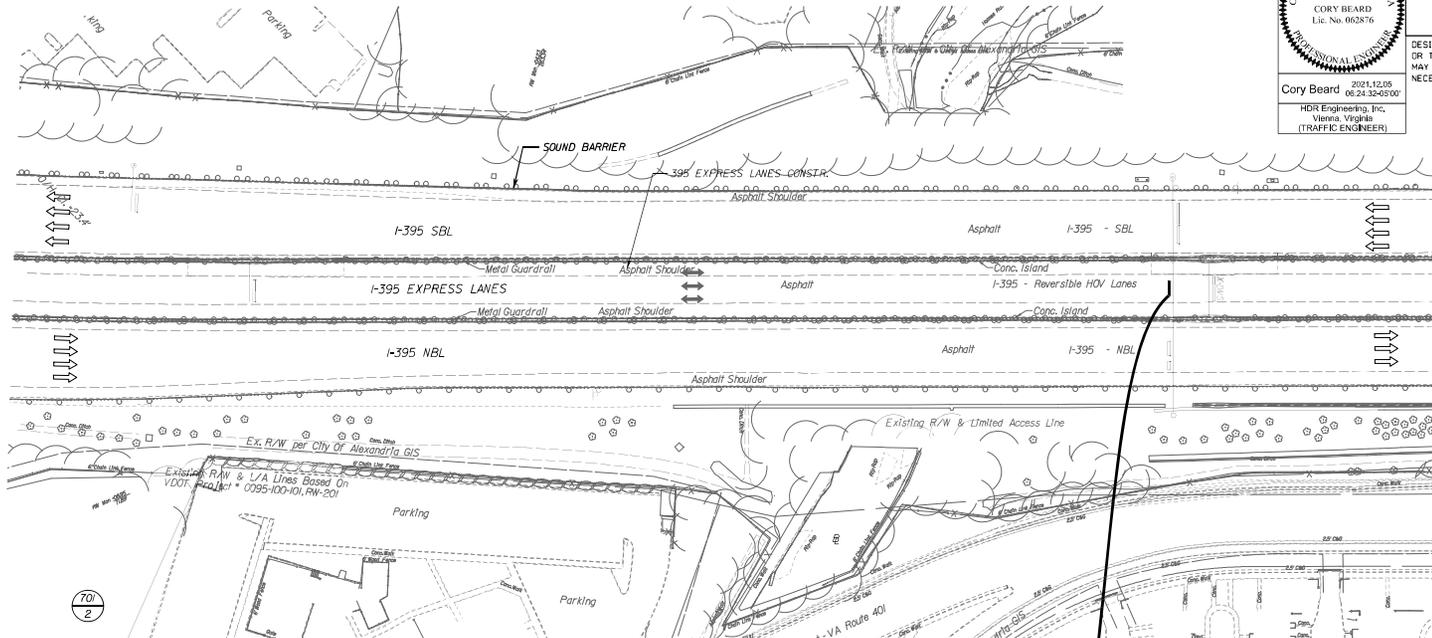
Plotted By: CBEARD  
LIMITED ACCESS HIGHWAY By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
2021.12.05  
06:21:33+0500  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	7

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



PROJECT: SEMINARY RD  
SHEET NO.: 7

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6/20/21 AM

7043-B Signing & Sign Elevation Sheet.dgn

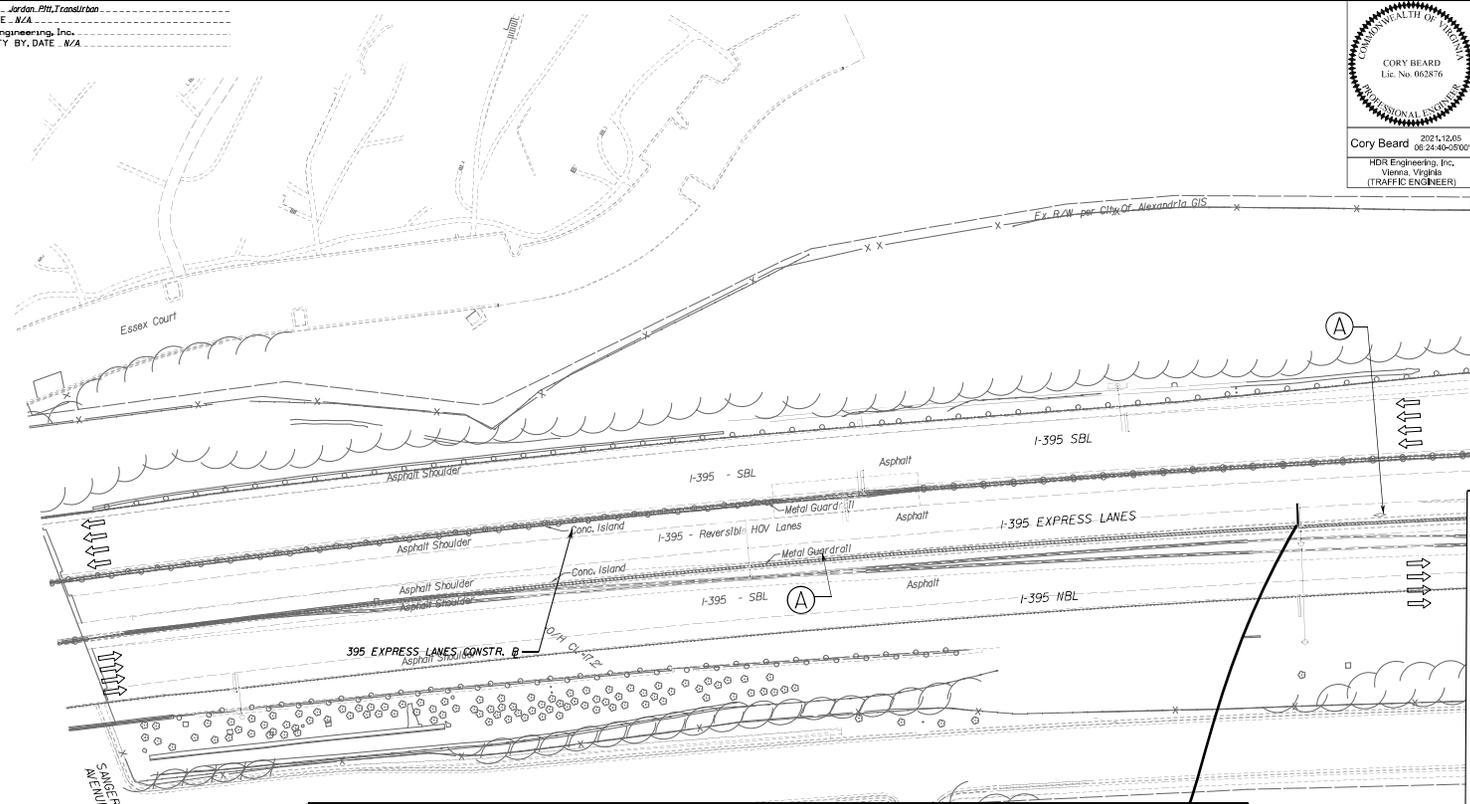
Plotted By: CBEARD  
LIMITED ACCESS HIGHWAY By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

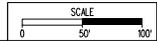
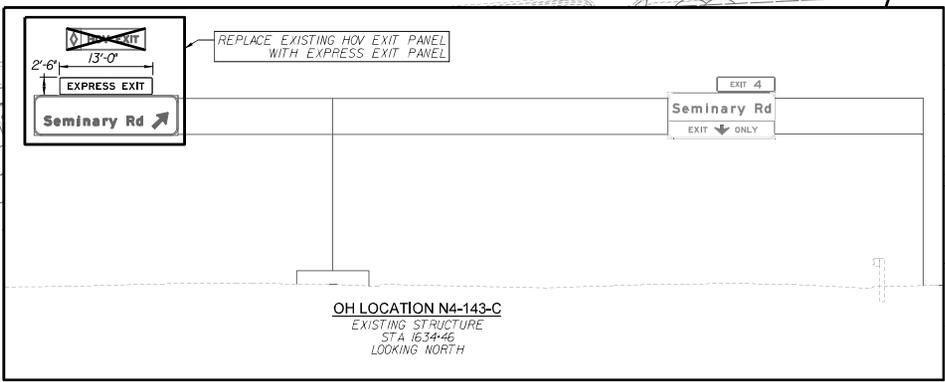
Cory Beard  
2021, 12, 05  
00:24:40:0500  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	8

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



MATCH LINE STA. 45+80.00 SEE SHEET 9



PROJECT: SEMINARY RD  
SHEET NO.: 8

Sunday, December 05, 2021 06:20:33 AM  
6:20:33 AM

7043-9\_Signing & Sign Elevation Sheet.dgn

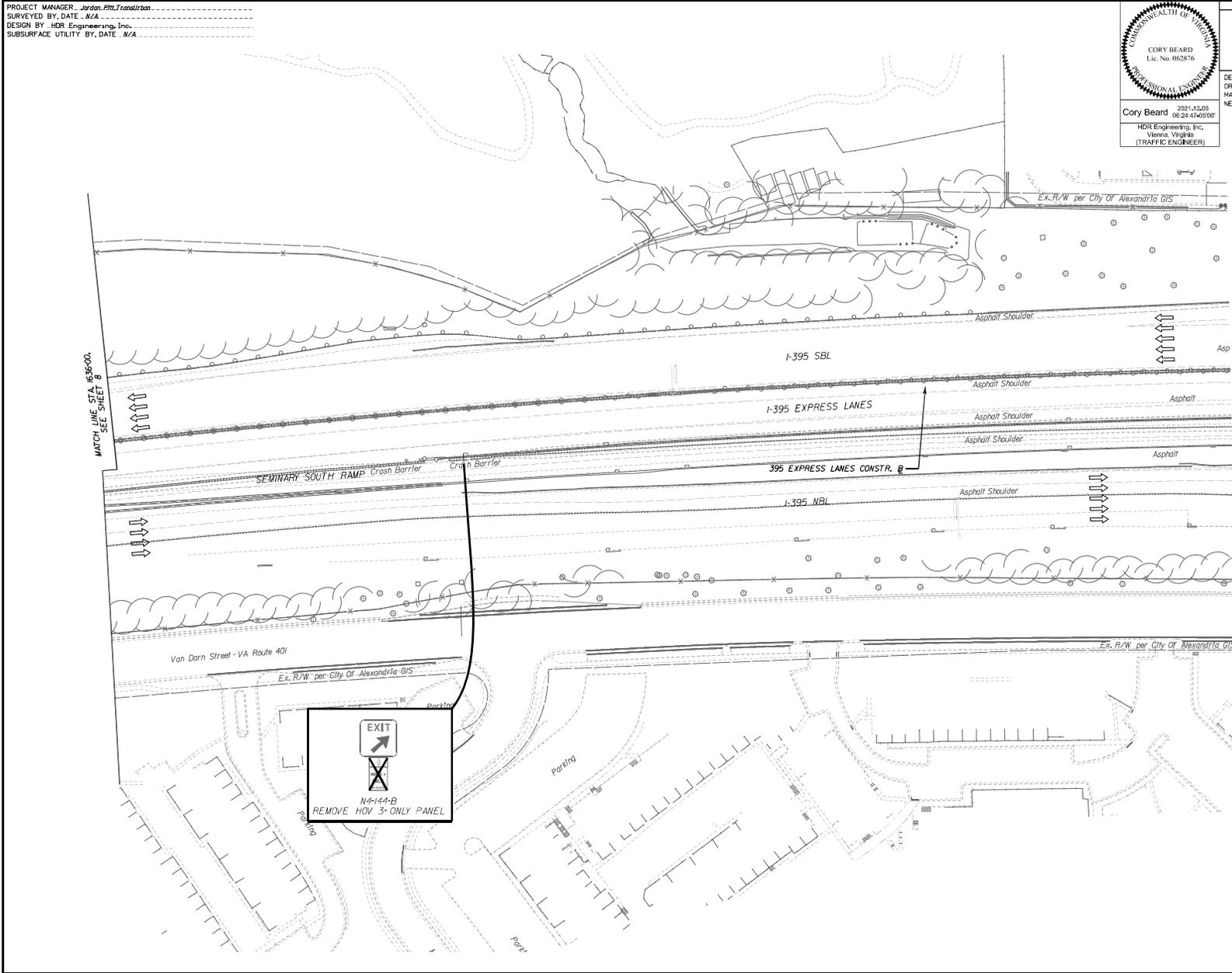
Plotted By: CBEARD  
LIMITED ACCESS HIGHWAY By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
2021-12-05  
06:20:43-0500  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	9

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



SCALE 0 50 100	PROJECT SEMINARY RD	SHEET NO. 9
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Sunday, December 05, 2021 06:20:41 AM  
6:20:41 AM

7043-II Signing & Sign Elevation Sheet.dgn

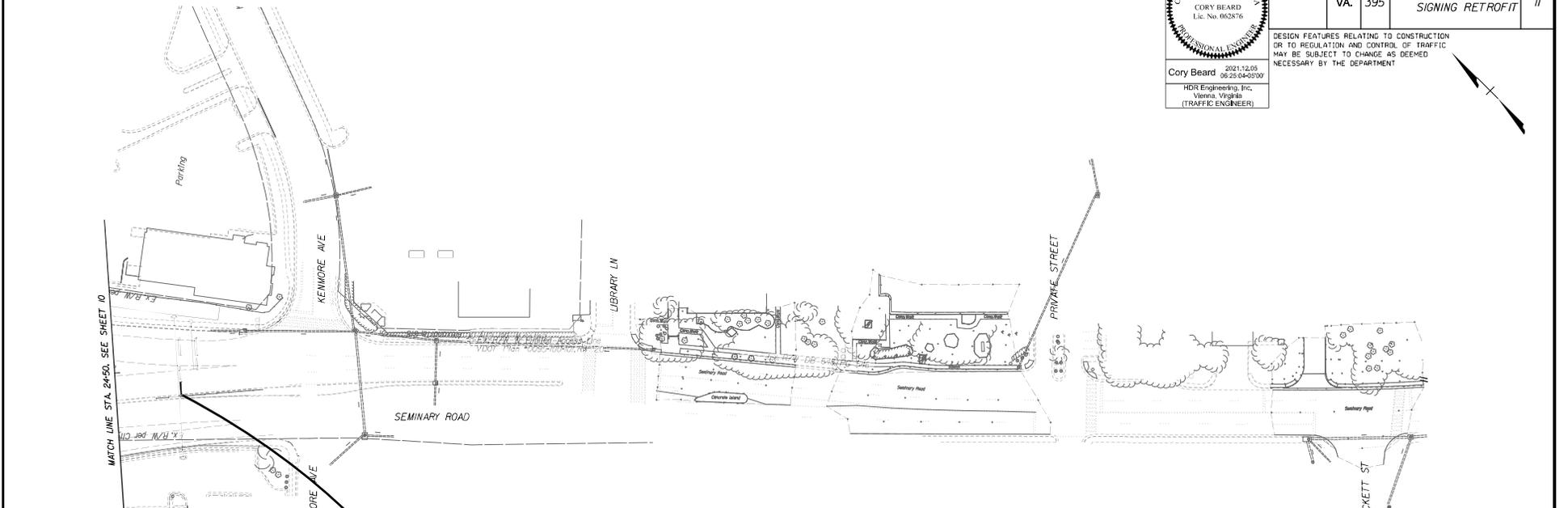
Plotted By: CBEARD  
LIMITED ACCESS HIGHWAY  
By Resolution of Commonwealth Transportation Board dated October 4, 1956

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

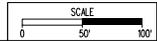
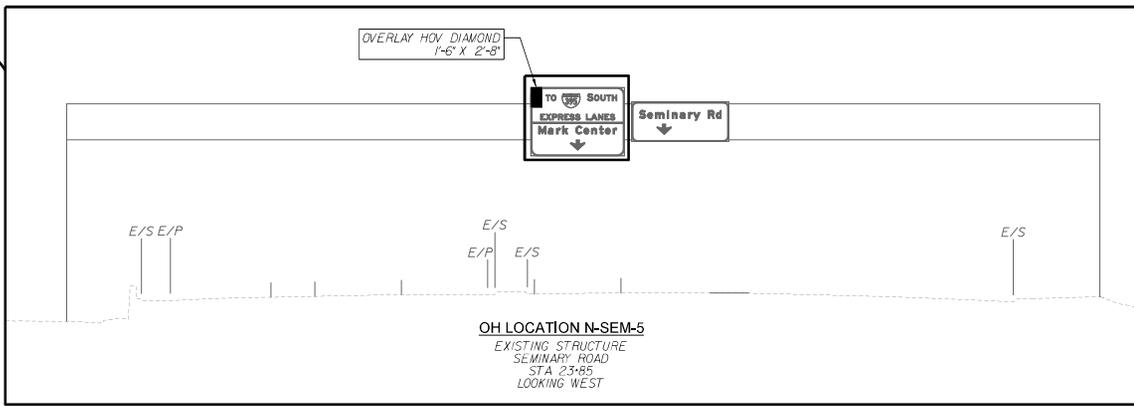
Cory Beard  
2021-12-05  
06-28-04-05500  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	11

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



MATCH LINE STA. 24+50. SEE SHEET 10



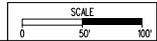
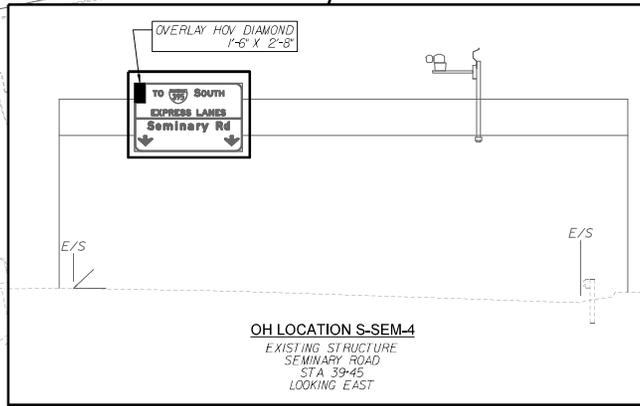
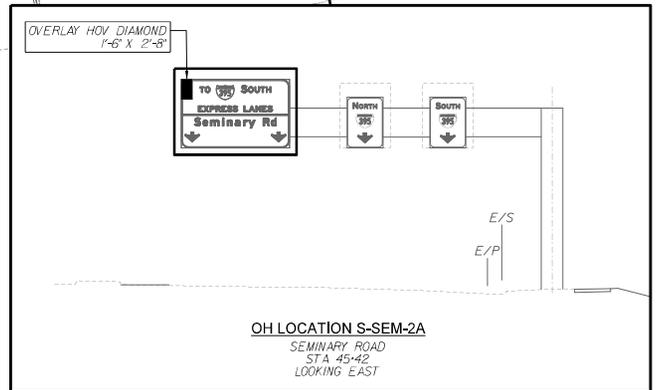
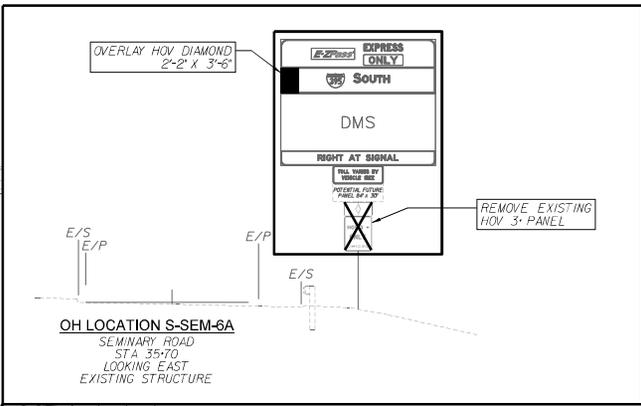
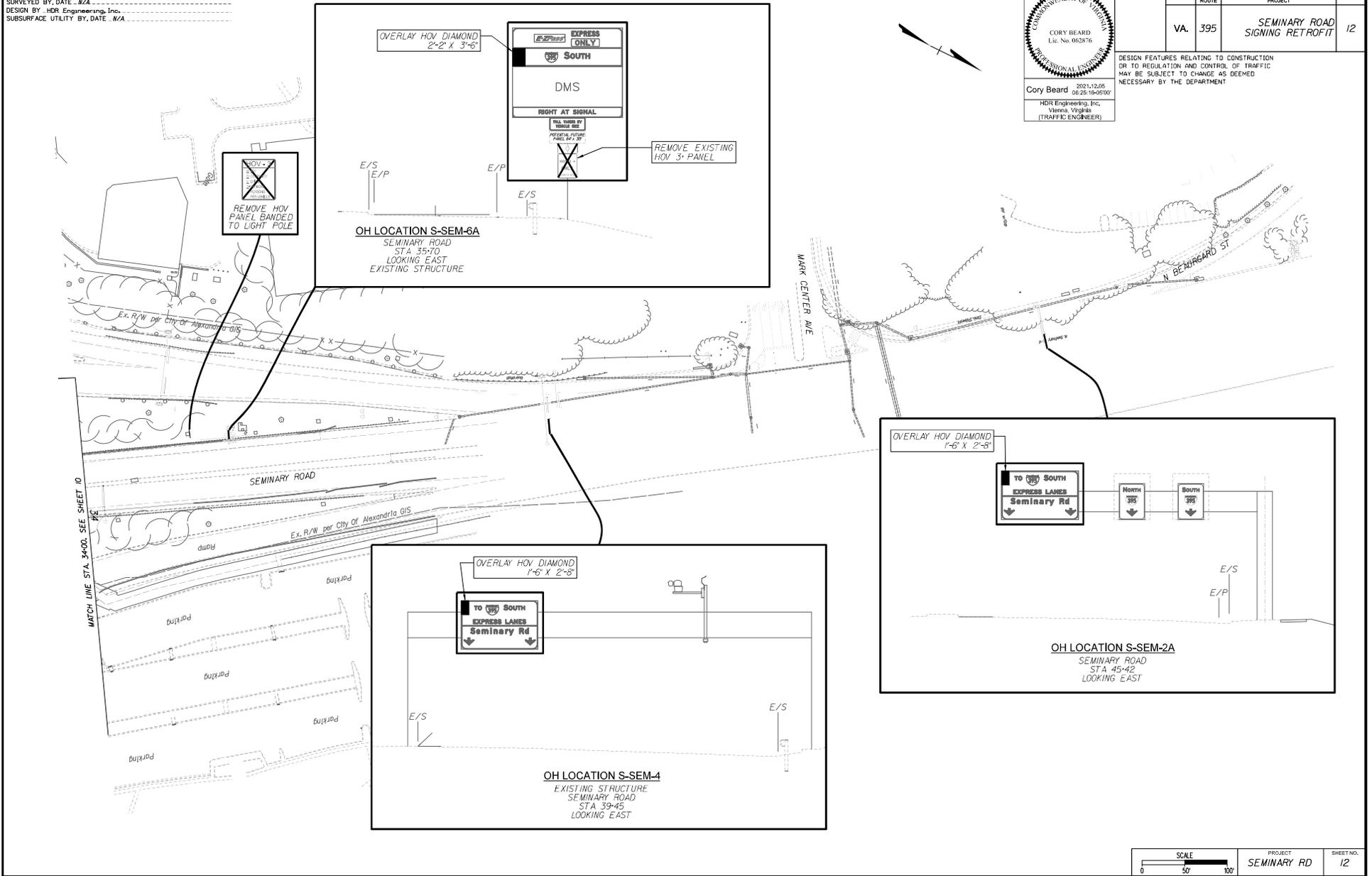
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SHEET NO.: 11

PROJECT MANAGER: Jordan Pitt, TransUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

Cory Beard  
2021-12-05  
09:25:19-0500  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISION	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	12

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



## **EXHIBIT C**

# **FEDERAL REQUIREMENTS AND CIVIL RIGHTS REQUIREMENTS**

### **Exhibit Description**

Exhibit C-1 – Federal Requirements

Exhibit C-2 – Civil Rights Requirements

**EXHIBIT C-1**  
**FEDERAL REQUIREMENTS**

<b><u>Exhibit Description</u></b>	<b><u>No. of Pages</u></b>
Attachment 1 – Federal Requirements for Federal-Aid Construction Projects	3
Attachment 2 – FHWA Form 1273 (July 2022)	13
Attachment 3 – Federal Prevailing Wage Rates	14
Attachment 4 – Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)	4
Attachment 5 – Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)	3
Attachment 6 – Certification Regarding Use of Contract Funds for Lobbying	1
Attachment 7 – Compliance with Buy America Requirements	2
Attachment 8 – Special Provision for Use of Domestic Metal	3
Attachment 9 – Certification of Non-Discrimination in Employment	1
Attachment 10 – Not Used	

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## ATTACHMENT 1

### FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS

GENERAL. — The Work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to the Work as a result of the Project being financed in whole or part with Federal funds will apply to such Work. The "Required Contract Provisions, Federal-Aid Construction Contracts, Form FHWA 1273," are included in this exhibit. Whenever in said required contract provisions references are made to:

- a. "contracting officer", or "authorized representative", such references shall be construed to mean the Department or its Authorized Representative;
- b. "contractor" or "Contractor", "prime contractor", "bidder", "Federal-aid construction contractor", "prospective first tier participant or First Tier Participant", such references shall be construed to mean the Concessionaire or its authorized representative and/or the Construction Contractor or its authorized representative, as may be appropriate under the circumstances;
- c. "contract" or "Contract" or "prime contract", "Federal-aid construction contract" or "construction contract", such references shall be construed to mean the Construction Contract;
- d. "subcontractor" or "Subcontractor", "supplier", "vendor", "prospective lower tier participant", lower tier prospective participant, "Lower Tier participant" or "lower tier subcontractor", such references shall be construed to mean, as appropriate, any Contractors other than the Construction Contractor; and
- e. "department", "agency" or "department or agency with which this transaction originated" or "contracting agency", such references shall be construed to mean the Department, except where a different department or agency or officer is specified.

PERFORMANCE OF PREVIOUS CONTRACT. — In addition to the provisions in Section II, "Nondiscrimination," and Section VI, "Subletting or Assigning the Contract," of the Form 1273 required contract provisions, the Concessionaire shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of Section VI of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

**NON-COLLUSION PROVISION.** — The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary Projects. Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28 U.S.C., Sec. 1746, is included in the Proposal.

**PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN SUBCONTRACTING.** — Part 26, Title 49, Code of Federal Regulations applies to the Project. Pertinent sections of said Code are incorporated within other sections of the Contract and the Department Disadvantaged Business Enterprise Program adopted pursuant to 49 CFR Part 26.

### **CONVICT PRODUCED MATERIALS**

- a. FHWA Federal-aid projects are subject to 23 CFR § 635.417, Convict produced materials.
- b. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal aid highway construction project if such materials have been: (i) produced by convicts who are on parole, supervised release, or probation from a prison, or (ii) produced in a prison project in which convicts, during the 12 month period ending July 1, 1987, produced materials for use in Federal aid highway construction projects, and the cumulative annual production amount of such materials for use in Federal aid highway construction does not exceed the amount of such materials produced in such project for use in Federal aid highway construction during the 12 month period ending July 1, 1987.

### **ACCESS TO RECORDS**

- a. As required by 49 CFR 18.36(i)(10), the Concessionaire and its Contractors shall allow FHWA and the Comptroller General of the United States, or their duly authorized representatives, access to all books, documents, papers, and records of the Concessionaire and Contractors or Subcontractors which are directly pertinent to any grantee or subgrantee contract, for the purpose of making audit, examination, excerpts, and transcriptions thereof. In addition, as required by 49 CFR 18.36(i)(11), the Concessionaire and its Contractors shall retain all such books, documents, papers, and records for three years after final payment is made pursuant to any such contract and all other pending matters are closed.
- b. The Concessionaire agrees to include this section in each Contract at each tier, without modification except as appropriate to identify the Contractor who will be subject to its provisions.

## **SUBCONTRACTING**

- a. Any distribution of work shall be evidenced by a written binding agreement on file at the project site. Where no field office exists, such agreement shall be readily available upon request to Department inspector(s) assigned to the project.
- b. The provisions contained in Form FHWA-1273 specifically, and other federal provisions included with the prime Contract are generally applicable to all Federal-aid construction projects and must be made a part of, and physically incorporated in all contracts as well as appropriate subcontracts for work so as to be binding in those agreements

## ATTACHMENT 2

FHWA-1273 -- Revised July 5, 2022

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

#### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

#### II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its 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, sexual orientation, gender identity, color, national origin, age or disability. 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, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### **6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding (29 CFR 5.5)**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics,

including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records (29 CFR 5.5)**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees (29 CFR 5.5)

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State

Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the

corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor

set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### **10. Certification of eligibility (29 CFR 5.5)**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1 of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 of this section. 29 CFR 5.5.

\* \$27 as of January 23, 2019 (See 84 FR 213-01, 218) as may be adjusted annually by the Department of Labor; pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990).

### **3. Withholding for unpaid wages and liquidated damages.**

The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section. 29 CFR 5.5.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

## **VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or

equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on longstanding interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance

with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

### **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.326.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders

or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.326.

### **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

#### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant

who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

## **3. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is

submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(b) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(c) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

\*\*\*\*\*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier

subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**ATTACHMENT 3**  
**FEDERAL PREVAILING WAGE RATES**

"General Decision Number: VA20220103 02/25/2022

Superseded General Decision Number: VA20210103

State: Virginia

Construction Type: Highway

Counties: Alexandria\* and Arlington Counties in Virginia.

\* including the independent city of Alexandria

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract.	
	. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.	
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract.	
	. The contractor must pay all covered workers at least \$11.25 per hour (or the	

	applicable wage rate listed
	on this wage determination,
	if it is higher) for all
	hours spent performing on
	that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	02/25/2022

ELEC0080-011 06/01/2019

	Rates	Fringes
ELECTRICIAN, Includes Traffic Signalization.....	\$ 28.35	15.95%+7.00

LABO0011-011 09/01/2021

	Rates	Fringes
LABORER: Common or General.....	\$ 20.90	7.90

PLAS0891-011 06/01/2020

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 20.70	8.03

\* SUVA2016-039 07/02/2018

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 20.97	0.00

FENCE ERECTOR.....	\$ 15.28	0.00
IRONWORKER, REINFORCING.....	\$ 34.18	0.00
IRONWORKER, STRUCTURAL.....	\$ 34.18	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 19.06	1.75
LABORER: Grade Checker.....	\$ 14.88 **	0.00
LABORER: Pipelayer.....	\$ 20.48	0.00
LABORER: Power Tool Operator....	\$ 15.69	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 23.93	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 19.00	3.49
OPERATOR: Broom/Sweeper.....	\$ 17.40	2.01
OPERATOR: Crane.....	\$ 29.46	0.00
OPERATOR: Drill.....	\$ 24.89	0.00
OPERATOR: Gradall.....	\$ 19.26	0.00
OPERATOR: Grader/Blade.....	\$ 23.21	0.00
OPERATOR: Hydroseeder.....	\$ 16.64	0.00
OPERATOR: Loader.....	\$ 18.92	0.00
OPERATOR: Mechanic.....	\$ 22.84	0.00
OPERATOR: Milling Machine.....	\$ 23.19	2.94
OPERATOR: PAVEMENT PLANER GROUNDSMEN.....	\$ 19.75	0.00
OPERATOR: PAVEMENT PLANER.....	\$ 21.14	0.00
OPERATOR: Paver (Asphalt,		

Aggregate, and Concrete).....	\$ 20.33	2.81
OPERATOR: Piledriver.....	\$ 21.83	4.08
OPERATOR: Roller (Finishing)....	\$ 18.73	3.23
OPERATOR: Roller.....	\$ 18.92	0.00
OPERATOR: Screed.....	\$ 22.13	4.89
OPERATOR: Asphalt Spreader and Distributor.....	\$ 20.58	2.31
OPERATOR: Bulldozer, Including Utility.....	\$ 20.64	0.00
PAVEMENT MARKING OPERATOR.....	\$ 22.15	0.00
PAVEMENT MARKING TRUCK DRIVER....	\$ 18.78	0.00
TRAFFIC CONTROL: Flagger.....	\$ 13.64 **	0.00
TRUCK DRIVER : HEAVY 7CY & UNDER.....	\$ 15.53	0.00
TRUCK DRIVER: 1/Single Axle Truck.....	\$ 19.35	0.00
TRUCK DRIVER: Fuel and Lubricant Service.....	\$ 18.25	0.00
TRUCK DRIVER: HEAVY OVER 7 CY.....	\$ 18.05	0.00
TRUCK DRIVER: MULTI AXLE.....	\$ 20.34	2.89

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number

where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.



30, 2022:	\$11.25 per hour (or the	
	applicable wage rate listed	
	on this wage determination,	
	if it is higher) for all	
	hours spent performing on	
	that contract in 2022.	

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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ELEC0080-011 06/01/2019

	Rates	Fringes
ELECTRICIAN, Includes Traffic Signalization.....	\$ 28.35	15.95%+7.00

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LABO0011-011 09/01/2021

	Rates	Fringes
LABORER: Common or General.....	\$ 20.90	7.90

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LABO0011-012 09/01/2020

	Rates	Fringes
LABORER		
Asphalt Raker.....	\$ 21.51	7.69
Asphalt Shoveler.....	\$ 20.59	7.69

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PLAS0891-011 06/01/2020

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 20.70	8.03

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\* SUVA2016-052 07/02/2018

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 20.97	0.00
FENCE ERECTOR.....	\$ 15.28	0.00
IRONWORKER, REINFORCING.....	\$ 34.18	0.00
IRONWORKER, STRUCTURAL.....	\$ 34.18	0.00
LABORER: Grade Checker.....	\$ 14.88 **	0.00
LABORER: Pipelayer.....	\$ 20.48	0.00
LABORER: Power Tool Operator....	\$ 15.69	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 23.93	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 19.00	3.49
OPERATOR: Broom/Sweeper.....	\$ 17.40	2.01
OPERATOR: Crane.....	\$ 29.46	0.00
OPERATOR: Drill.....	\$ 24.89	0.00
OPERATOR: Gradall.....	\$ 19.26	0.00
OPERATOR: Grader/Blade.....	\$ 23.21	0.00
OPERATOR: Hydroseeder.....	\$ 16.64	0.00
OPERATOR: Loader.....	\$ 18.92	0.00
OPERATOR: Mechanic.....	\$ 22.84	0.00
OPERATOR: Milling Machine.....	\$ 23.19	2.94
OPERATOR: PAVEMENT PLANER		

GROUNDSMEN.....	\$ 19.75	0.00
OPERATOR: PAVEMENT PLANER.....	\$ 21.14	0.00
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 21.39	2.98
OPERATOR: Piledriver.....	\$ 21.83	4.08
OPERATOR: Roller (Finishing)....	\$ 18.73	3.23
OPERATOR: Roller.....	\$ 18.92	0.00
OPERATOR: Screed.....	\$ 22.13	4.89
OPERATOR: Asphalt Spreader and Distributor.....	\$ 20.50	2.16
OPERATOR: Bulldozer, Including Utility.....	\$ 20.64	0.00
PAVEMENT MARKING OPERATOR.....	\$ 22.15	0.00
PAVEMENT MARKING TRUCK DRIVER....	\$ 18.78	0.00
TRAFFIC CONTROL: Flagger.....	\$ 13.64 **	0.00
TRUCK DRIVER : HEAVY 7CY & UNDER.....	\$ 15.53	0.00
TRUCK DRIVER: Fuel and Lubricant Service.....	\$ 18.25	0.00
TRUCK DRIVER: HEAVY OVER 7 CY.....	\$ 18.05	0.00
TRUCK DRIVER: Single & Multi Axle.....	\$ 18.94	3.02

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====  
\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658

(\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of

the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

## ATTACHMENT 4

### STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As, used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;
  - d. "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (ii) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors and Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction Contractors performing contracts in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the contract is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or any

Federal procurement contracting officer. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
  - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report. etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc. prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.
  - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
  - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.
  - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of Contractor's workforce.
  - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
  - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training. etc. such opportunities.
  - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
  - n. Ensure that all facilities and company activities are non-segregated, except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a

group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. Nondiscrimination programs require that Federal-aid recipients, subrecipients, and contractors prevent discrimination and ensure nondiscrimination in all of their programs and activities, whether those programs and activities are federally funded or not. The factors prohibited from serving as a basis for action or inaction which discriminates include race, color, national origin, sex, age, and handicap/disability. The efforts to prevent discrimination must address, but not be limited to a program's impacts, access, benefits, participation, treatment, services, contracting opportunities, training opportunities, investigations of complaints, allocations of funds, prioritization of projects, and the functions of right-of-way, research, planning, and design.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity, to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractor shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
16. In addition to the reporting requirements set forth elsewhere in this contract, the contractor and the subcontractors holding subcontracts, not including material suppliers, of \$10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form PR 1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.

**ATTACHMENT 5**  
**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE**  
**EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. **General.** In addition to the affirmative action requirements of Attachment 4 titled "Standard Federal Equal Employment Opportunity Construction Contract Specifications" as set forth elsewhere in this Contract, the Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" set forth herein.
  
2. **Goals.**
  - a. The goals for female and minority participation, expressed in percentage terms of the Contractor's aggregate work force in each trade on all construction works in the covered area, are as follows:

Females - 6.9%  
Minorities - See Attachment "A"
  
  - b. The goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area, whether or not it is Federal or federally assisted. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.
  
  - c. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Standard Federal Equal Employment Opportunity Construction Contract Specifications and its efforts to meet the goals. Equal Opportunity Clause, The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.
  
3. **Subcontracting.** The Contractor shall provide written notification to the Department within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction works under this contract. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the contract is to be performed.
  
4. **Reports.** The Contractor is hereby notified that he may be subject to the Office of Federal Contract Compliance Programs (OFCCP) reporting and record keeping requirements as provided for under Executive Order 11246 as amended. OFCCP will provide direct notice to the contractor as to the specific reporting requirements that he will be expected to fulfill.

**ATTACHMENT A**

**Economic Area** **Goal (Percent)**

Virginia:

021 Roanoke-Lynchburg, VA  
 SMSA Counties:  
     4640 Lynchburg, VA ..... 19.3  
         VA Amherst; VA Appomattox; VA Campbell; VA Lynchburg.  
     6800 Roanoke, VA..... 10.2  
         VA Botetourt; VA Craig; VA Roanoke; VA Roanoke City; VA Salem  
 Non-SMSA Counties ..... 12.0  
     VA Alleghany; VA Augusta; VA Bath; VA Bedford; VA Bland; VA Carroll;  
     VA Floyd; VA Franklin; VA Giles; VA Grayson; VA Henry; VA Highland;  
     VA Montgomery; VA Nelson; VA Patrick; VA Pittsylvania; VA Pulaski;  
     VA Rockbridge; VA Rockingham; VA Wythe; VA Bedford City; VA Buena Vista; VA Clifton  
     Forge; VA Covington; VA Danville; VA Galax; VA Harrisonburg;  
     VA Lexington; VA Martinsville; VA Radford; VA Staunton; VA Waynesboro; WV Pendleton.

022 Richmond, VA:  
 SMSA Counties:  
     6140 Petersburg - Colonial Heights - Hopewell, VA ..... 30.6  
         VA Dinwiddie; VA Prince George; VA Colonial Heights; VA Hopewell;  
         VA Petersburg.  
     6760 Richmond, ..... 24.9  
         VA Charles City; VA Chesterfield; VA Goochland, VA Hanover; VA Henrico; VA New Kent;  
         VA Powhatan; VA Richmond.  
 Non-SMSA Counties ..... 27.9  
     VA Albermarle; VA Amelia; VA Brunswick; VA Buckingham, VA Caroline;  
     VA Charlotte; VA Cumberland; VA Essex; VA Fluvanna; VA Greene;  
     VA Greensville; VA Halifax; VA King and Queen; VA King William;  
     VA Lancaster; VA Louisa; VA Lunenburg; VA Madison; VA .Mecklenburg;  
     VA Northumberland; VA Nottoway; VA Orange; VA Prince Edward;  
     VA Richmond; VA Sussex; VA Charlottesville; VA Emporia; VA South Boston

023 Norfolk - Virginia Beach - Newport News VA:  
 SMSA Counties:  
     5680 Newport News- Hampton, VA..... 27.1  
         VA Gloucester; VA James City; VA York; VA Hampton; VA Newport News;  
         VA Williamsburg.  
     5720 Norfolk - Virginia Beach - Portsmouth, VA - NC ..... 26.6  
         NC Currituck; VA Chesapeake; VA Norfolk; VA Portsmouth; VA Suffolk;  
         VA Virginia Beach.  
 Non-SMSA Counties.....29.7  
     NC Bertie; NC Camden; NC Chowan; NC Gates; NC Hertford;  
     NC Pasquotank; NC Perquimans; VA Isle of Wight; VA Matthews;  
     VA Middlesex; VA Southampton; VA Surry; VA Franklin.

Washington, DC:

020 Washington, DC.  
 SMSA Counties:  
     8840 Washington, DC - MD – VA ..... 28.0  
         DC District of Columbia; MD Charles; MD Montgomery MD Prince Georges;  
         VA Arlington; VA Fairfax; VA Loudoun; VA Prince William  
         VA Alexandria; VA Fairfax City; VA Falls Church.  
 Non- SMSA Counties ..... 25.2  
     MD Calvert; MD Frederick; MD St. Marys; MD Washington; VA Clarke;

VA Culpeper; VA Fauquier; VA Frederick; VA King George; VA Page;  
VA Rappahannock; VA Shenandoah; VA Spotsylvania; VA Stafford;  
VA Warren; VA Westmoreland; VA Fredericksburg; VA Winchester WV Berkeley;  
WV Grant; WV Hampshire; WV Hardy; WV Jefferson; WV Morgan.

Tennessee:

052 Johnson City - Kingsport - Bristol, TN – VA

SMSA Counties:

3630 Johnson City - Kingsport -Bristol, TN-VA.....2.6

TN Carter; TN Hawkins; TN Sullivan; TN Washington; VA Scott;

VA Washington; VA Bristol.

Non-SMSA Counties .....3.2

TN Greene; TN Johnson; VA Buchanan; VA Dickenson; VA Lee;

VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell;

WV Mercer.

## **ATTACHMENT 6**

### **CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

By signing and submitting its proposal or bid, and by executing the Contract or Subcontract, the prospective Contractor and Subcontractors (at all tiers) shall be deemed to have signed and delivered the following:

1. The prospective Contractor and Subcontractor(s) certifies, to the best of its knowledge and belief, that:
  - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Contract or Subcontract.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The Contractor and Subcontractor(s) shall require that the language of this certification be included in all lower tier Subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

## **ATTACHMENT 7**

### **COMPLIANCE WITH BUY AMERICA REQUIREMENTS**

The Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 CFR 635.410, which permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the contract price under the Contract.

Concurrently with execution of the Contract, the Contractor has completed and submitted, or shall complete and submit, to the Department a Buy America Certificate, in format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. 1001. Should this Contract be investigated, the Contractor has the burden of proof to establish that it is in compliance.

At the Contractor's request, the Department may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist. However, the Contractor certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Department. A request for a waiver shall be treated as a Concessionaire request for a Deviation under the Agreement.

## **BUY AMERICA CERTIFICATE**

The undersigned certifies on behalf of itself and all proposed subcontractors (at all tiers) that only domestic steel and iron will be used in the Project.

A. The Contractor shall comply with the Federal Highway Administration (“FHWA”) Buy America Requirements of 23 CFR 635.410, which permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States, and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the Contract Price.

B. A false certification is a criminal act in violation of 18 U.S.C. 1001. Should this Contract be investigated, the Concessionaire has the burden of proof to establish that it is in compliance.

C. At the Contractor’s request, the Department may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist. However, the Contractor certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Department.

<b>CONTRACTOR</b>	
<b>SIGNATURE</b>	
<b>NAME (Printed or Typed)</b>	
<b>TITLE</b>	
<b>DATE</b>	

## ATTACHMENT 8

[SP102-000510-02](#)

### VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR USE OF DOMESTIC MATERIAL

December 19, 2018

**SECTION 102.05 PREPARATION OF BID** of the Specifications is amended to include the following:

In accordance with the provisions of Section 635.410(b) of Title 23 CFR, hereinafter referred to as “Buy America”, except as otherwise specified, all iron and steel (including miscellaneous items such as fasteners, nuts, bolts and washers) to be permanently incorporated for use on federal aid projects shall be produced in the United States of America. This applies to any iron or steel item brought onto the project, regardless of the percentage of iron or steel that exists in the pay item or in the final form they take; however, electrical components (i.e., combination products such as signal controllers and similar products which are only sold as a unit) are not subject to Buy America provisions if the product as purchased by the Contractor is less than 50% steel and iron. "Produced in the United States of America" means all manufacturing processes occur in one of the 50 United States, the District of Columbia, Puerto Rico or in the territories and possessions of the United States. “Manufacturing processes” are defined as any process which alters or modifies the chemical content, physical size or shape, or final finish of iron or steel material (such as rolling, extruding, bending, machining, fabrication, grinding, drilling, finishing, or coating). For the purposes of satisfying this requirement “coating” is defined as the application of epoxy, galvanizing, painting or any other such process that protects or enhances the value of the material to which the coating is applied. Non-iron and non-steel materials used in the coating process do not need to be produced in the United States as long as the application of the coating occurred in the United States. The manufacturing process is considered complete when the resultant product is ready for use as an item in the project (e.g. fencing, posts, girders, pipe, manhole covers, etc.) or is incorporated as a component of a more complex product by means of further manufacturing. Final assembly of a product may occur outside of the United States of America provided no further manufacturing processes take place.

For the purposes of this provision, all steel or iron material meeting the criteria as produced in the United States of America will be considered as “Domestic Material.” All iron and steel items not meeting the criteria as produced in the United States of America will be considered “Non-Domestic Material.”

A minimal amount of “Non-Domestic” steel or iron material may be incorporated in the permanent work on a federal-aid contract provided that the cost of such materials or products does not exceed one-tenth of one percent of the Contract amount or \$2500, whichever is greater. The cost of the “Non-Domestic Material” is defined as its monetary value delivered to the job site and supported by invoices or bill of sale to the Contractor. This delivered-to-

site cost must include transportation, assembly, installation and testing.

Buy America provisions do not apply to iron or steel products used temporarily in the construction of a project such as temporary sheet piling, temporary bridges, steel scaffolding, falsework or such temporary material or product or material that remains in place for the Contractor's convenience.

Raw materials such as iron ore, pig iron, processed, pelletized and reduced iron ore, waste products (including scrap, that is, steel or iron no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, or the like and steel trimmings from mills or product manufacturing) and other raw materials used in the production of steel and/or iron products may, however, be imported. Extracting, handling, or crushing the raw materials which are inherent to the transporting the materials for later use in the manufacturing process are exempt from Buy America.

Any items containing foreign source steel or iron billet shall be considered "Non-Domestic Materials." Additionally, iron or steel ingots or billets produced in the United States, but shipped outside the United States of America for any manufacturing process and returned for permanent use in a project shall be considered "Non-Domestic Materials."

**Waivers:**

The process for receiving a waiver for Buy America provisions is identified in 23 CFR 635.410(c). The Contractor shall not anticipate that any Buy America provisions will be waived.

**Certification of Compliance:**

The Contractor is required to submit a Certificate of Compliance prior to incorporating any items containing iron or steel items into the project. This shall be accomplished by the Contractor submitting the Form C-76 Certificate of Compliance to the Department when the items are delivered to the project site. The Certification of Compliance will certify whether the items are considered "Domestic Material" or "Non-Domestic Material" as referenced in this Special Provision. The certificate must be signed and dated by the Prime Contractor's Superintendent and include a Buy America Submittal Number. The Buy America Submittal Number is simply the Contractor's project specific sequential numbering system that will allow the Contractor and Department to track the total number of certificates provided and the individual items containing iron or steel associated with each certificate.

**Supporting Documentation:**

Supporting documentation to demonstrate compliance with Buy America provisions (such as mill test reports manufacturer/supplier certifications, etc.) shall be organized by Buy America Submittal Number and maintained by the Contractor from the date of delivery until three years after project acceptance. The Contractor may maintain this documentation electronically or in paper format.

The Department or FHWA may review the Contractor's supporting documentation to verify compliance with the Buy America provisions at any time. Supporting documentation shall be provided within five business days of the request. The burden of proof to meet the Buy America provisions rests with the Contractor. If the supporting documentation does not undeniably demonstrate to FHWA or the Department that the "Domestic Materials" identified in the Certificates of Compliance were produced in the United States of America, then the Department may deduct payment from moneys due the Contractor for the value of the iron and steel that did not meet the Buy America provisions.

## **ATTACHMENT 9**

### **CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT**

By signing this Contract, the Contractor certifies that he has participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, or if he has not participated in a previous contract of this type, or if he has had previous contract or subcontracts and has not filed, he will file with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

## EXHIBIT C-2

### CIVIL RIGHTS REQUIREMENTS

#### **Modern Slavery Policy**

**Modern Slavery** means slavery, servitude, forced labor, trafficking in persons, forced marriage, child labor, debt bondage and any other slavery-like practices.

**“Guiding Principle on Business and Human Rights”** means the United Nations’ Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy Framework” (available at [https://www.ohchr.org/documents/publicatons/guidingprinciplesbusinessher\\_en.pdf](https://www.ohchr.org/documents/publicatons/guidingprinciplesbusinessher_en.pdf)).

Contractor represents and warrants, that at the time of entering into this Agreement and on an ongoing basis:

- (a) neither it, nor any of its officers, employees or agents, have been involved in any conduct constituting Modern Slavery;
- (b) neither it, nor any of its officers, employees or agents, have admitted to or been convicted of any offense relating to Modern Slavery;
- (c) neither it, nor any of its officers, employees or agents, have been, or are subject to or involved in, any past, current, pending or threatened investigation of any offense or allegation relating to Modern Slavery, including by any law enforcement, regulator or other governmental agency, or any customer or supplier;
- (d) neither it, nor any of its officers, employees or agents, are aware of any circumstances within its supply chain that is being investigated or could give rise to an investigation relating to Modern Slavery, including by any law enforcement, regulator or other governmental agency, or any customer or supplier;
- (e) it is not conducting, and has not conducted, any internal investigation in relation to allegations of Modern Slavery and no person has reported any instance or suspected instance of Modern Slavery;
- (f) it will use all reasonable endeavors to prevent and respond to Modern Slavery in its supply chain and activities, including performing appropriate due diligence for the identification of Modern Slavery in its supply chain and activities; and
- (g) it will not supply any goods or services that have their origin in, or are otherwise sourced, supplied, manufactured, assembled, developed, or otherwise provided or produced in any high risk jurisdiction. This includes, but is not limited to, the following countries and/or territories: Cambodia, Mauritania, the Democratic People’s Republic of Korea, the Democratic Republic of Congo, the Islamic

Republic of Pakistan, the Republic of Iraq, the Republic of Yemen, the Federal Republic of Somalia, Eritrea, the Republic of South Sudan, the Republic of Sudan, and the Syrian Arab Republic.

If at any time the Contractor becomes aware of any potential or actual incidence of Modern Slavery in the operations and supply chains utilised in its performance of the Contract, the Contractor must promptly:

- (a) notify the Concessionaire of the potential or actual incidence of Modern Slavery and provide any information reasonably requested by the Concessionaire in relation to such incidence;
- (b) take all reasonable action to address or remove such incidence of Modern Slavery, including where relevant by addressing any incidence identified in relation to other entities in its supply chains; and
- (c) take all reasonable steps to remediate any adverse impacts caused or contributed to by the Contractor from a potential or actual incidence of Modern Slavery in accordance with the Guiding Principles on Business and Human Rights.

### **Equal Employment Opportunity**

- (a) The Contractor shall comply with the applicable provisions of presidential executive orders and the rules, regulations, and orders of the President's Committee on Equal Employment Opportunity ("EEO"). The Contractor shall maintain the following records and reports as required by the EEO provisions:
  - record of all applicants for employment
  - new hires by race, work classification, hourly rate, and date employed
  - minority and non-minority employees employed in each work classification
  - changes in work classifications
  - employees enrolled in approved training programs and the status of each
  - minority subcontractor or subcontractors with meaningful minority group representation
  - copies of Form C-57 (Contractor's Monthly EEO Report) submitted by subcontractors

The Contractor shall cooperate with the Department in carrying out EEO obligations and in the Department's review of activities under the Agreement. The Contractor shall comply with the specific EEO requirements specified in this Exhibit 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 subcontractors.

- (b) EEO Policy: The Contractor 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, sexual orientation, gender identity, 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.

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

The Contractor shall furnish, erect, and maintain at least two bulletin boards having dimensions of at least 48 inches in width and 36 inches in height at locations readily accessible to all personnel concerned with the project. The boards shall be erected immediately upon initiation of the Agreement 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 shall protect posters from weather or damage. The Contractor shall promptly post official notices on the bulletin boards.

- b. The Contractor's EEO policy and the procedures to implement such policy shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

(e) Recruitment:

1. When advertising for employees, the Contractor 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 Contractor shall conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, state employment agencies, schools, colleges, and minority group organizations. The Contractor shall identify sources of potential minority group employees and shall establish procedures with such sources whereby minority group applicants may be referred to it for employment consideration.
3. The Contractor shall encourage its 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.

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

1. The Contractor shall conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of personnel.
2. The Contractor periodically shall evaluate the spread of wages paid within each classification to determine whether there is evidence of discriminatory wage practices.

3. The Contractor periodically shall review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor promptly shall take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, corrective action shall include all affected persons.
4. The Contractor shall investigate all complaints of alleged discrimination made to it in connection with obligations under the Agreement, attempt to resolve such complaints, and take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, corrective action shall include those persons. Upon completion of each investigation, the Contractor shall inform every complainant of all avenues of appeal.

(g) Training:

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

(h) Unions: If the Contractor relies in whole or in part on unions as a source of employees, best efforts shall be made to obtain the cooperation of such unions to increase opportunities for minority groups and women in the unions and to effect referrals by such unions of minority and women employees. Actions by the Contractor, either directly or through its agents or subcontractors, 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, sexual orientation, gender identity or national origin.

3. Information shall be obtained concerning referral practices and policies of the labor union except that to the extent the information is within the exclusive possession of the union. If the labor union refuses to furnish the information to the Contractor, the Contractor shall so certify to the Department and shall set forth what efforts he made to obtain the information.
  4. If a union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the union agreement, the Contractor shall, through its recruitment procedures, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity or national origin, making full efforts to obtain qualified or qualifiable minority group persons and women. If union referral practice prevents the Contractor from complying with the EEO requirements, the Contractor shall immediately notify the Department.
- (i) Subcontracting: The Contractor shall use best efforts to use minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. The Contractor shall use best efforts to ensure subcontractor compliance with its EEO obligations.
1. Records and Reports: The Contractor shall keep such records as are necessary to determine compliance with its EEO obligations. The records shall be designed to indicate the following:
    - i. the number of minority and nonminority group members and females employed in each work classification on the Project;
    - ii. 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;
    - iii. the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
    - iv. 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
  2. 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.
  3. Form C-57 shall be submitted each month for the first three months after each Contractor commences the Work pursuant to a Notice to Proceed issued by the Concessionaire and every month of July thereafter for the duration of the Project. Form C-57 shall be completed to indicate the number of minority, nonminority, and female employees currently engaged in each work classification shown on the form. The completed

Form C-57 shall be submitted within three weeks after the reporting period. Failure to do so may result in delay of approval of the Contractor's monthly Application for Payment.

### **Civil Rights Compliance**

- (a) DBE-SWaM Forms: The Contractor shall complete the following forms or equivalent forms as part of its compliance with the DBE-SWaM goals set forth in the Contract.

Form C-111 (Minimum DBE Requirements)

Form C-112 (Certification Of Binding Agreement)

Form C-48 (Subcontractor/Supplier Solicitation And Utilization Form)

Form C-49 (DBE Good Faith Efforts Documentation)

- (b) Payments made to DBE and SWaM consultants must be submitted on form C-63 (DBE Report) or an equivalent form on a quarterly basis. Form C-63 and submittal information for the form is set forth in the Department's Construction Directive Memorandum CD-2007-6.

- (c) Construction Requirements and Submittals:

1. EEO Contract Compliance:

- i. The following forms and associated submittal information are required from the Contractor and its subcontractors (including haulers and suppliers as applicable).

Form C-64 (Company Employment)

Letter Designating EEO Officer

Semi-annual Minutes of an EEO Meeting

Form C-57 (Contractor's Monthly EEO Report)

- ii. The Contractor and its subcontractors are subject to formal Department EEO Contractor Compliance Reviews at least annually.

2. Labor Compliance: The Contractor shall submit, or cause the submission, of the following. In addition, the Contractor's employees (and the employees of its subcontractors) may be subject to interviews by the Department.

- i. weekly payrolls from the Contractor and its subcontractors and haulers;

- ii. Form C-28 (Basic Hourly Rates paid by Contractor); and
  - iii. Form C-56 (Statement of Compliance).
3. DBE Compliance: The Contractor shall comply with all the requirements of “Virginia Department of Transportation Special Provision for Section 107.15 [Use of Disadvantaged Business Enterprises (DBEs)] For Design-Build Projects” dated January 4, 2017, attached hereto as Attachment 1. Use of the term “Design-Builder” or “Offeror” in Attachment 1 shall be read to mean “Contractor”.
- i. DBE subcontractors, suppliers, manufacturers and haulers must be listed and submitted on Form C-111 or an equivalent form, indicating the task(s) assigned and the approximate dollar value of the planned work pursuant to Attachment 1.
  - ii. Payments made to DBE firms must be submitted on form C-63 on a quarterly basis. Form C-63 and submittal information for the form is provided in the Department’s Construction Directive Memorandum CD-2007-6.
  - iii. All DBE firms are subject to formal DBE contract compliance reviews at least once during active participation on the project.
  - iv. Attachment 1 provides guidance on removal of a DBE firm from the contract or for substituting another firm for all or portions of items of work designated to be performed by a DBE firm. Advance approval must be obtained from the VDOT district Civil Rights Office.
4. SWaM Compliance: The Contractor shall comply with all the requirements of “Virginia Department of Transportation Special Provision for Section 107.15 Use of Small, Women-Owned and Minority-Owned-Businesses (SWaM) for Design-Build Projects” dated January 4, 2017, attached hereto as Attachment 2. Use of the term “Design-Builder” in Attachment 2 shall be read to mean “Contractor”.
- i. SWaM subcontractors, suppliers, manufacturers and haulers shall be listed and submitted on Form C-111 or an equivalent form, indicating the task(s) assigned and the approximate dollar value of the planned work pursuant to Attachment 2.
  - ii. Payments made to SWaM firms must be submitted on form C-63 on a quarterly basis in order to receive credit. See Construction Memorandum CD-2007-6.

## ATTACHMENT 1

### VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR SECTION 107.15 FOR DESIGN-BUILD PROJECTS

January 4, 2017

Section 107.15 of the Specifications is replaced by the following:

#### **Section 107.15—Use of Disadvantaged Business Enterprises (DBEs) for Design-Build Projects**

##### **A. Disadvantaged Business Enterprise (DBE) Program Requirements**

Any Design-Builder, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the United States Department of Transportation (USDOT) DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; and the Virginia Department of Transportation's (VDOT or the Department) Road and Bridge Specifications and DBE Program rules and regulations.

For the purposes of this provision, Offeror is defined as any individual, partnership, corporation, or Joint Venture that formally submits a Statement of Qualification or Proposal for the work contemplated there under; Design-Builder is defined as any individual, partnership, or Joint Venture that contracts with the Department to perform the Work; and subcontractor is defined as any supplier, manufacturer, or subcontractor performing work or furnishing material, supplies or services to the contract. The Design-Builder shall physically include this same contract provision in every supply or work/service subcontract that it makes or executes with a subcontractor having work for which it intends to claim credit.

In accordance with 49 CFR Part 26 and VDOT's DBE Program requirements, the Design-Builder, for itself and for its subcontractors and suppliers, whether certified DBE firms or not, shall commit to complying fully with the auditing, record keeping, confidentiality, cooperation, and anti-intimidation or retaliation provisions contained in those federal and State DBE Program legal requirements. By submitting a Proposal on this contract, and by accepting and executing this contract, the Design-Builder agrees to assume these contractual obligations and to bind the Design-Builder's subcontractors contractually to the same at the Design-Builder's expense.

The Design-Builder and each subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Design-Builder shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Design-Builder to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Design-Builder exercises the right of appeal within the required timeframe(s) specified herein.

Appeal requirements, processes, and procedures shall be in accordance with guidelines stated herein and current at the time of the proceedings. Where applicable, the Department will notify the Design-Builder of any changes to the appeal requirements, processes, and procedures after receiving notification of the Design-Builder's desire to appeal.

All time frames referenced in this provision are expressed in business days unless otherwise indicated. Should the expiration of any deadline fall on a weekend or holiday, such deadline will automatically be extended to the next normal business day.

**B. DBE Certification**

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified as Disadvantaged Business Enterprises by the Virginia Department of Small Business and Supplier Diversity (SBSD) or the Metropolitan Washington Airports Authority (MWAA) in accordance with federal and VDOT guidelines. DBE firms must be certified in the specific work listed for DBE contract goal credit. A directory listing of certified DBE firms can be obtained from the Virginia Department of Small Business and Supplier Diversity's website: <http://www.sbsd.virginia.gov>.

**C. DBE Program-Related Certifications Made by Offerors/Design-Builders**

By submitting a Proposal and by entering into any contract on the basis of that Proposal, the Offeror/Design-Builder certifies to each of the following DBE Program-related conditions and assurances:

1. That the Offeror/Design-Builder agrees to comply with the project construction and administration obligations of the USDOT DBE Program, 49 CFR Part 26 as amended, and the Standard Specifications setting forth the Department's DBE Program requirements.
2. Design-Builder shall comply fully with the DBE Program requirements in the execution and performance of the contract. Design-Builder acknowledges that failure to comply may result in enjoinder from participation in future Department or State procurements and/or other legal sanctions.
3. To ensure that DBE firms have been given full and fair opportunity to participate in the performance of the contract. The Design-Builder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had, and will have, an opportunity to compete for and perform work on the contract. The Design-Builder further certifies that the Design-Builder shall not discriminate on the basis of race, color, age, national origin, or sex in the performance of the contract or in the award of any subcontract. Any agreement between a Design-Builder and a DBE whereby the DBE promises not to provide quotations for performance of work to other Design-Builders are prohibited.
4. Design-Builder shall make good faith efforts to obtain DBE participation in the proposed contract at or above the goal. The Offeror shall submit a written statement as a part of its Statement of Qualifications and/or Proposal indicating the Offeror's commitment to achieve the minimum requirement related to DBE

goal indicated in Request for Qualification (RFQ) and/or Request for Proposal (RFP) for the entire value of the contract. The Offeror, by signing and submitting its Proposal, certifies the DBE participation information that will be submitted within the required time thereafter is true, correct, and complete, and that the information to be provided includes the names of all DBE firms that will participate in the contract, the specific item(s) that each listed DBE firm will perform, and the creditable dollar amounts of the participation of each listed DBE.

5. Offeror further certifies, by signing its Proposal, it has committed to meet the contract goal for DBE participation. Award of the contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents. By signing the Proposal, the Offeror certifies that good faith efforts will be made on work that it proposes to sublet; and that it will seek out and consider DBE firms as potential subcontractors and subconsultants. The Design-Builder shall, as a continuing obligation, contact DBE firms to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation to substantiate its good faith efforts.
6. Design-Builder shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Design-Builder's own forces or those of an affiliate of the Design-Builder without the prior written consent of Department as set out within the requirements of this Special Provision.
7. Design-Builder shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for DBE firms. The designation and identity of this officer needs to be submitted only once by the Design-Builder.
8. Design-Builder shall comply fully with all contractual requirements and Legal Requirements of the USDOT DBE Program, and shall cause each DBE firm participating in the contract to fully perform the designated work items with the DBE firm's own forces and equipment under the DBE firm's direct supervision, control, and management. Where a contract exists and where the Design-Builder, DBE firm, or any other firm retained by the Design-Builder has failed to comply with federal or Department DBE Program requirements, Department has the authority and discretion to determine the extent to which the DBE contract regulations have not been met, and will assess against the Design-Builder any remedies available at law or provided in the contract.
9. If a bond surety assumes the completion of work, if for any reason VDOT has terminated the Design-Builder, the surety shall be obligated to meet the same DBE contract terms and requirements as were required of the original Design-Builder in accordance with the requirements of this specification.

## D. DBE Program Compliance Procedures

The following procedures shall apply to the contract for DBE Program compliance purposes:

1. **Prequalification of Subcontractors:** All prospective DBE subcontractors shall prequalify with the Department in accordance with the *Rules Governing Prequalification*.
2. **DBE Goal, Good Faith Efforts Specified:** Design-Builder shall evidence attainment of the DBE commitment equal to or greater than the required DBE Goal through submission, to Department, of completed Form C-111, Minimum DBE Requirements; Form C-112, Certification of Binding Agreement; and Form C-48, Subcontractor/Supplier Solicitation and Utilization, as a part of the good faith efforts documentation set forth below:

**Design Phase:** Thirty (30) days after the Notice to Proceed for Design, the Design-Builder shall submit to Department for review and approval Forms C-111 and C-112 for each DBE firm to be utilized during the design phase to meet the DBE minimum requirement and Form C-48. Failure to submit the required documentation within the specified timeframe shall be cause to deny credit for any work performed by a DBE firm and delay approval of the Design-Builder's monthly payment.

**Construction Phase:** No later than thirty (30) days prior to the DBE firm undertaking any work, Design-Builder shall submit to Department for review and approval Forms C-111, C-112, and C-48. Failure to submit the required documentation within the specified timeframe shall result in disallowed credit of any work performed prior to approval of Forms C-111 and C-112 and delay approval of monthly payment.

The District Civil Rights Office (DCRO) will monitor good faith effort documentation quarterly to determine progress being made toward meeting the DBE minimum requirement established for the contract.

Forms C-48, C-49, C-111, and C-112 can be obtained from the VDOT website at:

<http://vdotforms.vdot.virginia.gov/>

3. **Good Faith Efforts Described:** Department will determine if Design-Builder demonstrated adequate good faith efforts, and if given all relevant circumstances, those efforts were made actively and aggressively to meet the DBE requirements. Efforts to obtain DBE participation are not good faith efforts if they could not reasonably be expected to produce a level of DBE firm participation sufficient to meet the DBE Program requirements and DBE Goal.

Good faith efforts may be determined through use of the following list of the types of actions the Design-Builder may make to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be

exclusive or exhaustive. Other factors or types of efforts of similar intent may be relevant in appropriate cases:

- (a) Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to DBE firms who have the capability to perform the work of the contract. Examples include: advertising in at least one daily/weekly/monthly newspaper of general circulation, as applicable; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. DBE firms shall have no less than five (5) business days to reasonably respond to the solicitation. Design-Builder shall determine with certainty if the DBE firms are interested by taking reasonable steps to follow up initial solicitations as evidenced by documenting such efforts as requested on Form C-49, DBE Good Faith Efforts Documentation.
- (b) Selecting portions of the work to be performed by DBE firms in order to increase the likelihood that the DBE Goal will be achieved. This includes, where appropriate, breaking out work items into economically feasible units to facilitate DBE firm participation, even when the Design-Builder might otherwise prefer to completely perform all portions of this work in its entirety or use its own forces;
- (c) Providing interested DBE firms with adequate information about the plans, specifications, and requirements of the contract in a timely manner, which will assist the DBE firms in responding to a solicitation;
- (d) Negotiating for participation in good faith with interested DBE firms;
  - 1. Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBE firms that were considered; dates DBE firms were contacted; a description of the information *provided* regarding the plans, specifications, and requirements of the contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBE firms to perform the work;
  - 2. Design-Builder should, using good business judgment, consider a number of factors in negotiating with subcontractors/subconsultants, and should take a DBE firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using DBE firms is not sufficient reason for a Design-Builder's failure to meet the DBE goal as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a Design-Builder to perform the work with its own organization does not relieve the Design-

Builder of the responsibility to make diligent good faith efforts. Design-Builders are not, however, required to accept higher quotes from DBE firms if the price difference can be shown by the Design-Builder to be excessive, unreasonable, or greater than would normally be expected by industry standards;

- (e) A Design-Builder cannot reject a DBE firm as being unqualified without sound reasons based on a thorough investigation of the DBE firm's capabilities. The DBE firm's standing within its industry, membership in specific groups, organizations, associations, and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the Design-Builder's efforts to meet the contract goal for DBE participation;
- (f) Making efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by Department or by Design-Builder;
- (g) Making efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in this Special Provision;
- (h) Effectively using the services of appropriate personnel from VDOT and from SBSD; available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

#### **E. Documentation and Administrative Reconsideration of Good Faith Efforts**

Design-Builder must provide Form C-49, DBE Good Faith Efforts Documentation, of its efforts made to meet the DBE goal within the time frames specified in this provision. The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the Design-Builder. Design-Builder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain the DBE firm's participation in the proposed work.

However, Design-Builder shall timely submit its completed and executed forms C-111, C-112, C-48, and C-49, as aforementioned. Failure to submit the required documentation within the specified time frames shall be cause to disallow DBE goal credit and delay approval of the Design-Builder's monthly payment.

**During the Contract:** If a DBE, through no fault of the Design-Builder, is unable or unwilling to fulfill his agreement with the Design-Builder, the Design-Builder shall immediately notify the Department and provide all relevant facts. If a Design-Builder relieves a DBE subcontractor of the responsibility to perform work under their subcontract, the Design-Builder is encouraged to take the appropriate steps to obtain another DBE firm to perform the remaining subcontracted work for the amount that would have been paid to the original DBE firm. In such instances, Design-Builder is expected to seek DBE participation towards meeting the goal during the performance of the contract.

If at any point during the execution and performance of the contract it becomes evident that the remaining dollar value of allowable DBE goal credit for performing the subcontracted work is insufficient to obtain the DBE contract goal, and the Design-Builder has not taken the preceding actions, the Design-Builder and any aforementioned affiliates may be subject to disallowance of DBE credit until such time as sufficient progress toward achievement of the DBE goal is achieved or evidenced.

**Project Completion:** If, at final completion, the Design-Builder fails to meet the DBE goal, and fails to adequately document that it made good faith efforts to achieve sufficient DBE goal, then Design-Builder and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding, responding, or participating on Department projects for a period of ninety (90) days and be removed from Department's prequalification list.

Prior to such enjoinder or removal, Design-Builder may submit documentation to the State Construction Engineer or other designee of Department to substantiate that failure was due solely to quantitative underrun(s), elimination of items subcontracted to DBEs, or to circumstances beyond Design-Builder's control and that all feasible means had been used to achieve the DBE goal. The State Construction Engineer, or such other designee, upon verification of such documentation shall determine whether Design-Builder has met the requirements of the contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Design-Builder may request an appearance before the Department's Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The Administrative Reconsideration Panel will be made up of Department Division Administrators or their designees, none of who took part in the initial determination that the Design-Builder failed to make the DBE goal or make adequate good faith efforts to do so. After reconsideration, Department shall notify the Design-Builder in writing of its decision and explain the basis for finding that the Design-Builder did or did not meet the DBE goal or make adequate good faith efforts to do so. The decision of the Administrative Reconsideration Panel shall be administratively final. If the decision is made to enjoin the Design-Builder from bidding or participating on other Department work as described herein, the enjoinder period will begin upon Design-Builder's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

#### **F. DBE Participation for Contract Goal Credit**

DBE participation on the contract will count toward meeting the DBE contract goal in accordance with the following criteria:

1. The applicable percentage of the total dollar value of the contract or subcontract awarded to the DBE firm will be counted toward meeting the DBE goal in accordance with the **DBE Program-Related Certifications Made by Offerors/Design-Builder's** section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the DBE firm itself or subcontracted by the DBE to other DBE firms.

2. When a DBE performs work as a participant in a joint venture with a non-DBE firm, the Design-Builder may count toward the DBE goal only that portion of the total dollar value of the subcontract equal to the distinctly defined portion of the work that the DBE firm has performed with the DBE firm's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to coordinate Department review and approval of the joint venture's organizational structure and proposed operation where the Design-Builder seeks to claim the goal credit.
3. When a DBE firm subcontracts part of the work to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE firm's subcontractor is a DBE firm. Work that a DBE firm subcontracts to a non-DBE firm, or to a firm that may be eligible to be a DBE firm, but has not yet been certified as a DBE firm, will not count toward the DBE. The cost of supplies and equipment a DBE subcontractor purchases or leases from the Design-Builder or prime contractual affiliates, as in the case of a joint venture, will not count toward the DBE goal.
4. The Design-Builder may count expenditures to a DBE subcontractor toward the DBE goal only if the DBE performs a Commercially Useful Function (CUF) on that subcontract, as such term is defined in subparagraph H below.
5. A Design-Builder may not count the participation of a DBE subcontractor toward the DBE goal until the amount being counted has actually been paid to the DBE firm. Design-Builder may count sixty (60) percent of its expenditures actually paid for materials and supplies obtained from a DBE certified as a regular dealer, and one hundred (100) percent of such expenditures actually paid for materials and supplies obtained from a regular dealer of the goods or a manufacturer DBE firm.
  - (a) For the purposes of this Special Provision, a "regular dealer" is defined as a firm or person that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required and used under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm or person shall be an established business that regularly engages, as its principal business and under its own name, in the purchase and sale or lease of the products or equipment in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.
  - (b) A DBE firm or person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business where it keeps such items in stock if the DBE firm both owns and operates distribution equipment for the products it sells and provides for the work, *provided* further that the DBE firm or person has been certified with an appropriate North American Industry Classification System (NAICS) code for supply of such bulk items. Any supplementation of a regular

dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis to be eligible for credit to meet the DBE goal credit.

- (c) If a DBE regular dealer is used for DBE goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the DBE regular dealer, which shall be responsible for distribution of the goods or materials.
- (d) For the purposes of this Special Provision, a manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the contract and of the general character described by the project specifications. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material, or purchase and substantially alter goods and materials to make them suitable for construction use before reselling them.
- (e) A Design-Builder may count toward the DBE goal the following expenditures to DBE firms that are not regular dealers or manufacturers for DBE program purposes:
  - 1. The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive or greater than would normally be expected by industry standards for the same or similar services.
  - 2. The entire amount of that portion of the contract that is performed by the DBE firm's own forces and equipment under the DBE firm's supervision. This includes the cost of supplies and materials ordered and paid for by the DBE firm for work, including supplies purchased or equipment leased by the DBE firm, except Design-Builder supplies and equipment a DBE subcontractor purchases or leases from the Design-Builder or its affiliates.
- (f) Design-Builder may count toward the DBE goal one hundred (100) percent of the fees paid to a DBE trucker or hauler for the delivery of material and supplies required on the project job site, but not for the cost of those materials or supplies themselves, provided that the trucking or hauling fee is determined by Department to be reasonable, as compared with fees customarily charged by non-DBE firms for similar services. Design-Builder shall not count costs for the removal or relocation of excess material from or on the job site when the DBE trucking company is the manufacturer of or a regular dealer in those materials and supplies. The DBE trucking firm shall also perform a CUF on the project and not

operate merely as a pass through for the purposes of gaining DBE goal credit. Prior to entering into a trucking subcontract, Design-Builder shall determine, or contact the Department Civil Rights Division or its district offices for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project. See section on **Miscellaneous DBE Program Requirements; Factors used to Determine if a DBE Trucking Firm is Performing a CUF.**

- (g) Design-Builder will receive DBE goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases, or other work arrangements provided that those fees are determined by Department to be reasonable and not excessive as compared with fees customarily charged by non-DBE firms for similar services. For the purposes of this Special Provision, a broker is defined as a person or firm that regularly engages in arranging for delivery of material, supplies, and equipment, or regularly arranges for the providing of project services as a course of routine business, but does not own or operate the delivery equipment necessary to transport materials, supplies or equipment to or from a job site.

#### **G. Performing a Commercially Useful Function (CUF)**

No credit toward the DBE goal will be allowed for payments or reimbursement of expenditures to a DBE firm if that DBE firm does not perform a CUF on that contract. A DBE firm performs a CUF when the DBE is solely responsible for execution of a distinct element of the work and the DBE firm actually performs, manages, and supervises such work with the DBE firm's own forces or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. To perform a CUF the DBE firm alone shall be responsible and bear the risk for the material and supplies used on the contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE firm's own forces and equipment, and paying for those materials and supplies. The amount the DBE firm is to be paid under the subcontract shall be commensurate with the work the DBE actually performs and the DBE goal credit claimed for the DBE firm's performance.

**Monitoring CUF Performance:** It shall be the Design-Builder's responsibility to confirm that all DBE firms selected for subcontract work on the contract, for which he seeks to claim credit toward the DBE goal, perform a CUF. Further, the Design-Builder is responsible for and shall confirm that each DBE firm fully performs the DBE firm's designated tasks in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. For the purposes of this Special Provision the DBE firm's equipment will mean either equipment directly owned by the DBE as evidenced by title, bill of sale or other such documentation, or leased by the DBE firm, and over which the DBE has control as evidenced by the leasing agreement from a firm not owned in whole or part by the Design-Builder or an affiliate of the Design-Builder.

Department will monitor Design-Builder's DBE involvement during the performance of the contract. However, Department is under no obligation to warn the Design-Builder that a DBE firm's participation will not count toward the goal.

**DBE Firms Must Perform a Useful and Necessary Role in Contract Completion:**

A DBE firm does not perform a CUF if the DBE firm's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE firm participation.

**DBE Firms Must Perform The Contract Work With Their Own Workforces:**

If a DBE firm does not perform and exercise responsibility for at least thirty (30) percent of the total cost of the DBE firm's contract with the DBE firm's own work force, or the DBE firm subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involve, Department will presume that the DBE firm is not performing a CUF and such participation will not be counted toward the DBE goal.

**Department Makes Final Determination On Whether a CUF Is Performed:**

Department has the final authority to determine, in its sole discretion, whether a DBE firm has performed a CUF on the contract. To determine whether a DBE is performing or has performed a CUF, Department will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Design-Builder or by employees or equipment of the Design-Builder shall be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated. When a DBE firm is presumed not to be performing a commercially useful function the DBE may present evidence to rebut the Department's finding. Department has the final authority to determine, in its sole discretion, whether a DBE firm has performed a CUF on the contract.

**H. Verification of DBE Participation and Imposed Damages**

Within fourteen (14) days after subcontract execution between Design-Builder and DBE subcontractors (or subcontract execution between DBE subcontractors and DBE subcontractors), Design-Builder shall submit to the DCRO, a copy of the fully executed subcontract agreement for each DBE firm used to claim credit in accordance with the requirements stated on Form C-111. The subcontract shall be executed by both parties stating the work to be performed, the details or specifics concerning such work, and the price which will be paid to the DBE subcontractor. Because of the commercial damage that the Design-Builder and its DBE subcontractor could suffer if their subcontract pricing, terms, and conditions were known to competitors, the Department staff will treat subcontract agreements as proprietary Design-Builder trade secrets with regard to Freedom of Information Act requests. In lieu of subcontracts, purchase orders may be submitted for haulers, suppliers, and manufacturers. These too, will be treated confidentially and protected. Such purchase orders must contain, as a minimum, the following information: authorized signatures of both parties; description of the scope of work to include contract item numbers, quantities, and prices; and required federal contract provisions.

The Design-Builder shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each quarter during the life of the contract in which participation occurs and verification is available. The information shall be indicated on Form C-63, DBE and SWAM Payment Compliance Report. The Department reserves the right to request proof of payment via copies of cancelled checks with appropriate identifying notations. Failure to provide Form C-63

to the DCRO within five (5) business days after the reporting period may result in delay of approval of the Design-Builder's monthly payment. The names and certification numbers of DBE firms provided by the Design-Builder on the various forms indicated in this Special Provision shall be exactly as shown on SBSD's latest list of certified DBEs. Signatures on all forms indicated herein shall be those of authorized representatives of the Design-Builder as shown on the Prequalification Application, Form C-32 or the Prequalification/Certification Renewal Application, Form C-32A, or authorized by letter from the Design-Builder. If DBE firms are used which have not been previously documented with the Design-Builder's minimum DBE requirements documentation and for which the Design-Builder now desires to claim credit toward the contract goal, the Design-Builder shall be responsible for submitting necessary documentation in accordance with the procedures stipulated in this Special Provision to cover such work prior to the DBE firm beginning work. Form C-63 can be obtained from the VDOT website at: <http://vdotforms.vdot.virginia.gov/>

Design-Builder shall submit to the Department's Project Manager with a copy to the DCRO, a narrative with each project schedule submission, as required in the Special Provision for Design-Build Project Schedule (Part 3, Exhibit 11.1). The project schedule narrative shall include a log of applicable DBE participation activities in the Design-Builder's project schedule for which the Design-Builder intends to claim credit for attaining the DBE goal required in the contract. The log shall include the proposed start/finish dates, durations, and dollar values of the DBE participation activities.

Narratives or other agreeable format of schedule information requirements and subsequent progress determination shall be based on the commitment information shown on the latest Form C-111 as compared with the appropriate Form C-63.

Prior to beginning any major component of the work to be performed by a DBE firm not previously submitted, Design-Builder shall furnish a revised Form C-111 showing the name(s) and certification number(s) of any such DBEs for which Design-Builder seeks DBE goal credit. Design-Builder shall obtain the prior approval of the Department for any assistance it may provide to the DBE firm beyond its existing resources in executing its commitment to perform the work in accordance with the requirements listed in the **Good Faith Efforts Described** section of this Special Provision. If Design-Builder is aware of any assistance beyond a DBE firm's existing resources that Design-Builder, or another subcontractor, may be contemplating or may deem necessary and that have not been previously approved, Design-Builder shall submit a new or revised narrative statement for Department's approval prior to assistance being rendered.

If the Design-Builder fails to correctly complete and any of the required documentation requested by this Special Provision within the specified time frames, the Department will withhold payment until such time as the required submissions are received by Department. Where such failures to provide required submittals or documentation are repeated, Department will move to enjoin the Design-Builder and any prime contractual affiliates, as in the case of a joint venture, from bidding, responding or participating Department projects until such submissions are received.

**I. Documentation Required for Semi-final Payment**

Design-Builder must submit Form C-63 to the DCRO sixty (60) days prior to date of final completion, set forth on the Baseline Schedule (as updated from time to time in accordance with the contract). The form must include each DBE firm used on the contract and the work performed by each DBE firm. The form shall include the actual dollar amount paid to each DBE firm for the accepted creditable work. The form shall be certified under penalty of perjury, or other applicable legal requirements, to be accurate and complete. Department will use this certification and other information available to determine applicable DBE credit allowed to date by Department and the extent to which the DBE firms were fully paid for that work. The Design-Builder acknowledges by the act of filing the form that the information is supplied to obtain payment regarding the contract as a federal participation contract. A letter of certification, signed by both the Design-Builder and appropriate DBE firms, will accompany the form, indicating the amount, including any retainage, if present, that remains to be paid to the DBE firm(s).

**J. Documentation Required for Final Payment**

In anticipation of final payment, Design-Builder shall submit a final Form C-63 marked "Final" to the DCRO, within thirty (30) days of the anticipated date of final completion, as set forth on the Baseline Schedule (as updated from time to time in accordance with the contract). The form must include each DBE firm used on the contract and the work performed by each DBE firm. The form shall include the actual dollar amount paid to each DBE firm for the creditable work. Department will use this form and other information available to determine if Design-Builder and DBE firms have satisfied the DBE goal and the extent to which credit was allowed. Design-Builder acknowledges by the act of signing and filing the form that the information is supplied to obtain payment regarding the contract as a federal participation contract.

**K. Prompt Payment Requirements**

Design-Builder shall make prompt and full payment to the subcontractor(s) (including DBE subcontractors) of any retainage held by Design-Builder after the subcontractor's work is satisfactorily completed.

For purposes of this Special Provision, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted as required by the contract documents by Department. If Department has made partial acceptance of a portion of the contract, then Department will consider the work of any subcontractor covered by that partial acceptance to be satisfactorily completed. Payment will be made in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

Upon Department's payment of the subcontractor's portion of the work as shown on the application for payment and the receipt of payment by Design-Builder for such work, the Design-Builder shall make compensation in full to the subcontractor for that portion of the work satisfactorily completed and accepted by the Department. For the purposes of this Special Provision, payment of the subcontractor's portion of the work shall mean the Design-Builder has issued payment in full, less agreed upon retainage,

if any, to the subcontractor for that portion of the subcontractor's work that Department paid to Design-Builder pursuant to the applicable application for payment.

Design-Builder shall make payment of the subcontractor's portion of the work within seven (7) days of the receipt of payment from Department in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

If Design-Builder fails to make payment for the subcontractor's portion of the work within the time frame specified herein, the subcontractor shall notify the Department and the Design-Builder's bonding company in writing. Upon written notice from the subcontractor, the Design-Builder's bonding company and Department will investigate the cause for non-payment. Barring mitigating circumstances that would make the subcontractor ineligible for payment, the Design-Builder's bonding company shall be responsible for insuring payment to the subcontractor in accordance with the applicable requirements of Section 107.01, Section 109.08, and Section 109.09 of the Division I Amendments to the Standard Specifications (Part 5).

By accepting and executing this contract, the Design-Builder agrees to assume these obligations, and to bind the Design-Builder's subcontractors contractually to these obligations.

Nothing contained herein shall preclude Design-Builder from withholding payment to the subcontractor in accordance with the terms of the subcontract in order to protect the Design-Builder from loss or cost of damage due to a breach of the subcontract by the subcontractor.

#### **L. Miscellaneous DBE Program Requirements**

**Loss of DBE Eligibility:** When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:

1. When a Design-Builder has made a commitment to use a DBE firm that is not currently certified, thereby making the Design-Builder ineligible to receive DBE goal credit for work performed, the ineligible DBE firm's work does not count toward the DBE goal. Design-Builder shall meet the DBE goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the DCRO that it has made good faith efforts to do so.
2. When a Design-Builder has executed a subcontract with a DBE firm prior to official notification of the DBE firm's loss of eligibility, Design-Builder may continue to use the firm on the contract and shall continue to receive DBE credit toward DBE goal for the subcontractor's work.
3. When Department has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the contract before VDOT has issued the notice of its ineligibility shall count toward the contract goal.

**Termination of DBE:** If a DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the contract for any reason, Design-Builder

must promptly request approval to substitute or replace that DBE firm in accordance with this section of this Special Provision.

Design-Builder, shall notify DCRO in writing before terminating and/or replacing the DBE firm that is being used or represented to fulfill DBE-related contract obligations during the term of the contract. Written consent from the DCRO for terminating the performance of any DBE firm shall be granted only when the Design-Builder can demonstrate that the DBE firm is unable, unwilling, or ineligible to perform its obligations for which the Design-Builder sought credit toward the DBE goal. Such written consent by the Department to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE with another DBE. Consent to terminate a DBE firm shall not be based on the Design-Builder's ability to negotiate a more advantageous contract with another subcontractor whether that subcontractor is, or is not, a DBE firm.

4. All Design-Builder requests to terminate, substitute, or replace a DBE firm shall be in writing, and shall include the following information:
  - (a) The date the Design-Builder determined the DBE to be unwilling, unable, or ineligible to perform.
  - (b) The projected date that the Design-Builder shall require a substitution or replacement DBE to commence work if consent is granted to the request.
  - (c) A brief statement of facts describing and citing specific actions or inaction by the DBE firm giving rise to Design-Builder's assertion that the DBE firm is unwilling, unable, or ineligible to perform;
  - (d) A brief statement of the DBE firm's capacity and ability to perform the work as determined by the Design-Builder;
  - (e) A brief statement of facts regarding actions taken by the Design-Builder, that Design-Builder believes constitute good faith efforts toward enabling the DBE firm to perform;
  - (f) The current percentage of work completed by the DBE firm;
  - (g) The total dollar amount currently paid for work performed by the DBE firm;
  - (h) The total dollar amount remaining to be paid to the DBE firm for work completed, but for which the DBE firm has not received payment, and with which the Design-Builder has no dispute;
  - (i) The total dollar amount remaining to be paid to the DBE firm for work completed, but for which the DBE firm has not received payment, and over which the Design-Builder and/or the DBE firm have a dispute.
5. Design-Builder's Written Notice to DBE of Pending Request to Terminate and Substitute with another DBE.

Design-Builder shall send a copy of the “request to terminate and substitute” letter to the affected DBE firm and make best efforts to ensure its receipt by the DBE firm, in conjunction with submitting the request to the DCRO. The DBE firm may submit a response letter to the DCRO and Department within two (2) business days of receiving the notice to terminate from the Design-Builder. If the DBE firm submits a response letter, then Design-Builder shall, as part of its subcontract, obligate the DBE firm to explain its position concerning performance on the committed work. The Department will consider both the Design-Builder’s request and the DBE firm’s response and explanation before approving the Design-Builder’s termination and substitution request.

If, after making its best efforts to deliver a copy of the “request to terminate and substitute” letter, the Design-Builder is unsuccessful in notifying the affected DBE firm, the Department will verify that the DBE firm is unable or unwilling to continue performing its subcontract let with respect to the contract. Department will timely approve the Design-Builder’s request for a substitution.

6. Proposed Substitution of Another Certified DBE

Upon termination of a DBE firm, Design-Builder shall use reasonable good faith efforts to replace the terminated DBE firm. The termination of such DBE firm shall not relieve Design-Builder of its obligations under this Special Provision, and the unpaid portion of the terminated DBE firm’s subcontract will not be counted toward the DBE goal.

When a DBE substitution is necessary, the Design-Builder shall submit an amended Form C-111 to the DCRO for approval with the name of another DBE firm, the proposed work to be performed by that DBE firm, and the dollar amount of the work to replace the unfulfilled portion of the work of the original DBE firm.

Should Design-Builder be unable to commit the remaining required dollar value to the substitute DBE firm, the Design-Builder shall provide written evidence of good faith efforts made to obtain the substitute value requirement. Department will review the quality, thoroughness, and intensity of those efforts. Efforts that are viewed by Department as merely superficial or pro-forma will not be considered good faith efforts to meet the DBE goal. Design-Builder must document the steps taken that demonstrated its good faith efforts to obtain participation as set forth in **the Good Faith Efforts Described** section of this Special Provision.

**Factors Used to determine if a DBE Trucking Firm is performing a CUF:**

The following factors will be used to determine whether a DBE trucking company is performing a CUF:

1. To perform a CUF, the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE trucking firm is responsible by subcontract under the contract. There shall not be a contrived arrangement, including, but not limited to, any arrangement that would not

customarily and legally exist under customary construction project subcontracting practices for the purpose of meeting the DBE goal;

2. The DBE firm must own and operate at least one fully licensed, insured, and operational truck used in the performance of the contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the subject materials or supplies;
3. Design-Builder is eligible to receive full credit toward the DBE goal for the total reasonable amount the DBE firm is paid for the transportation services provided on the subcontract under the contract using acceptable trucks the DBE firm owns, insures, and operates using drivers that the DBE employs and manages;
4. The DBE trucking firm may lease trucks from another DBE firm, including from an owner-operator who is a DBE firm. Design-Builder is eligible to receive credit for the total fair market value actually paid for transportation services the lessee DBE firm provides to the DBE firm that leases trucks from such lessee DBE firm on the contract;
5. The DBE firm may also lease trucks from a non-DBE firm, including an owner-operator. Design-Builder may be eligible to receive DBE goal credit for the services of a DBE firm who leases trucks from a non-DBE firm up to the total value of the transportation services provided by non-DBE lessees, not to exceed the value of transportation services provided by DBE-owned trucks on the contract. For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

### **Truck Counting**

Design-Builders may count for credit against the DBE goal the dollar volume attributable to no more than twice the number of trucks owned by a DBE firm or leased from another DBE firm.

As an example, DBE credit would be awarded for the total transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

#### **Value of Transportation Services (For Illustrative Purposes Only)**

#### **Firm X**

Truck 1	Owned by DBE	\$100 per day
Truck 2	Owned by DBE	\$100 per day

**Value of Transportation Services**  
(For Illustrative Purposes Only)

**Firm Y**

Truck 3	Leased from DBE	\$110 per day
Truck 4	Leased from DBE	\$110 per day

**Firm Z**

Truck 1	Leased from Non-DBE	\$125 per day
Truck 2	Leased from Non-DBE	\$125 per day
Truck 3	Leased from Non-DBE	\$125 per day
Truck 4	Leased from Non-DBE	\$125 per day
Truck 5	Leased from Non-DBE*	\$125 per day
Truck 6	Leased from Non-DBE*	\$125 per day

DBE credit would be awarded for the total transportation services provided by DBE firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

**Credit = 8 Trucks**

**Total Value of Transportation Services = \$820.00**

In all, full DBE credit would be allowed for the participation of eight (8) trucks (twice the number of DBE trucks owned and leased) and the dollar value attributable to the Value of Transportation Services provided by the eight (8) trucks.

\* With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.

1. For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name

and identification number of the DBE firm that has leased the truck at all times during the life of the lease.

**M. Suspect Evidence of Criminal Behavior**

Failure of Design-Builder or any subcontractor to comply with the Standard Specifications, this Special Provision, or any other contract document wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted prosecution.

**Suspected DBE Fraud**

In appropriate cases, Department will bring to the attention of the United States Department of Transportation any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or “Program Fraud and Civil Penalties” rules provided in 49 CFR Part 31.

## ATTACHMENT 2

### VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR SECTION 107.15 USE OF SMALL, WOMEN-OWNED, AND MINORITY-OWNED BUSINESSES (SWaM) FOR DESIGN-BUILD PROJECTS

January 4, 2017

It is the policy of the Department that Small, Women-Owned, and Minority-Owned Businesses (SWaMs) shall have the maximum opportunity to participate in the performance of the Contract. The Contractor is encouraged to take necessary and reasonable steps to ensure that SWaMs have the maximum opportunity to compete for and perform work on the Contract, including participation in any subsequent subcontracts.

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

**Small business** means an independently owned and operated business which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less.

**Women-owned business** means a business concern that is at least 51% owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U.S. citizens or legal resident aliens.

**Minority-owned business** means a business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

**Minority individual** means an individual who is a citizen of the United States or a non-citizen who is in full compliance with United States immigration law and who satisfies one or more of the following definitions:

1. African American means a person having origins in any of the original peoples of Africa and who is regarded as such by the community of which this person claims to be a part.
2. Asian American means a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Mariana, the Philippines, a U.S. territory of the Pacific, India,

Pakistan, Bangladesh, or Sri Lanka and who is regarded as such by the community of which this person claims to be a part.

3. Hispanic American means a person having origins in any of the Spanish-speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who is regarded as such by the community of which this person claims to be a part.
4. Native American means a person having origins in any of the original peoples of North America and who is regarded as such by the community of which this person claims to be a part or who is recognized by a tribal organization.
5. A member of another group, or other individual, found to be economically and socially disadvantaged by the Small Business Administration under 8(a) of the Small Business Act as amended (15 U.S.C. 637(a)).

**State agency** means any authority, board, department, instrumentality, institution, agency, or other unit of state government. "State agency" shall not include any county, city, or town.

A list of Virginia Department of Small Business and Supplier Diversity (SBSD) certified SWaM firms is maintained on the SBSBD web site (<http://www.sbsd.virginia.gov>) under the **SWaM Vendor Directory** link.

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

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

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

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

If the Department has determined that specific opportunities for participation by SWaMs are available on a particular Contract and the bidder chooses to claim credit for SWaM participation, the extent of such participation will be shown as a percentage of the Contract amount and will be indicated on Form C-111, *SWaM Participation*.

**Design Phase:** Thirty (30) days after the Notice to Proceed for Design, the Design-Builder shall submit to the Department for review and approval Forms C-111 and C-112 for each SWaM firm to be utilized during the design phase to meet the SWaM contract goal requirement. Failure to submit the required documentation within the specified timeframe shall be cause to

deny credit for any work performed by a SWaM firm and delay approval of the Design-Builder's monthly payment.

**Construction Phase:** No later than thirty (30) days prior to the SWaM firm undertaking any work, the Design-Builder shall submit to the Department for review and approval Forms C-111, and C-112. Failure to submit the required documentation within the specified timeframe shall result in disallowed cred of any work performed prior to approval of Forms C-111 and C-112 and delay approval of monthly payment.

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

- (a) attend any pre-solicitation or pre-bid meetings at which SWaMs could be present and/or informed of contracting and subcontracting opportunities;
- (b) advertise in general circulation, trade association and minority-focus media concerning the subcontracting opportunities;
- (c) provide written notice to a reasonable number of specific SWaMs that their interest in the Contract is being solicited in sufficient time to allow the SWaMs to participate effectively;
- (d) follow-up initial solicitations of interest by contacting SWaMs to determine with certainty whether the SWaMs are interested;
- (e) select portions of the work to be performed by SWaMs in order to increase the likelihood of obtaining SWaM participation (including, where appropriate, breaking down proposed contract work into economically feasible units to facilitate SWaM participation);
- (f) provide interested SWaMs with adequate information about the plans, Specifications, and requirements of the Contract
- (g) negotiate in good faith with interested SWaMs, not rejecting SWaMs as unqualified without sound reasons based on a thorough investigation of their capabilities;
- (h) make efforts to assist interested SWaMs in obtaining bonding, lines of credit, or insurance required by the Department or Contractor;
- (i) make efforts to assist interested SWaMs in obtaining necessary equipment, supplies, materials, or other necessary or related assistance or services; and,
- (j) effectively use the services of available minority, woman and small business community organizations; minority, woman and small business contractors' groups; local, state and federal minority, woman and small business assistance offices; and other organizations that provide assistance in the recruitment and placement of SWaMs.

Any agreement between the Design-Builder and a SWaM firm whereby the SWaM firm agrees not to provide quotations for performance of work to other contractors/consultants is prohibited.

The Design-Builder shall furnish, and require each subcontractor to furnish, on a quarterly basis, information relative to all SWaM involvement on the project. The information shall be indicated on Form C-63, DBE and SWAM Payment Compliance Report or by copies of canceled checks with appropriate identifying notations. If participation achievement is to be fulfilled with a SWaM whose name has not been previously furnished to the Department for the Contract in question, an initial or revised Form C-111, whichever is appropriate, shall be submitted prior to such SWaM beginning the work. Failure to provide the Department the forms by the fifth of the month following each quarterly reporting period may result in delay of the Design-Builder's estimate for payment.

If a SWaM, through no fault of the Contractor, is unable or unwilling to fulfill his agreement with the Contractor, the Contractor shall immediately notify the Department and provide all relevant facts. If any subcontractor is relieved of the responsibility to perform work under their subcontract, the Contractor is encouraged to take the appropriate steps to obtain a SWaM to perform an equal or greater dollar value of the remaining subcontracted work. The substitute SWaM's name, description of the work, and dollar value of the work shall be submitted to the Department on Form C-111 prior to such SWaM beginning the work, if such work is to be counted for participation achievement.

**EXHIBIT D**

**SPECIAL PROVISIONS**

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## MASTER LIST

<b>No.</b>	<b>Doc. No.</b>	<b>Title</b>	<b>Revision Date</b>
1	SS200-002020-03	VDOT 2020 Road and Bridge SS - General	Aug 25, 2020
2	SP512-000100-00	VDOT Special Provision for Work Zone Traffic Control Management	July 12, 2016
3	SS512-002020-02	VDOT 2020 Road and Bridge SS – Maintaining Traffic	Sep 22, 2020
4	SS700-002020-01	VDOT 2020 Road and Bridge SS – Traffic Engineering (General)	Jul 17, 2020
5	SS701-002020-01	VDOT 2020 Road and Bridge SS – Traffic Signs	Oct 20, 2020
6	SP703-000100-00	VDOT Special Provision for Mast Arm Hanger Assembly STD SM-3 and SMD-2	Jul 12, 2016
7	SS704-002020-01	VDOT 2020 Road and Bridge SS – Pavement Markings and Markers	Sep 3, 2020

VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 200 – GENERAL**

**SECTION 200 – GENERAL** of the Specifications is amended as follows:

**Section 200.04 – Acceptance Procedures for Aggregates** is amended to replace the fourth paragraph with the following:

The No. 10 sieve shall be the dividing sieve for soils, select material, aggregate subbase material, and aggregate base material. The No. 8 sieve shall be the dividing sieve for asphalt concrete aggregates. That portion of the total aggregate retained on the sieves is defined as *coarse aggregate*, and that portion passing the sieves is defined as *fine aggregate*. Soundness tests will be performed according to the requirements of AASHTO T 104 without regard to these definitions of fine and coarse aggregate. Fine and coarse aggregates for hydraulic cement concrete are distinguishable by their conformity to the series of grading requirements specified in Sections 202 and 203, respectively, except that lightweight aggregate is specified in Section 206.

**Section 200.06 – Technician and Batcher Certification** is renamed **Technician Certification** is amended to replace the first paragraph with the following:

When the Contract requires a type of technician defined by this Section, the Contractor shall use a person certified by the Department. The Department will either certify technicians upon a candidate's satisfactory completion of an examination or recognize third-party certifications as described herein. The Contractor shall ensure their technician is able to prove their certification status upon demand.

**Section 200.06(e) – Concrete Batcher** is deleted.

**Section 200.06(h) – Concrete Field Technician** is replaced with the following:

**Concrete Field Technician:** A Concrete Field Technician provides quality control of placement operations for hydraulic cement concrete in accordance with applicable requirements. The Department will recognize ACI Concrete Field Testing Technician Grade I, Washington Area Council of Engineering Laboratories (WACEL) Concrete I, or National Institute for Certification in Engineering Technologies (NICET) Construction Materials Testing Level II for Concrete for this certification.

**Section 200.06(j) – Aggregate Properties Technician** is deleted.

**Section 200.06(m) – Soils and Aggregate Compaction Technician** is inserted as follows:

**Soils and Aggregate Compaction Technician:** A Soils and Aggregate Compaction Technician conducts density, moisture content, and depth checks of soil placement and aggregate lifts during construction, including stabilized lifts. The Technician also monitors application rates of stabilizing chemicals used in soil and aggregate lifts in the field. The Department will recognize NICET Construction Materials Testing Level II for Soils for this certification.

**Section 200.06(n) – Cold Asphalt Recycling – Plant Technician** is inserted as follows:

**Cold Asphalt Recycling – Plant Technician** samples Cold In-place Recycling (CIR) or Cold Central Plant Recycling (CCPR) material during production and is capable of conducting any tests necessary to put the CIR equipment and CCPR plant into operation.

**Section 200.06(o) – Cold Asphalt Recycling – Field Technician** is inserted as follows:

**Cold Asphalt Recycling – Field Technician** provides quality control testing and inspection of the placement of CIR and CCPR materials.

**Section 200.06(p) – Full Depth Reclamation (FDR) Technician** is inserted as follows:

**Full Depth Reclamation (FDR) Technician** provides quality control testing, inspection of the placement of FDR, samples FDR material during production, and is capable of conducting any tests necessary to put the FDR equipment into operation.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**WORK ZONE TRAFFIC CONTROL MANAGEMENT**

January 14, 2008; Reissued July 12, 2016

**I. GENERAL DESCRIPTION**

This work shall consist of providing work zone traffic control management in strict compliance with the contract, plans, specifications, the Virginia Work Area Protection Manual and the Manual on Uniform Traffic Control Devices (MUTCD), including supervision of personnel and the installation, inspection, and maintenance of all traffic control devices on the project.

**II. REQUIREMENTS**

The Contractor shall assign a traffic control supervisor (TCS) to provide work zone traffic control management for the project. If the Contractor assigns more than one TCS to provide work zone traffic control management, a weekly schedule identifying who will be in charge of providing work zone traffic control management on a daily basis shall be submitted to the VDOT Area Construction Engineer by the Contractor.

The TCS shall have a set of traffic control plans and a copy of the edition of the Virginia Work Area Protection Manual specified on the plan sheet or in the contract readily available at all times.

**A. Certification**

Prior to commencing work requiring work zone traffic control management, the Contractor shall submit to the Area Construction Engineer a valid copy of the Traffic Control Supervisor certificate (wallet size card) issued by the American Traffic Safety Services Association (ATSSA), or another similarly accredited agency or firm approved by the Department.

The Department will accept the certification by ATSSA or any approved agency or firm only if all of the following minimum requirements are met:

1. Successful completion of an Intermediate or Advanced work zone traffic control training course approved by the Department.
2. Passing a written examination given by the agency or firm on the approved work zone traffic control training course.
3. A minimum of two years full-time field experience in work zone traffic control. The experience may be verified by the Department at its discretion.

The TCS certification shall be renewed every four years by the TCS taking and passing a recertification test. The recertification test shall be taken through ATSSA or an agency or firm approved by the Department. Recertification shall be done in the fourth year prior to the expiration date.

**B. Duties**

The TCS's main responsibility shall be work zone traffic control management. The TCS may have other assigned duties on the project as approved in writing by the Area Construction Engineer. The following is a listing of the TCS's primary duties:

1. The TCS(s) shall personally provide work zone traffic control management and supervision services at the project site.
2. The TCS(s) shall coordinate the training of flagging and signing personnel.
3. The TCS(s) shall supervise the flagging and signing personnel.
4. The TCS(s) shall coordinate all work zone traffic control operations for the duration of the contract, including those of subcontractors, utility companies, and suppliers, to ensure that all work zone traffic control is in place and fully operational prior to the commencement of any work.

The Department recognizes that the Contractor does not have direct control over the work zone traffic control operations of the utility companies. The coordination provided by the TCS when dealing with utility companies is for the purpose of coordinating concurrent utility work zone traffic control with any other construction/maintenance work zone traffic control to avoid conflicts.

5. The TCS(s) shall perform daily reviews of work zone traffic control when work activities are underway and document in the work zone traffic control daily diary activities taking place and any deviation from the traffic control plan, length and timing and mitigation of excessive traffic queues, and instances or conflicts or problems with the work zone traffic control and corrective actions taken. In addition, the TCS(s) shall perform weekly reviews of the work zone traffic control and document in detail using Forms TE-97001 and 97002. Every other detailed weekly review shall be performed during nighttime hours or as directed by the Area Construction Engineer.

The TCS shall inspect traffic control devices in use for compliance with the ATSSA Quality Standards for Work Zone Traffic Control Devices, the Road and Bridge Specifications, and the Virginia Work Area Protection Manual. The TCS shall provide for the immediate repair, cleaning, or replacement of traffic control devices not functioning as required to ensure the safety of the motorists and construction personnel.

The traffic control devices shall be inspected by the TCS during working and nonworking hours on a schedule approved in writing by the Area Construction Engineer, but as a minimum at the beginning and end of each work day or night and once during non-working weekends and holidays, and daily on restricted days due to inclement weather or during any work shutdown.

Traffic control devices in use longer than fourteen (14) days shall be inspected by the TCS at least once every other week during nighttime periods.

6. The TCS(s) shall prepare and submit statements concerning road closures, delays, and other project activities to the District Public Affairs office as required.
7. The TCS(s) shall be responsible for notifying the VDOT project Maintenance of Traffic (MOT) Coordinator or designee, of all accidents related to the project traffic control. The time and date of notification shall be documented in the daily diary.
8. The TCS(s) assigned to the project shall attend the preconstruction conference and any other meeting which involves traffic control.
9. The TCS(s) shall be responsible for the maintenance, cleanliness, and replacement of traffic control devices of the existing traffic control plan during working and non-working hours.

**C. Documentation - Traffic Control Diary**

The TCS shall maintain a project work zone traffic control diary in a bound book. The Contractor shall provide a sufficient number of diaries for his or her use.

The TCS shall keep the work zone traffic control diary current on a daily basis, and shall sign each daily entry. Entries shall be made in ink in a format approved by the Area Construction Engineer, and there shall be no erasures or white-outs. Incorrect entries shall be struck out and then replaced with the correct entry. Photographs may be used to supplement the written text.

The work zone traffic control diary shall, at all times, be available for inspection by the VDOT Maintenance of Traffic Coordinator and a copy of the diary shall be submitted to the MOT Coordinator on a weekly basis.

The work zone traffic control diary(s) shall become the property of the Department at the completion of the project. Failure to submit the diary shall result in the withholding of final payment until the diary(s) is submitted.

**D. Availability of TCS**

Traffic control management shall be provided under the supervision and direction of the TCS on a 24-hour-per-day basis throughout the duration of the project.

The TCS shall be available on every working day—on call at all times—and available upon the Area Construction Engineer's request during normal working hours and during other than normal working hours in the case of emergency. The provisions for availability of the TCS shall also be met during times of partial or full project suspension. Contact telephone numbers for the TCS(s) shall be provided to Department project personnel, the Area Construction Engineer, the Residency Administrator, and the region Smart Traffic Center prior to the Contractor commencing work requiring work zone traffic control management.

**E. Failure to Comply**

The Area Construction Engineer may suspend all or part of the Contractor's operation(s) for failure to comply with the approved "Traffic Control Plan" or failure to correct unsafe traffic conditions within 24 hours for critical items and 72 hours for non-critical items after such notification is given to the Contractor in writing.

In the event that the Contractor does not take appropriate action to bring the deficient work zone traffic control into compliance with the approved traffic control plan or fails to correct the unsafe traffic conditions, the Department may proceed with the corrective action using its own forces, equipment, and material to maintain the project and such costs, plus 25 percent for supervisory and administrative personnel, will be deducted from the money owed to the Contractor for the project.

The Contractor shall not be relieved of the responsibility to provide work zone traffic control safety to the traveling public when a project is under full or partial suspension. When a project is under suspension due to the Contractor's failure to comply with this section, or when the contract is under liquidated damages, the Contractor shall continue to provide work zone traffic control management and no additional measurement or payment will be made.

If suspensions or partial suspensions are requested by the Contractor, the additional work zone traffic control management costs will be at the Contractor's expense.

**III. MEASUREMENT AND PAYMENT**

**Work Zone Traffic Control Management** will be paid for at the contract lump sum price. This price shall be full compensation for furnishing 24 hour services as specified, including preparing and furnishing Work Zone Traffic Control diaries.

When work zone traffic control management is paid for by the lump sum, monthly partial payments for work zone traffic control management will be made on a pro rata basis for the estimate period being vouchered for payment.

In the event the contract time is authorized to be extended according to the provisions of Section 108.04 of the Specifications, the provisions of Section 104.02 of the Specifications will not apply. The payment for this item will be compensated on a daily basis by dividing the original lump sum bid amount by the number of calendar days in the original contract time and the resultant daily dollar value assigned to this item.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Work Zone Traffic Control Management	Lump Sum

VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 512 – MAINTAINING TRAFFIC**

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

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

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

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

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

**Sign Substrates for Type 3 Barricades and Portable Sign Stands**

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Rollup sign

0.4 inch thick corrugated polypropylene or polyethylene plastic

0.079 inch thick aluminum/plastic laminate

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**Sign Substrates for Drums**

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0.4 inch thick corrugated polypropylene or polyethylene plastic

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

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

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

The Contractor shall locate, remove, and dispose of all existing asphalt-embedded Snowplowable Raised Pavement Marker (SRPM) castings which lie within a travel lane that has been shifted during construction for three months or longer. The cavity left by the removal of the existing marker shall be cleaned of debris, filled with an approved mix design for resurfacing or material found on the Department's Approved List 78, and compacted before shifting traffic.

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

**Temporary (Construction) Signs:** The Contractor shall furnish, install, remove, relocate, and maintain temporary signs and sign panels necessary for prosecution of the work. Installation shall

be in accordance with Section 701. The Contractor shall also furnish and install those signs not listed in the *VWAPM* that may be required by the Engineer.

Signs shall be fabricated in accordance with the *MUTCD* and *VWAPM*. If the Contractor proposes a sign message not included in the Plans, *VWAPM*, or *MUTCD*, then the Contractor shall submit a sign fabrication detail to the Engineer for approval before fabrication.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Barrier openings for access to the work area may be provided only along tangent sections or along curved sections on the inside of traffic and shall be limited to the minimum length required for equipment access. The Contractor shall delineate and maintain normal pavement alignment at the barrier opening with Type D pavement marking.

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

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

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

1. **Guardrail barrier service and terminal treatments** shall be installed in accordance with Section 505 except that the offset distance shall be as specified by the Engineer. The Contractor may be permitted to reuse guardrail or its hardware used for traffic barrier service guardrail for permanent installation provided the guardrail material is acceptable to the Engineer and conforms to Section 505 and the Standard Drawings for such guardrail. Marred galvanized surfaces shall be repaired in accordance with Section 233. Terminal treatments shall be permanently identified with a device specific Manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.
2. **Traffic barrier service** (concrete or longitudinal steel) shall be installed in accordance with the Plans and Standard Drawings or as directed by the Engineer, who will design according to Appendix A of the VWAPM. When traffic barrier ends at guardrail, fixed object attachment methods for construction zone shall be used to connect the barrier to the guardrail. Installation shall include additional guardrail posts and attachments as required. The traffic barrier, at a minimum, shall be tapered with the end of the barrier located behind the adjacent guardrail

post in accordance with the VWAPM. Barrier connections shall be snug to prevent motion between sections.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The Contractor may take retroreflectivity readings to counter visual observations by the Engineer as the basis for replacement of temporary pavement markings. These measurements shall be taken within 48 hours after the Contractor has been notified of the visual determination by the

Engineer of deficient markings. The Engineer will grant additional time to the Contractor when inclement weather prevents accurate measurement of the temporary pavement markings.

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

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

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

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

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

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

1. **Temporary Type A or B pavement markings** shall be used where the roadway is to be resurfaced before changes in the traffic pattern or where pavement is to be demolished and traffic patterns will not change before demolition.
2. **Type D, Class III pavement markings** shall be used on final roadway surfaces or in areas where traffic patterns are subject to change before pavement is resurfaced, unless otherwise specified in the Contract.

On non-final pavement surfaces, the Contractor may install Type A or B pavement markings when the surface temperature of the pavement is below the manufacturer's minimum application temperature for a Type D pavement marking. In such cases, the Contractor shall select a Type A or B product known to perform the best under those temperature conditions.

When a Type A or B pavement marking is used instead of a Type D pavement marking due to the surface temperature being below the manufacturer's minimum application temperature, the Contractor will be paid at the contract unit price for Type D pavement marking. This shall include the Type A or B marking and any necessary eradication of the Type A or B pavement marking.

3. **Type D, Class III contrast pavement markings** shall be used for all longitudinal temporary pavement markings on bridge decks and hydraulic cement concrete riding surfaces if all of the following are met:
  - The road has a speed limit of 45 MPH or greater.
  - The hydraulic cement concrete riding surface in question is at least 300 feet in length.
  - The temporary markings are planned for at least 15 days of use.

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

4. **Type E pavement markings** shall be used to cover existing markings in accordance with paragraph (l) herein.
5. **Temporary pavement markers** shall be installed with temporary pavement markings in accordance with paragraph (m) herein.

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

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

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

The Contractor may submit other methods for eradication for the Engineer's approval; however, the Department will not permit obscuring existing pavement markings with black paint or asphalt as a substitute for removal or obliteration. The Contractor shall minimize roadway surface damage when performing the eradication. The Contractor shall repair the pavement if eradication of pavement markings results in damage to or deterioration of the roadway presenting unsafe conditions for motorcyclists, bicyclists, or other road users. Pavement repair, when required, shall be performed using a method approved by the Engineer.

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

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

Eradication residue from the removal of any pavement markings is considered to be a nonhazardous waste material and shall be disposed of in a properly permitted waste disposal facility in accordance with applicable state and federal laws and regulations. The Department does

not require Contractor testing of the eradication residue for the eight Resource Conservation Recovery Act metals.

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

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

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

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

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

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

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

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

The Contractor shall replace damaged, ineffective, or missing temporary raised pavement markers upon notification by the Engineer at no additional cost to the Department. Markers damaged by the Department's snow removal operations or other maintenance and construction operations, however, will be paid for at the contract unit price.

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

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

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

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

Temporary pavement message markings shall be maintained in accordance with Section 512.03(k). Retroreflective measurements conforming to Section 512.03(k) shall be taken out of the

wheel path locations. The pavement message/symbol marking shall be replaced when the average of the three readings for the symbol/message is below 100 mcd/sf/ft.

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

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

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

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

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

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

The weight of the support vehicle shall be as recommended by the manufacturer of the Truck/Trailer-mounted attenuator. The Contractor shall provide a copy of the manufacturer's recommendations to the Engineer, a copy of the original weigh ticket for the support vehicle, and a self-certification letter stating the support vehicle has not been altered since the original weight ticket was issued. The weigh ticket shall contain adequate information to identify the ticket with the applicable support vehicle. A copy of the self-certification and weigh ticket shall be available in the support vehicle at all times and upon request.

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

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

The support vehicle shall have at least one vehicle warning light functioning while in operation in accordance with the VWAPM. When allowed by the VWAPM, an electronic arrow operated in the

caution mode may be used with the vehicle warning light. When installing and removing lane closures on a multilane roadway as well as when performing mobile operations, the support vehicle shall be equipped with both vehicle warning lights and an arrow board.

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

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

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

The sign shall be capable of sequentially displaying at least 2 phases of 3 lines of text each with appropriate controls for selection of messages and variable off-on times. Trailer-mounted PCMS shall be capable of displaying 3 lines of 8-character 18-inch text in a single phase, and vehicle-mounted PCMS shall be capable of displaying 3 lines of 8-character 10-inch text in a single phase. Each character module shall at a minimum use a five wide by seven high pixel matrix. The message shall be composed from keyboard entries.

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

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

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

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

**Portable Temporary Rumble Strip (PTRS):**

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

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

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

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

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

PTRS Placement shall be in accordance with the VWAPM.

**Section 512.04 – Measurement and Payment** is amended to replace the thirteenth paragraph with the following:

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

**Section 512.04 – Measurement and Payment** is amended to replace the twentieth paragraph with the following:

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

**Section 512.04 – Measurement and Payment** is amended to replace the 29th paragraph with the following:

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

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

The following pay items are removed:

<b>Pay Item</b>	<b>Pay Unit</b>
Portable temporary rumble strip	Each

The following pay items are inserted:

<b>Pay Item</b>	<b>Pay Unit</b>
Portable temporary rumble strip array	Day

VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SECTIONS  
**SECTION 700 – GENERAL**

**SECTION 700 – GENERAL** of the Specifications is amended as follows:

**Section 700.03 – General Requirements** is amended by replacing the second paragraph with the following:

The design of traffic control device and ITS device structures and foundations shall conform to AASHTO's *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th Edition (LTS-6), 2013 with 2015 and 2019 interims*, as modified elsewhere in the Contract.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 701 – TRAFFIC SIGNS**

**SECTION 701 – TRAFFIC SIGNS** of the Specifications is amended as follows:

Section 701.02 Materials is amended as follows:

**Section 701.02(a)1 – Overhead Permanent Signs** is replaced with the following:

**Overhead Permanent Signs** (signs attached to sign structures which overhang travel lanes) shall use ASTM D4956 Type XI sheeting.

**Table VII-1A – Reflective Sheeting** is replaced with the following:

<b>TABLE VII-1A Reflective Sheeting</b>	
<b>Background Color of Sign</b>	<b>Sheeting Type<sup>1</sup></b>
White	ASTM D4956 Type XI
Red	ASTM D4956 Type XI
Fluorescent Yellow	ASTM D4956 Type XI <sup>2</sup>
Fluorescent Yellow-Green	ASTM D4956 Type XI <sup>3</sup>
Green	ASTM D4956 Type XI
Black	ASTM D4956 Type XI
Purple	ASTM D4956 Type XI
Brown	ASTM D4956 Types IV, IX, or XI
Blue	ASTM D4956 Types IV, IX, or XI

<sup>1</sup>The following signs may use ASTM D4956 Types IV, IX, or XI, regardless of color: Pushbutton education signs (R10-series signs mounted adjacent to pedestrian pushbuttons), Signs erected on bikeways physically separated from adjacent roads, R7- or R8-series parking restriction signs located on non-limited-access highways, D10-series Reference Location Signs (mile markers) and Intermediate Reference Location Signs, and Post-mounted street name signs.

<sup>2</sup>The yellow portions of all signs shall be fluorescent yellow.

<sup>3</sup>All temporary and permanent warning signs related to school zones, pedestrians, or bicyclists (including associated supplemental plaques) shall use fluorescent yellow-green sheeting where required by the VA Supplement to the MUTCD unless otherwise specified on the Plans.

**Section 701.02(b) – Sign panel rivets** is replaced with the following:

**Sign panel rivets** shall be fabricated in accordance with Standard Drawing SPD-1.

**Section 701.03 Procedures** is amended as follows:

**Section 701.03 (a) 3 Letters, numerals, arrows, symbols, borders, and other features of the sign message** is amended to include the following:

- (e) **Type L5 - Digital Printing:** Features of the sign message shall be created with transparent and opaque durable inks, using the materials, equipment, and fabrication processes recommended by the sheeting manufacturer. Digitally applied colors shall present a smooth surface, free from foreign material, and all messages and borders shall be clear

and sharp. Digitally printed signs shall have at least 70% of the retroreflective minimum values shown in Section 247 for their type and color. Digitally printed signs shall meet the daytime color, nighttime color, and luminance, requirements of ASTM D4956. No variations in color or overlapping of colors will be allowed.

All digitally printed signs shall be comprised of an integrated engineered match component system from the sheeting manufacturer. The integrated engineered match component system shall consist of retroreflective sheeting, durable inks, and clear overlay film all from the same manufacturer applied to the substrate.

The digital sign fabricator shall be certified within the last 12 months by the sheeting manufacturer to produce an engineered-match component traffic control sign product. The Contractor shall provide documentation of this certification before starting digital printing sign fabrication. The submittal shall also include documentation that the manufacturer will warrant digitally printed signs fabricated by the sign fabricator in accordance with Section 247.03.

After printing, all digitally printed permanent and temporary traffic signs shall have an integrated engineered match component clear protective overlay recommended by the sheeting manufacturer applied to the entire face of the sign.

**Section 701.03(f)2 – Inventory Sheet** is replaced with the following:

**Inventory Sheet.** The Contractor shall provide an .xlsx formatted file to the Engineer, using a sign inventory template provided by the Engineer. The file shall include the information required above for the label, as well as the following:

- Route no.
- Project UPC no. (if applicable).
- Station or milepost information.
- Lane designation.
- *MUTCD*, if applicable and if denoted on the plans.
- Sign message.
- Sign width.
- Sign height.
- Sheeting Manufacturer
- Sheeting Type
- Sign fabricator company name

The cost of preparing and submitting the .xlsx formatted file shall be included with the cost of the sign panel pay items.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**MAST ARM HANGER ASSEMBLY STD SM-3 AND SMD-2**

May 25, 2016; Issued July 12, 2016

**I. Description**

This work shall consist of furnishing and installing mast arm signal hanger assembly (Standard SM-3) and mast arm sign hanger assembly (Standard SMD-2) for new or relocated signals and signs on mast arms and replacing existing hanger assemblies.

**II. Definitions**

The following terms are used as follows in this special provision:

1. **Mast Arm Hanger Assembly (Complete):** An inclusive mast arm hanger assembly that consists of the main mount, swivel plate, mounting system, mounting tube, and miscellaneous hardware items.
2. **Mast Arm Hanger Assembly (Components):** Main mount, swivel plate, mounting system and miscellaneous hardware items (washers, screws, bolts, or nuts).
3. **Main Mount:** The bracket component that mounts against the mast arm signal pole. Once installed, this component is fixed and is not adjusted.
4. **Swivel Plate:** The bracket component(s) that mate to the main mount. The swivel plate can be adjusted along multiple axis to allow the signal mounting tube to be positioned at different angular orientations. The mounting tube is connected to the swivel plate.
5. **Mounting System:** Stainless steel cables which connect the main mount and mast arm signal pole.
6. **Mounting Tube:** The bracket component that holds the signal head assembly, camera, or sign panel bracing to the swivel plate.
7. **Miscellaneous items:** Other components of the hanger assembly not listed above, including but not limited to: tie back, or tether clamps which fasten the cable to the mounting tube; mounting arms; cover plates; hardware (washers, screws, bolts, or nuts); caps; and seals.
8. **Special Tools:** Unique tools identified by a specific item or product number in the manufacturer's installation instructions

**III. Materials**

As used below: XX, XXX or xx refers to stainless steel cable length, which shall be determined by the Contractor for the specific mast arm diameter at each installation location; YY or yy refers to the mounting tube length for sign panels, which shall be determined by the Contractor for the specific sign height at each location; ## refers to the channel width, which shall be determined by the Contractor for the specific sign width at each location.

1. **Mast Arm Signal Hanger Assembly (Components) for Relocation or Maintenance Replacement – Signals**

Mast arm hanger components (main mount, swivel plate, mounting system, and associated miscellaneous items) used for signal relocation or maintenance replacement of signal hanger assemblies shall be of the following or approved equal:

<b>Table 1: MAST ARM SIGNAL HANGER ASSEMBLY (COMPONENTS) FOR RELOCATION OR MAINTENANCE REPLACEMENT - SIGNALS</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AB-3055-XX-SS-PNC
Traffic Hardware & Design	CAN-BRAC, Model CBL-VUB-2CXX-9
General Traffic Equipment Corp.	RM - MAC - XX
Cost Cast, Inc.	Cost Cast Item # 1816-A-CXX
Sky Bracket	SKYBRACKET, Model SS-SBCXX-SCK-VA

**2. Mast Arm Signal Hanger Assembly (Complete) - Signals**

Complete Mast Arm Hanger Assemblies used for new signals, relocated signals or maintenance replacement of signal hanger assemblies shall be of the following or approved equal:

<b>Table 2: MAST ARM SIGNAL HANGER ASSEMBLY (COMPLETE) – SIGNALS</b> (New Signals, Relocated Signals Or Maintenance Replacement)	
<b>1-SECTION HEAD HANGER ASSEMBLY (IN LINE)</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AG-0125-1-XX-SS-PNC
Traffic Hardware & Design	CAN-BRAC, Model CBL-VUN1-T24-2Cyy-9
General Traffic Equipment Corp.	RM-1000C-XX-1
Cost Cast, Inc.	Cost Cast Item # 1816-G-CXX-24
Sky Bracket	SKYBRACKET, Model SS-SBCXX-18-VA
<b>3-SECTION HEAD HANGER ASSEMBLY (IN LINE)</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AG-0125-3-XX-SS-PNC
Traffic Hardware & Design	CAN-BRAC, Model CBL-VUN1-T46-2Cyy-9
General Traffic Equipment Corp.	RM-1000C-xx-3
Cost Cast, Inc.	Cost Cast Item # 1816-G-CXX-48
Sky Bracket	SKYBRACKET, Model SS-SBCXX-46-VA
<b>4-SECTION HEAD HANGER ASSEMBLY (IN LINE)</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AG-0125-4-XX-SS-PNC
Traffic Hardware & Design	CAN-BRAC, Model CBL-VUN1- T58-2Cyy-9
General Traffic Equipment Corp.	RM-1000C-xx-4
Cost Cast, Inc.	Cost Cast Item # 1816-G-CXX-60
Sky Bracket	SKYBRACKET, Model SS-SBCXX-60-VA
<b>5-SECTION HEAD HANGER ASSEMBLY (CLUSTER)</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AG-0138-XX-SS-PNC
Traffic Hardware & Design	CBL-VUN2-14-T37-2CXX-9
General Traffic Equipment Corp.	RM-5C-5000C-xx
Cost Cast, Inc.	Cost Cast Item # 1816-G-CXX-5X
Sky Bracket	SKYBRACKET, Model SS-SBCXX-SCB-46-VA

**3. Mast Arm Sign Hanger Assembly (Components) for Relocation or Maintenance Replacement – Signs**

Mast Arm Hanger Assembly components (main mount, swivel plate, mounting system, and associated miscellaneous items) used for sign relocation or maintenance replacement of sign hanger assemblies shall be of the following or approved equal:

<b>Table 3: MAST ARM SIGN HANGER ASSEMBLY (COMPONENTS) FOR RELOCATION OR MAINTENANCE REPLACEMENT - SIGNS</b>	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AB-3055-XX-SS-PNC 1-Bracket per 16 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Traffic Hardware & Design	CBS-HU-Exx-2Cyy-3 1-Bracket per 20 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
General Traffic Equipment Corp.	RM-MAC-XX 1-Bracket per 15 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Cost Cast, Inc.	Cost Cast Item # 1816-A-Cxx 1-Bracket per 16 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Sky Bracket	SKYBRACKET, Model SS-SBCXX-SCK-VA 1-Bracket per 13 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Xcessories Squared	PAX2PC30-XXX and PASCL316-XXXX 1-Bracket per 10 Sq. Ft. of sign panel spaced per manufacturer's installation instructions

4. **Mast Arm Sign Hanger Assembly (Complete) - Signs**

Complete Mast Arm Hanger Assemblies used for new signs, relocated signs or maintenance replacement of sign hanger assemblies shall be of the following or approved equal:

<b>Table 4: MAST ARM SIGN HANGER ASSEMBLY (COMPLETE) – SIGNS</b> (New Signs, Relocated Signs Or Maintenance Replacements)	
<b>MANUFACTURER</b>	<b>MODEL</b>
Pelco Products, Inc.	Galaxy, Model AG-0142-XX-XX-SS-PNC Galaxy, Model AG-0144-XX-XX-SS-PNC 1-Bracket per 16 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Traffic Hardware & Design	CAN-BRAC, Model CBS-HU-Exx-2Cyy-3 1-Bracket per 20 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
General Traffic Equipment Corp.	SMA - 3000 – XX 1-Bracket per 15 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Cost Cast, Inc.	Cost Cast Item # 1816-N-CXX-YY 1-Bracket per 16 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Sky Bracket	SKYBRACKET, Model SS-SBXX-SBK-XXTK-##-VA 1-Bracket per 13 Sq. Ft. of sign panel spaced per manufacturer's installation instructions
Xcessories Squared	PAX2PC30-XXX and PASCL316-XXXX 1-Bracket per 10 Sq. Ft. of sign panel spaced per manufacturer's installation instructions

**IV. Procedures**

All work shall be accomplished according to the manufacturer's installation instructions. Only the tools, special tools, and anti-seize lubricants specifically noted in the manufacturer's installation

instructions shall be used. If the Contractor deviates from the manufacturer's installation instructions, the Contractor shall provide documentation from the manufacturer authorizing such deviations, including the use of alternate tools.

If a bolt tightening sequence is not specified in the manufacturer installation instructions, bolts shall be tightened in an alternating pattern for even compression.

If a main mount with fully tightened bolts requires adjustment that necessitates loosening of the main mount bolts, the mounting system and associated hardware for the mounting system (washers, screws, bolts or nuts) shall be replaced at no additional cost to the Department.

1. **Tools:** If maximum torque values are provided in the manufacturer's installation instructions, a calibrated torque wrench shall be used to verify that torque has not been exceeded. The Contractor shall calibrate torque wrenches in accordance with torque wrench manufacturer recommendations at the interval recommended by the torque wrench manufacturer. The torque wrench calibration testing lab shall be ISO, or ANSI accredited for instrument calibration.

If special tools are identified in the manufacturer's instructions as being either required or recommended for installation the Contractor shall furnish no less than one set of tools to the Engineer per ten mast arm hanger assemblies or portion thereof, unless otherwise specified in the contract documents.

2. **Packaging:** All required components of each hanger assembly, except the mounting tube, shall be packaged as one set. The mounting tube may be packaged separately. If special tools are required, or recommended, they may be packaged separately. Under no circumstances shall the parts from multiple assemblies be mixed.
3. **New Signal or Sign Installations:** A Mast Arm Hanger Assembly (Complete) shall be used - see Table 2 for signals and Table 4 for signs.

The Mast Arm Hanger Assembly (Complete) may be attached to the mast arm and all bolts tightened to final tightness before lifting and placing the mast arm onto the signal pole (i.e. on the ground- attached to the mast arm prior to installation of the mast arm).

4. **Relocate Existing Mast Arm Hanger Assemblies for Signals or Signs:** Existing Mast Arm Hanger Assemblies (main mount, swivel plates, mounting systems and all associated miscellaneous items) that are in service before the commencement of any project shall not be relocated on the same mast arm or reused on a different mast arm.

The initial relocation of each existing signal or sign from its location at commencement of the project (Location A) to a new location on a mast arm (Location B) may be accomplished using one of the following at the new location on a mast arm:

- a. A new Mast Arm Hanger Assembly (Complete) – see Table 2 for signals and Table 4 for signs or
- b. New Mast Arm Hanger Assembly (Components) – see Table 1 for signals and Table 3 for signs. Existing mounting tubes, cover plates, tie backs, and tether clamps may be reused if they are compatible with the new components;

Subsequent relocations of the signal or sign from Location B to another location may be accomplished by the Contractor using one of the following at the new location on a mast arm:

- a. A new Mast Arm Hanger Assembly (Complete) – see Table 2 for signals and Table 4 for signs; or

- b. New Mast Arm Hanger Assembly (Components) – see Table 1 for signals and Table 3 for signs. Existing mounting tubes, cover plates, tie backs, and tether clamps may be reused if they are compatible with the new components; or
  - c. New mounting system. The existing hanger assembly equipment installed for the initial relocation from Location A to Location B may be reused.
5. **Modify Existing Hanger Assembly:** Modifying an existing mast arm hanger assembly at the same location on a mast arm shall be accomplished in accordance with the following:
- New Mast Arm Hanger Assembly (Components) – see Table 1 for signals and Table 3 for signs. Existing mounting tubes, cover plates, tie backs and tether clamps may be reused if they are compatible with the new components;
6. **Remove Existing Hanger Assembly:** Removing and disposing of an existing hanger assembly or components shall be in accordance with Section 510 of the Specifications.
7. **Prosecution of Work:** The Contractor shall prosecute work in accordance with Section 703.03 of the Specifications.

While performing this work, if the Contractor discovers any mechanical or electrical problems with the signals, or discovers any problems that require immediate repair, the Contractor shall log each problem by intersection and signal head and advise the Engineer immediately. The Engineer will instruct the Contractor how to proceed.

The Contractor shall exercise caution during prosecution of work to prevent damage to any existing wiring, or signal component. If the Contractor damages any existing wiring, or signal equipment, repair and replacement shall be at no additional cost to the Department.

## V. Reporting

For each mast arm hanger assembly (Complete or Components) installed, the Contractor shall submit the attached Mast Arm Bracket Installation Report form to the Engineer. The form shall also be submitted to the Department's email [hangerassemblies@vdot.virginia.gov](mailto:hangerassemblies@vdot.virginia.gov).

Hard copy submission of the Mast Arm Bracket Installation Report to the Engineer shall not substitute for reporting to the required email address. The Mast Arm Bracket Installation Report shall be submitted within 7 business days of mast arm hanger assembly installation.

By submitting the report, the Contractor certifies that the mast arm hanger assembly installation was accomplished in strict conformance with these specifications.

Reporting will not be measured for separate payment but shall be considered incidental to the mast arm hanger assembly work.

## VI. Warranty

The Contractor shall furnish a manufacturer warranty for the Complete Mast Arm Hanger Assembly or installed components to cover defects for a minimum of three years from the date of installation. The warranty shall include providing replacements, within 10 calendar days of notification, for defective parts and equipment at no additional cost to the Department. When the warranty normally given by the manufacturer is longer than three years, the manufacturer's normal warranty shall be furnished.

## VII. Measurement and Payment

**Mast Arm (Type) Hanger Assembly (Standard)** will be measured in units of each for the standard and type specified to be paid for at the contract unit price per each. This price shall include furnishing and installing Mast Arm Hanger Assembly (Complete), including the main mount, swivel plate, mounting system, mounting tube, miscellaneous items, reporting, and special tools (when required).

**Remove Existing Traffic Signal Head Assembly** will be measured in units of each and will be paid for at the contract unit price per each. Signal head assembly is defined as one or more traffic signal head sections (vehicular or pedestrian) assembled as one unit. This price shall include disconnecting the signal head assembly from existing conductor cables, removing the signal head assembly and backplate, removing and disposing of hanger assembly, and removing all associated mounting equipment, hardware, and accessories. If the traffic signal head assembly is to be reinstalled, the price also shall include reconnecting signal cables. When designated in the contract for salvage or if salvage is directed by the Engineer, this price shall include storing, protecting, and delivering to a designated Department facility.

**Relocate Existing Mast Arm (Signal or Sign)** will be measured in units of each and will be paid for at the contract price per each. This price shall include removing and relocating an existing traffic sign, signal head, or pedestrian signal head from an existing to proposed location, disconnecting and reconnecting conductor cables, adjusting or relocating conductor cables, removing and disposing or salvaging the existing mast arm hanger assembly, installing a new Mast Arm Hanger Assembly (Complete) or installing new Mast Arm Hanger Assembly (Components) and relocating or replacing existing miscellaneous items.

When relocation of signals or signs is accomplished when maintenance of the traffic signal is the responsibility of the Contractor as specified in Section 512 for the items Modify Signal or Temporary Traffic Control Signal, relocating existing mast arm hanger assemblies for signals or signs will not be measured separately and the cost thereof shall be included in the contract unit price of Modify Signal or Temporary Traffic Control Signal.

**Modify Existing Mast Arm Hanger Assembly (Type)** will be measured in units of each and will be paid for at the contract price per each. This price shall include removing an existing traffic sign, signal head, or pedestrian signal head from the existing hanger, furnishing new hanger assembly components, disconnecting and reconnecting conductor cables, removing, salvaging, and disposing of existing mast arm hanger assembly components, installing new Mast Arm Hanger Assembly (Components) and reusing or replacing existing miscellaneous items.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Mast Arm (Type) Hanger Assembly (Standard)	Each
Remove Existing Traffic Signal Head Assembly	Each
Relocate Existing Mast Arm (Signal or Sign)	Each
Modify Existing Mast Arm Hanger Assembly (Type)	Each



VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 704 – PAVEMENT MARKINGS AND MARKERS**

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

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

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

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

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

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

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

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

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

The Contractor shall exercise caution and protect the public from damage while performing pavement marking operations. The Contractor shall be responsible for the complete preparation of the pavement surface, including, but not limited to, removing dust, dirt, loose particles, oily residues, curing compounds, concrete laitance, residues from eradication, and other foreign matter immediately before installing pavement markings. The pavement surface shall be clean and dry at the time of pavement marking installation and shall be tested in accordance with VTM 94 before permanent installation, with the VTM 94 test results noted on Form C-85. The Contractor shall provide the equipment indicated in VTM 94 that are needed to perform the moisture test before application.

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

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

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

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

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

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

Glass beads and retroreflective optics shall be applied to the entire surface of the marking at the minimum rate of 6 pounds per gallon of paint, unless specified otherwise in the Department's Approved List 20 for the selected pavement marking product.

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

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

**Section 704.03(a)2a – Thermoplastic (Class I)** is amended to replace the fourth paragraph with the following:

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

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

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

Preformed thermoplastic shall not be applied over existing pavement markings of materials other than paint or thermoplastic, unless the existing marking is 90 percent worn away or eradicated. When applying preformed thermoplastic over existing paint or thermoplastic, the existing marking

shall first be swept or eradicated to the extent necessary to ensure the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

**Section 704.03(a)2f – Polyurea (Class VII)** is amended by replacing the second paragraph with the following:

Polyurea marking material shall be applied at a wet film thickness of 20 mils ( $\pm 1$  mil). Glass beads and retroreflective optics shall be applied at the rate specified in the Department's Approved List 74 for the specific polyurea product.

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

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

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

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

**Table VII-3** is replaced with the following:

**TABLE VII-3  
Pavement Markings**

Type	Class	Name	Film Thickness (mils)	Pavement Surface	Application Limitations	Appr. List No.
A		Traffic paint	15 $\pm$ 1 when wet	AC HCC	May be applied directly after paving operations	20
B	I	Thermoplastic Alkyd	90 $\pm$ 5	AC HCC	May be applied directly after paving operations	43
	I	Thermoplastic Hydrocarbon	90 $\pm$ 5 when dry	AC HCC	Do not apply less than 30 days after paving operations	43
	II	Preformed Thermoplastic	120-130	AC HCC	Manufacturers installation instructions	73
	III	Epoxy resin	20 $\pm$ 1 when wet	AC HCC	Manufacturers installation instructions	75
	IV	Plastic-backed preformed Tape	60 - 120	AC HCC	Manufacturer's installation instructions	17
	VI	Patterned preformed Tape	20 min <sup>1</sup> 65 min <sup>2</sup>	AC HCC	(Note 4)	17
	VII	Polyurea	20 $\pm$ 1	AC HCC	Manufacturer's installation instructions	74

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

<sup>1</sup>Thinnest portion of the tape's cross section.

<sup>2</sup>Thickest portion of the tape's cross section.

<sup>3</sup>In accordance with manufacturer's installation instructions.

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

**Section 704.03(d)1 – Snowplowable raised pavement markers** is replaced as follows:

**Snow-plowable raised pavement markers** shall not be used.

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

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

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

The following pay items are removed:

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

The following pay items are inserted:

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

## EXHIBIT E

### SAFETY REQUIREMENTS

- A. The Concessionaire and the Contractor recognize that in every circumstance, activity, and decision related to the Project, the safety of the public and Contractor, Concessionaire, and VDOT personnel is the primary concern. Ensuring and maintaining safety on the Project is paramount.
- B. The Contractor 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 Contractor or any other person shall be immediately corrected.
- C. Compliance with current construction safety and health standards and the Concessionaire's Safety requirements is a condition of the Project Contract and shall be made a condition of each subcontract entered into by the Contractor. The Contractor and any Contractor shall not require any worker employed in performance of the Work to place themselves 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.
- D. The Contractor's shall ensure that a safety-responsible individual who is a supervisor-level employee of the Contractor, is located on site whenever work is being performed. This individual must have completed an OSHA 30-Hour Outreach Training Course within the past five years.
- E. The Contractor shall develop a Health, Safety and Security Plan. The Health, Safety and Security Plan will define the health, safety and security policies, procedures and activities required during the construction of the Project and will address:
- the health and safety policy for the Project;
  - the health and safety goals for the Project;
  - the health, safety and security roles and responsibilities of all positions on the Project;
  - the health and safety rules and regulations for the Project;
  - any unique safety requirements of the Concessionaire including incorporation and compliance with the Concessionaire **HSE Minimum Requirements, Attachment A**;
  - disciplinary processes for violation of project safety requirements and rules.
  - site security plan and requirements;
  - emergency procedures including coordination with local emergency responders and the Concessionaire during an emergency
  - protection of the public

- documented procedures on meeting the health and safety requirements for the Contractor and its Contractors and suppliers;
- on-going tracking of efforts and corrective actions required and how they have been met;
- reporting and documentation mechanism;
- the requirements of this section

The Health, Safety and Security Plan must be submitted to the Concessionaire for review and comment prior to commencement of work. Compliance with the Health, Safety and Security Plan is a requirement of all subcontractors.

- F. The Contractor shall comply with the safety requirements listed below and the policies and procedures included in the Contractor's approved Health, Safety and Security Plan.
1. The Contractor shall ensure that the Health, Safety and Security Plan and associated policies and procedures are provided to all relevant personnel before such personnel are permitted access to the Project site or perform any Project Work.
  2. The Contractor shall ensure that all required safety training is properly conducted in a timely manner. At a minimum, foremen and above assigned to the Project shall have current CPR, First Aid, and AED certification.
  3. Specialized training (e.g., work zone safety, confined space, erosion and sediment control, energized lines, etc.) shall be provided to all relevant personnel if such training is required.
  4. Personal protective equipment (PPE) is anything used or worn by a person to minimize risk to the person's health or safety and includes a wide range of clothing and safety equipment. PPE requirements must be identified and the correct signage shall be put in place. The following PPE is the minimum that must be worn by all personnel and employees of the Contractor and any subcontractors at all site projects (outside general offices):
    - Head protection, hard hat, (with project induction sticker) as per 29 CFR 1910.135, 1926.100 and American National Standards Institute (ANSI) Z89.1 - American National Standard for Industrial Head Protection.
    - Eye protection with side shields or wrap around as per as per ANSI/ISEA Z87.1 (Z87+) - Standard for Occupational and Educational Eye and Face Protection Devices. Over-the-glasses safety glasses must be worn over prescription glasses if the wearer does not have prescription safety glasses.
    - Foot protection, safety-toed boots, as per as per ASTM F 2413 - Specification for Performance Requirements for Protective Footwear.
    - High visibility clothing; Class 3 high visibility shirt, vest or jacket as per ANSI/ISEA 107 - Standard for High-Visibility Safety Apparel and Headwear, are required at all times on the Project site or when on or near any roadway, whether or not protected by a concrete steel barrier. In addition, Type E pants are required whenever not protected by a concrete or steel barrier or when working in hours of darkness. Note: These must be worn over any other clothing such as rain coats.
    - Hand protection, gloves; required at all times whenever outside of vehicle or heavy motorized equipment
    - Shirt with sleeves of sufficient length to cover shoulders;

- Hearing protection, as per ANSI/ISEA S12.68, must be carried at all times and must be worn when working near areas where excessive noise is being generated, i.e. in a tunnel with live traffic.
- 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.

All Concessionaire employees will follow the site PPE requirements. All Project team members will be required to maintain an adequate supply of PPE based on their roles, and to regularly inspect and replace PPE as needed. All damaged or worn PPE must be replaced immediately. No person may undertake any task using or wearing faulty PPE.

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 person shall be permitted to position themselves under any raised load or between hinge points of equipment without first taking steps to support the load by the placing of safety bar or blocking.
  8. 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 person 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.
  12. When working near hot areas, such as road asphaltting, long sleeve cotton shirts and pants must be worn whether night or day.
  13. Explosives shall be purchased, transported, stored, used and disposed of by a Virginia State Certified Blaster in possession of a current criminal history record check and a commercial driver's license with hazardous materials endorsement and a valid medical examiner's certificate. All Federal, State and local regulations pertaining to explosives shall be followed. No explosives shall be used on the project without express written authorization from the Concessionaire and VDOT.
- G. If the Contractors' actions (or that of its subcontractors or suppliers) create an unsafe environment for the Contractor's workers, Concessionaire or VDOT personnel, or the travelling public, upon notification, the Contractor shall immediately stop operations in that location to identify the cause(s) and resolve the safety issues. All reports of unsafe behavior received by the Contractor will be promptly investigated and, where necessary, changes made to the personnel, construction methods or work zone protections.
- H. If required by the Contractor's or any subcontractor's performance, or as requested, the Contractor shall conduct root cause analyses to determine those factors that are

contributing to safety-related incidents and/or trends that are negatively affecting the performance of the work, the health and safety of workers, or the travelling public. In each instance, the Contractor shall identify and implement appropriate corrective actions.

#### I. Safety Reporting

Contractor on a monthly basis by no later than the third (3rd) business day of each month, must complete the monthly HSE report form provided by the Concessionaire (Monthly HSE Report Form) and provide the completed form to the Concessionaire in the manner directed by the Concessionaire. The Contractor agrees that by submitting each Monthly HSE Report Form to the Concessionaire, the Contractor represents and warrants for the benefit of the Concessionaire that the information contained in the Monthly HSE Report Form is true and correct; and no information requested in the Monthly HSE Report Form has been intentionally or knowingly omitted from the form. The information shall be provided for all direct hire and subcontractor project activity.

For any First Aid, Near Miss, Injury, Illness, or Property Damage Incident involving the Contractor (including subcontractors, consultants and suppliers), within 24-hours of the incident, the Contractor shall provide a detailed Report of Incident that shall include time and date, brief description, classification type and location of the injury. Within one week of the incident, the Contractor shall provide any update of the 24-hour report and an analysis of the root cause of the incident.

#### J. Incident and Injury Management Procedures

Any and all incidents, including those involving subcontractors, must be reported to the Concessionaire in accordance with Concessionaire Incident Reporting and Management Procedure. All incidents, illnesses, injuries, near miss incidents or interaction with a regulatory agency must be reported to the Concessionaire within one hour (1) of occurrence. In relation to any incidents, the Contractor must at any time, give the Concessionaire a verbal briefing or briefings, containing such information as may be required by the Concessionaire in relation to the incident. Within the time required by the Concessionaire, provide a written report to the Concessionaire, giving complete details of the incident, including the results of investigations into its cause and any recommendations, in the form directed by the Concessionaire including:

- details of immediate actions taken to prevent recurrence of the incident and interim control measures;
- where applicable, confirmation and evidence that the appropriate authorities have been notified in accordance with all Laws;
- details of the factors that caused or contributed to the incident;
- the risk potential of the incident;
- details of permanent control measures to be implemented (and the timelines for implementing those measures) to prevent reoccurrence of the incident;
- identification of whether a more detailed investigation and follow up will be undertaken by the Contractor in relation to the incident; and
- Within the time required by the Concessionaire, provide the Concessionaire with any other information, including copies of any investigation reports, as requested by it.



The Contractor is responsible for assuring that all project tasks are conducted using a daily pre-task plan, which has been developed with the input of the workers required to perform the work and signed by the workers. The Contractor is also responsible for conducting audits of pre-task plans.

**Q. Safety Audits**

The Contractor is responsible for implementing and following a formal safety audit program of the project on a predetermined schedule (at a minimum every six months). Concessionaire staff shall be invited to participate in any Contractor safety audits.

The Concessionaire shall have the right to conduct, or to nominate a third party to conduct on the Concessionaire's behalf (and at its expense), a health, safety and security audit of the Contractor to ensure that the Contractor complies with these requirements and the Project Health, Safety and Security Plan.

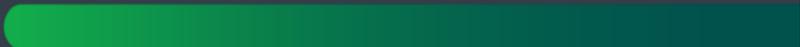
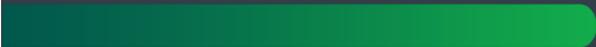
If an audit indicates any deficiencies or matters requiring attention, the Contractor shall promptly address all such items and deliver written confirmation to the Concessionaire describing the actions undertaken to address and correct such deficiencies.

**R. Authority to Access Permitting Process**

The Contractor is required to comply with all Concessionaire requirements associated with Authority to Access permitting process, including but not limited to ensuring all project are "site ready" and authority to interface with existing Express Lanes is granted through the Authority to Access process within the Concessionaire's Permitted system.

**Attachment A – HSE Minimum Requirements**

# HSE minimum requirements



# HSE minimum requirements

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**For more information:**

Contact a member of the HSE team

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The Transurban Health, Safety and Environment (HSE) Minimum Requirements define the minimum requirements and controls to manage key HSE risks to protect the people who work for, or are performing work for Transurban, as well as the community, from injury, illness or harm.

They are applicable across all Transurban entities within Australia and North America. These minimum requirements aim to mitigate HSE risks, meet applicable legislative obligations and demonstrate due diligence. They are in addition to business unit, asset or project-specific processes.

The HSE minimum requirements are an internal resource document for Transurban and WestConnex employees to use as a reference tool.

### *Transurban “monitored” worksites*

On sites or projects where Transurban does not have operational control, work is conducted under the relevant contractor’s Health, Safety and Environment Management System (HSE MS). In these circumstances, the Transurban HSE Minimum Requirements provide the benchmark for our HSE expectations of that contractor. The contractor may set higher or more stringent requirements and in those instances, Transurban will adopt the higher requirements as the HSE baseline.

Please note that all high risk tasks included in this document must be performed by a *competent person* as defined by local legislation. Definitions such as “*confined space*” and “*suitable warning devices*” may differ across the regions in which Transurban operates and may be defined in local requirements or guidance material (e.g. Codes of Practice).

Where the HSE Minimum Requirements refers to applicable or relevant standards, these standards may be different depending on geographical location. Contact your local HSE Advisor should you require information relating to standards.

Refer to *TU-HSE-MN-03 HSE Definitions and Explanations* for common HSE terms used throughout this document.



### Confined spaces



Intent:

**To eliminate the risk of fatalities, injuries and incidents arising from entering or working in confined spaces.**

## Requirements

1. Design and planning processes must consider the elimination of the need to enter a confined space.
2. Risk assessments and Safe Work Method Statements (SWMS) are to be documented for activities involving confined spaces.
3. Registers of confined spaces are to be maintained and provided to those who are required to work in proximity to, or enter a confined space.
4. Works in confined spaces are authorised by a permit, with the following required to be in place:
  - Documented rescue plans that are communicated and regularly reviewed with relevant personnel trained in the details of the rescue plan;
  - Necessary rescue equipment is worn at all times to facilitate rescue in the event of an emergency in line with the documented rescue plan;
  - Systems/equipment which are likely to modify the atmospheric or physical status of a confined space, identified, purged and/or confirmed to be isolated before entry;
  - Testing for atmospheric conditions utilising calibrated equipment is to be conducted prior to entry to a confined space;
  - A competent person shall be in place to continuously monitor atmospheric conditions, where atmospheric hazards are identified as a risk;
  - A suitably trained standby person to be located outside at all times when occupied – this person may have no other duties whilst the confined space activity is being conducted;
  - Effective two-way communication to be in place between the standby person and the confined space entrants
  - A method of activating an emergency response is to be maintained at all times whilst confined space work is being conducted; and
  - Signage displayed at each entry point for the full duration of works.

**For more information:**

Contact a member of the HSE team

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## Ground disturbance and/or penetration



Intent:

**To prevent harm and minimise risks to personnel required to undertake ground disturbance and penetration activities and to minimise environmental harm or damage.**

*Examples may include drilling and cutting into walls, ceilings, floors, bridges, tunnels, buildings and related infrastructure.*

## Requirements

1. Risk assessments and Safe Work Method Statements (SWMS) are to be documented for activities involving ground disturbance and penetration activities. If there is a potential impact to the environment, this is to be included in the risk assessment.
2. Utilities, services, natural or built environment and other civil structural considerations are required to be positively identified (e.g. potholing), located and marked using:
  - As-built drawings; and
  - Information obtained from applicable utility services or companies -
    - Australia – Dial Before You Dig;
    - USA – VA Utility Protection Service; or
    - Canada – Info-Excavation.
3. Drawings of service locations are to be provided to all parties involved in the activity prior to the work commencing.
4. Services should be isolated prior to breaking ground or penetration into structures. Where not possible, a detailed risk assessment must be undertaken.
5. A ground disturbance and penetration permit is required for all ground disturbance and penetration activities.
6. Refer to the *Transurban HSE Minimum Requirements for Excavations* as required.

**For more information:**

Contact a member of the HSE team

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### Excavations



Intent:

**To minimise environmental harm or damage, prevent harm and minimise risk to personnel required to undertake excavation activities and to minimise risks and impacts to members of the public or fauna.**

## Requirements

1. Risk assessments and Safe Work Method Statements (SWMS) are to be documented for activities involving excavations. If there is a potential impact to the environment, this is to be included in the risk assessment.
2. A ground disturbance and penetration permit is required for all excavation activities.
3. Excavations deeper than 1.5 metres (5 feet) must be benched, shored or battered to the relevant Standard.
4. Safe access and egress points from all excavations and trenches, for personnel and fauna, must be identified and monitored.
5. Barriers and cover plates shall be installed to prevent fauna, personnel or members of the public from accessing or falling into bored holes or open excavations.
6. Material disturbed during excavation must be contained in an appropriate, approved location to reduce the potential for collapse or unintended release.
7. Adequate erosion and sediment control measures are to be implemented to prevent sediment being released into drains and local waterways.
8. Excavation, batters and trenches are inspected by a competent person prior to each workday/shift, after rainfall or other events that may affect ground stability or introduce new hazards.
9. Refer to the *Transurban HSE Minimum Requirements for Confined Spaces and Ground Disturbance and Penetration* as required.

**For more information:**

Contact a member of the HSE team

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## Cranes and lifting operations



Intent:

**To prevent harm and minimise risks to personnel who participate in, operate or maintain cranes and lifting activities and to minimise risks to people around them and members of the public.**

## Requirements

1. Risk assessments and Safe Work Method Statements (SWMS) are to be documented for activities involving crane and lifting operations (i.e. Lift Plan). The SWMS must address all requirements of this HSE Minimum Requirement.
2. *Significant lifts* to have a documented lift study/plan developed by a suitably qualified engineer. A *significant lift* includes:
  - Any lift over 90% of the Manufacturers Rated Capacity (MRC);
  - Any lift over 20 tonne (22 ton);
  - Any lift involving multiple crane lifting (e.g. dual and tandem crane lifts);
  - Any lifts where energised power lines or exposed services (i.e. gas/water) are within the slew radius of the crane and lifting equipment;
  - A lift on, or over water;
  - A lift within a rail corridor; or
  - A lift occurring on a structure e.g. a bridge.
  - A lift where live traffic lanes are within the slew radius
3. Ground conditions must be assessed for stability by a competent person prior to any lifting operations being conducted.
4. Plant and equipment used for lifting must be fit for purpose and operated in accordance with original equipment manufacturers (OEM) specifications.
5. When lifting using an installed point/lug that point/lug must be engineer certified.
6. Up to date inspection records are maintained with no "open" safety-related deficiencies, in accordance with OEM and regulatory requirements.
7. A procedure shall be in place, which outlines the frequency of inspection, and the testing and tagging of lifting equipment and lifting gear by a competent person prior to use.
8. Outriggers are deployed in accordance with OEM specifications (no shortening of outriggers permitted).
9. Mobile cranes rated with a lifting capacity greater than 3 tonne (3.3 ton) must have limiting and indicating devices installed.
10. Crane operators and dogman/riggers must have two-way communication and a method of activating emergency response at all times.
11. The Manufacturers Rated Capacity (MRC) or Working Load Limit (WLL) must be clearly displayed on crane and lifting equipment.
12. The type and weight of loads are checked prior to a lift to confirm it is less than the minimum WLL of the lifting device.
13. No loads are to be lifted or suspended over people or live traffic.
14. Exclusion zones and associated procedures are to be established with signage for all lifts.
15. Non-conductible tag lines are to be established to guide loads.
16. Lifting devices and tag lines remain attached for loads capable of shifting until secured.

**For more information:**

**Contact a member of the HSE team**

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### Working at height



Intent:

**To prevent harm and minimise risk to personnel who may fall off an edge, object, structure, opening or sustain an injury from an object that may fall from one level to another.**

## Requirements

1. Design and planning processes must consider the elimination of the need to undertake work at height.
2. Risk assessments and Safe Work Method Statements (SWMS) are to be documented for work at height.
3. A secure working area of suitable design and strength must be established, including securely fastened flooring, railings or solid barriers; and toe boards or similar means to prevent personnel, tools and materials falling.
4. Where a secure working area is not reasonably practicable, fall arrest or fall restraint equipment must be used. The equipment must be fit for purpose and incorporate a full body harness attached to anchor points and/or safety lines designed to withstand the maximum dynamic load from all persons attached to the anchor point and/or safety line.
5. Fall arrest or fall restraint equipment must have lanyards and snap-hooks (carabiners) with a secondary locking mechanism and 100% tie-off must be achieved at all times.
6. A shock absorber must be incorporated when using fall arrest equipment.
7. A documented procedure shall be in place to ensure no person works alone when using fall arrest equipment.
8. Penetration covers, guardrails or grid mesh may only be removed if approved by an authorised permit.
9. A rescue plan is developed and communicated for immediate response to a person suspended in a harness to prevent suspension trauma.
10. Persons working in a boom type elevated work platform (EWP) must wear fall restraint equipment attached to an anchor point in the basket, unless when working over water where the risk of the work platform submerging beneath the water exists, creating the risk of the person being unable to exit from the platform in an emergency.
11. Secondary guarding devices e.g. guarding and interlocks, must be fitted to boom type EWPs in compliance with Standards to prevent crush or trap injuries.
12. A procedure shall be in place, which outlines the frequency of inspection, and the testing and tagging of equipment by a competent person prior to use.
13. Fall prevention shall be utilised on fixed ladders exceeding 75 degrees to the horizontal.
14. Portable ladders are not to be used. In circumstances where this is not possible, a risk assessment must be undertaken. Under no circumstances are portable ladders longer than 9 metres (29.5 feet) to be used.
15. Procedures are in place to protect personnel from falling objects (e.g. warning signs, tool lanyards, chin straps and exclusion zones).
16. Exclusion zones and associated procedures must be in place and communicated to those working in proximity to works at height.

**For more information:**

Contact a member of the HSE team

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### Working near live traffic



Intent:

**To prevent harm and minimise risks to personnel that are required to work near live traffic and to minimise risks to motorists, pedestrians, cyclists and other road users.**

Working near live traffic includes roadways, roadsides and shoulders.

## Requirements

1. Works design and planning processes must consider elimination of the need to undertake work near live traffic.
2. Transurban's position is not to cross live traffic. If the need to cross live traffic cannot be eliminated (e.g. recovery of debris or misplaced traffic management devices) then a specific risk assessment must be undertaken and provided to an authorised business unit, asset or project representative.  
Note – exemptions are not intended to be applied to routine maintenance activities.
3. Risk assessments and Safe Work Method Statements (SWMS) are documented for work near live traffic.
4. Pre-start activities specific to the location including hazard identification, are undertaken and documented prior to works commencing.
5. Traffic Management Plans, Traffic Control Plans and Vehicle Movement Plans are to be developed by a competent person and reviewed by the authorised business unit, asset or project representative.
6. Traffic Control and Traffic Management Plans must identify the controls necessary to separate workers from traffic such as physical barriers, minimum separation distances and shadow vehicles.
7. Traffic management planning ensures that identified risk reduction controls are implemented and communicated to all relevant personnel.
8. Non-traffic control personnel are not permitted within work areas until required traffic controls are implemented.
9. Vehicles used for works on roads are fitted with suitable warning devices.
10. Mobile Works on motorways require a Truck Mounted Attenuator (TMA) to be used as a shadow or cover vehicle at all times when workers are on foot.
11. Incident management vehicles on a non-managed motorway used to protect an incident scene from motorists should consist of a TMA. If a TMA is not available then a documented risk assessment should be undertaken to determine if an approved alternative vehicle can be considered.
12. Refer to the Transurban TMA Guidelines as required.

For more information:

Contact a member of the HSE team

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### Mobile plant operations



Intent:

**To prevent harm and minimise risks to personnel that are required to operate or work in proximity to mobile plant.**

## Requirements

1. Risk assessments and Safe Work Method Statements (SWMS) are documented for activities involving mobile plant.
2. Pre-start inspections of mobile plant are conducted by a competent person to confirm they are fit for purpose prior to use.
3. Guarding and interlocks that comply with relevant Standards and regulatory requirements, are fitted in all mobile plant.
4. Where possible, mobile plant should have in-built technology controls for collision avoidance, fatigue management, visibility improvements and proximity notification for pedestrians, other plant, equipment and structures.
5. Mobile plant must be fitted with:
  - Lockable isolation points;
  - An amber flashing beacon;
  - A reversing alarm;
  - Suitable two-way radios;
  - Fire extinguishers; and
  - Any additional equipment that has been identified by a risk assessment for the application and use of the mobile plant.
6. Mobile plant is used only for its originally intended purpose and should not be modified unless undertaken by the original equipment manufacturer (OEM) or a suitably qualified third party provider. Modifications shall have engineering certificates and compliance plates.
7. Operational controls to minimise risk are defined in one or more of the following, with updates communicated to relevant personnel:
  - Traffic Management Plans;
  - Traffic Control and Vehicle Movement Plans;
  - Risk registers;
  - Standard Operating Procedures, SWMS; and/or
  - Pre-task risk assessments.
8. Exclusion zones and associated procedures that encompass the entire operating zone of the mobile plant must be in place and communicated to those working in proximity to the plant.
9. An effective and reliable means of two-way communication between the mobile plant operator and those controlling the work operations and maintaining exclusion zones is established.
10. A documented procedure is in place to ensure mobile plant and equipment is maintained on a periodic basis in accordance with or OEM and regulatory requirements. Deficiencies are recorded and safety related deficiencies are resolved before equipment is returned to operation.
11. Documented procedures must be in place to manage people and operating plant interactions. Where possible, physical barriers are to be used. Where not possible or a spotter is proposed, a detailed risk assessment must be undertaken.
12. Personnel operating mobile plant must hold and keep on them at all times, the required licence and competency for the type of mobile plant to be used.

**For more information:**

Contact a member of the HSE team

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### Energy isolation



Intent:

**To prevent and minimise risks for personnel required to isolate energy sources and to work on energy-isolated equipment.**

*Energy may include electrical, chemical, gravitational, mechanical (or kinetic) or stored energy including pneumatic, hydraulic, battery, spring loaded or gravitational.*

## Requirements

1. Risk assessments and Safe Work Method Statements (SWMS) are documented for activities involving energy isolation and tag out.
2. Hazardous energy sources are identified, de-energised and isolated prior to working on equipment and/or systems.
3. Isolation points are clearly identified, labelled, lockable and fully maintained to prevent inadvertent energisation or de-energisation.
4. Energy sources and equipment are treated as live unless confirmed to be de-energised by a competent person.
5. A permit authorised by a competent person is in place and communicated prior to work commencing on energy isolation activities or working on isolated equipment.
6. The permit identifies each isolation point and specifies test requirements for the presence of hazardous materials/stored energy.
7. A documented procedure shall be in place for lock out and tag out to ensure no person works alone when isolating energy sources and working in energy-isolated equipment.
8. Refer to the *Transurban Minimum Requirements for Electrical Work* as required.

**For more information:**

Contact a member of the HSE team

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### Electrical work



Intent:

**To prevent harm and minimise risks to personnel required to work on or near potentially hazardous electrical energy above 50 volts AC or 120 volts DC.**

## Requirements

1. Transurban's position is there should be no live electrical work. In circumstances where this is not possible, such as testing or commissioning, a risk assessment must be undertaken.
2. Risk assessments and Safe Work Method Statements (SWMS) are documented for activities involving the potential for contact with live conductors or equipment.
3. Electrical energy sources should be isolated. Where not possible, a detailed risk assessment must be undertaken. *Refer Transurban HSE Minimum Requirement - Energy Isolation.*
4. Electrical equipment must be compliant with applicable Standards and a procedure shall be in place which outlines the frequency of inspection, testing and tagging of all portable electrical equipment by a competent person prior to use.
5. Circuits and powered equipment must have Residual Current Device (RCD) protection.
6. Temporary electrical leads must be secured off the ground by insulated hooks and/or lead stands.
7. Live electrical circuits are identified prior to penetrations of surfaces (walls, flooring and roofing). *Refer HSE Minimum Requirements – Ground Disturbance and Penetration.*
8. Regulated safe working distances and exclusion zones are identified and maintained when working near live Overhead Line Equipment (OHLE), live electrical parts or on assets with known ARC flash energy potential.
9. Electrical works are installed, tested and certified in accordance with applicable Standards and regulations.
10. A testing and tagging regime of portable electrical equipment must be maintained by an appropriately trained and competent person.
11. Warning barricades, signage and flagging is installed to prevent damage to underground and overhead electrical services.
12. Access to high voltage rooms is restricted to trained and competent personnel (or persons accompanied by trained and competent personnel).
13. A documented procedure shall be in place to manage high and low voltage risks.

**For more information:**

**Contact a member of the HSE team**

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## Driver and vehicle safety



### Intent:

To prevent harm and minimise risks to personnel required to operate or maintain vehicles; and to minimise risks to motorists, pedestrians, cyclists and other road users.

## Requirements

### Vehicles

1. Servicing and maintenance of all vehicles must be conducted in accordance with the manufacturer's specifications. Any damage, faults or changes to the vehicle's condition affecting its roadworthiness or safe use must be reported and rectified. Vehicles must be taken out of service until rectifications are made.
2. Vehicles must be registered and fully insured.
3. Vehicles, including hire vehicles, are inspected prior to driving each day.
4. Loose equipment is securely restrained prior to driving a vehicle.
5. Vehicles should not be left unattended when the engine is running.
6. Vehicles must be parked in a fundamentally stable position i.e. in "park" with the handbrake fully engaged and engine switched off
7. Modifications, including attaching equipment, must comply with manufacturer's specifications, and applicable design rules and Standards. Vehicles should not be modified unless undertaken by the OEM or a suitably qualified third party

### Drivers

1. The driver must have a blood alcohol concentration (BAC) of zero and not be impaired by fatigue, prescription medication or other drugs.
2. Drivers must:
  - Adhere to all applicable road rules, including speed limits;
  - Ensure all occupants are wearing a seatbelt;
  - Drive to environmental conditions including adjusting speed, increasing distance/gaps in rain or poor visibility (fog, glare and heavy rain) and use day time running lights at all times;
  - Not smoke in vehicles;
  - Not use a mobile phone whilst driving, unless hands free functionality is built into the vehicle and is operational. *It is recommend that drivers avoid phone use even in hands free mode.*
3. Where possible, drivers should reverse park to allow forward exiting.

### Transurban drivers/vehicles

This minimum requirement must be read in conjunction with:

- Transurban Fleet Motor Vehicle Standard;
- Transurban & TQ Motor Vehicle Usage Policy and Procedures; and
- Transurban USA Motor Vehicle Usage Procedure.

# **EXHIBIT F**

## **FORM OF LIEN WAIVER**

### **Exhibit Description**

Exhibit F-1 – Form of Contractor Interim Lien Waiver

Exhibit F-2 – Form of Subcontractor Interim Lien Waiver

Exhibit F-3 – Form of Subcontractor Final Lien Waiver

Exhibit F-4 – Form of Contractor Final Lien Waiver



paid and there is no known basis for filing of any liens, security interests, encumbrances or other claims in the nature of mechanics', labor or materialmen's liens or other similar liens arising out of or in connection with the performance by Contractor or any of the Subcontractors of the Work under the Contract Documents; and releases, assignments and waivers from all Subcontractors that would otherwise have had the right to place a lien or encumbrance with respect to and on the Project, the Project Right of Way and any and all interests and estates therein, and all improvements and Materials placed on the Site, for all services done and Materials furnished to the date hereof have been obtained in such a form as to constitute an effective defense against the assertion of all such liens and encumbrances under the law of the Commonwealth of Virginia, if and to the extent required under the Contract Documents.

The Commonwealth of Virginia may rely on this Interim Lien Waiver as a third-party beneficiary thereof.

Signed this \_\_\_\_ day of 20\_\_\_\_.

[NAME OF CONTRACTOR]

By: \_\_\_\_\_

Name:

Title:

Subscribed and sworn to before me this \_\_\_\_ day of 20\_\_\_\_\_.

Notary Public in and for  
Said County and State







otherwise have had the right to place a lien or encumbrance with respect to and on the Project, the Project Right of Way and any and all interests and estates therein, and all improvements and Materials placed on the Site, for all services done and Material furnished have been obtained in such a form as to constitute an effective defense against the assertion of all such liens and claims under the laws of the Commonwealth of Virginia.

Executed copies of all such releases, assignments and waivers obtained by Contractor and not previously delivered to Concessionaire are attached hereto.

The Commonwealth of Virginia may rely on this Final Lien Waiver as a third-party beneficiary thereof.

Signed this \_\_\_\_ day of 20\_\_\_\_.

By: \_\_\_\_\_  
Name:  
Title:

Subscribed and sworn to before me this \_\_\_\_ day of 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public in and for  
Said County and State

## EXHIBIT G

### INSURANCE REQUIREMENTS

All contractors performing any portion of the Seminary Road Ramp Construction Work are required to obtain and maintain the following insurance coverages or be responsible for maintaining such coverages on their behalf, which requirements shall apply from the Effective Date until Seminary Road Ramp Final Completion:

- a) **Workers' Compensation and Employer's Liability Insurance** with statutory workers' compensation (Coverage A) limits and employer's liability (Coverage B) limits of \$1,000,000 bodily injury each accident, \$1,000,000 bodily injury by disease policy limit and \$1,000,000 bodily injury by disease each employee. Coverage will be extended, if needed, to cover any claims under the United States Longshore and Harbor Workers' Compensation Act (33 U.S.C. §§ 901-950) and the Jones Act (46 U.S.C. § 30104).
- b) **Automobile Liability Insurance** with a limit of at least \$1,000,000 combined single limit for bodily injury and property damage covering all owned (if any), non-owned, hired, or borrowed vehicles on site or off. The Concessionaire and VDOT are to be named as an additional insured on a primary, non-contributory basis.
- c) **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 of limits of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate applicable on a per project basis.
  - ISO Occurrence Form (CG 0001 12/04) or equivalent
  - Name Concessionaire (95 Express Lanes LLC), its parent, owners, subsidiaries and affiliate companies, their officers, agents, managers, employees, directors, Subcontractors, joint owners, VDOT, and Contractor as "Additional Insureds" on a primary and non-contributory basis, including both premises-operations coverage and products/completed operations coverage utilizing endorsements CG 2010 07/04 and CG 2037 07/04.
  - Products/Completed Operations for five (5) years after substantial completion or the statute of repose, whichever is less.
  - The Commercial General Liability Policy (General Aggregate) shall be endorsed to include CG-25-03 – Aggregate Limits of Insurance (per project), or its equivalent.

- d) **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 \$5,000,000 per occurrence and in the aggregate annually.

### **Contractor Insurances - General Requirements**

Contractor shall ensure that all required insurances required contain the following provisions:

- a) With the exception of Workers' Compensation insurance, Concessionaire and VDOT shall be named as an additional insured on all policies. Each such policy shall also include the appropriate severability of interest and cross-liability clauses to allow one insured to bring claim against another insured party.
- b) All insurance coverages shall be considered primary and non-contributory with regard to other insurances that might be available to Contractor or Concessionaire or VDOT.
- c) All insurers shall provide a waiver of subrogation against Concessionaire and VDOT for any claims covered by insurances required herein.
- d) Any inadvertent errors or omissions by Contractor in procuring the insurance required herein shall in no way prejudice the rights of Concessionaire or VDOT to collect under such policies.
- e) Any deductibles shall be the sole responsibility of Contractor.
- f) Required insurances and coverage levels shall remain in full force and in effect for the duration required by the Contract. Contractor and all Subcontractors shall maintain the required insurances and coverage levels without interruption from the date of contract (or subcontract) award through the end of the warranty period.
- g) No insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Concessionaire and VDOT. In the case of non-payment of premiums, ten (10) days' notice, to Concessionaire and VDOT for any changes related to Contractor and Subcontractor Required Coverages.
- h) Contractor shall file certificates of insurance with Concessionaire for itself and each Subcontractor evidencing the coverages and limits described above within the times required by the Contract. All endorsements must be included with any certificates of insurance provided. The certificates shall be executed by approved insurance companies authorized to do business in Virginia with a minimum "Best Rating" of "B +" or greater, and shall cover the Work.
- i) The insurance coverage limits shall not be construed to relieve Contractor or Subcontractor(s) of liability in excess of such coverage, nor shall it preclude Concessionaire or VDOT from taking such actions as are available to it under any other provision of the Contract or otherwise in Law.

## **EXHIBIT H**

### **FORMS OF PERFORMANCE AND PAYMENT BONDS**

#### **Exhibit Description**

Exhibit H-1 – Form of Payment Bond

Exhibit H-2 – Form of Performance Bond

**EXHIBIT H-1  
FORM OF PAYMENT BOND**

**BOND NO.  
PENAL SUM: \$[●]**

**KNOW ALL WHO SHALL SEE THESE PRESENTS:**

**THAT WHEREAS**, the Commonwealth of Virginia, Department of Transportation, a state agency of the Commonwealth of Virginia (the “Owner”), has awarded to 95 Express Lanes LLC (the “Obligee” which term hereinafter includes its successors and assigns) a Comprehensive Agreement dated July 31, 2012 (the “Original Agreement”) to develop, design, build, finance, operate, and maintain the Interstate 95 HOV/HOT Lanes Project (the “Project”); and

**WHEREAS**, the Owner and the Obligee have entered into a First Amendment to the Original Agreement dated May 2, 2016 (the “First Amendment”) under which the parties agreed to add the “Southern Terminus Extension” to the Project; and

**WHEREAS**, the Owner and the Obligee have entered into an Amended and Restated Comprehensive Agreement (the “ARCA”) dated June 8, 2017 under which the Obligee would add approximately eight miles of high-occupancy toll lanes on Interstate 395 to the Project, and other significant related improvements on and around Interstate 395 (collectively, the “395 Project”); and

**WHEREAS**, the Owner and the Obligee have entered into a Second Amended and Restated Comprehensive Agreement (the “Second ARCA”) dated April 18, 2019 under which the Obligee would add approximately ten miles of high-occupancy toll lanes on Interstate 95 from the Southern Terminus Extension to Fredericksburg (the “Fred Ex Project”)

**WHEREAS**, the Owner and the Obligee intend to enter into a Third Amended and Restated Comprehensive Agreement (the “Third ARCA”) under which the Obligee will convert the existing south-facing HOV ramp from Seminary Road to 395 Express to a HOT ramp (the “Seminary Project”); and

**WHEREAS**, the Obligee intends to enter into the Seminary Construction Contract (the “Construction Contract”) between the Obligee and [Contractor Name], as contractor (hereinafter, the “Principal”), bearing the date of [\_\_\_\_\_], for the performance of certain work defined within the Construction Contract as the “Seminary Work,” which Construction Contract, together with any and all changes, extensions of time, alterations, modifications, or additions thereto or to the work to be performed thereunder, shall hereafter be referred to as the “Contract;” and

**WHEREAS**, it is one of the conditions of the Third ARCA and the Contract that these presents shall be executed.

**NOW THEREFORE**, we, the undersigned Principal, and [\_\_\_\_\_] (the “Surety”, [and collectively, the “Co-Sureties”]) jointly and severally, bind ourselves, our heirs, executors, administrators, successors, and assigns to the Obligee to pay for labor, materials, and equipment furnished for use in the performance of the Contract, which Contract is deemed a part hereof as if said Contract were fully set forth herein. [Any reference to the “Surety” in this Bond shall be read as a reference to the Co-Sureties and each of them on the basis of such joint and several liability.] **This Bond is in the amount of [ ]**.

The following terms and conditions shall apply with respect to this Bond:

1. If the Principal promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Obligee and the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Contract, then the Surety and the Principal shall have no obligation under this Bond.
2. The Surety’s obligation to the Obligee under this Bond shall arise after the Obligee, or the Owner has promptly notified the Principal and the Surety (at the address described in Section 13) of claims, demands, liens, or suits against the Obligee, the Obligee’s property, or the Owner or its property, by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Contract, and tendered defense of such claims, demands, liens, or suits to the Principal and the Surety.
3. When the conditions of Section 2 have been satisfied, the Surety shall promptly and at the Surety’s expense defend, indemnify, and hold harmless the Obligee and the Owner against a duly tendered claim, demand, lien, or suit.
4. The Surety’s obligations to a Claimant under this Bond shall arise after the following:
  - a. Claimants, who do not have a direct contract with the Principal,
    - i. have furnished a written notice of non-payment to the Principal, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
    - ii. have sent a Claim to the Surety (at the address described in Section 13).
  - b. Claimants, who are employed by or have a direct contract with the Principal, have sent a Claim to the Surety (at the address described in Section 13).

5. If a notice of non-payment required by Section 4 is forwarded or otherwise provided by the Obligee or the Owner to the Principal that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 4.
6. When a Claimant has satisfied the conditions of Sections 4(a) or (b), whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
  - a. Send an answer to the Claimant, with a copy to the Obligee and the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - b. Pay or arrange for payment of any undisputed amounts.
7. The Surety's failure to discharge its obligations under Section 6(a) or Section 6(b) shall not be deemed to constitute a waiver of defenses the Surety or Principal may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 6(a) or Section 6(b), the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Obligee to the Principal under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By the Principal furnishing and the Obligee accepting this Bond, they agree that all funds earned by the Principal in the performance of the Contract are dedicated to satisfy obligations of the Principal and Surety under this Bond, subject to the Obligee's or the Owner's priority to use the funds for the completion of the Contract work.
10. The Surety shall not be liable to the Obligee, Claimants, or others for obligations of the Principal that are unrelated to the Contract. Neither the Obligee nor the Owner shall be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction within the Commonwealth of Virginia after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 4, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Obligee, or the Principal shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however, accomplished, shall be sufficient compliance as of the date received.
14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Principal and the Obligee shall promptly furnish a copy of this Bond or shall permit a copy to be made.

**15. Definitions**

**15.1 “Claim”** means a written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials, or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Contract;
- .4 a brief description of the labor, materials, or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Contract;
- .6 the total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

**15.2 “Claimant”** means any subcontractor or supplier of any tier who furnishes labor, materials, or equipment for use in the performance of the Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Seminary Project

is located. The intent of this Bond shall be to include without limitation in the terms “labor, materials, or equipment” that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural, and engineering services required for performance of the Contract, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this at [\_\_\_\_\_] on this [\_\_\_\_\_] day of [\_\_\_\_\_] , 20[\_\_\_\_].

PRINCIPAL (full legal name):

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: (    )

SURETY (full legal name):

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: (    )

[Note: If more than one surety, then add appropriate number of lines to signature block.]

[Note: A copy of a certificate that the Surety (or Co-Sureties) is (are) authorized to transact business in Virginia must be attached.]

[Note: The Bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but are not a member of the firm, partnership, or joint venture, or an officer of the legal entity involved, evidence of authority including the appropriate power of attorney documentation must be attached.]

**EXHIBIT H-2  
FORM OF PERFORMANCE BOND**

**BOND NO.  
PENAL SUM: \$[●]**

**KNOW ALL WHO SHALL SEE THESE PRESENTS:**

**THAT WHEREAS**, the Commonwealth of Virginia, Department of Transportation, a state agency of the Commonwealth of Virginia (the “Owner”), has awarded to 95 Express Lanes LLC (the “Obligee” which term hereinafter includes its successors and assigns) a Comprehensive Agreement dated July 31, 2012 (the “Original Agreement”) to develop, design, build, finance, operate, and maintain the Interstate 95 HOV/HOT Lanes Project (the “Project”); and

**WHEREAS**, the Owner and the Obligee have entered into a First Amendment to the Original Agreement dated May 2, 2016 (the “First Amendment”) under which the parties agreed to add the “Southern Terminus Extension” to the Project; and

**WHEREAS**, the Owner and the Obligee have entered into an Amended and Restated Comprehensive Agreement (the “ARCA”) dated June 8, 2017 under which the Obligee would add approximately eight miles of high-occupancy toll lanes on Interstate 395 to the Project, and other significant related improvements on and around Interstate 395 (collectively, the “395 Project”); and

**WHEREAS**, the Owner and the Obligee have entered into a Second Amended and Restated Comprehensive Agreement (the “Second ARCA”) dated April 18, 2019 under which the Obligee would add approximately ten miles of high-occupancy toll lanes on Interstate 95 from the Southern Terminus Extension to Fredericksburg (the “Fred Ex Project”)

**WHEREAS**, the Owner and the Obligee intend to enter into a Third Amended and Restated Comprehensive Agreement (the “Third ARCA”) under which the Obligee will convert the existing south-facing HOV ramp from Seminary Road to 395 Express to a HOT ramp (the “Seminary Project”); and

**WHEREAS**, the Obligee intends to enter into the Seminary Construction Contract (the “Construction Contract”) between the Obligee and [Contractor Name], as contractor (hereinafter, the “Principal”), bearing the date of [\_\_\_\_\_], for the performance of certain work defined within the Construction Contract as the “Seminary Work,” which Construction Contract, together with any and all changes, extensions of time, alterations, modifications, or additions thereto or to the work to be performed thereunder, shall hereafter be referred to as the “Contract;” and

**WHEREAS**, it is one of the conditions of the Third ARCA and the Contract that these presents shall be executed.

**NOW THEREFORE**, we, the undersigned Principal, and [\_\_\_\_\_] (the “Surety”, [and collectively, the “Co-Sureties”]) are firmly bound and held unto the Obligee as the “Obligee” in the penal sum of [\_\_\_\_\_] Dollars (\$[\_\_\_\_\_] good and lawful money of the United States of America for the payment whereof, well and truly to be paid to the Obligee, bind ourselves, our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents. [Any reference to the “Surety” in this Bond shall be read as a reference to the Co-Sureties and each of them on the basis of such joint and several liability.]

**THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:**

If the Principal shall, in all things stand to and abide by and well and truly keep, perform and complete all covenants, conditions, agreements, and obligations under the Contract, including any and all amendments, supplements, and alterations made to the Contract as therein provided, on the Principal's part to be kept and performed at the time and in the manner therein specified, if the Principal shall indemnify and save harmless the Obligee, its directors, officers, employees and agents, as therein stipulated, and if the Principal shall reimburse upon demand of the Obligee any sums paid the Principal that exceed the final payment determined to be due upon completion of the Work (as defined in the Contract), then these presents shall become null and void; otherwise, they shall remain in full force and effect unconditionally, irrevocably and shall be non-cancellable.

The following terms and conditions shall apply with respect to this Bond:

1. The provisions of the Contract are deemed a part hereof as if said Contract were fully set forth herein. Capitalized terms not separately defined herein have the meanings assigned such terms in the Contract.

2. This Bond specifically guarantees the performance of each and every obligation of Principal related to the Work under the Contract, as they may be amended and supplemented, including, but not limited to, its liability for liquidated damages as specified in the Contract, but not to exceed the penal sum of this Bond.

3. The guarantees contained herein shall survive Final Completion (as defined in the Contract) of the Work called for in the Contract with respect to those obligations of Principal which survive Final Completion.

4. Whenever Principal shall be, and is declared by the Obligee to be, in default under the Contract, Surety shall promptly:

- a) with the consent of the Obligee, arrange for the Principal to perform and complete the Contract;
- b) complete the Work in accordance with the terms and conditions of the Contract, through its agents or through independent contractors; or
- c) obtain bids or negotiated proposals from qualified contractors acceptable to the Obligee for a contract for performance and completion of the Work, through a

procurement process approved by the Obligee, arrange for a contract to be prepared for execution by Obligee and the contractor selected with the Obligee's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to the Obligee the amount of damages as described in Paragraph 6 of this Bond in excess of the unpaid balance of the Contract Price (as defined in the Contract) incurred by the Obligee resulting from the Principal's default; or

- d) waive its right to perform and complete, arrange for completion, or obtain a new contractor and, with reasonable promptness under the circumstances, pay the penal sum of the Bond to the Owner within 30 days of such waiver.

5. If Surety does not proceed as provided in Paragraph 4 of this Bond within 30 days of Surety's receipt of notice that the Principal has been declared to be in default by the Obligee, Surety shall be deemed to be in default on this Bond fifteen (15) days after receipt of an additional written notice from the Obligee to Surety demanding that Surety perform its obligations under this Bond, and such Obligee shall be entitled to enforce any remedy available to the Obligee.

6. If Surety elects to act under Subparagraph 4.a, 4.b, or 4.c above, then the responsibilities of Surety to the Obligee shall not be greater than those of the Principal under the Contract, and the responsibilities of the Obligee to Surety shall not be greater than those of Obligee under the Contract. To the limit of the penal sum of this Bond, but subject to commitment of the unpaid balance of the Contract Price, Surety is obligated without duplication for:

- a) the responsibilities of the Principal for correction of defective work and completion of the Work;
- b) additional legal, design, engineering, professional and delay costs resulting from Principal's default, and resulting from the actions or failure to act of Surety under Paragraph 4 of this Bond; and
- c) Liquidated damages and any other sums due and owing under the Contract.

7. No alteration, modification, or supplement to the Contract or the nature of the work to be performed thereunder, including without limitation any extension of time for performance, shall in any way affect the obligations of Surety under this Bond. Surety hereby waives notice of any such alteration, modification, or supplement, including changes in time, to the Contract.

8. Correspondence or claims relating to this Bond shall be sent to Surety at the following address: [\_\_\_\_\_]

9. No right of action shall accrue on this Bond to or for the use of any entity other than the Obligee or its successors and assigns.

10. [If multiple or co-sureties] The Co-Sureties agree to empower a single representative with authority to act on behalf of all of the Co-Sureties with respect to this Bond, so that the Oblige will have no obligation to deal with multiple sureties hereunder. All correspondence from the Oblige to the Co-Sureties and all claims under this Bond shall be sent to such designated representative. The designated representative may be changed only by delivery of written notice (by personal delivery or by certified mail, return receipt requested) to the Oblige designating a single new representative, signed by all of the Co-Sureties. The initial representative shall be [\_\_\_\_], whose contact information is [\_\_\_\_\_].

11. If any provision of this Bond is found to be unenforceable as a matter of law, all other provisions shall remain in full force and effect.

12. This Bond shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia, without regard for conflicts of laws principles, and any action seeking enforcement of the Bond will be litigated exclusively in the courts of the Commonwealth of Virginia.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this at [\_\_\_\_\_] on this [\_\_\_\_\_] day of [\_\_\_\_\_], 20[\_\_\_\_].

PRINCIPAL (full legal name):

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: ( )

SURETY (full legal name)

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: ( )

[Note: If more than one surety, then add appropriate number of lines to signature block.]

[Note: A copy of a certificate that the Surety (or Co-Sureties) is (are) authorized to transact business in Virginia must be attached.]

[Note: The Bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but are not a members of the firm, partnership, or joint venture, or an officer of the legal entity involved, evidence of authority including the appropriate power of attorney documentation must be attached.]

**EXHIBIT [\_\_]**  
**FORM OF MULTIPLE OBLIGEE RIDER**  
**(Performance Bond)**

MULTIPLE OBLIGEE RIDER  
(PERFORMANCE BOND)

This Multiple Obligee Rider (this “Rider”) is executed concurrently with and shall be attached to and form a part of Performance Bond No. [●] (hereinafter referred to as the “Performance Bond”).

**WHEREAS**, [●], a [●] (hereinafter called the “Principal”) entered into a written agreement bearing the date of [●], 20[●] (hereinafter called the “Contract”) with 95 Express Lanes LLC (hereinafter called the “Primary Obligee”) for the performance of design and construction work for the Seminary Project; and

**WHEREAS**, the Primary Obligee requires under the Contract that Contractor provide a performance bond and that the Commonwealth of Virginia Department of Transportation, a state agency of the Commonwealth of Virginia (“VDOT”) and (ii) [●], and collectively with VDOT, the “Additional Obligees”) be named as additional obligee(s) under the performance bond; and

**WHEREAS**, Principal and [●], a [●] duly organized and existing under and by virtue of the laws of the State of [●] and authorized to transact business as a surety within the Commonwealth of Virginia (the “Surety”) [and [●], and collectively, the “Co-Sureties”) have agreed to execute and deliver this Rider concurrently with the issuance of the Performance Bond, upon the conditions herein stated.

**NOW, THEREFORE**, the undersigned hereby agree and stipulate as follows:

1. The Additional Obligees are hereby added to the Performance Bond as named obligee(s).
2. The aggregate liability of the Surety (or Co-Sureties) under the Performance Bond to any or all of the Primary Obligee and the Additional Obligees, as their respective interests may appear, is limited to the penal sum of the Performance Bond, the Additional Obligees’ rights hereunder are subject to the same defenses Principal and/or Surety have against the Primary Obligee, and the total liability of the Surety shall in no event exceed the amount recoverable from the Principal by the Primary Obligee under the Contract.
3. The Surety shall not be liable under the Bond to the Primary Obligee, the Additional Obligees, or any of them, unless the Primary Obligee, the Additional Obligees, or any of them, shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) strictly in accordance with the terms of said Contract as to payments and shall perform all other obligations to be performed under said Contract at the time and in the manner therein set forth, as said Contract may be amended or modified from time to time.

4. The Surety may, at its option, make any payments under the Bond by check issued jointly to all of the obligees and delivered to VDOT at [address/wire instructions TBD].

5. An Additional Obligee may enforce the Performance Bond if such Additional Obligee has provided to the Surety written certification that such Additional Obligee has the right to enforce the Performance Bond under its direct agreement(s) between or among the Primary Obligee and Additional Obligees.

The Principal and the Surety (and Co-Sureties) have caused these presents to be duly signed and sealed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**PRINCIPAL** (full legal name):

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: ( )

**SURETY** (full legal name):

Address:

By: \_\_\_\_\_

Title:

Contact Name:

Phone: ( )

[Note: Date of this Rider must be the same as the date of the Bond.]

[Note: If more than one surety, then add appropriate number of lines to signature block.]

EXHIBIT I  
MINOR CHANGE REQUEST FORM



**Seminary Road Ramp Project Contract Minor Change**

1. Minor Change No: MC-XX

2. Initiated by: [Entity]

3. Subject Document:  Plans  Specifications  Standards  Other:

4. Reason for minor change:

5. Existing Requirements/Contract Provisions:

6. Minor Change proposed:

Supporting Documents Attached?  No  Yes  [list supporting docs]

7. Agreement by CES Consulting:

Signature and Date:

8. Agreement by 95 Express Lanes:

Signature and Date:

9. Agreement by VDOT (if applicable):

Signature and Date:

**EXHIBIT J**

**TASK ORDER**

## TASK ORDER NO. 1

### SEMINARY ROAD RAMP PROJECT MATERIAL PROCUREMENT AND STORAGE

This is Task Order No. 1 to that certain Master Services Agreement between CES Consulting, LLC (the “**Service Provider**”) and Transurban (USA) Operations Inc. (the “**Company**”) dated as of March 1, 2022 (the “**Agreement**”). All capitalized terms used and not otherwise defined in this Task Order No. 1 shall have the respective meanings assigned to them in the Agreement.

#### SERVICES AND DELIVERABLES

The Service Provider shall provide services to the Company necessary to complete procurement and storage of materials required for Seminary Road Ramp Project. The range of services that are required for this Task Order No. 1 are described in Exhibit A attached hereto titled “Scope of Services and Deliverables” (the “**Services**”).

The Services may be refined or modified during the Period of Performance (defined below) as needed to meet the requirements of the Company, the Virginia Department of Transportation (“**VDOT**”) or other third parties. Any such revisions will be coordinated with the Service Provider and formally communicated in writing. The Service Provider is responsible for maintaining a complete and current record of the Services.

All assignments under this Task Order No. 1 shall be managed by the designated Project Manager, Preliminary Engineering and Design in coordination with the Company’s other business leads. The Company and the Service Provider agree that the Services shall be performed by the Service Provider’s personnel with the appropriate expertise and shall be completed to the Company’s satisfaction. The Service Provider must satisfy the performance requirements mentioned in Exhibit A.

The Service Provider shall provide all necessary labor, materials, and other resources to complete the work and prepare all required deliverables associated with the Services as mentioned in Exhibit A.

#### SUBMITTALS AND CORRESPONDENCE

All deliverables, submittals, and correspondence are to be provided in electronic (.pdf) format, and where required or requested, in native electronic format (e.g., .xlxs, .docx, .dgn, etc). Up to ten (10) hard copies of any deliverable or submittal shall be provided upon request, and if required, copies transmitted directly to VDOT or other third parties. All deliverables or submittals shall be accompanied by a transmittal or letter indicating the date and contents of the submittal and due dates for any actions or responses.

#### MANAGEMENT AND ADMINISTRATION

The Service Provider is responsible for the management and administration of all work required to complete this Task Order No. 1 (including any additional or supplemental tasks), including contract administration, quality management, third party coordination, project reporting, deliverable preparation and submittal, electronic file management, and document and configuration control.

### **SCHEDULE**

The commencement date of this Task Order No. 1 is April 25, 2022, and the Service Provider shall complete the Services by no later than July 15, 2022 (the “**Period of Performance**”).

### **PAYMENT AND FEE**

The total fee payable shall be in the form of a lump sum payment of six thousand four hundred and thirty two dollars (\$6,432.00) (the “**Fee**”). Payment will be made only for those tasks authorized by the Company and satisfactorily completed.

### **INVOICES AND PROGRESS REPORTS**

Invoices must be submitted electronically to the Company’s dedicated invoice processing email address: [invoices@transurban.com](mailto:invoices@transurban.com).

The invoice package shall include:

1. The current request for payment;
2. Back-up documentation required to substantiate the billings for the period (e.g., detailed project breakdown); and
3. A narrative description of work initiated, underway or completed during the period.

*[Signature page follows]*

By their signatures below, the parties agree that the terms and conditions of the Agreement remain in full force and effect and that this Task Order No. 1 shall be governed by such terms and conditions.

**TRANSURBAN (USA) OPERATIONS INC.**

By:   
Name: Amanda Baxter  
Title: Senior Vice President

**CES CONSULTING, LLC**

By:   
Name: Chowdhary Gondy  
Title: Pricipal and Executive Vice-President

## **EXHIBIT A**

### **SCOPE OF SERVICES AND DELIVERABLES**

The Service Provider is responsible for the timely completion of all the Services as agreed upon by the Service Provider and the Company. This Scope of Services and Deliverables outlines the technical, functional, and performance requirements. It may be refined or modified during the Period of Performance as needed to meet the Company's requirements. Any such revisions will be coordinated between the Company and the Service Provider, and formally agreed in writing.

#### **PREPARE AND SUBMIT SHOP DRAWINGS FOR APPROVAL**

This task consists of preparation and submittal of shop drawings for sign panels, sign overlays and sign brackets including clamp kit, tube and hardware kit. The deliverables from Task 1 includes shop drawings of materials listed above for the scope of work detailed in "Seminary Road Signing Retrofit Plans (Signed and Sealed)," dated 12/5/2021, provided as Attachment A to this exhibit. The shop drawings shall be prepared in accordance with VDOT requirements including 2020 Road and Bridge Specifications and 2016 Road and Bridge Standards, 2009 MUTCD (Manual on Uniform Traffic Control Devices) and 2011 Virginia Supplement to the MUTCD.

Coordinate with the Company's Engineer on Record during the review and approval of Service Provider's submitted shop drawings. The review will be in accordance with the design plans and VDOT requirements as specified.

#### **PROCURE AND STORE MATERIALS**

This task includes fabrication, procurement and storage of all materials including sign panels, sign overlays and sign brackets. The fabrication and procurement of materials shall be in accordance with the approved shop drawings. The Service Provider is also responsible for storage of the procured materials. Storage shall be in a manner to protect the materials and shall comply with the VDOT Specifications. Service Provider shall submit proper documentation of stored materials in accordance with VDOT requirements.

**ATTACHMENT A**

Seminary Road Signing Retrofit Plans (Signed and Sealed)

**[ATTACHED]**



STATE	FEDERAL AID		STATE		SHEET NO.
	PROJECT	ROUTE	PROJECT		
VA.		395	SEMINARY ROAD SIGNING RETROFIT		1

INDEX OF SHEETS:

- 1 - TITLE SHEET
- 1A - KEY MAP
- 2 - GENERAL NOTES AND LEGEND
- 2A - SIGN DETAILS
- 2B - SIGN SCHEDULE
- 3 THRU 12 - SIGNING PLAN & ELEVATION

# PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

## SEMINARY ROAD SIGNING RETROFIT S&S SUBMITTAL

FAIRFAX COUNTY AND CITY OF ALEXANDRIA  
395 EXPRESS LANES  
From: 0.3 Mi. North of Interstate 495  
To: Seminary Road

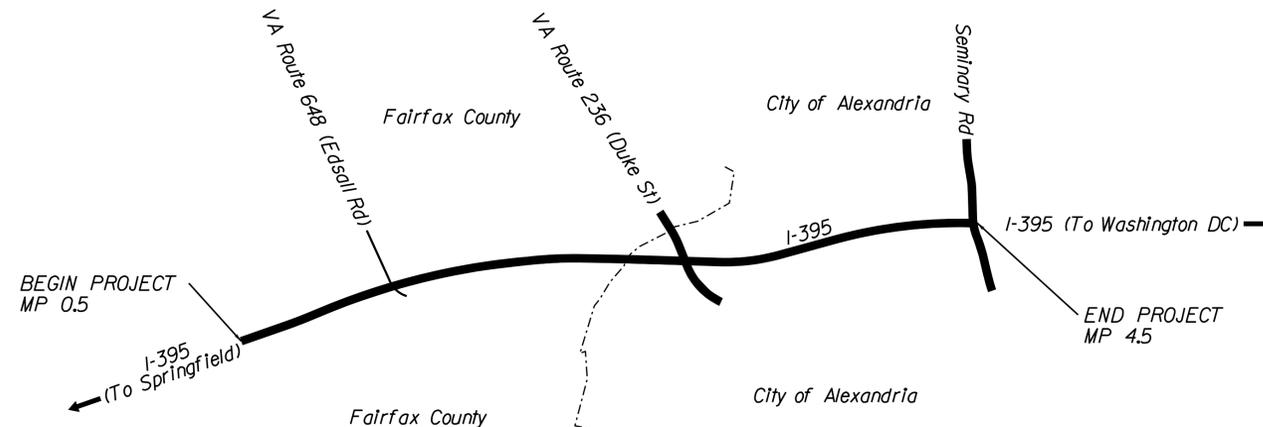
THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).  
GEOPAK Computer Identification No. \_\_\_\_\_

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL REV. 2 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CONSTRUCTION IS TO BE PERFORMED WITHIN EXISTING RIGHT OF WAY.

PROJECT MANAGER: Jordan Pitt, Transurban  
SURVEYED BY: DATE N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY: DATE N/A

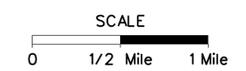


CONVENTIONAL SIGNS

STATE LINE	---
COUNTY LINE	----
CITY, TOWN OR VILLAGE	-----
RIGHT OF WAY LINE	-----
FENCE LINE	-----
UNFENCED PROPERTY LINE	-----
FENCED PROPERTY LINE	-----
WATER LINE	-----
SANITARY SEWER LINE	-----
GAS LINE	-----
ELECTRIC UNDERGROUND CABLE	-----
TRAVELED WAY	-----
GUARD RAIL	-----
RETAINING WALL	-----
RAILROADS	-----
BASE OR SURVEY LINE	-----
LEVEE OR EMBANKMENT	-----
BRIDGES	-----
CULVERTS	-----
DROP INLET	-----
POWER POLES	-----
TELEPHONE OR TELEGRAPH POLES	-----
TELEPHONE OR TELEGRAPH LINES	-----
HEDGE	-----
TREES	-----
HEAVY WOODS	-----
GROUND ELEVATION	-----
GRADE ELEVATION	-----

Fairfax County Population 1,150,309 (2020 Census)  
City of Alexandria Population 159,467 (2020 Census)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PLAN NO.	TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES			
XXXX-XXX-XXX				XXXXXX	21,500	4.07	20,370	3.86			From: 0.3 Mi. North of Interstate 495 To: Seminary Road



Project Lengths are based on 395 Express Lanes Construction Baseline

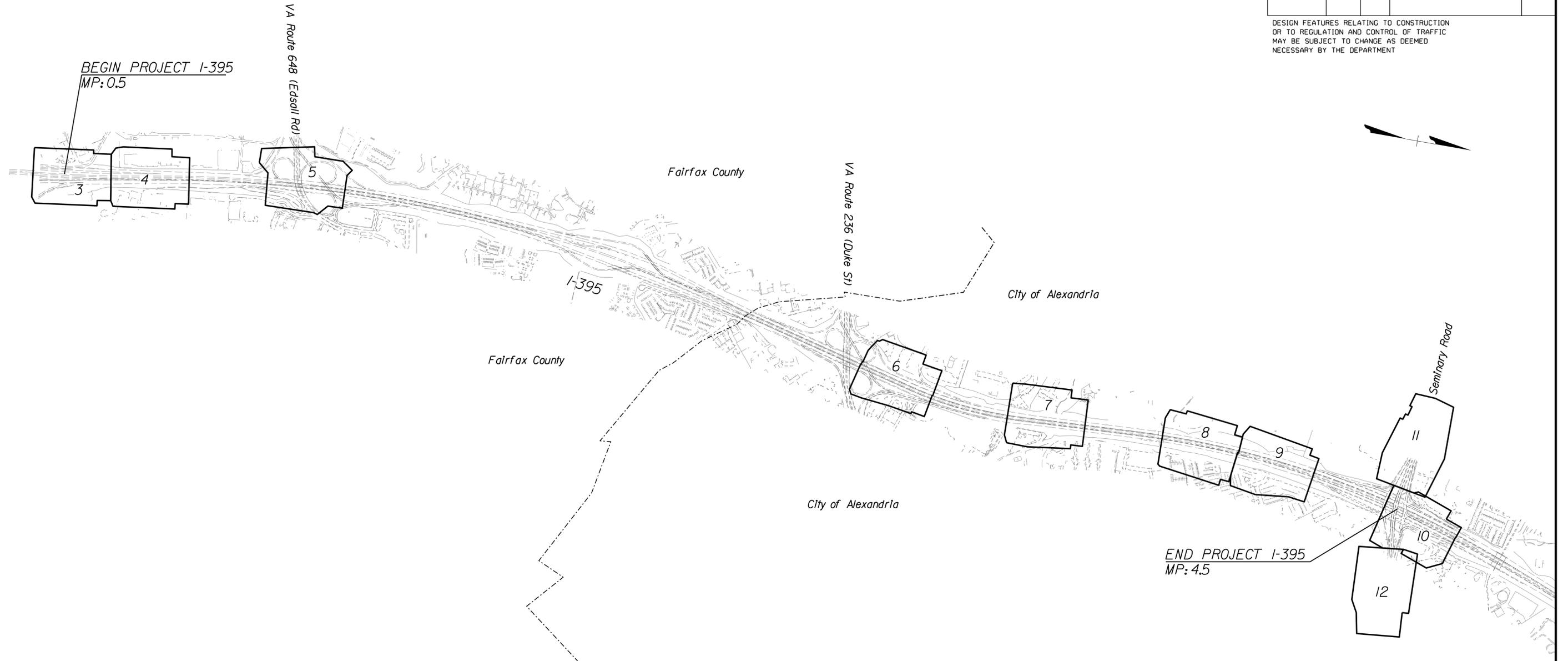
Copyright 2020, Transurban Holdings Limited, LLC

PROJECT MANAGER *Jordan Pitt, Inc./Urban*  
 SURVEYED BY, DATE *N/A*  
 DESIGN BY *HDR Engineering, Inc.*  
 SUBSURFACE UTILITY BY, DATE *N/A*

# KEY MAP

REVISED	STATE		PROJECT		SHEET NO.
	STATE	ROUTE	PROJECT		
	VA.	395	SEMINARY ROAD SIGNING RETROFIT		1A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



PROJECT MANAGER Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE N/A  
DESIGN BY HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE N/A

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2

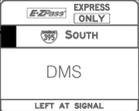
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

# GENERAL NOTES AND LEGEND

## GENERAL NOTES - SIGNING

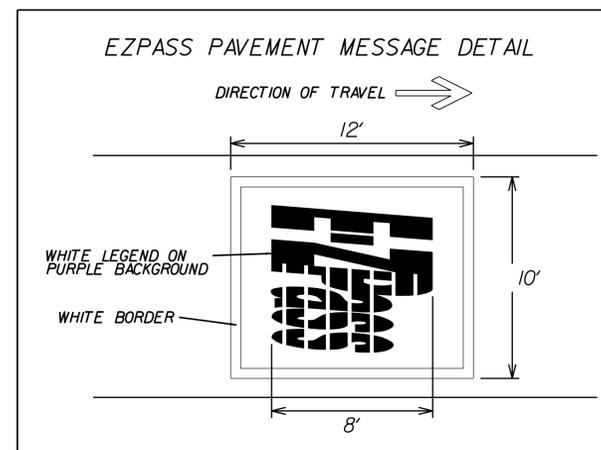
1. ALL SIGNING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS AND REVISIONS OF THE 2009 MUTCD, THE 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, AND VDOT'S SPECIFICATIONS AND STANDARDS.
  2. THIS PROJECT IS TYPE A, CATEGORY M BASED UPON VDOT'S IIM-LD-2417.
  3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2019 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 1.
  4. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO THE INSTALLATION OF ANY CLOSURE MEASURES.
  5. A 42' CLEAR ZONE SHALL BE MAINTAINED FREE OF PARKED EQUIPMENT AND STORED MATERIAL PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL.
  6. TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS SHALL BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
  7. UPON COMPLETION OF CONSTRUCTION, REMOVE TEMPORARY SIGNAGE.
  8. SIGN SPACING DISTANCE SHOULD BE 1300'-1500' ALONG LIMITED ACCESS HIGHWAYS AND RAMPS.
  9. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL STAKE ALL PROPOSED SIGN LOCATIONS FOR REVIEW AND APPROVAL BY TRANSURBAN PRIOR TO ANY INSTALLATION OR RELOCATION.
  10. REMOVAL OF EXISTING OVERHEAD SIGN LUMINAIRES SHALL BE PERFORMED PER SPECIAL PROVISION INCLUDED IN THE CONTRACT DOCUMENTS, AND SHALL BE CONSIDERED INCIDENTAL TO OVERHEAD SIGN PANEL REMOVAL. ELECTRICAL SERVICE FOR SIGN LIGHTING SHALL BE DISENGAGED AT NEAREST JUNCTION BOX AND ALL CONDUCTORS CAPPED AND SEALED IN PLACE. LOCATIONS OF SIGN LUMINAIRE REMOVAL ARE IDENTIFIED IN THE PLANS.
- TRANSPORTATION OPERATIONS PLAN:**
1. THE COMMUNICATION SECTION AND TRANSPORTATION OPERATIONS CENTER SHALL BE NOTIFIED BY THE CONSTRUCTION PROJECT MANAGER OF ROAD CLOSURE AND DETOUR INFORMATION FOR DISTRIBUTION ON THE 511 SYSTEM AND VOIS. EMERGENCY RESPONSE PROFESSIONALS SHALL RESPOND TO TRAFFIC INCIDENTS IN THE WORK ZONE AS SOON AS POSSIBLE.
  2. THE FOLLOWING IS THE CONTACT LIST OF EMERGENCY RESPONSE AGENCIES IN CASE AN INCIDENT OCCURS IN THE WORK ZONE:  
POLICE / AMBULANCE / FIRE SAFETY / HAZMAT SPILLS - 911  
TRANSURBAN TRAFFIC CONTROL ROOM - (571) 419-6046
  3. FOLLOWING ANY TRAFFIC INCIDENTS, THE SITE SHALL BE CLEARED AND RESTORED FOR NORMAL TRAFFIC OPERATIONS AS SOON AS POSSIBLE.
  4. TRAFFIC INCIDENTS WILL BE INVESTIGATED AND MEASURES INTRODUCED TO REDUCE OCCURRENCES. IF NECESSARY THE MAINTENANCE OF TRAFFIC PLANS MAY BE REVISED IN CONSULTATION WITH THE ENGINEER.
- PUBLIC COMMUNICATIONS PLAN:**
1. THE PUBLIC SHALL BE NOTIFIED OF THE EXPECTED SCHEDULE ON VDOT'S WEB SITE FOR THIS PROJECT. INFORMATION OF THE POTENTIAL FOR BACK-UPS DURING THE PEAK HOURS OF OPERATION SHALL BE PROVIDED TO THE COMMUNICATIONS SECTION AND TRANSPORTATION OPERATIONS CENTER BY THE CONSTRUCTION PROJECT MANAGER.

## SIGNING AND PAVEMENT MARKING LEGEND

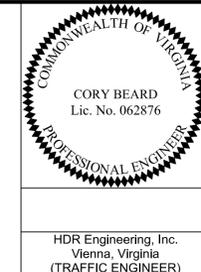
EXISTING	PROPOSED	DESCRIPTION
 <p>TO BE REMOVED</p>	 <p>TO REMAIN</p>	SIGN PANEL
		SIGN PANEL
		SIGN PANEL OVERLAY
	NOT USED	OVERHEAD SPAN SIGN STRUCTURE
	NOT USED	OVERHEAD CANTILEVER SIGN STRUCTURE
	NOT USED	OVERHEAD BUTTERFLY SIGN STRUCTURE
	NOT USED	GROUND MOUNTED MULTI-POST STRUCTURE
	NOT USED	GROUND MOUNTED SINGLE POST STRUCTURE
		PAVEMENT MESSAGE (TYPICAL)

## PAVEMENT MARKING CALLOUT LEGEND

- (A) ERADICATION OF EXISTING PAVEMENT MARKING SYMBOL, "HOV" DIAMOND
- (B) TYPE B, CLASS VI, PAVEMENT MARKING SYMBOL, "E-Z PASS" LOGO



PROJECT MANAGER Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE N/A  
DESIGN BY HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE N/A



REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

# SIGN DETAILS

**SIGN DETAIL**  
1:50

TEXT NO. 1, 2, 3

BORDER  
R=3.25"  
TH=2"

Panel Style: tab1.bsi  
M.U.T.C.D.: 2009 Edition

Panel Style: guide\_exit\_name\_a\_2012.ssi  
Dimensions are in inches/feet

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE		
E	X	P	R	E	S	S	E	X	I	T	E 2000		
14	24.7	37.6	49.3	61.4	72.1	83.5	93.2	105.2	115.9	128.8	133	127.9	12

**SIGN DETAIL**  
1:100

BORDER  
R=3"  
TH=1"

Panel Style: guide\_fw\_distance\_2012.ssi  
M.U.T.C.D.: 2009 Edition

Panel Style: guide\_fw\_distance\_2012.ssi  
Dimensions are in inches/feet

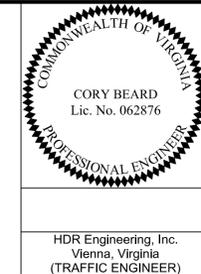
LETTER POSITIONS (X)										LENGTH	SERIES/SIZE			
E	x	p	r	e	s	s	L	a	n	e	s	ClearviewHwy-5-W		
6.9	16.9	29.2	42	50.5	62.5	73.1	80.7	94.3	104.3	117.1	129.5	141.5	142.3	12/9.8

**NOTES:**

- ALL SIGN PANELS SHALL BE FABRICATED USING ASTM D4956 TYPE XI REFLECTIVE SHEETING

PROJECT MANAGER: Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

# SIGN SCHEDULE



REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

TEXT NO.	SIGN ASSEMBLY NO(s).	TEXT	MUTCD ST'D.	SIGN ASSEMBLY COMPONENTS		QTY.	SIGN PANEL AREA (s.f.)		PROP. SIGN STRUCTURE ST'D.	REMARKS
				W	H		per ASSEMBLY	ALL ASSEMBLIES		
1	601		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 029-1267	SEE DETAIL SHEET 2A
2	701		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 000-0233	SEE DETAIL SHEET 2A
3	801		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE	SEE DETAIL SHEET 2A
4	1001, 1002		SPECIAL	156"	24"	2	26	52	EXIST. SIGNAL MAST ARMS NO. 02903593 & 02903594	SEE DETAIL SHEET 2A

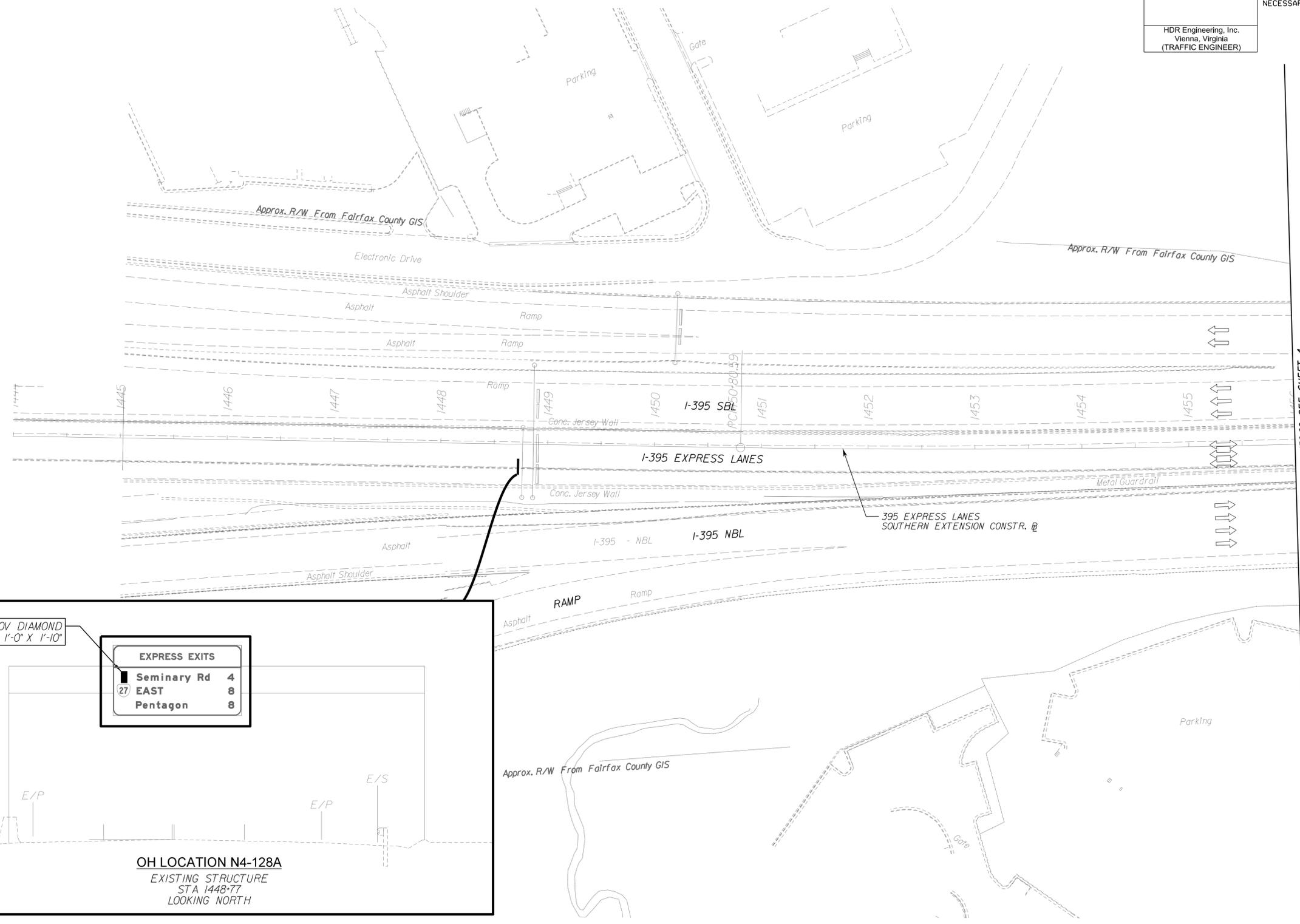
PROJECT MANAGER Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE N/A  
DESIGN BY HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER

HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



MATCH LINE STA. 1456+00. SEE SHEET 4

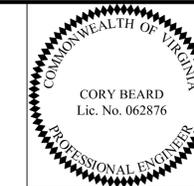
OVERLAY HOV DIAMOND  
1'-0" X 1'-10"

EXPRESS EXITS	
Seminary Rd	4
27 EAST	8
Pentagon	8

E/P      E/S

**OH LOCATION N4-128A**  
EXISTING STRUCTURE  
STA 1448+77  
LOOKING NORTH

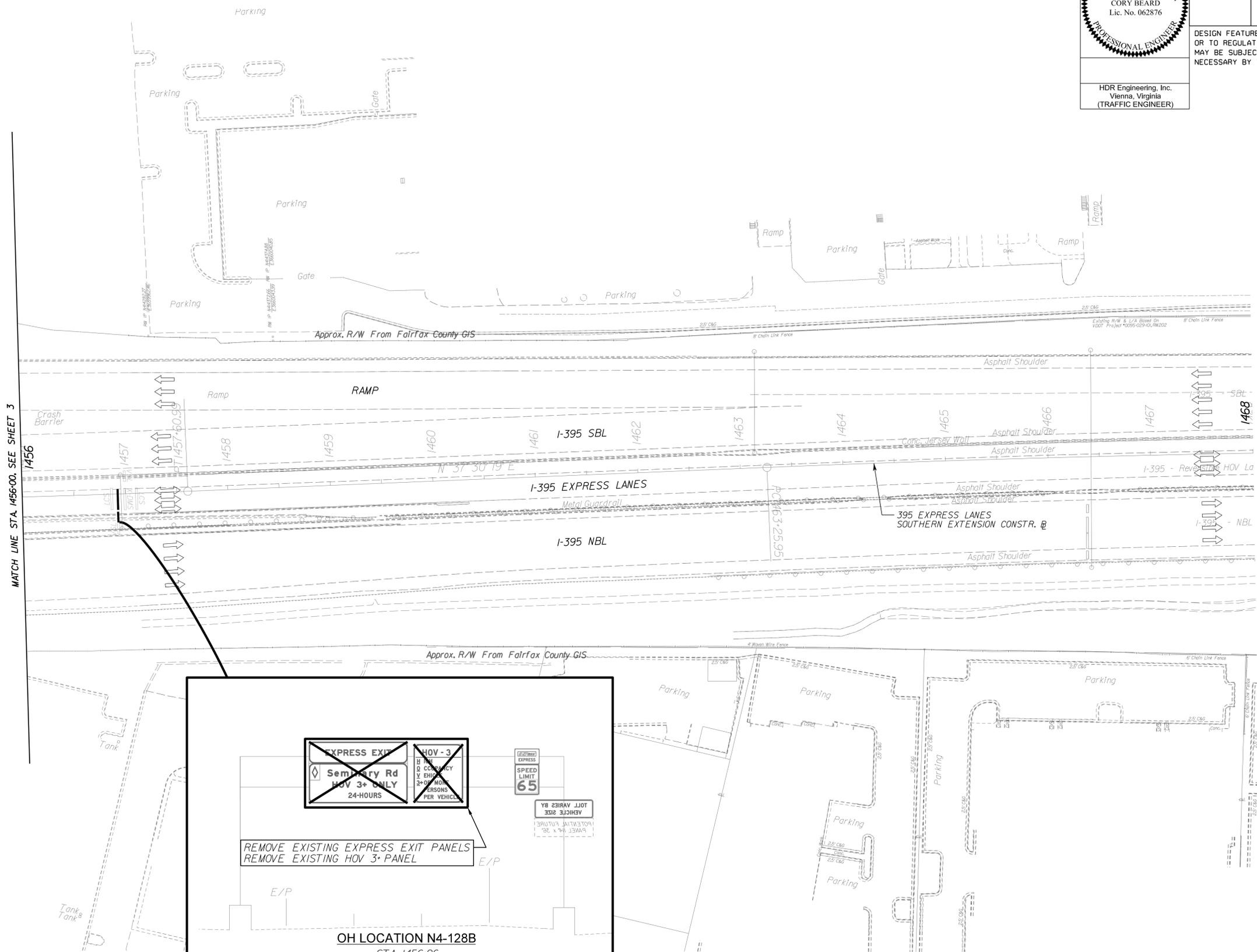
PROJECT MANAGER: Jordan Pitt, Inc. (I) caaslrbab  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A



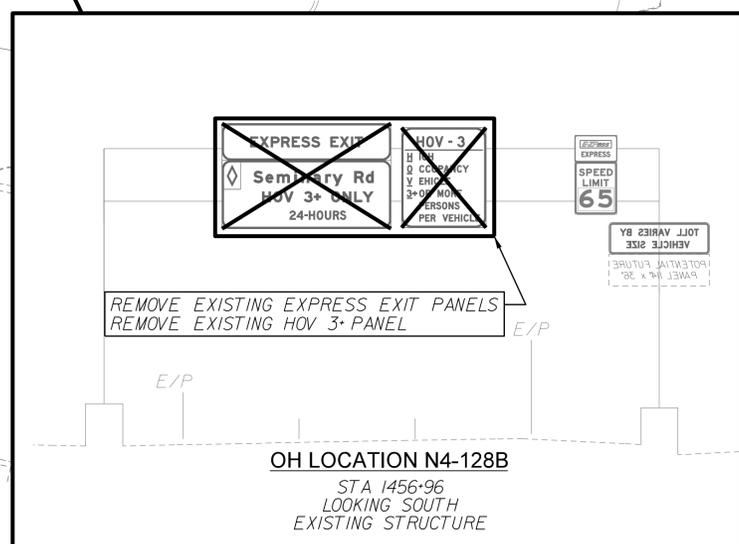
REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)



MATCH LINE STA. 1456+00. SEE SHEET 3



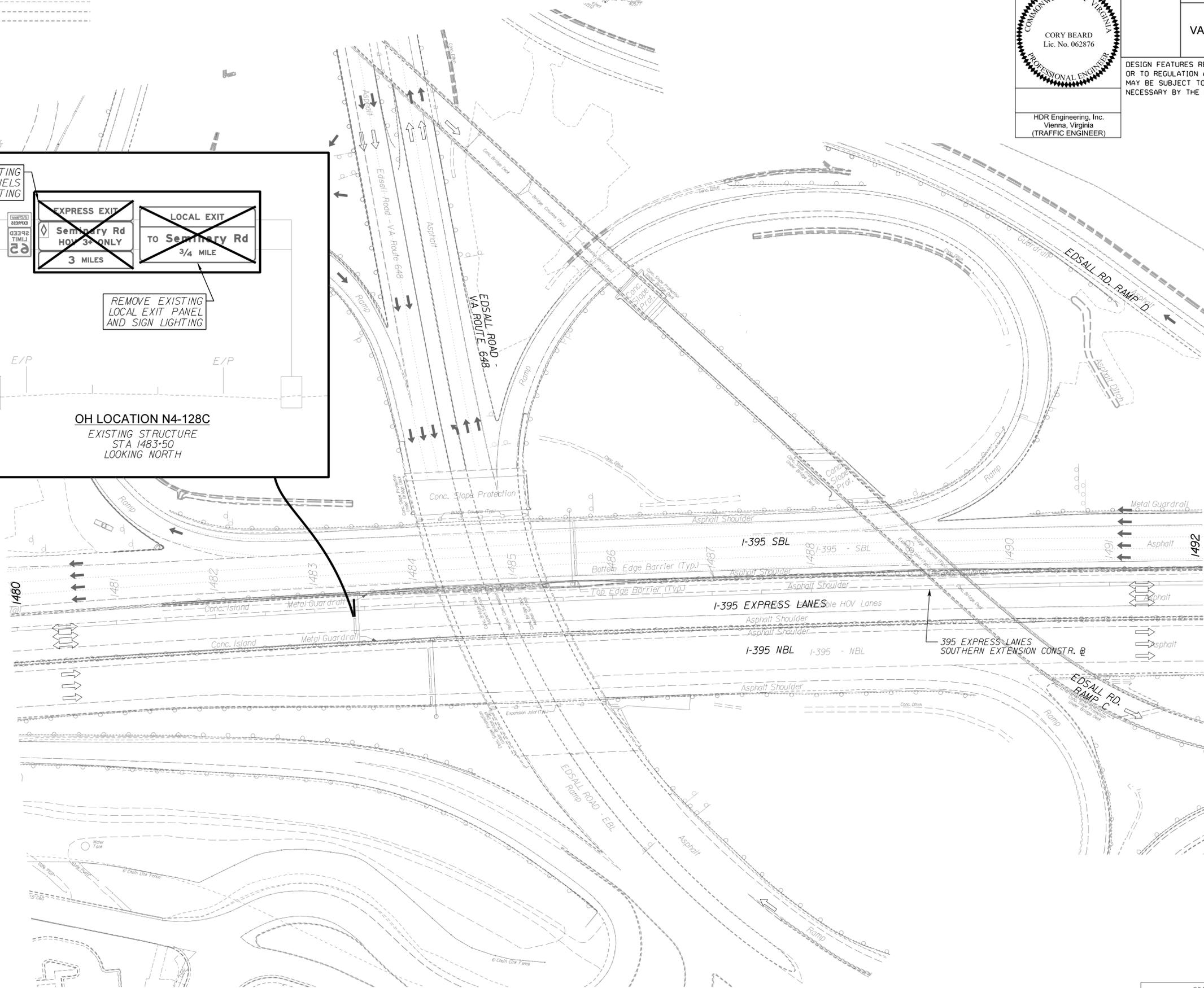
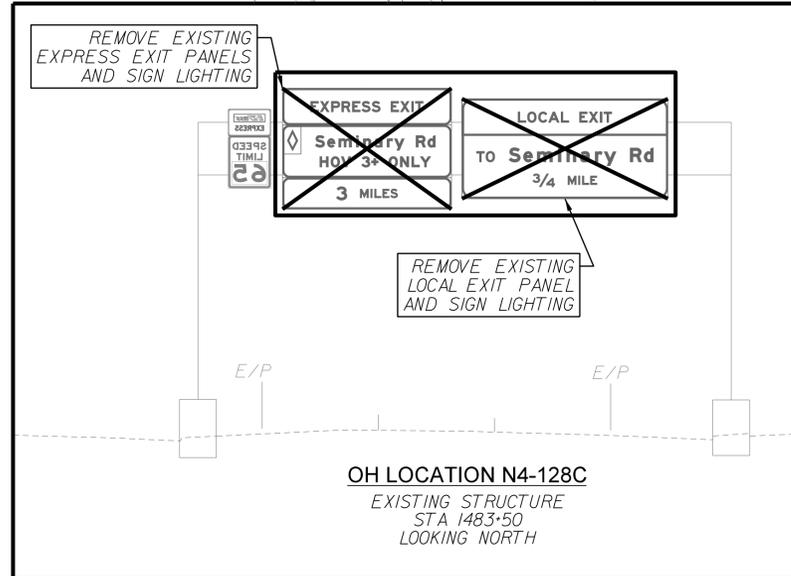
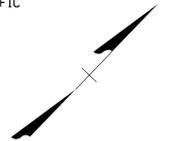
PROJECT MANAGER Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE N/A  
DESIGN BY HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER

HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	5

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

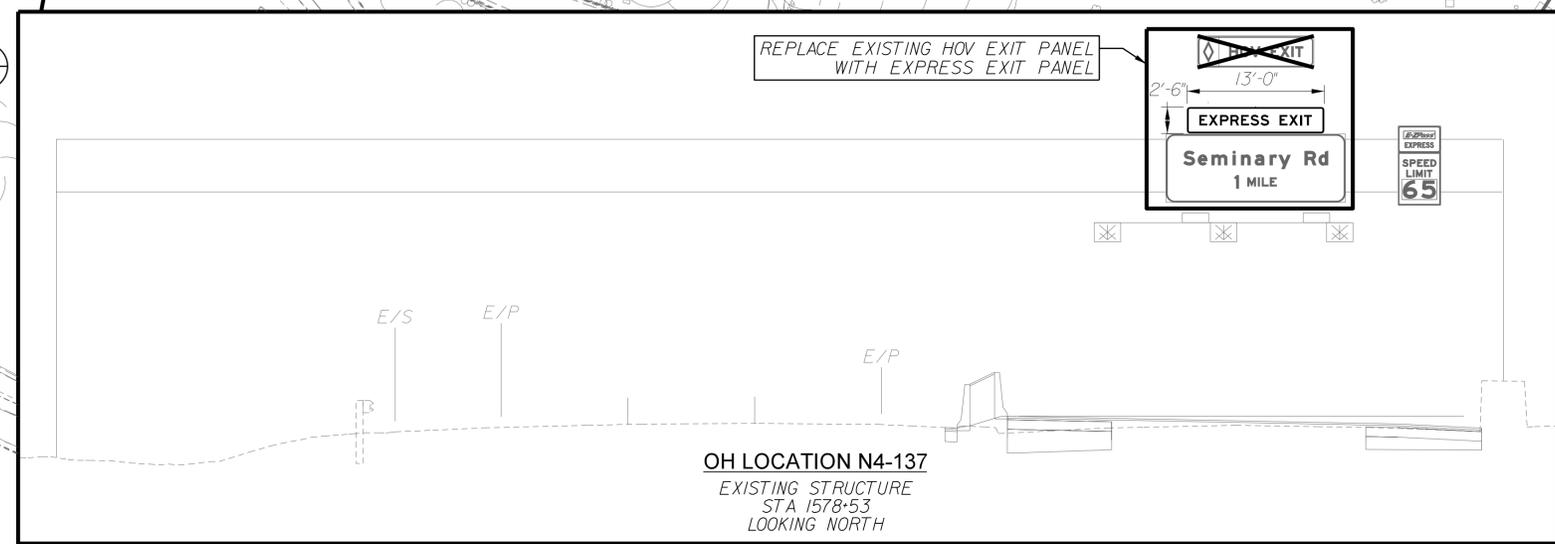
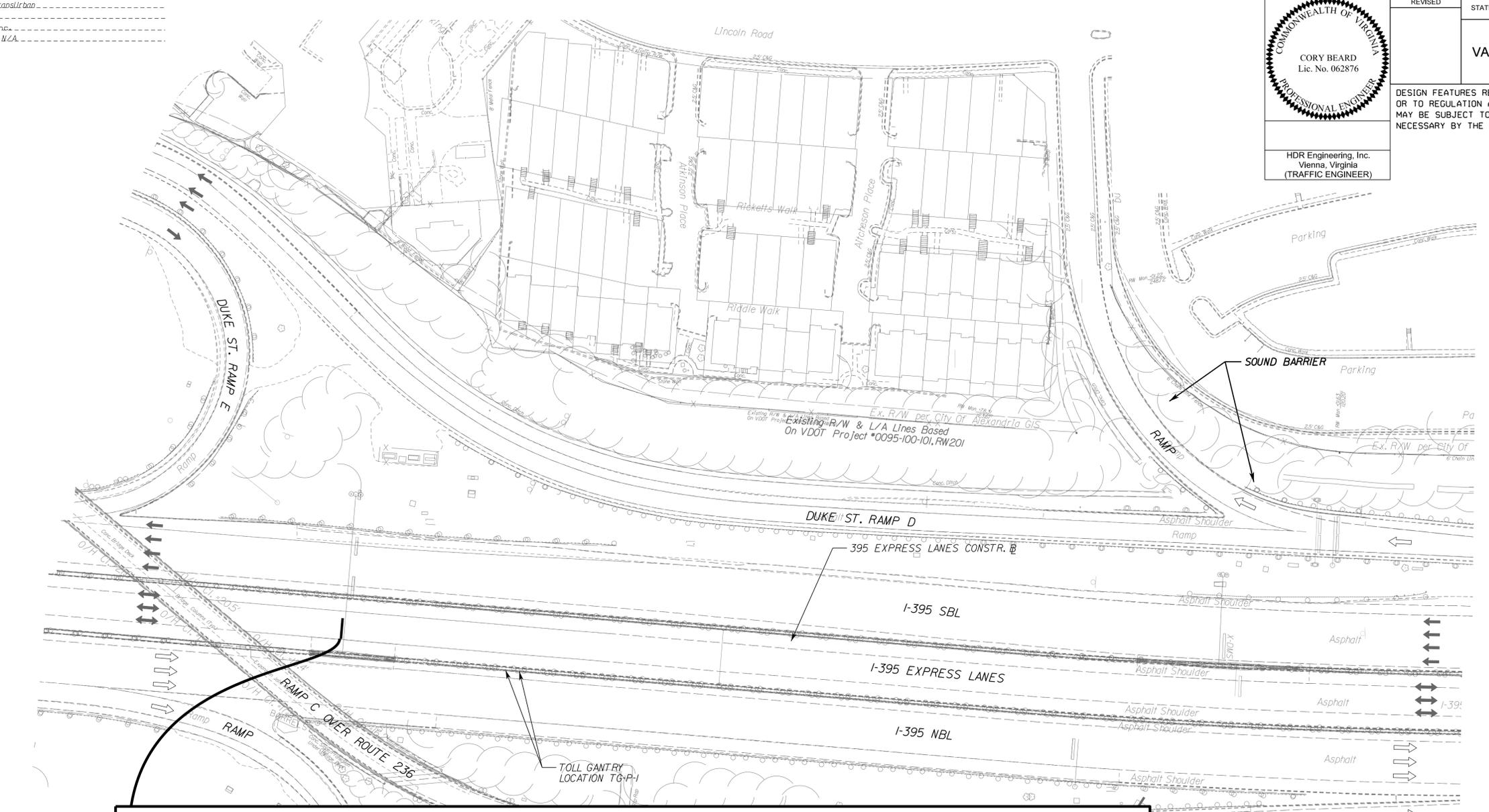


PROJECT MANAGER: Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	6

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

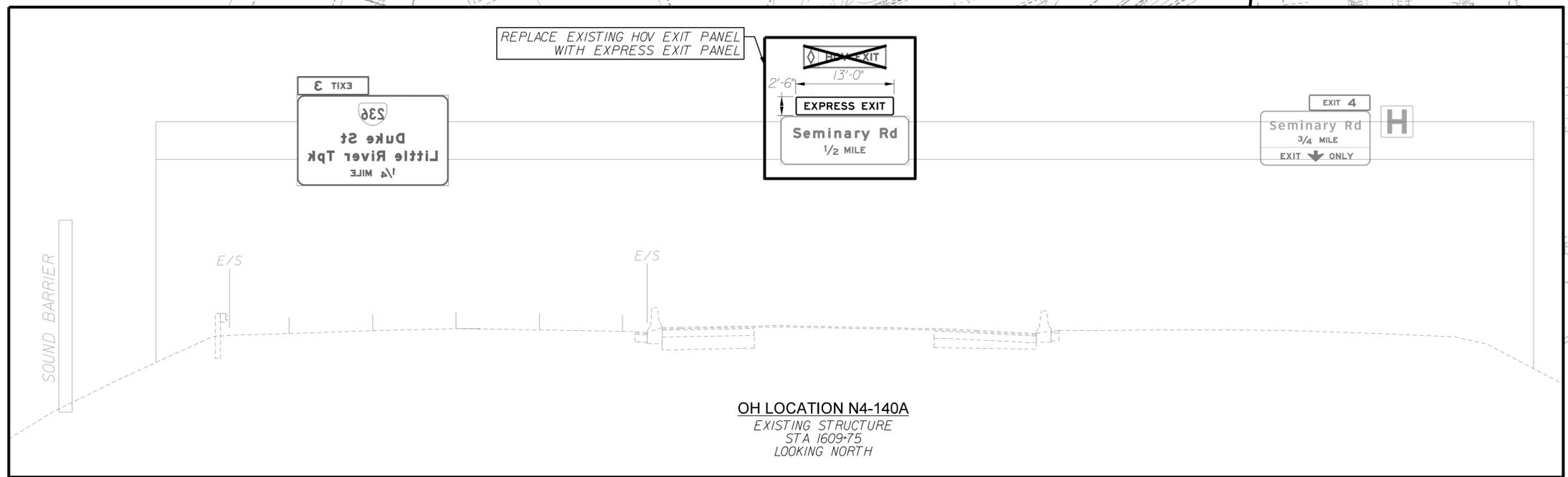
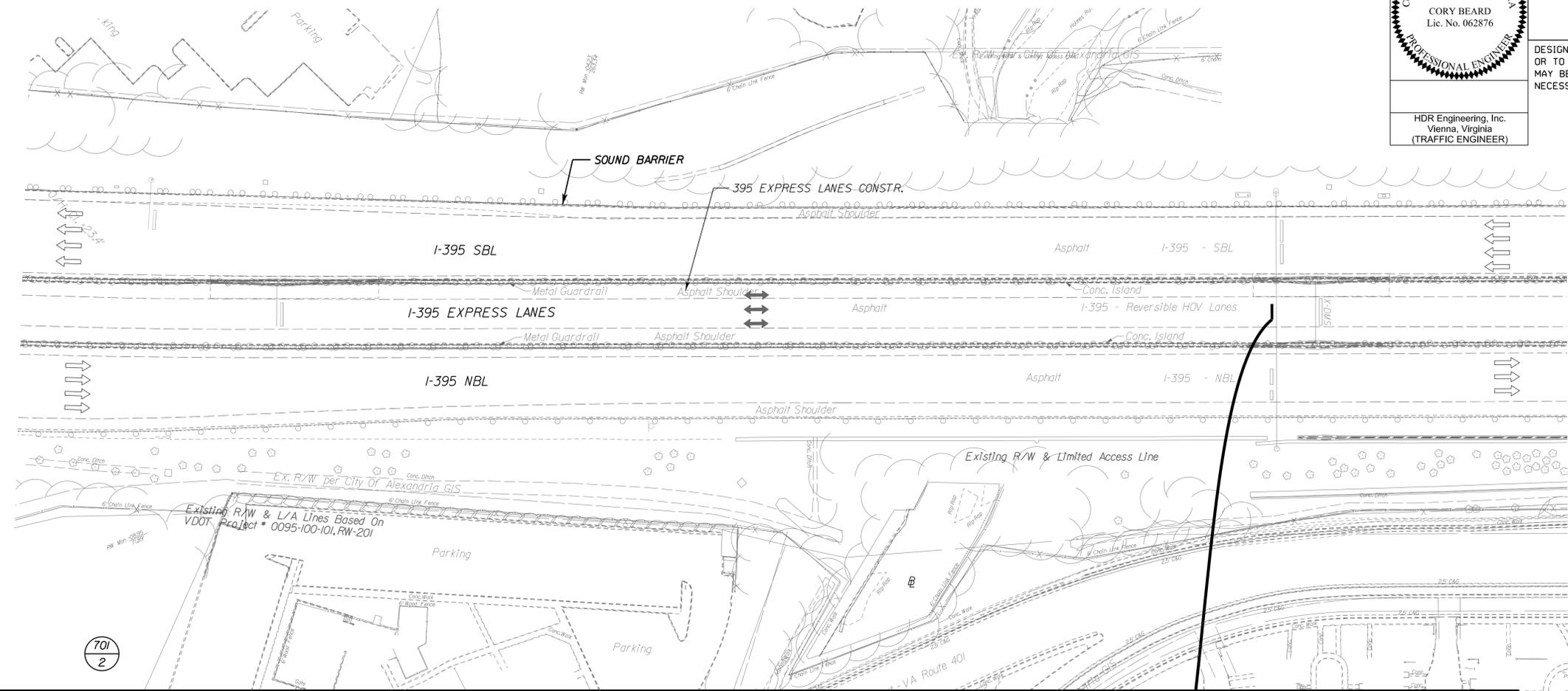


PROJECT MANAGER: Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	7

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

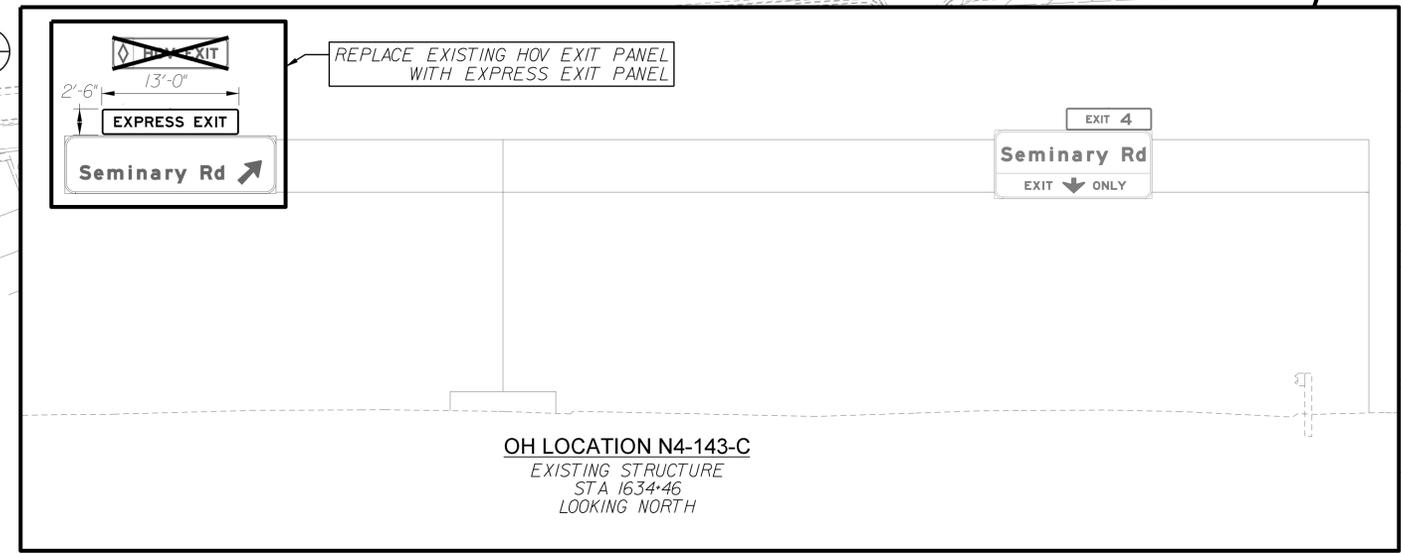
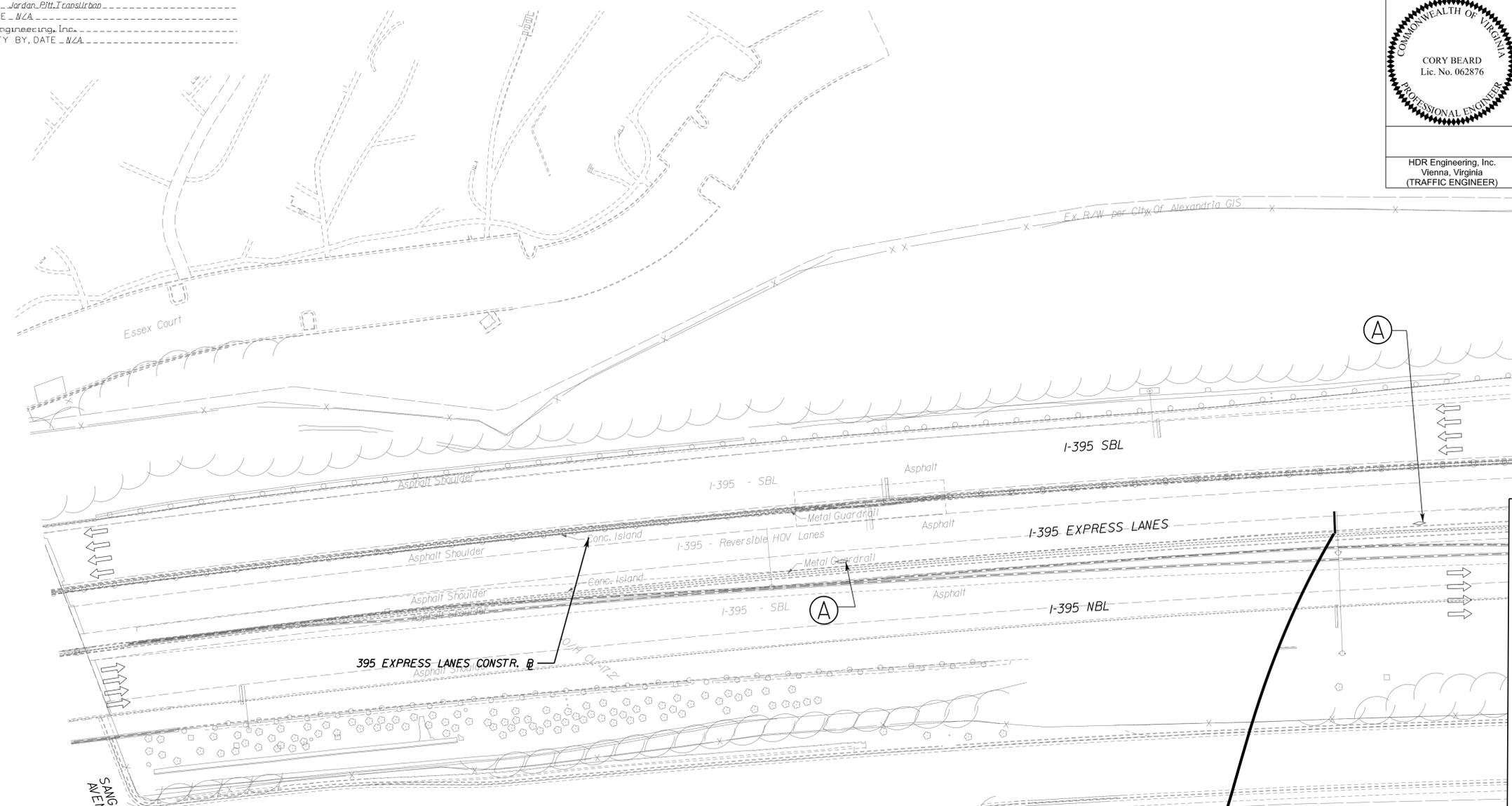
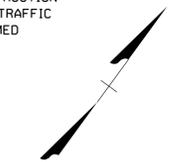


PROJECT MANAGER: Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	8

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



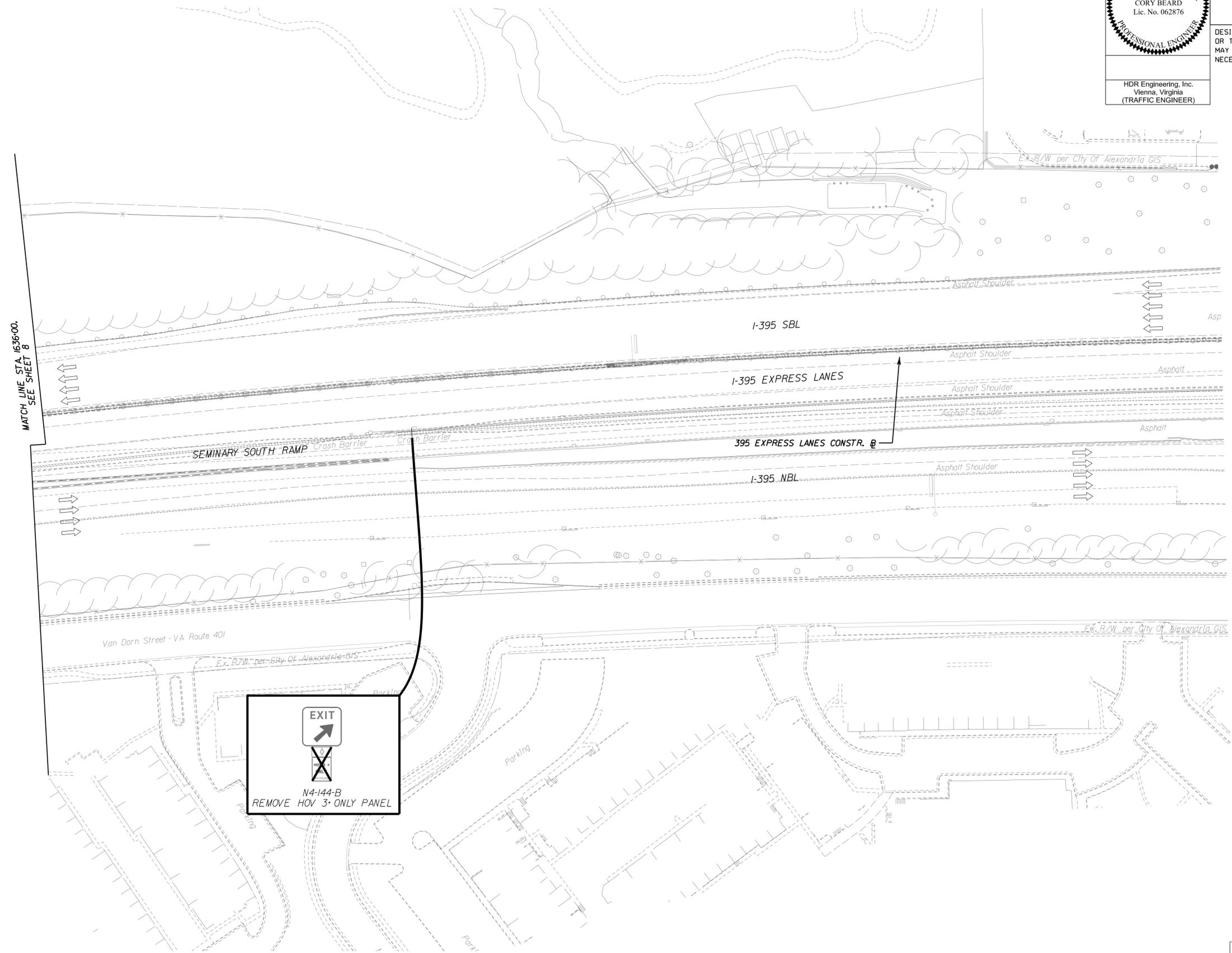
MATCH LINE STA 1636+00. SEE SHEET 9

PROJECT MANAGER: Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	9

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



MATCH LINE STA. 1636+00.  
SEE SHEET 8

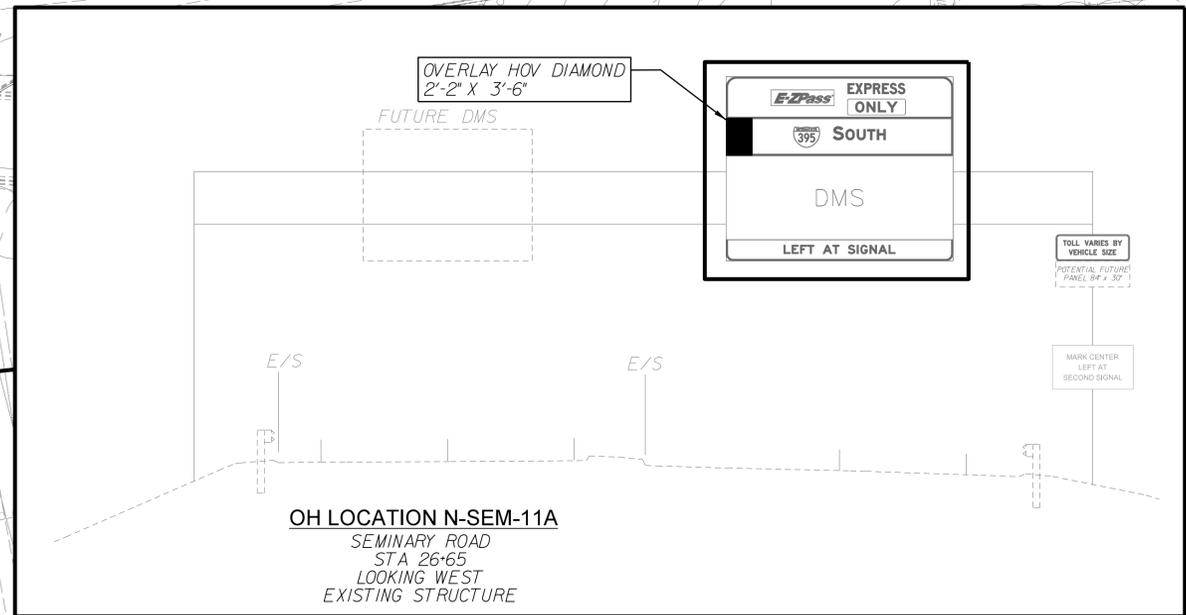
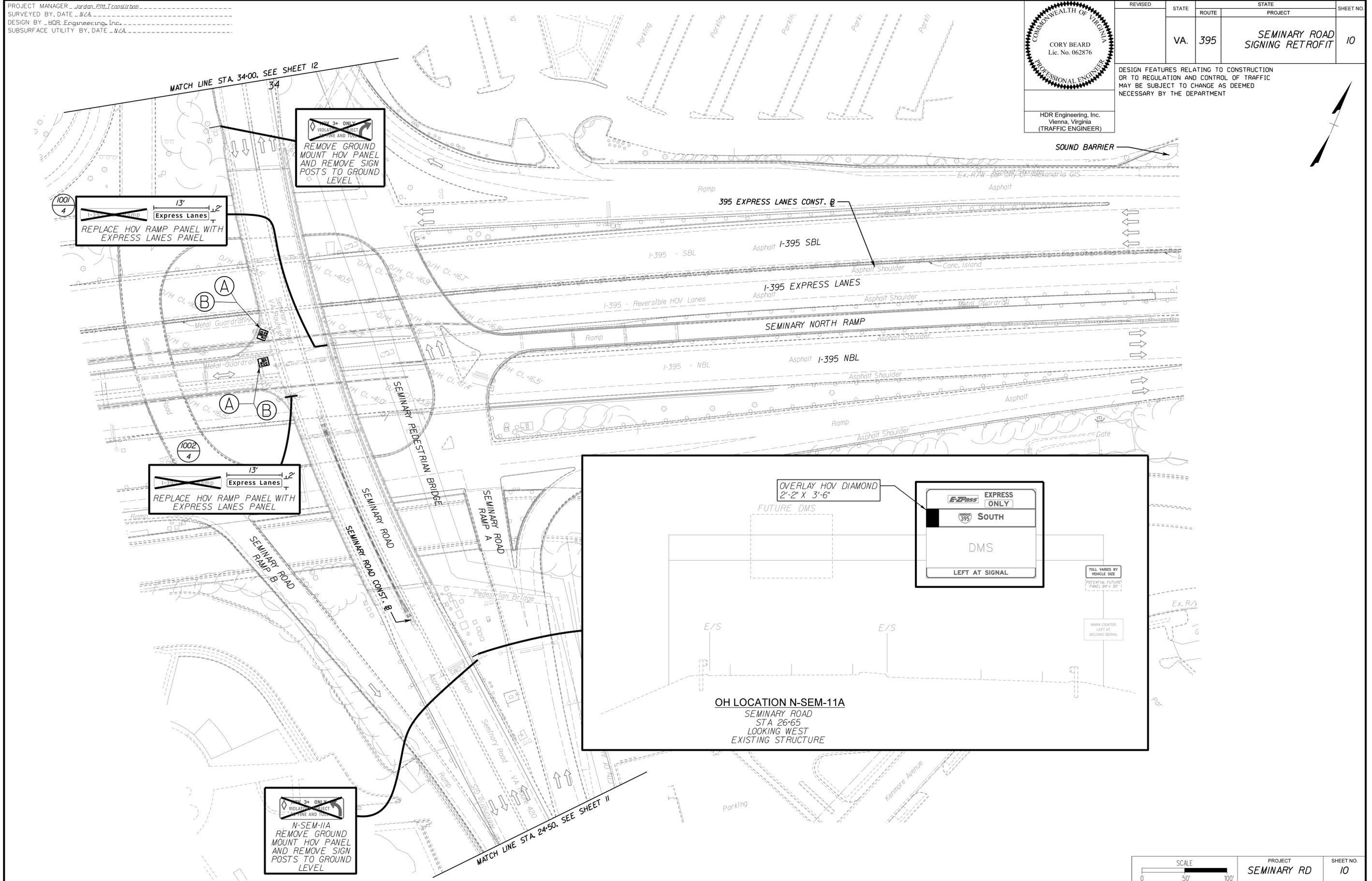
**EXIT**  
↑  
~~↓~~  
N4-144-B  
REMOVE HOV 3+ ONLY PANEL

PROJECT MANAGER: Jordan Pitt, I. caaslUrban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	10

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



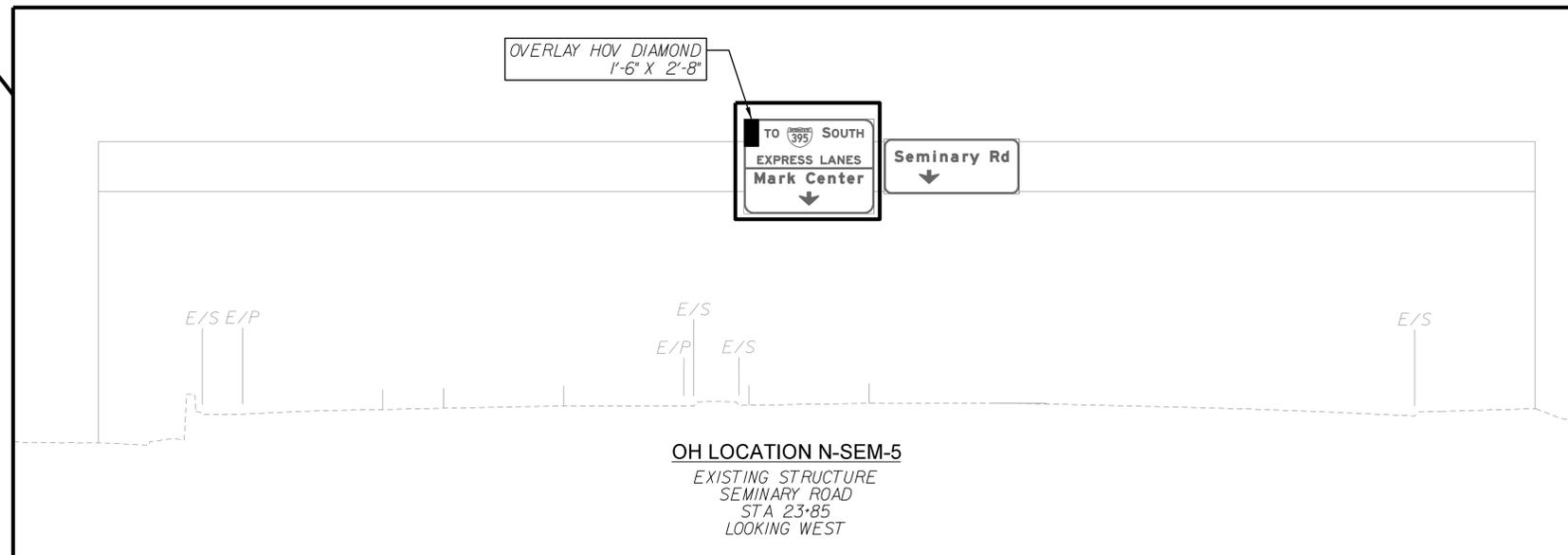
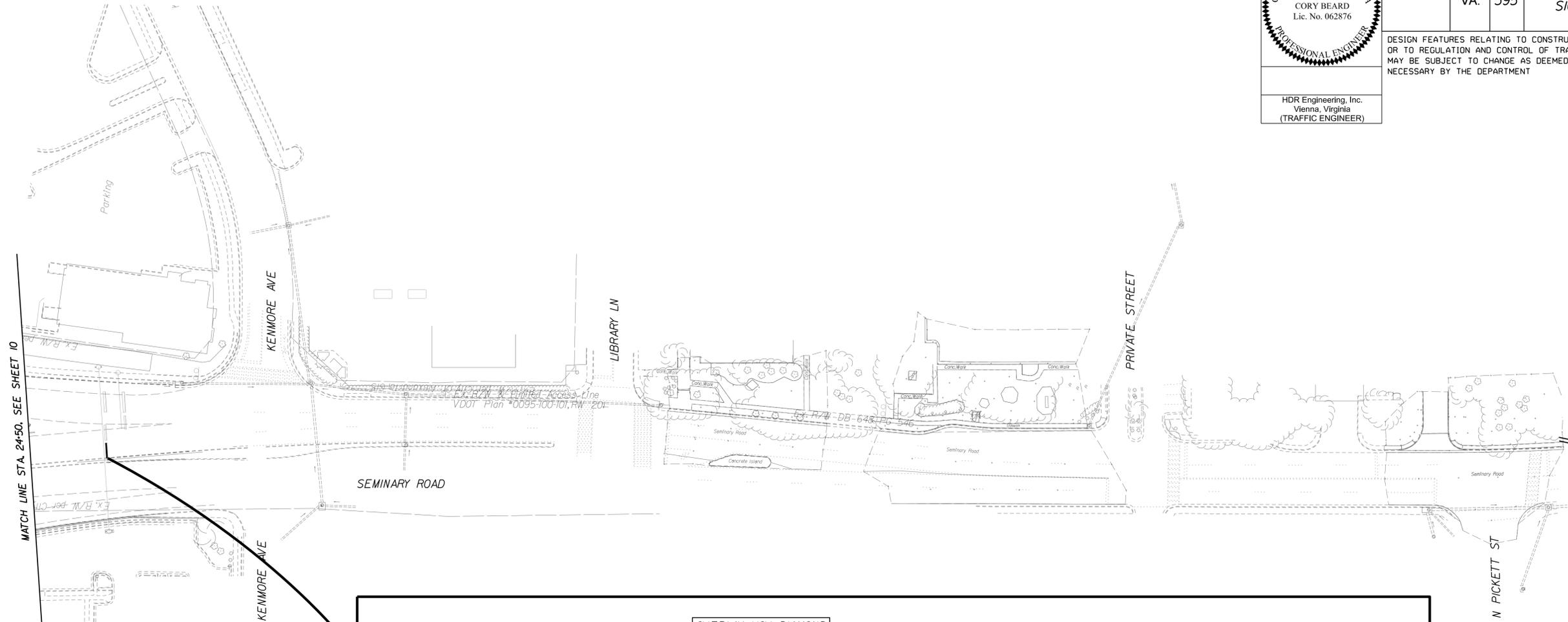
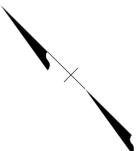
PROJECT MANAGER Jordan Pitt, Inc./Urban  
SURVEYED BY, DATE N/A  
DESIGN BY HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA  
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HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	11

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



PROJECT MANAGER: Jordan Pitt, Icaas@rban  
SURVEYED BY, DATE: N/A  
DESIGN BY: HDR Engineering, Inc.  
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA  
CORY BEARD  
Lic. No. 062876  
PROFESSIONAL ENGINEER  
HDR Engineering, Inc.  
Vienna, Virginia  
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	12

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

OVERLAY HOV DIAMOND  
2'-2" X 3'-6"

REMOVE EXISTING HOV 3+ PANEL

OH LOCATION S-SEM-6A  
SEMINARY ROAD  
STA 35+70  
LOOKING EAST  
EXISTING STRUCTURE

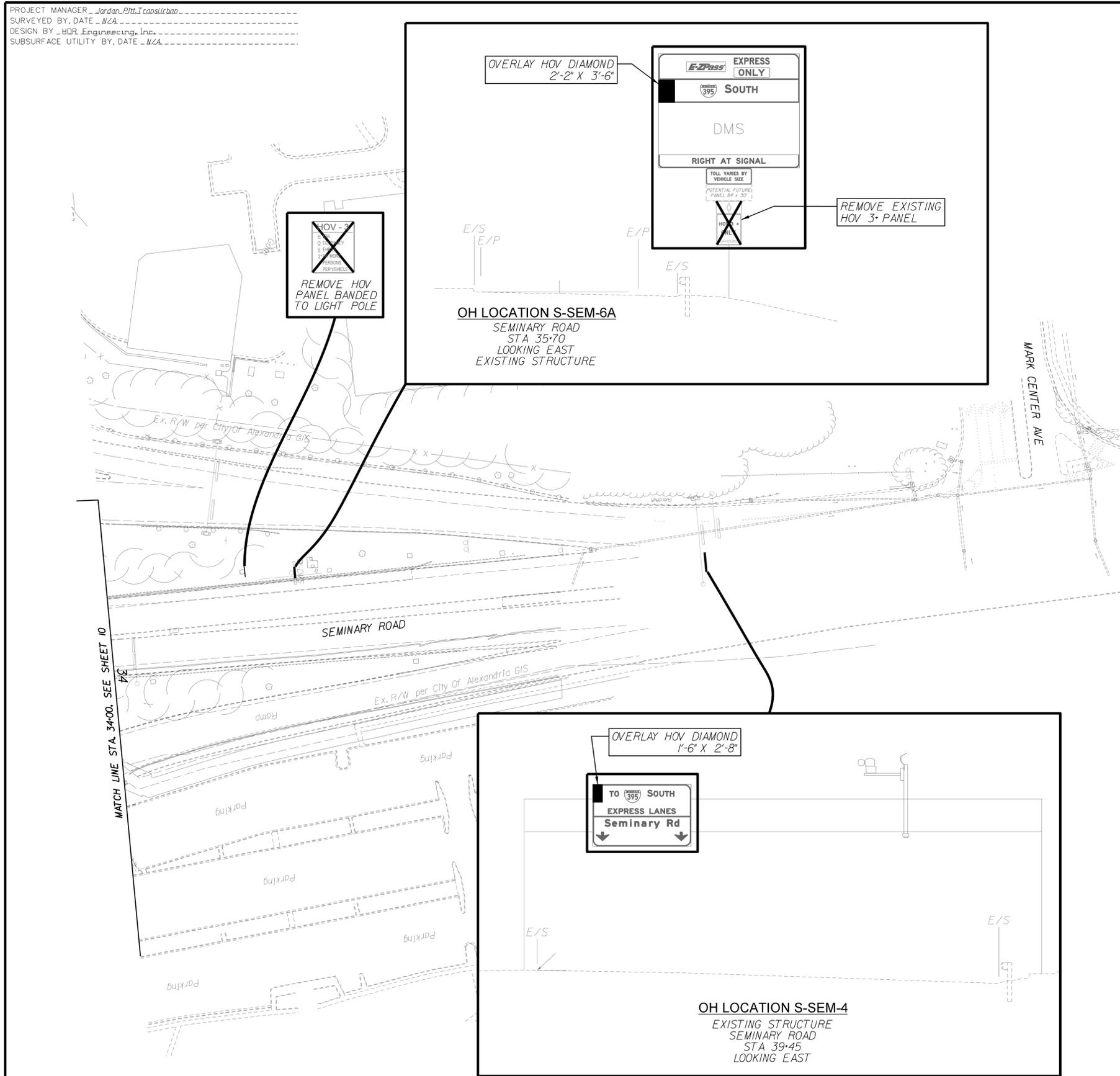
REMOVE HOV PANEL BANDED TO LIGHT POLE

OVERLAY HOV DIAMOND  
1'-6" X 2'-8"

OH LOCATION S-SEM-2A  
SEMINARY ROAD  
STA 45+42  
LOOKING EAST

OVERLAY HOV DIAMOND  
1'-6" X 2'-8"

OH LOCATION S-SEM-4  
EXISTING STRUCTURE  
SEMINARY ROAD  
STA 39+45  
LOOKING EAST





Transurban (USA) Operations Inc.  
6440 General Green Way  
Alexandria, VA 22312  
571-419-6100 tel  
571-419-6101 fax  
www.transurban.com

July 14, 2022

Chowdhary S. Gondy  
Principal and Executive Vice-President  
CES Consulting, LLC  
23475 Rock Haven Way, Suite 255  
Dulles, VA 20166

**Re: Amendment No. 1 to Task Order No. 1**

Dear Mr. Gondy:

We refer to that certain Task Order No. 1, with a commencement date of April 25, 2022 (“**Task Order No. 1**”), entered into pursuant to that certain Master Services Agreement, dated March 1, 2022 (the “**Agreement**”), between Transurban (USA) Operations Inc. (the “**Company**”), and CES Consulting, LLC (the “**Service Provider**”). All capitalized terms used and not defined herein shall have the meanings provided in Task Order No. 1 or the Agreement, as applicable.

The parties have mutually agreed to extend the Services completion deadline for Task Order No. 1 and therefore, in accordance with clause 13.4 of the Agreement, the parties make the following change to Task Order No. 1:

- (1) The section titled “Schedule” is hereby amended to replace the Period of Performance completion date of “July 15, 2022” with “the earlier of (x) the execution of the Construction Contract Relating to the 395 Express Lanes Seminary Road Ramp Project, to be entered into by and between 95 Express Lanes LLC and the Service Provider and (y) August 15, 2022.”

Except as set forth herein, the Company and the Service Provider confirm that Task Order No. 1 and the Agreement shall continue in full force and effect and are otherwise unchanged. Please confirm that the foregoing is in accordance with your understanding by countersigning and returning a copy of this letter to the Company, which shall become binding and part of Task Order No. 1 upon the Company’s receipt.

*[Signature page follows]*

**IN WITNESS WHEREOF**, the parties have caused this Amendment No. 1 to Task Order No. 1 to be executed, by duly authorized representatives, as of the date first written above.

**TRANSURBAN (USA) OPERATIONS INC.**

By:   
Name: Amanda Baxter  
Title: Senior Vice President, VA Market & Operations

**CES CONSULTING, LLC**

By:   
Name: Chowdhary Gondy  
Title: Principal and Executive Vice-President

**EXHIBIT K**  
**PRICING DETAILS**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
1	SIGN PANEL – INSTALL ONLY	1.0	LS	\$ 7176.00	\$ 7176.00
2	OVERLAY SIGN PANEL – INSTALL ONLY	1.0	LS	\$ 6537.50	\$ 6537.50
3	REMOVE EXIST. 2 POST SIGN PANEL & POSTS	1.0	LS	\$ 500.00	\$ 500.00
4	REMOVE EXIST. OVERHEAD SIGNAL SIGN PANEL	1.0	LS	\$ 26,400.00	\$ 26,400.00
5	NS REMOVE EXIST. OVERHEAD SIGN STR SIGN LIGHTING	1.0	LS	\$ 2175.00	\$ 2175.00
6	ERADICATE NON-LINEAR PAVEMENT MARKINGS	1.0	LS	\$ 1440.00	\$ 1440.00
7	PAVEMENT SYMBOL EZ-PASS TYPE B CL. II	1.0	LS	\$ 8500.00	\$ 8500.00
8	POLICE	24.0	HR	\$ 120.00	\$ 2880.00
9	QUALITY CONTROL	1.0	LS	\$ 11,200.00	\$ 11,200.00
10	UNVEILING SIGNS	1.0	LS	\$ 3550.00	\$ 3550.00
11	AUTHORITY TO ACCESS TRAINING	1.0	LS	\$ 1100.00	\$ 1100.00
12	MAINTENANCE OF TRAFFIC (MOT) ALLOWANCE*	N/A	N/A	N/A	\$ 18,000.00
				<b>TOTAL</b>	<b>\$89,458.50</b>

\* MOT will be paid on a unit rate basis per each based on actual quantity used and in accordance with the unit rate schedule shown on the following page, not to exceed the Maintenance of Traffic Allowance of \$18,000.00.

### MOT UNIT PRICES

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT RATE (EACH)</b>
10	MOT - SHOULDER CLOSURE - NO TMA - ARTERIAL	\$1,400.00
20	MOT - SINGLE LANE CLOSURE -NO TMA - ARTERIAL	\$1,400.00
30	MOT - SHOULDER CLOSURE - WITH TMA - INTERSTATE	\$2,700.00
40	MOT - SINGLE LANE CLOSURE - WITH TMA - INTERSTATE	\$2,700.00
50	MOT - SHOULDER CLOSURE - NO TMA - ARTERIAL – NIGHTSHIFT	\$1,600.00
60	MOT - SINGLE LANE CLOSURE – NO TMA - ARTERIAL – NIGHTSHIFT	\$1,600.00
70	MOT - SHOULDER CLOSURE – WITH TMA - INTERSTATE – NIGHTSHIFT	\$3,120.00
80	MOT - SINGLE LANE CLOSURE – WITH TMA - INTERSTATE - NIGHTSHIFT	\$3,120.00
90	MOT – MOBILE – MULTIPLE LANES – WITH TMA – INTERSTATE –NIGHTSHIFT	\$7,225.00
100	MOT - MOBILE CLOSURE - ARTERIAL - DAYSHIFT	\$2,750.00
110	MOT - MOBILE CLOSURE - ARTERIAL - NIGHTSHIFT	\$3,025.00