

EXHIBIT A

The County has developed a RFP Design (hereinafter named “RFP Plans”) for the West Glebe Road Bridge Over Four Mile Superstructure Replacement and Substructure Repair Project (“Project”) as part of the Request for Proposals No. 20-227-RFP. The successful Design-Builder (hereinafter referred to as “Contractor”) will be engaged by the County to design and build the Project. The RFP Plans are included in this Agreement as Attachment B. The Guaranteed Maximum Price for this project shall be \$8.6 million.

A1. GENERAL INTENT

A1.1 Project Description. The Project is located in Arlington County, Virginia. The project limits include the West Glebe Road bridge over Four Mile Run and approach roadways and sidewalks transitioning to the new structure. The bridge connects Arlington County on the north side of the bridge to the City of Alexandria on the south side of the bridge.

The Project requires replacement of the superstructure on West Glebe Bridge (NBI Structure# 5901) in a manner that improves safety and eliminates the structural deficient condition. The Project includes removing the existing prestressed concrete superstructure and constructing a new superstructure with steel girders and a concrete deck. The Project also includes repairing the existing substructures and constructing new beam seats. Sidewalks, bike lanes, and modifications to the intersection with South Glebe Road are also components of this Project. The Contractor shall work closely with the County to design and furnish architectural features and enhanced lighting.

The RFP Information Package (Attachment B) is included with this solicitation and includes the following:

1. RFP Plans, including roadway and bridge electronic reference files, survey and utility files
2. Plans for the Existing Bridge
3. Original Design Calculations for Prestressed Concrete Beams
4. Environmental Documents
 - o Nationwide Permit #3
 - o Virginia Marine Resources Commission Permit
 - o Approved Jurisdictional Determination
 - o Endangered and Threatened Species (ETS) Review
 - o Waters of the U.S. (Including Wetlands) Delineation
5. Traffic and Pedestrian counts
6. Hydrology and Hydraulics Analysis Report
7. Utilities
 - o Verizon conduit relocation plan
 - o Existing Virginia Dominion Power Overhead Electric Plan
 - o Gas Line Abandonment As-Built Plans
8. West Glebe Road Bridge 30% Design Concepts “Ideabook”
9. Public Engagement Summary

The design and construction work for the Project shall be performed in accordance with the applicable federal and state laws and Arlington County, City of Alexandria and VDOT Standards, Specifications and Reference Documents to include, but not limited to the documents listed herein. All improvements in Arlington County will be governed by the Arlington County reference documents

and all improvements in the City of Alexandria will be governed by the City of Alexandria documents. The Contractor must verify and use the latest version of the documents listed herein as of the date of the RFP or latest Addenda. The Contractor must meet or exceed the minimum roadway design standards and criteria unless otherwise shown on the RFP drawings.

If during the course of the design, the Contractor determines that a specific Standard, Specification or Reference Document is required but is not listed herein, it is the responsibility of the Contractor to identify the pertinent Standard, Specification, or Reference Document and submit to the County, as applicable, for review and approval prior to inclusion in the Contract Documents.

The standards and references for the Project are listed below in the following order: (a) Standards and Specifications; (b) Reference Manuals. Items (a) and (b) are published references that are available publicly, for which copies are not provided to the Offerors in Attachment B, but these items are to be used as manuals for design and construction.

(a) Standards and Specifications

- [Arlington County Code](#)
- [Arlington County Zoning Ordinance](#)
- [Arlington County DES Construction Standards and Specifications](#)
- [Arlington County Infrastructure Design Standards](#)
- [Arlington County DES Signal and Street Lighting Standards](#)
- [Arlington County DES Pavement Marking Standards](#)
- [Arlington County Stormwater Management Ordinance](#)
- [Arlington County Stormwater Manual](#)
- [Arlington County CADD Standards and Guidelines](#)
- [Arlington County Land Disturbing Activities \(LDA\) Permit Information](#)
- [Article XII of the City of Alexandria Zoning Ordinance \(Environmental Management Ordinance which includes SWM and RPA\)](#)
- [City of Alexandria Erosion & Sediment Control Ordinance \(Chapter 4\)](#)
- [City of Alexandria Environmental Action Plan 2040](#)
- [City of Alexandria Construction and Design Standards](#)
- [City of Alexandria Transportation and Environmental Services General Information](#)
- [City of Alexandria Landscape Guidelines – Sec. 11-410\(CC\)\(1\)](#)
- [City of Alexandria Noise Control](#)
- [City of Alexandria Bike and Pedestrian Work Zone Requirements](#)
- [2010 ADA Standards for Accessible Design, Department of Justice \(September 15, 2010\)](#)
- [AASHTO A Policy on Geometric Design of Highways and Streets, 6th Edition, 2011](#)
- [AASHTO Construction Handbook for Bridge Temporary Works, 2nd Edition, 2017](#)
- [AASHTO Guide Design Specifications for Bridge Temporary Works, 2nd Edition, 2017](#)
- [AASHTO Guide for Design of Pavement Structures \(Rigid Pavement and Flexible Pavement\), 1993 Edition](#)
- [AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004](#)
- [AASHTO Guide Specifications for Highway Construction, 9th Edition](#)
- [AASHTO Guide Specifications for Wind Loads on Bridges During Construction, 1st Edition, 2017](#)
- [AASHTO Guidelines to Design for Constructability, G 12.1, 2016](#)
- [AASHTO LRFD Bridge Construction Specifications, 4th Edition, 2017](#)

- [AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications](#)
- [AASHTO Manual for Bridge Element Inspection, 1st Edition with 2015 Interim Revisions; and VDOT Supplement, 2016](#)
- [AASHTO Roadside Design Guide, 4th Edition, 2011 \(including errata\)](#)
- [AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 6th Edition, 2013 with 2015 Interim Revisions](#)
- [AASHTO's Highway Safety Manual, 1st Edition, Vol. 1-3, 2010](#)
- [AASHTO's Manual of Bridge Evaluation, 2nd Edition, 2010, 2011, 2012, 2013, 2014, and 2015 Interim Revisions](#)
- [Americans with Disabilities Act Accessibility Guidelines for State and Local Government Facilities, July 1, 2011](#)
- [Manual of Uniform Traffic Control Devices \(MUTCD\), 2009 Edition with Revisions 1 and 2 incorporated, dated May 2012](#)
- [NEPA 70 National Electrical Code, 2014 Edition](#)
- [VDOT Drainage Manual, April 2002, \(including all revisions through March 2019, and current Errata Sheet\)](#)
- [VDOT Instructional & Informational Memoranda \("IIM"\), All Divisions \(including revisions and attachments\)](#)
- [VDOT Manual of the Structure and Bridge Division](#)
- [VDOT Materials Division Approved Products Lists](#)
- [VDOT Right of Way Manual of Instruction \(January 2011, revised December 2016\)](#)
- [VDOT Road and Bridge Specifications, 2020, including all revisions](#)
- [VDOT Road and Bridge Standards, Vol. 1 and Vol. 2, 2016, including all revisions](#)
- [VDOT Road Design Manual, Issued January 2005, revised January 2019](#)
- [VDOT Traffic Engineering Design Manual, September 2014](#)
- [VDOT Utility Manual of Instructions, October 2016, including all revisions](#)
- [VDOT Virginia Work Area Protection Manual, 2011 edition, Revised July 2019](#)
- [VDOT, The Virginia Supplement to the 2009 Manual on Uniform Traffic Control Devices \(MUTCD\), 2011 Edition, Revision 1, September 30, 2013](#)
- [Virginia Erosion and Sediment Control Handbook, Third Edition, 1992](#)

(b) Reference Manuals

- [American Welding Society Standards](#)
- [FEMA National Flood Insurance Program Regulations](#)
- [National Electric Code \(NEC\)](#)
- [National Electrical Manufacturers Association \(NEMA\) Standards](#)
- [Society for Protective Coatings \(SSPC\) Standards](#)
- [Virginia Stormwater Management Program Regulations and VSMP Regulations, 9VAC25-870](#)
- [Virginia Test Methods Manual, June 2016](#)
- [Virginia, Erosion and Sediment Control Law, Regulations and Certification Regulations, 9VAC25-840](#)
- [American National Standards Institute \(A.N.S.I.\)](#)
- [International Society of Arboriculture \(I.S.A.\)](#)
- [Landscape Contractors Association \(L.C.A.\)](#)
- [Landscape Contractors Association, 4th Addition, 1993](#)
- [Four Mile Run Restoration Master Plan](#)

In the event of a discrepancy between Standards and References listed herein, the County and the City of Alexandria Standards shall take precedence. The VDOT Standards shall take precedence over all other Standards and References.

A1.2 Specific Project Requirements.

A1.2.1 Bridge Superstructure Replacement and Substructure Repairs. Unless otherwise stated in the RFP plans, all bridge design shall conform to the details and requirements provided in the VDOT Manual of the Structure and Bridge Division (*reference Section A1.1.*).

The bridge typical section included in the RFP Plans is provided to convey the required configuration and widths of travel lanes.

The Contractor shall submit a demolition and erection plan to the County for review and approval prior to commencement of any demolition or erection of the bridge superstructure. The erection plan shall include at a minimum, details of protection of underlying waterway and trail, pedestrians, roadway and users, ingress & egress of construction equipment's, means & methods, equipment to be utilized, false work and shoring plan.

The demolition plan shall address the stability of the existing beams during all phases of demolition. The plan shall account for the reduced capacity of the superstructure that will occur when the transverse post tensioning strands are cut. No live loads shall be permitted on a span that has been partially demolished.

During the Design Confirmation Phase, a preliminary type, size and location plan, including all proposed stages of construction, shall be submitted by the Contractor to the County for review and approved prior to proceeding with final design. Any modifications to the type, size and location plan shown in the RFP plans require approval from the County. The stage construction plans shall outline expected methods of protecting roadway users (adjacent vehicles and pedestrian traffic) during each stage. Detailed demolition and erection plans shall be included for review with the final design plan submittal.

The bridge for this Project shall be designed using AASHTO LRFD Bridge Design Specifications, 8th Edition; and VDOT Modifications (IIM-S&B-80.6).

The Contractor is prohibited from any deviation of VDOT's bridge standards without allowance granted in this document or prior written approval from the County. VDOT's Standard Details, including VDOT Design Aids, are available from the VDOT Website at <http://www.virginiadot.org/business/bridge-manuals.asp>. These standards, design aids, and typical details shall be used by the Contractor to the maximum extent possible in the development of the plans. Future wearing surface loads and construction tolerance loads shall be utilized in accordance with IIM-S&B-80.6.

All reinforcing steel shall be deformed and shall conform to ASTM A615, Grade 60 except for reinforcing steels noted as CRR (corrosion resistant reinforcement). The proposed structure shall utilize CRR in accordance with [IIM-S&B-81.8](#). Epoxy coated reinforcing steel shall not be used.

With the exception of the bridge railing, details and drawings not specifically included in the VDOT Manual of the Structure and Bridge Division (*reference Section A1.1.*) may only be included in structural plans and working drawings after review and approval by the County. Should any such details not be acceptable, the Contractor shall make the necessary modifications or shall submit an alternate detail that is acceptable to the County.

The existing bridge plans that are provided include sheets that do not accurately depict the as-built condition. The Contractor is responsible for determining all dimensions, details and other information required for the design. The existing bridge plans and original design calculations are provided for information only and the County is not responsible for any inaccuracies or discrepancies shown in the existing plans or calculations.

A1.2.2 Superstructure. The proposed superstructure shall consist of continuous steel girder spans with deck slab extensions as outlined in the VDOT Manual of the Structure and Bridge Division – Part 2 Chapter 17. All structural steel, including bearings, shall be ASTM A709 grade 50W and shall be unpainted except for the entire outside surface of fascia girders including the underside of the bottom flange.

Finish paint color shall be determined by the Contractor at the 60% submittal. Final color will be approved by the County and the City of Alexandria.

No fracture critical bridge elements of any kind will be acceptable in the proposed structure.

Girders shall be designed as composite with the cast-in-place deck. Maximum beam/girder spacing shall be limited to 12 feet-0 inches.

Cover plates on continuous rolled beam sections and longitudinal stiffeners shall not be used. Other fatigue prone details shall not be used. No field welding to structural steel members, primary or secondary, shall be permitted except as allowed by the 2020 VDOT Road and Bridge Specifications (*reference Section A1.1.*).

The existing structural approach slabs will be removed by the Contractor. Replacing these approach slabs is not required.

The use of asphalt overlays on concrete bridge decks shall not be permitted.

The use of prestressed deck panels as stay-in-place forms shall not be permitted.

A1.2.3 Substructure. The proposed design shall ensure that the dead load from the new superstructure is not greater than the dead load from the existing structure.

Care shall be taken during riprap installation to ensure that the existing piers and timber piles are not damaged. Any damage caused to the existing substructure units during construction shall be repaired by the Contractor at his own expense. Under no circumstance shall the existing timber pile be exposed to air.

All substructure concrete shall be repaired in accordance with Section 412 of the 2020 VDOT Road and Bridge Specifications.

The top portions of all substructure units shall be removed and recast as shown in the RFP plans. Minimum anchor bolt clearances shall be in accordance with the VDOT Manual of the Structure and Bridge Division.

Modifications may be required to the existing retaining walls to accommodate the bridge widening. The abutments and proposed abutment modifications shall ensure that the abutment remains structurally independent from the existing retaining walls.

Cheek walls are required at each end of the widened abutment seats to conceal the new bearings. Cheek walls shall extend to the top of deck elevation and be designed as a transverse restraint for the deck slab extension. Other methods of restraining the structure in the transverse may be used if approved by the county.

A1.2.4 Miscellaneous. The following utilities shall be designed, furnished and installed on the bridge structure:

1. Conduit, including all junction boxes for the proposed bridge lighting based on coordination with Virginia Dominion Power.
2. Verizon 4" diameter conduits and conduit hangers. Contractor shall coordinate with Verizon for the relocation of the 4" diameter conduits. Eight (8) conduits will be installed as shown in the RFP plans. Conduits or conduit hangers shall not extend below the bottom of the beams. Contractor shall ensure that the deck slab extension is sufficiently supported by the end diaphragm for all loading conditions while providing enough space for the conduits. Galvanized steel sleeves are required in the backwall openings in accordance with [VDOT Standard Drawing BCLC-1B](#).

The existing Verizon conduits shall be temporarily supported and remain operational during phased construction until they are permanently relocated and attached to the new structure. The design and installation of the temporary supports is the responsibility of the Contractor.

VDOT and TxDOT standard drawings are included in the RFP plan set for reference only. Final design plans for these items must be signed and sealed by the Contractor. Additional notes to Contractor for these standard drawings can be found in the VDOT Manual of the Structure and Bridge Division, Part 3.

1. Bridge railing shall be in accordance with the [TxDOT Type T222](#) Traffic Railing standards with modifications as shown in the RFP drawings.
2. Conduits and supports for bridge lighting on the bridge deck shall follow the details in [VDOT Standard BCS-31A](#). Details shall be modified as necessary to apply to the T222 railing standard.
3. Verizon 4" diameter conduits and conduit hangers shall be in accordance with VDOT Standard BCLC-1B with modifications as necessary for conduit formation and end diaphragm requirements.

The superstructure shall be designed so that the top of the 36" tall solid portion of the concrete

bridge parapet on the west side of the bridge matches the elevation of the existing concrete railing on the existing abutments. The Contractor is responsible for determining this elevation prior to removing the existing railing.

The proposed structure shall be designed to meet all applicable hydraulic requirements specified herein, as well as current FEMA and VDOT guidelines as described in the latest edition of the VDOT Drainage Manual (*reference Section A1.1.*).

Bridge construction and repairs shall be designed and constructed to limit impacts on wetlands and floodplain.

Construction of the proposed bridge shall be staged as necessary to maintain a minimum of (1) lane of traffic in both directions throughout all stages of construction as shown in the RFP plans. Additionally, the Contractor must provide continuous and safe access for pedestrian and bicycle traffic between the limits of construction and along the Four Mile Run Trail. Temporary pedestrian/bicycle access and detours must comply with Americans with Disabilities Act (ADA) Accessibility Guidelines for State and Local Government Facilities (*reference Section A1.1.*).

The existing sidewalks are currently closed to pedestrian traffic due to severe deterioration and cracking of the supporting beams. Prior to opening the existing downstream sidewalk to pedestrians during phased construction (as shown in the RFP Plans), the sidewalk shall be strengthened, repaired or replaced so that it is able to support pedestrian loads in accordance with AASHTO LRFD Bridge Design Specifications (*reference Section A1.1.*). The railing used on the downstream sidewalk during phased construction shall be 42" tall and match or exceed the capacity of the existing railing. The existing railing may be reused for the temporary condition.

The existing structure is posted for a 5-ton weight restriction. This weight restriction shall be observed by the Contractor at all times during construction unless temporary improvements are installed and a new analysis is submitted to the County for review and approval. No modifications shall be made to the portion of the existing structure that is carrying vehicular or pedestrian traffic without approval from the County.

A1.2.5 Structure Load Ratings. The following structure load ratings analyses and reports shall be required and shall be performed in accordance with the requirements of the current version of [IIM-S&B-86, Load Rating and Posting of Structures \(Bridges and Culverts\).](#)

1. A load rating is required when a newly constructed structure or any phased portion of a newly constructed structure is intended to carry traffic in a temporary configuration. This As-Designed load rating shall be submitted as part of the process to obtain plan approval and shall include any partial configuration of the structure.
2. A final, As-Built, load rating analysis of the new structure reflecting traffic in its final configuration. This load rating should incorporate any As-Built changes that may have been made, which in the judgment of the Contractor's structural engineer will affect the load rating (e.g., minor changes to stiffener or diaphragm locations may not affect a load rating).

No partial or completed new construction shall be placed into service if a Load Restriction

(Posting) is required based upon the load rating analyses. The Contractor is responsible for all remedial measures/corrective action required to provide the County a structure which satisfies the load rating requirements outlined in the current version of [I&IM-S&B-86, Load Rating and Posting of Structures, Load Rating and Posting of Structures \(Bridges and Culverts\)](#).

A1.2.6 Working Drawings. The Contractor shall review and approve working/shop drawings and submit approved sets to the County. The working/shop drawings shall be approved by a registered, licensed, Professional Engineer in the Commonwealth of Virginia. Details not included in the Issued for Construction (IFC) plans shall be reviewed and approved by the County prior to incorporating in working drawings.

A1.2.7 Safety and Acceptance Inspection for the Proposed Structures. Acceptance of the bridge structure will require the following two (2) independent inspections by the County:

1. A satisfactory safety/inventory inspection by the County is required prior to opening the structure or portion of the structure to public traffic. This safety/inventory inspection by the County will serve as the initial inspection of the structure. Data gathered will include location, date completed, alignment, description, horizontal/vertical clearances, structure element description and condition data, and traffic safety features. Such inspections will be required prior to opening any newly constructed portion or phase of the bridge to traffic.
2. A satisfactory final construction inspection by the County is required prior to Final Acceptance of the structure. To facilitate inspection of the structure by the County, the Contractor shall ensure that all structural elements are accessible and shall provide adequate resources including:
 - o Man-lifts, bucket trucks, under bridge inspection vehicles, or other equipment necessary to conduct a hands-on inspection of the structure as well as properly trained staff of sufficient composition to support the inspections.
 - o Plans, procedures, personnel, and equipment to implement traffic control measures.

The Contractor shall provide a thirty (30) day notice to the County whenever it requires the County to undertake an inspection. The Contractor's notice to the County shall include As-Built drawings, traffic control procedures, a description of the items to be inspected and an anticipated schedule for the inspections.

Unless otherwise approved by the County, structures shall be substantially complete before the final construction inspection will be performed.

A1.2.8 Roadway Improvements. The information contained in the RFP plans shall serve as a basis for the Contractor to determine the appropriate criteria to apply to the design of the bridge approaches within the Project limits. Offerors are on notice that the entirety of the information contained in the RFP plans, including but not limited to the design criteria, and other notes and data, contain the minimum roadway geometric design requirements that the Contractor shall meet in its performance of the Work. By submitting its Proposal, Offeror certifies that their technical proposal is fully compliant with such minimum requirements. Unless otherwise

approved by the County, no changes to or deviation from the listed criteria shall be allowed. Any schedule delays as a result of changes or deviations are the responsibility of the Contractor.

West Glebe Road is functionally classified as an Urban Minor Arterial as defined in Appendix A-1 of the VDOT Road Design Manual (*reference Section A1.1*). This Project will include construction of a sidewalk with curb and gutter that ties into the proposed sidewalk and bike lanes on the new bridge superstructure. The bridge approaches and sidewalks (e.g. sidewalk with curb and gutter, etc.) shall be designed utilizing the RFP Plans.

A1.2.9 Environmental. The Contractor shall carry out environmental commitments during design and construction, as applicable, as identified in the Nationwide Permit #3 and Virginia Marine Resources Commission Permit. If the proposed construction methods result in temporary or permanent impacts not included in these permits, modifications to these permits or additional permits will be required. All new permits or permit modifications will be at the sole responsibility of the Contractor and at no additional cost and/or time delays to the Project.

The Contractor shall acquire all water quality permits for the Project in the Contractor's name (i.e. the Contractor shall be the "Permittee") and shall provide for any necessary stream and/or wetland compensation required by permits to accomplish the work.

The Contractor shall be responsible for compliance with pre-construction and construction-related environmental commitments and shall be responsible for compliance with pre-construction, construction-related permit conditions, as well as post-construction monitoring if required by regulatory agencies. The Contractor shall assume all obligations and costs incurred by complying with the terms and conditions of the permits and environmental certifications. Any fines associated with environmental permit or regulatory violations shall be the responsibility of the Contractor.

Any changes in scope or Project footprint from that contained in the Nationwide Permit No. 3 (*reference Attachment B*) proposed by the Contractor, and accepted by the County, may require additional environmental technical studies and analysis to be performed by the Contractor at their cost. These technical studies and analyses are to be conducted in accordance with the professional standards and guidelines of each discipline. The Contractor shall then carry out any additional environmental commitments that result from such coordination at its sole expense and at no additional cost and/or time delays to the Project.

A1.2.10 Water Quality Permits and Compensatory Mitigation. The Contractor is responsible for obtaining all water quality permits required to construct the Project (including utility relocations by the Contractor). The Contractor shall be the Permittee. Should the Contractor propose design changes acceptable to the County, permitting requirements may also change and the Contractor remains responsible for obtaining any and all necessary water quality permits and permit modifications required by the regulatory agencies.

Approximately 116 linear feet of regulated perennial stream channels (Four Mile Run) was identified within the study area as identified in the Environmental Documents in the RFP Information Package .

If the Contractor determines that wetlands and/or stream mitigation is required to secure the permit authorization, the Contractor shall provide the required compensatory mitigation. The Offeror shall account for all costs associated with water quality permit acquisition, as well as compensatory mitigation, in their Cost Proposal.

The Contractor shall ensure that Project schedules accommodate any Special Provisions, Time of Year Restrictions (TOYR), and the duration of permit acquisition from the regulatory agencies. The Contractor shall be responsible for adhering to permit conditions and Special Provisions, as identified in the permit authorizations including but not limited to TOYR, avoidance and minimization recommendations and restoration of temporary impact areas.

The Contractor shall be responsible for compliance with pre-construction, construction-related permit conditions, as well as post-construction monitoring if required by regulatory agencies. This shall include costs associated with acquiring water quality permits and additional compensatory mitigation for the Project if needed. The Contractor shall report any deviations or violations of these permit conditions to the regulatory agencies in accordance with the permits. The County's Environmental Compliance Inspector will be monitoring the Project to ensure compliance with all permits and conditions.

The Contractor shall provide to the County copies of all permits, documentation, and correspondence with regulatory agencies. Construction activities shall not impact regulated areas within the Project limits until all applicable water quality permits have been issued to the Contractor. The Contractor shall not proceed with work covered by the water quality permits until the County releases the work in writing. The County may release a portion or all of such work not in jurisdictional areas, but may order a suspension of the same work after its release. The Contractor shall not be allowed to begin work that pre-determines the work required in the jurisdictional areas until the permits are secured. After receiving the County's release of the work, the Contractor shall notify the County and the regulatory permitting agencies in writing fourteen (14) days prior to beginning work in the jurisdictional areas covered by the water quality permits.

The Contractor shall carry out any additional permit conditions/commitments that result from change in footprint and/or scope at its sole expense; additionally, the Contractor shall be responsible for any schedule delays and associated costs.

At the conclusion of the Project, the Contractor shall notify the County and the regulatory permitting agencies in writing of the completion of the work in the jurisdictional areas covered by the water quality permits. At the completion of the Project, the Contractor is required to transfer any Virginia Marine Resources Commission (VMRC) permit back to the County.

A1.2.11 Threatened and Endangered Species. The County has performed preliminary database reviews using the Virginia Department of Game and Inland Fisheries (DGIF) Fish and Wildlife Information Service (FWIS) database and the U.S. Fish and Wildlife Service (FWS) Information Planning and Conservation (IPAC) database to determine the Project's potential effects on threatened and endangered (T&E) species, indicating that the Project may affect T&E species. No T&E species were identified in these searches.

The Offeror shall be advised that new and updated T&E information is continually added to agency databases. The Contractor shall be responsible for any subsequent coordination to obtain

updated information, requirements, and clearances from environmental regulatory agencies that provide T&E species oversight. This T&E species coordination is a standard component of the water quality permit acquisition process and may result in permit conditions for which the Contractor shall be responsible. The Contractor is responsible for ensuring that all T&E species are correctly identified and impacts assessed, noting that more or less resources may be present than initially identified. Avoidance and minimization shall be implemented to the greatest extent possible. The Contractor shall provide to the County copies of all documentation and correspondence with regulatory agencies

A1.2.12 Environmental Compliance. The Contractor is responsible for compliance with all applicable state and federal environmental laws, regulations, and permits. If, at any time, the Contractor is not in compliance with all applicable environmental laws, regulations, Executive Orders, commitments, etc., the County has the authority to suspend work, in whole or in part, until such time as the deficiencies or non-compliant items have been corrected. Should any non-compliant item(s) be identified during construction, immediate and continuous corrective action shall be taken by the Contractor to bring the item(s) back into compliance. The Contractor shall notify the County immediately of all non-compliant item(s) and shall provide to the County copies of all documentation and correspondence with regulatory agencies related to the non-compliant item(s) and their resolution, concurrent with each submission.

The Contractor shall be responsible for any schedule delays and associated costs as a result of any delays and/or shutdowns associated with non-compliance. Any monetary fines associated with violations and/or any environmental restoration activities required to resolve violations and other non-compliance issues shall be the responsibility of the Contractor.

The Contractor shall carry out environmental commitments during design and construction, as applicable. All commitment compliance shall be supported by appropriate documentation, to be provided by the Contractor to the County.

The Contractor shall be responsible for compliance with pre-construction and construction-related environmental commitments and permit conditions. The Contractor shall assume all obligations and costs incurred by complying with the terms and conditions of the permits and certifications. Any fines associated with environmental permit or regulatory violations shall be the responsibility of the Contractor.

A1.2.13 Survey. The Project survey files are included in the RFP documents. The Contractor shall be responsible for obtaining any additional survey data that may be required for design including obtaining all right-of-entry and land use permits. Additional survey data may include locating and/or designating underground utilities, digital terrain model (DTM), utility test holes and obtaining other related data necessary for the design and construction of the Project. Survey may also be required for the acquisition of temporary construction easements. Right of Entry notification shall be in accordance with [Chapter 4 of the VDOT's Survey Manual](#).

The Contractor shall reset or relocate any survey control damaged, destroyed or located within the footprint of the final design construction limits. The control will be established by a land surveyor registered, licensed in the Commonwealth of Virginia.

A1.2.14 Geotechnical Work. Geotechnical investigations and analysis are not required. Minimum pavement sections are shown in the typical sections in the RFP plans. The Contractor shall be responsible for any temporary pavement design to accommodate Maintenance of Traffic (MOT). Temporary pavements shall be designed in accordance with the AASHTO Guide for the Design of Pavement Structures (1993 edition) (*reference Section A1.1.*). All temporary pavement shall be completely removed once it is no longer in service

Pavement sections require that proper grading be maintained to direct surface water away from paved areas and have efficient runoff from surrounding areas. Any utility excavations or excavations for storm drains within pavement areas shall be backfilled with compacted structural fill in accordance with applicable sections of the 2020 VDOT Road and Bridge Specifications and applicable Special Provisions (*reference Section A1.1.*).

A1.2.15 Drainage, Stormwater Management and Bridge Hydraulics. The Contractor shall provide and/or perform all investigations, evaluations, analysis, coordination, documentation, and design required to meet all hydrologic and hydraulic, drainage, stormwater management, erosion and sedimentation control, stormwater pollution prevention, and Arlington County and Virginia Storm Water Management Program permitting requirements.

A1.2.15.1 Hydrologic and Hydraulic Analysis (H&HA). The Contractor shall complete the H&HA analysis for the proposed bridge and shall be approved by the Arlington County hydraulics engineer or floodplain administrator prior to the commencement of construction. The analysis shall be conducted using the [Arlington County Code Chapter 48 Floodplain Management Ordinance](#) and is to be in compliance with 44 CFR 60.3 (C) (10) of Federal Emergency Management Agency (FEMA) floodplain management regulations (*reference Section A1.1.*). West Glebe Road Bridge over Four Mile Run is located within the FEMA floodplain zone AE (FIRM# 51013C0077C and 515519002E). Therefore, the H&HA analysis shall meet the County and FEMA requirements for floodplain Zone AE for 100- year storm event. The County developed preliminary H&H analysis for the bridge based on the field survey and LiDAR data. The analysis report and model will be available for the Contractor. The Contractor may elect to use the provided hydraulics model and report as base to develop the new hydraulics model. The report and the model provided by the County shall be evaluated and modified as necessary. The H&HA analysis shall be conducted using the Army Corps of Engineers' Hydrologic Engineering Center's River Analysis System (HEC-RAS) software. The Contractor shall provide interim and a final sealed H&HA report. The report and the hydraulics model shall be reviewed and approved by the County prior to construction. The Contractor shall avoid the Letter of Map Revision/Conditional Letter of Map Revision (LOMR/CLOMR) process while developing the hydraulics model for the proposed design to minimize the impact on construction schedule of a long approval process by the County and FEMA.

Upon completion of the Project, the As-Built survey shall include the horizontal location and vertical elevations of the constructed major bridge structure in sufficient detail to confirm pre-construction hydraulic performance. A post construction As-Built Hydrologic and Hydraulic Analysis and report shall be developed based on the As-Built survey and submitted to the County for review and acceptance. The post construction H&HA shall demonstrate that the anticipated post construction hydraulic performance of the major

bridge structures matches or betters that of the pre-construction H&HA. If the post construction analysis shows an impact greater than the pre-construction H&HA and/or exceeds the construction tolerances established with the pre- construction H&HA, then the Contractor shall be responsible for mitigating the adverse impacts of the post construction condition at no additional cost to the County.

A1.2.15.2 Drainage. The proposed work within the Project limit will have minimum impact on the surrounding existing drainage system. However, existing drainage system shall be analyzed for the proposed improvements. The drainage work shall include the design, construction, and any necessary improvements including new catch basins and storm sewer systems. The drainage analysis, including spread and storm sewer calculation, HGL analysis and outfall adequacy analysis, shall be conducted based on the Arlington County Department of Environmental Services (DES) Construction Standards and Specifications and the VDOT Drainage Manual (*reference Section A1.1.*). The drainage report, including input data (drainage divides, land use, soil map, HSG, runoff coefficient, etc.), all assumptions, methods, criteria used in the analysis and calculation results, shall be prepared and submitted to the County for review and approval.

The outfall analysis for each existing outfall which will be impacted by the proposed improvement or newly proposed shall be analyzed for outfall adequacy utilizing the [Four Mile Run Design Guideline and Arlington County Construction Standard Manual and Specification.](#)

All proposed improvements to the existing storm drain facilities located in the City of Alexandria shall be in accordance with the City of Alexandria Standards and Specifications (*reference Section A1.1.*).

Upon completion of the installation of any drainage structure, the Contractor shall prepare a final As-Built survey of the drainage structure and provide to the Project Officer for review. The As-Built survey shall include the horizontal location and vertical elevations of the constructed drainage structure in sufficient detail to confirm pre-construction hydraulic performance. A post construction As-Built drainage analysis and report shall be developed based on the As-Built survey and submitted to the County for review and acceptance. The post construction analysis and report shall demonstrate that the anticipated post construction hydraulic performance of the drainage structure matches or betters that of the pre-construction data. If the post construction analysis shows an impact greater than the pre-construction condition and/or exceeds the construction tolerances established with the pre-construction level, then the Contractor shall be responsible for mitigating the adverse impacts of the post construction condition at no additional cost to the County.

A1.2.15.3 Stormwater Management. The Contractor shall be responsible for designing and implementing the stormwater management plan required for the Project in accordance with the Arlington County and City of Alexandria Stormwater Management Ordinance and the Virginia Stormwater Management Program (VSMP) Regulation (*reference Section A1.1.*). The stormwater management design shall meet both the water quality and quantity requirements of the County Ordinance and the VSMP for the project. The Project is not grandfathered and the Contractor shall use the Part IIB technical criteria

to design stormwater management. Therefore, the Total Phosphorus (TP) that needs to be treated to meet the water quality requirement of the VSMP shall be calculated using Virginia Runoff Reduction Method (VRRM) Spreadsheet.

The Contractor may elect to purchase nutrient credits for land disturbing activities outside of the Arlington County Right of Way (ROW) to satisfy the post-construction water quality requirements for the Project. It is the responsibility of the Offeror to investigate the feasibility and availability of nutrient credits and as such their purchase shall be at their risk. All costs associated with the purchase of the nutrient credits shall be included in the Offeror's Cost Proposal. The use of such nutrient credits shall be identified in the Contractor's Stormwater Pollution Prevention Plan (SWPPP) including documentation of the evaluation process.

The Contractor shall conduct channel and flood protection analysis for the Project to meet the water quantity requirement. The Contractor shall provide interim and a final sealed Stormwater Management (SWM) report incorporating all SWM calculations and analysis including pre- and post- development discharges at Project limit outfall locations and supporting data such as drainage areas (with maps), ground cover calculations, etc. in accordance with the documentation requirements as outlined in the Arlington County Stormwater Management Ordinance (*reference Section A1.1.*). Drainage area maps for pre- and post-conditions with contours shall show clearly the drainage area limits, flow path used for the time of concentration calculations and the different land uses. For offsite drainage areas, the most detailed available mapping shall be used such as the County GIS mapping with contours. Detailed calculations including all input data, will be required to have proof of meeting the applicable channel and flood protection criteria of the County Stormwater Management Ordinance.

A1.2.15.4 Stormwater Pollution Prevention Plan (SWPPP). A SWPPP, including, but not limited to, an Erosion and Sediment Control (ESC) Plan and Narrative, a Pollution Prevention (P2) Plan, and a post construction Stormwater Management (SWM) Plan shall be prepared and implemented by the Contractor in compliance with applicable requirements, including the Arlington County Code Chapter 60 (Stormwater Management), Chapter 57 (Erosion and Sediment Control), Virginia Erosion and Sediment Control Handbook and the Virginia Stormwater Management Program (VSMP) (*reference Section A1.1.*).

The Contractor shall submit a SWPPP (including a complete ESC Plan, a complete SWM Plan, and P2 Plan) for the entire Project, for review and approval with the initial application for permit coverage. The Project is located within the Resource Protected area and if the Limit of Disturbance (LOD) is greater than 2500 sq. ft., the Contractor shall apply and get approval for the Land Disturbing Activity/Stormwater Permit from the County. In addition, Contractor shall apply and get approval for coverage under the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for discharge of stormwater from construction activities (VPDES Construction Permit). The Contractor shall complete the applicable sections of the VPDES Construction Permit Registration form along with the completed ESC and SWM Plan and submit them to the County.

The County will review the submitted information and, if complete and acceptable,

process a request for coverage under the VPDES Construction Permit in accordance with the County's guidelines. If any information submitted by the Contractor is found to be incomplete and/or unacceptable, the assembly will be returned to the Contractor for corrective action and resubmission.

The Contractor shall not proceed with work to be covered by the permit until permit coverage is secured and the County releases the work in writing. Any request for an exception from the technical criteria of the VSMP regulation shall be coordinated and approved prior to receiving permit coverage.

The Contractor shall be responsible for compliance with construction-related permit conditions and shall assume all obligations and costs incurred by complying with the terms and conditions of the permit. Any fines associated with permit or regulatory violations shall be the responsibility of the Contractor. Upon completion of the entire regulated land disturbing activity (including final stabilization of all disturbed areas), the Contractor shall complete the VPDES Construction Permit Termination Notice form and submit the documents to the County for processing. The Contractor shall also have on-site during any land disturbing operations an individual or individuals holding a VDEQ Inspector Certification and a VDEQ Responsible Land Disturber (RLD) Certification and an Erosion and Sediment Control Certification (ESCC) to ensure compliance with all VDEQ and the County erosion and sediment control plan implementation requirements. It shall be the responsibility of the Contractor's certified ESCC representative and the Contractor's VDEQ certified ESC Inspector to monitor Project compliance with the approved SWPPP and the construction general permit. The Contractor's VDEQ certified ESC Inspector must represent the Quality Assurance firm for the Project.

A1.2.15.5 Other Drainage Requirements

1. All drainage facilities (existing and newly constructed) located within the Project limits that are disturbed or extended as a part of the Project and are functional elements of the final design shall be rendered in a serviceable condition, free from debris and physical obstructions. Accumulated debris resulting from Project construction activities shall be removed by the Contractor, as such maintaining the original line and grade, hydraulic capacity or construction of the facility prior to the final acceptance of the Project.
2. An assessment of the serviceable condition (cleanness) of the existing drainage structures located within the Project limits shall be conducted prior to the commencement of any land disturbing activities by the Contractor and provided to the County.
3. At the first plan submittal, and at each milestone submission, the Contractor will provide the completed Virginia Runoff Reduction Method spreadsheets in .pdf and Microsoft Excel format.
4. The use of manufactured treatment devices is not permitted unless approved in writing by the County Hydraulic Engineer.
5. For storm sewer outlets, outlet protection is required if the design storm velocity is greater than 8 feet per second.
6. Inlets shall be designed to intercept 100% of the flow. Carryover is not

permitted.

7. All uses of the words “should” or “may” in the VDOT Drainage Manual and the Arlington County Construction Standard Manual (*reference Section A1.1.*) shall be interpreted as “shall” unless authorized in writing by the County Hydraulic Engineer. All uses of the word “recommended” in the Drainage Manual shall be interpreted as “required” unless authorized in writing by the County Hydraulic Engineer.
8. All support facilities, laydown yards, equipment storage areas, material storage areas, or disposal areas, outside the Arlington County right-of-way are considered offsite support areas. All offsite support areas will require a separate land disturbing permit from that obtained for activities occurring within the right-of-way. The offsite land disturbing permit shall be obtained from the state or DEQ, and a copy of this permit shall be kept within the overall project’s SWPPP.

A1.2.16 Bridge Architecture and Enhanced Lighting (Public Art). The artist, lighting designer and/or architect (hereafter referred to as “Artist”) shall design and oversee site-specific public art and design enhancements that are to be incorporated into the replacement bridge project within one or more of the following priority areas:

1. interior and/or exterior face of the parapets
2. handrail above the parapets
3. enhanced lighting of the bridge architecture
4. enhanced lighting along the Four Mile Run Trail under the bridge

Artistic treatments may include but are not limited to the following: surface texturing; embedding; coloring; lighting schemes; form liner, steel or ironwork enhancements to bridge parapet; handrail design; and adaptive re-use of existing elements such as the open steel guardrail.

The artist shall develop artwork from concept phase to completion, including coordination of fabrication and installation in consultation with the Contractor and the County. The artist will build upon the past community engagement process as summarized in the guidance from the [Four Mile Run Master Plan](#) and [Design Guidelines](#), and the “Ideabook”: [West Glebe Road Bridge 30% Design Concepts](#) (*reference Attachment B*). The Ideabook identifies a series of images, inspirations and concept sketches for the enhancement of the parapet, handrail and lighting. The document shall serve as a reference to guide the artist in their design approach and identifies specific opportunity areas for enhancement as well as specifications for form liner treatment.

Lighting schemes shall reflect concern for recent advances in light source technology, color changing capability; lighting control technology and available software; use of existing electrical infrastructure; maintenance and operation; and specification of marine grade materials.

The Artist shall submit a proposed scope of services task list from concept design through construction administration and a maintenance plan. The scope shall include a step-by-step description of how the artist will present the concepts to the County for review and final recommendation.

The Artist shall consider the following goals and principles of integrating art into the bridge before selecting a site installation:

- Art creates a signature public art piece for the surrounding community and enhance the safety, comfort and enjoyment of pedestrians, bicyclists, transit riders, and motorists;
- Art uses light as means to inspire and educate about history and the environment; past, present, future;
- Art has high visibility day and night;
- Art is properly scaled to surroundings;
- Art is dynamic and has site-specific illumination to emphasize the unique architectural and engineering features of the bridge;
- Art can be experienced during all seasons and be respectful of neighboring buildings, their inhabitants, and as promulgated in [Dark Sky criteria](#);
- Art is affordable and sustainable in initial investment, day-to-day operating cost, and long-term maintenance (i.e. has low life cycle and long-term maintenance cost);
- Art relates to the surrounding environment, including the remaining bridge elements, natural setting, industrial history, and Army Corps of Engineers stream channel;
- Art incorporates enduring materials able to withstand extreme weather, substantial vehicular, bicycle and pedestrian traffic, and exposure to vehicular pollution;
- Art is easily cleaned and maintained in the event of graffiti or other defacing;
- Art appeals to a mass audience;
- Art is structurally sound; and
- Art is designed with the potential to be integrated throughout the Four Mile Run valley as outlined in the adopted [Four Mile Run Master Plan](#) and is it complimentary to [Four Mile Run Restoration Projects](#) (also reference [Four Mile Run Stream Restoration](#))

A1.2.17 Traffic Control Devices. The Project shall include all Traffic Control Devices (TCD), including temporary and permanent installation of the following: traffic signals; signing; guardrail; pavement markings/markers; and delineation. All TCD designed and installed under the Project shall be in accordance with standards and references herein (*reference Section A1.1.*). The Signing and Pavement Marking Plans, Traffic Signal Construction Plans, Transportation Management Plan (TMP), including Temporary Traffic Control/ Public Information and Traffic Operations Plans are required from the Contractor for final approval by the County prior to any activities that will disrupt traffic.

All existing TCD impacted by the Project shall be modified, upgraded, or replaced by the Contractor to meet current County standards.

A1.2.18 Signs. The Contractor shall be responsible for modifications to existing signs and sign structures, and furnishing and installing all required new temporary and permanent signs and structures. The Contractor must consider final lines of sight and sight distances in the placement of all Project signage.

The Contractor shall complete an existing sign inventory to the County prior to site demolition. This existing information shall be submitted at the same time as the first plan submittal for proposed signing.

The Contractor shall dispose of all signs and sign structures requiring removal during the construction of the Project. Temporary relocation of signs may be necessary as part of this Project and it is the responsibility of the Contractor to perform all the required sign relocations.

A1.2.18.1 Limits of Project Signing. The Contractor shall replace all existing signage and install new signing within the Project limits. Any signing on adjacent roadways beyond the Project limits that require relocation, replacement, or modification due to the proposed design shall be the responsibility of the Contractor.

A1.2.18.2 Signing Plan Requirements. The Contractor signing plans shall show the proposed sign message, Manual on Uniform Traffic Control devices (MUTCD) or Virginia Supplement sign designation (if applicable), size and location of all signs. The structure type used for mounting sign shall be noted on the signing plans. These signing plans shall show the location and messages of all existing signs. All existing sign removals and relocations shall be shown on the signing plans. The signing plans also shall include the location and type of delineation devices (including pavement markings, pavement messages/arrows, raised and recessed pavement markers, and, post- and barrier-mounted delineators).

A1.2.18.3 Design of Sign Panels and Locations. Proposed and replaced sign panels shall be in accordance with Arlington County Standards and other references herein. Sign structures shall be located, designed, fabricated, and constructed in accordance with applicable standards and specifications. The Contractor shall coordinate all sign locations with all proposed and existing signing, landscaping, fencing, signals, utility, drainage, and all other roadside features to assure proper clearances and adequate sight distances. Sign sizes shall adhere to the latest edition of the [Federal Highway Administration \(FHWA\) Standard Highway Signs Book](#), and the current edition of the MUTCD (*reference Section A1.1.*). No guide signs shall be mounted on the bridge.

The Contractor shall use Standard VDOT sign structures for new and relocated VDOT owned signs. The Contractor shall utilize the current edition of the MUTCD, 2011 Virginia Supplement to the 2009 MUTCD, the FHWA's Standard Highway Signs including Pavement Markings and Standard Alphabets to design all non-standard signs that do not have a MUTCD or VDOT standard sign designation (*reference Section A1.1.*). The Clearview font shall be used in accordance with IIM-TE-337.3. IIM-TE-337.3 clarifies VDOT's policy on when to use Clearview lettering and when to use FHWA Standard Alphabet (Highway Gothic) series lettering on guide signs.

A1.2.18.4 Signals. The Contractor shall be responsible for evaluating the existing West Glebe Road/South Glebe Road/South Four Mile Run Drive Intersection and designing all signal improvements necessary to accommodate the proposed design. All traffic signal plans for new or modified permanent signals shall be reviewed and approved by the County. All traffic signals shall be designed in accordance with the MUTCD and 2011 Virginia Supplement to 2009 MUTCD (*reference Section A1.1.*). All new and modified traffic signals shall be designed and constructed as a mast arm configuration. Uninterruptible Power Supply (UPS) shall be included in new traffic signal designs. New and modified traffic signals shall include emergency vehicle pre-emption for all approaches.

Traffic signal controllers, shall be the manufacturer's standard design and shall contain all modules and parts for the specified model number per the manufacturer. The manufacturer's name, model number, serial number, and part identification number shall

be permanently attached to the cover of the equipment. The Contractor shall also furnish the manufacturer's instructions for installing and maintaining the equipment.

The Contractor shall arrange for and provide all necessary field tests to demonstrate the traffic signal installation is in proper working order and in accordance with the applicable requirements of the contract. All test and test equipment shall be supplied by the Contractor unless specifically noted herein. All test must be successfully completed before final acceptance of the project.

A1.2.18.5 Guardrail/Barrier. The Contractor shall ensure that the clear zone within the Project limits is free from hazards and fixed objects. In the event that removal or relocation of hazard and fixed objects from the clear zone is not feasible, the Contractor shall design and install an approved guardrail barrier system and end treatments, where appropriate, for protection in accordance with the [AASHTO Manual for Assessing Safety Hardware \(MASH\), First Edition](#). The same clear zone requirement applies to existing conditions affected by this Project where guardrail upgrade will be required. Existing sub-standard guardrail within the Project limits must be upgraded by the Contractor to meet current standards per Appendix I of the VDOT Road Design Manual (*reference Section A1.1.*). This may require the upgrade of guardrail to the nearest logical termination point beyond the current Project limits.

A1.2.18.6 Pavement Markings/Markers. The Contractor shall include all required pavement markings, markers, and delineators. Pavement markings, markers, and delineators shall conform to the requirements of the MUTCD and the 2011 Virginia Supplement to the 2009 MUTCD. All pavement marking plans shall be in accordance with Arlington County Standards (*reference Section A1.1.*). All removable pavement marking tape shall be Type D – Class III wet-reflective temporary tape.

A1.2.18.7 Project Lighting. The Contractor will be responsible for designing and installing all conduit, handholes and foundations for the proposed streetlights as shown on the RFP Plans. Foundations shall be in accordance with [Arlington County Signal and Street Lighting Standards](#). The light pole support on the bridge shall be similar follow the VDOT standard drawing BCS-31A (*reference Attachment B*), with the necessary modifications to attach to the proposed railing type.

All poles and conductors will be installed by Dominion Virginia Power. All streetlights will be unmetered, owned and maintained by Dominion Virginia Power.

The Contractor shall also provide temporary lighting during construction to adequately illuminate the pedestrian sidewalk. The Contractor shall submit his proposed lighting plan to the County for review and approval.

A1.2.19 Transportation Management Plan. The Contractor shall prepare a Transportation Management Plan (TMP) in accordance with [I&IM-241/TE-351](#) for all proposed work associated with the Project at 90% submittal. The TMP shall document how traffic shall be managed during the construction of the Project. This Project is classified as a Type B, Category IV in terms of the TMP. The Contractor shall coordinate all work in accordance with the TMP. The construction phases shown in the RFP Plans shall be followed unless the Contractor submits and

secures County approval for a sequence which will both expedite construction while lessening the effect of such construction upon the traveling public.

A1.2.19.1 Maintenance of Traffic. The Contractor's TMP shall include a Maintenance of Traffic (MOT) Plan detailing all phases of work, proposed lane closures, maintenance of traffic through the work area, and all construction accesses. This plan shall also address safe and efficient operation of adjacent public transportation facilities and State Highways. The plan shall also include coordination with local agencies and other contractors performing work in the vicinity of the Project. This plan shall reflect the noted Scope of Work and all applicable County and VDOT Standards and Specifications regarding time of work. All users, such as traffic, pedestrians and bikes, must be addressed and accommodated in the TMP, including pedestrians, bicyclists, transit vehicles, and other motorists. The TMP shall also accommodate safe and efficient snow removal operations and ensure proper drainage during all phases of construction. Access must be maintained to all businesses, residential communities, and private entrances at all times. The phases in the Contractor's suggested sequence of construction that accompany an approved work package shall be followed unless the Contractor submits and secures County approval for a sequence which will both expedite construction while lessening the effect of such construction upon the traveling public.

Traffic counts are provided in the RFP documents. If additional traffic counts are required, it will be the responsibility of the Contractor to collect such data. The Contractor shall note that any proposed detour utilizing streets that are maintained by VDOT or the City of Alexandria will require the coordination with the applicable owner.

All temporary traffic signal plans shall be submitted to the County for review and approval prior to construction phase, detour or traffic shift. Construction signs and pavement markings (temporary) shall be installed, maintained, adjusted, and removed by the Contractor throughout the duration of the Project.

All entrances, intersections or pedestrian access points/routes that will be affected by the work zone or by the traffic control devices will be maintained or an acceptable alternate must be provided by the Contractor. Alternate pedestrian and bicycle routes complete with wayfinding signage must be submitted to the Project Officer for review and approval prior to any construction activities that will impact existing pedestrian or bicycle facilities.

A1.2.19.2 Lane and Road Closure Restrictions. The County acknowledges that temporary lane closures may occasionally be required; however, temporary lane closures are only allowed at the sole discretion of the County when necessary to ensure the safety of the traveling public and no practical alternative exists. Long term detours will not be permitted.

Lane, shoulder, or road closures shall be detailed in the Contractor's TMP. Anticipated and proposed temporary lane and/or shoulder closures shall be reviewed and approved by the County.

Detour plans will be required for any proposed temporary total road closures exceeding fifteen (15) minutes, and are subject to County review and approval as part of the

Contractor's TMP. In addition to addressing the traffic analysis requirements in [IIM-LD-241](#), the Contractor shall demonstrate in its detour plan(s) efforts to minimize impacts to the community (including noise, access, additional travel time, etc.), and address geometry, safety (including accident analysis along the detour route), capacity, and existing roadway conditions.

The Contractor shall submit all lane and/or shoulder closure requests to the County for coordination purposes (for determination of conflicts with other projects, for instance) at least seven (7) days in advance of the proposed lane and/or shoulder closure, stating the location, purpose, date, time, and duration of the closure. The Contractor shall confirm at least twenty- four (24) hours before any scheduled lane and/or shoulder closure and shall include a written reiteration of the proposed tasks and a listing of materials, labor, and equipment to be utilized.

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 (*reference Section A1.1.*). Once a closing is in place, work shall commence immediately and shall progress on a continuous basis to completion or to a designated time.

If the Contractor is unable to remove the lane and/or shoulder closure by the stipulated time, the Contractor will not be allowed further lane closures until the reasons for the failure are evaluated and the 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 the County within two (2) days of the occurrence.

The County reserves the right to monitor traffic conditions impacted by the work and to make additional restrictions as may be necessary or as emergency situations dictate. Additional restrictions for other holidays or special local events may be necessary; however, in these situations the County will endeavor to inform the Contractor at the earliest and in no case less than forty- eight (48) hours prior to the event.

A1.2.19.3 Use of Local Police. The Contractor shall be responsible for coordinating with the local police for service during Temporary Traffic Control operations involving temporary lane closures and any other operation as covered in Appendix C of the Virginia Work Area Protection Manual. The Contractor shall be responsible for all costs incurred by local police specific to the Project.

A1.2.19.4 Portable Changeable Message Signs. Portable Changeable Message Signs (PCMS's) shall be used in advance of the work zone when closing or shifting lanes within the Project limits. PCMS's shall also be used to provide en-route travel information about planned construction, delays or other sudden changes in travel conditions throughout the Project's duration. The PCMS shall be placed in a semi-permanent location; protected from traffic but highly visible to the public. The Contractor shall coordinate the implementation of PCMS's with the County. The use of PCMS's shall not replace any traffic control device otherwise required per the MUTCD or the Virginia Work Area Protection Manual (*reference Section A1.1.*).

A1.2.20 Right of Way. The Offeror's design shall be wholly contained within the right of way limits shown on the RFP Plans, with the exception of temporary construction easements in addition to the temporary construction easements shown on the RFP Plans. The Contractor shall be responsible for negotiating and obtaining any additional temporary construction easements at their own discretion and at no cost to the County. All right of way activities shall occur in accordance with the accepted Baseline Schedule.

A1.2.21 Utilities. Utility information provided on the RFP Plans identifies all known utilities, at the time of plan development, that are located within the Project limits. Aerial utilities are identified on the RFP Plans and/or in the Survey files. However, it is the Offeror's responsibility to verify, to their satisfaction, the owner, type, size, height and number of cables attached to the structure when preparing their Cost Proposal. It is the Offeror's responsibility to verify, to their satisfaction, the owner, type, size, number of cable/conduits, pipes, services, and horizontal and vertical (depth) location of underground utilities to include service connections and laterals with the utility owners when preparing their Cost Proposal.

The Contractor shall make all reasonable efforts to design the Project to avoid conflicts with utilities, and minimize impacts where conflicts cannot be avoided.

Utility owners and their respective contact information that are known to the County are provided below for reference only. It is the Contractor's responsibility to verify whether other utility owners exist within the Project limits and coordinate with them.

Verizon

James McKenzie, Engineer
Verizon, OSPE-NORVA
4242 Duke St.
Alexandria, VA, 22304
Phone: (703) 212-5271
Email: james.g.mckenzie@verizon.com

Dominion Energy Virginia

Ronald A. Velez, Customer Project Designer II
Electric Distribution Design
3072 Centreville Road
Herndon, VA 20171
Office Phone: (571) 203-5108
Cell Phone: (571) 353-0226
Email: ronald.a.velez@dominionenergy.com

The Contractor shall coordinate and conduct a preliminary utility review meeting with the Project Officer and all affected utility owners to assess and explain the impact of the Project.

The existing gas line on the bridge is abandoned. The removal and disposal of this line shall be the responsibility of the Contractor.

The Contractor shall notify Verizon and Dominion Energy Virginia a minimum of 90 days prior to the removal or installation of their facilities. This 90 day notification period shall be included in

the Contractors baseline schedule.

The County is coordinating the relocation of the existing Verizon conduits that are attached to the existing bridge. The proposed location of the conduits is shown in the RFP Plans. The Contractor shall coordinate with the County and Verizon and account for this relocation in the approved baseline schedule. It is critical that the relocation of the existing conduits occurs after the proposed southbound lane is constructed and before demolition begins on the northbound lane. The Contractor's shall coordinate with the County and Verizon to account for this relocation in the proposed MOT plan and construction phasing.

The Contractor shall be responsible for providing and installing the Verizon conduits and all related attachments on the bridge. The Contractor responsibility is limited to 12" behind each abutment. Verizon will be responsible for installing the conduits in the roadway and for connecting to the bridge supported conduits. The Contractor shall coordinate with Verizon to determine the final location of the backwall opening to accommodate the conduit.

The Contractor shall coordinate with the County and Dominion Virginia Power for the removal of the light poles in the median of the existing bridge. Once the power is turned off, the Contractor will be responsible for removing and disposing of the existing light poles, wires and all associated hardware for the existing bridge lighting. The Contractor shall notify the County a minimum of four (4) weeks prior to removing the existing bridge lighting.

The Contractor shall coordinate with the County and Dominion Virginia Power for the required clearances to be maintained from the existing overhead transmission lines and poles.

Unless otherwise noted, the Contractor shall coordinate the Project construction with all utility owners that may be affected. The Contractor shall coordinate the work of the Contractor, its subcontractors, and the various utilities. The Contractor shall initiate early coordination with all utility owners with facilities located within the Project limits. The resolution of any conflicts between utilities and the construction of the Project shall be the responsibility of the Contractor. No additional compensation or time will be granted for any delays, inconveniences, or damage sustained by the Contractor or its subcontractors due to interference from utility owners or the operation of relocating utilities or betterments.

The Contractor shall be responsible for all utility locates (test holes), conflict evaluations, relocations and adjustments, utility reimbursement, utility coordination, and coordination of utility betterments that are required for the Project and not specifically addressed in this RFP. All utility work and coordination shall be accounted for in the accepted Baseline Schedule.

A1.2.22 Plan Preparation. The Contractor shall utilize AutoCAD Civil 3D to develop the design plans. The plans will be signed and sealed by a professional engineer, licensed to practice in the Commonwealth of Virginia. All design work and plans shall be under the direct supervision of this licensed professional. All plans shall be prepared in U.S. customary units and in accordance with the most recent version of Arlington County CADD Standards and Guidelines (*reference Section A1.1.*).

A1.2.23 Public Involvement. The County and the City of Alexandria will be responsible for organizing public meetings to share the proposed design with local citizens and

stakeholders. The Contractor will be responsible for assisting with public involvement by developing materials that can be used to present the proposed design to the public. Materials may include, but are not limited to color display boards, renderings, and preliminary design plans. The Contractor may also be required to participate in virtual public information meetings or in person meetings if conditions allow. All materials shall be developed in English and Spanish languages, as determined by the County and the City of Alexandria. All materials that are developed for Public Involvement will be required after the 60% design submittal. The Contractor shall pay the cost for preparing these materials.

A1.3 Contractor's Duties. The Contractor's work shall be divided into two phases: (i) the Design Confirmation Phase and (ii) the Implementation Phase.

Phase 1: Design Confirmation Phase. During the Design Confirmation Phase, the Contractor will meet with County representatives and other stakeholders to discuss the RFP Plans and incorporate any revisions to the RFP Plans that are mutually agreed upon. At the conclusion of the Design Confirmation Phase, the County and the Contractor will have agreed on a Basis of Design, which will form the basis for the iterative design process that will follow during the Implementation Phase.

Phase 2: Implementation Phase. The Implementation Phase will have two stages: the Design Implementation Stage and the Construction Implementation Stage (the "Implementation Stages"). During the Design Implementation Stage the Contractor will: (i) advance the design and budget for the Project in iterative steps, each involving the review and input of the Project Officer, such that at the end of this stage the Contractor will have produced, and the Project Officer will have approved, a full set of plans and specifications necessary to construct the Project in accordance with the requirements of the Contract (such approved documents will be the "Issued for Construction (IFC) Set"); and (ii) submit for and receive all necessary permits and approvals from local, state and federal authorities (the "Code Officials"). During the Construction Implementation Stage, the Contractor shall construct the Project in accordance with the IFC Set and the Contract Documents.

A.1.4 Design Team. The Contractor shall, in a manner consistent with applicable state licensing laws, provide the necessary design services, including engineering, site-specific public art, design enhancements and other design professional services, required during the Design Confirmation Phase and the Design Implementation Stage, through its use of qualified, licensed design professionals employed or subcontracted by Contractor (Design Professionals) (such employees of Contractor and the design professionals are referred to as the "Design Team").

A1.5 Order of Work. The Contractor has been selected, in part, based on its experience with managing design/build projects and managing the design process. It is understood that with respect to any specific element of Work, such element of Work shall proceed sequentially through the Implementation Stages in the order described herein (i.e. each such element of Work shall first proceed through the Design Implementation Stage, then the Construction Implementation Stage). It is understood, however, that different elements of Work may be in different Implementation Stages at the same time, and in this sense, the Work which the Contractor performs may overlap the Implementation Stages.

A1.6 Guaranteed Maximum Price Contract. This Agreement is a guaranteed maximum price (GMP) contract". Adjustments to the GMP can only be made in accordance with the terms of this Agreement.

A1.6.1 Formation of GMP. At the 60% Design Phase, the Contractor shall propose a Guaranteed Maximum Price (referred to as the "GMP Proposal"). The GMP Proposal shall provide the Contractor the opportunity to adjust the original Cost Proposal based upon the GMP Drawings & Specifications (60% Design Documents). The GMP Proposal shall be submitted pursuant to this Section and include: (1) a list of proposed sub-contractors and major suppliers, and the bid packages submitted by each sub-contractor, as requested by the County; and (2) procedures used for selecting each sub-contractor and major supplier to ensure that the selection process was fair and competitive. The Guaranteed Maximum Price proposed therein is intended to represent the Contractor's offer to Fully Complete the Project. As part of the GMP Amendment, the Contractor shall certify that the GMP established thereby (1) contains sufficient amounts to provide and construct for a fully functioning West Glebe Road Bridge Over Four Mile Superstructure Replacement and Substructure Repair. The Contractor will further covenant and agree in the GMP Amendment that it will perform all construction work necessary to Fully Complete the Project, including, without limitation, aspects of the Work that are not shown on the GMP Drawings & Specifications but which are a logical development of the design intent reflected in the GMP Drawings & Specifications, for an amount not to exceed the Guaranteed Maximum Price.

A1.6.2 Review of GMP Drawings & Specifications (60% Drawings & Specifications). Before submitting its Guaranteed Maximum Price, the Contractor shall review the GMP Drawings & Specifications for accuracy, constructability and completeness and shall bring such deficiencies to the attention of the County. To the extent that any such deficiencies in the GMP Drawings & Specifications could have been identified by such review by a competent Contractor, such deficiencies shall not be the basis for a change in the GMP or delaying the Project Schedule.

A1.6.3 Basis of Guaranteed Maximum Price. The Contractor shall include with the GMP Proposal a written statement of its basis, which shall include:

1. A list of the Drawings and Specifications, addenda and General, Supplementary, and other Conditions of the Contract on which the GMP is based.
2. A list of Unit Prices and Allowance items as well as a statement of their basis; provided, however, that only such allowances as are agreed to by the County shall be included.
3. A list of the assumptions and clarifications made by the Contractor in the preparation of the GMP Proposal to supplement the information contained in the Drawings & Specifications. These assumptions and clarifications will include specific reference to any exclusion from the bridge or roadway components typically required for a functional and operational West Glebe Road Bridge. Such clarifications and assumptions must have been brought to the attention of the County prior to submission of the proposal in sufficient time for any discrepancies to be reconciled.
4. The proposed Guaranteed Maximum Price, including a statement of the detailed cost estimate organized by trade categories, Allowances, Contractor's Contingency, and other items, as well as the Cost of the Work, General Condition Fee, and Design/Build Fee that comprise the GMP.
5. An agreed upon schedule that the Contractor has negotiated with the Designers, and all Subcontractors. The schedule shall include, but not limited to the Substantial and Final Completion Dates, upon which the proposed GMP is based. All other project schedule requirements shall be followed as defined in the County issued RFP.

A1.6.4 County Review of GMP Proposal. The Contractor shall meet with the County to review the GMP Proposal and the written statement of its basis. In the event of any inconsistencies or inaccuracies in the information presented, the Contractor shall make appropriate adjustments to the GMP Proposal.

A1.6.5 GMP Amendment. Upon acceptance by the County of the GMP Proposal, the Guaranteed Maximum Price and its basis shall be set forth in the Guaranteed Maximum Price Amendment ("GMP Amendment"). In the event that the Contractor and the County are unable to agree upon a GMP and a project schedule for any reason, the Contract will be terminated and the County will only be obligated to pay the fee required to develop the design to the 60% design level. In the event the Contract is terminated, the County shall be free to use any of the information developed during the Design Confirmation Stage to retain a new contractor to complete the Project.

A1.6.6. Certification. As part of the Guaranteed Maximum Price Proposal, the Contractor agrees to specifically acknowledge and declare that the Contract Documents are sufficiently complete to have enabled the Contractor to determine the Cost of the Work therein in order to enter into the GMP Amendment and to enable the Contractor to agree to construct the Work outlined therein in accordance with applicable leases, statutes, building codes and regulations without any increase to the GMP or extension of Contract Time, except if and to the extent otherwise expressly provided in the Agreement. The Contractor shall further acknowledge that it has visited the site, examined all conditions affecting the Work, performed and agrees with all studies the Contractor was required to be performed under this agreement, is fully familiar with all of the conditions thereon and affecting the same, and has carefully examined all drawings and specifications.

A1.7 Compliance with Design Criteria Documents. The Design Criteria Documents consist of the RFP Plans (Attachment B) and Scope of Work as described in this document. The Contractor must design and construct the Project in accordance with all RFP Documents. Accordingly, all of the documents required to be produced during the Design Confirmation Phase and Design Implementation Stage must conform to the Design Criteria.

A2. DESIGN CONFIRMATION PHASE

A2.1 General Understandings and Selection Process. The RFP Plans represents a level of design that is generally consistent with the level of design contemplated in a 30% design as that term is used in the design and construction industry. The RFP Plans were prepared by the County.

A2.2 RFP Plans Review. Promptly after a Notice to Proceed is issued for the Design Confirmation Phase (the "Initial NTP"), the Contractor shall meet with the Project Officer and other stakeholders to discuss the RFP Plans. The Contractor and the Project Officer will meet as often as necessary in order to discuss and agree upon what adjustments, if any, will be incorporated in the RFP Plans. The Contractor shall revise the RFP Plans to reflect any such approved design adjustments and submit such revisions to the Project Officer for approval, which approval may be withheld in the Project Officer's sole and absolute discretion. The revised RFP Plans, with adjustments approved by the Project Officer, shall become the "Basis of Design".

A2.3 Baseline Milestone Schedule. Within 30 days after the Initial NTP is issued, the Contractor shall prepare and submit a detailed baseline milestone schedule for all significant milestones to take place during the Implementation Phase (the “Baseline Milestone Schedule”) that is consistent with the requirements of the Design Criteria. The Contractor shall provide the Project Officer with regular updates to the Baseline Milestone Schedule on a bi-weekly basis.

A2.4 Control Budget. Within 30 days after the Initial NTP is issued, the Contractor shall prepare and submit for the Project Officer’s review and approval a detailed line item budget for the Project based on the Basis of Design (the “Control Budget”) that is consistent with the GMP and the requirements of the Design Criteria.

A2.5 End of Design Confirmation Phase. The Design Confirmation Phase shall conclude when the parties (i) agree upon the Basis of Design (which shall replace the RFP Plans as the basis from which further design documents shall be produced); (ii) establish, in the Baseline Milestone Schedule, the revised Substantial and Final Completion Dates for the Project, if needed; and (iii) execute a Contract amendment, if necessary.

A3. IMPLEMENTATION PHASE

The Implementation Phase shall consist of the Design Implementation Stage and the Construction Implementation Stage. The Implementation Phase shall commence when the County issues a Notice to Proceed for the Design Implementation Stage (the “Implementation NTP”).

A3.1 DESIGN IMPLEMENTATION STAGE

A3.1.1 Use of e-Builder. The Contractor shall utilize e-Builder, the County’s web-based Project Management System (PMS) throughout the duration of the Project as required by the Contract Documents. Use of the E-builder PMS will not replace or change any contractual responsibilities of the Contractor. The system has been implemented to enhance and expedite team communication.

All Contractor Project correspondence shall be either created electronically or digitized so that it can be stored and tracked in e-Builder . This includes, but is not limited to:

1. Requests for Interpretations (RFIs) and attachments;
2. Submittals;
3. Field Orders and Change Orders;
4. Payment Applications;
5. Meeting Minutes;
6. Daily Construction Reports;
7. Action Items;
8. Project Schedules (Design, Construction, etc.);
9. Punch Lists;
10. Incident Reports;
11. Agendas; and
12. Construction Photographs.

Responses and directions from the County will be transmitted to the Contractor through e-Builder.

The County will provide the Contractor access to e-Builder. The County will also provide eight (8) hours of e-Builder training specific to the role of the Contractor. The training will be held at a time and location in Arlington County to be determined by the County.

The Contractor shall provide, at the Contractor's temporary site office, and home office if required, the computer hardware and software necessary to provide access to the e-Builder.

A3.1.2 Design Development (60% Design Document). The Contractor shall develop a set of Design Development Documents that is consistent with and a logical development of the Basis of Design and in accordance with the Design Criteria Documents and submit it to the Project Officer for review and approval. The Design Development shall be an iterative and collaborative process that involves the County and Project Officer.

A3.1.3 Review and Revisions to Design Development Submission. Within twenty-eight (28) business days after the Design Development submission, the Project Officer will meet with the Contractor and provide comments on the submission. The Contractor shall make such revisions to the Design Development submission as necessary to incorporate comments, feedback and other direction provided by the Project Officer. The Project Officer shall have the right to disapprove the Design Development submission for any reason. The Design Development submission, as approved by the Project Officer, shall be referred to as the "Approved Design Development".

A3.1.4 Permit Set Submission to Code Official. The Contractor shall submit the Permit Set of documents to the Code Official in order to obtain the necessary permits to construct the Project. The Contractor shall monitor the permit process and shall incorporate any changes or adjustments required by the Code Official, with no change to the GMP. The Contractor shall also meet with the Project Officer to discuss any such changes for which it seeks approval. The Contractor shall highlight (or bubble) any aspect of the design that represents a material deviation from the Permit Set documents and shall address in a narrative format the impact, if any, such deviation shall have on the Project's aesthetics, functionality or performance.

A3.1.5 Construction Document (90% Design Documents). The Contractor shall develop a set of 90% Design Documents that is consistent with and a logical development of the Approved 60% Design Documents and in accordance with the Design Criteria Documents and submit it to the Project Officer for review and approval.

A3.1.6 Review and Revisions to 90% Construction Documents Submission. Within twenty-eight (28) days after the 90% Construction Documents submission, the Project Officer will meet with the Contractor and provide comments on the submission. The Contractor shall make such revisions to the 90% Design Documents submission as necessary to incorporate comments, feedback and other direction provided by the Project Officer. The Project Officer shall have the right to disapprove the 90% Construction Documents for any reason. As approved by the Project Officer, the 90% Construction Document submission shall be referred to as the "Approved 90% Construction Documents".

A3.1.7 Issued for Construction (IFC) (100% Design Documents). Based on the Approved 90% Construction Documents, the Contractor shall submit for the Project Officer's approval an IFC Set submission, which shall be based on the Approved 90% Construction Documents and the Design Criteria Documents. Within seven (7) days after the IFC Set submission, the Project Officer will meet with the Contractor and provide comments on the IFC Set submission. The Contractor shall make such revisions as necessary to incorporate comments, feedback and other direction provided by the Project Officer. The Project Officer shall have the right to disapprove the IFC Set submission for any reason. As approved by the Project Officer, the IFC Set submission shall be referred to as the IFC Set. Notwithstanding the design/build nature of this Contract, the Contractor shall be required to fully and faithfully implement the IFC Set unless the IFC Set is amended and such amendment to the IFC Set is approved by the Project Officer.

A3.1.8 Design Changes. If unforeseen circumstances beyond the control of the Contractor or changes required by the County make it necessary to amend any of the approved IFC Set documents, the Contractor shall prepare an amendment to the IFC Set and shall submit such amendment to the Project Officer for review and approval. In this submittal, the Contractor shall highlight (or bubble) any aspect of the design in the IFC Set that represents a material deviation from the IFC Set documents and shall address in a narrative format the impact, if any, such departure shall have on the Project's aesthetics, functionality or performance.

A3.2 CONSTRUCTION IMPLEMENTATION STAGE

The Construction Implementation Stage begins when the IFC Set documents are approved by the Project Officer and after the County issues the Notice to Proceed for the Construction Implementation Stage (the "Construction NTP").

A3.2.1 Drawings & Specifications. All of the Work shall be constructed in strict accordance with the final IFC Set and all Contract Documents.

A3.2.2 On-Site Management. The Contractor shall provide on-site management and superintendence during all working hours.

A3.2.3 Site Office. Throughout the Project, the Contractor shall provide and maintain a fully-equipped construction office on the Project site.

A3.2.4 Supervision. Throughout the Project, the construction office shall be manned by personnel competent to oversee the Work at all times while construction is underway. Such personnel shall maintain full-time on-site construction supervision and provide daily inspections, quality control, monitoring, coordination of various trades, record drawings, and daily work log.

A3.2.5 Weekly Progress Meetings. Throughout the Project, the Contractor shall conduct weekly progress meetings with the County and key trade subcontractors following a Contractor-generated agenda. The Contractor shall draft and circulate meeting minutes within five (5) business days of such meetings.

A3.2.6 Site Safety Generally. The Contractor shall provide a safe and efficient site, with controlled access. As part of this obligation, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Project.

A3.2.6.1 Safety Barriers/Fences. As part of its responsibility for Project safety, the Contractor shall install such fences and barriers as may be necessary to separate the construction areas of the site from adjacent areas.

A3.2.6.2 Site Security. The Contractor shall be responsible for site security and shall be required to provide such watchmen as are necessary to protect the site from unwanted intrusion.

A3.2.6.3 Exculpation. The right of the County to comment on the Safety Plan and the nature and location of the required fences and barriers shall in no way absolve the Contractor from the obligation to maintain a safe site.

A3.2.7 Workhours; Coordination with County and Community.

A3.2.7.1 Workhours. The Contractor shall comply with all applicable requirements of Arlington County and the City of Alexandria noise ordinance (*reference Section A1.1.*); generally, noise, and other requirements that may impose limitations regarding working hours, and neither it nor its subcontractors shall undertake work on the Project site other than at the times and sound level permitted by applicable requirements.

A3.2.7.2 Parking. The Contractor shall organize its Work in such a manner so as to minimize the impact of its operations on the surrounding community. To the extent that the number of workers on the site is likely to have an adverse impact on neighborhood parking as determined by the County, the Contractor shall develop a parking plan for those individuals working on the site that is reasonably acceptable to the County.

A3.2.7.3 Outreach Plan. The Contractor shall keep the Project Officer informed of the construction activities and their potential impact on the community. The Contractor shall submit a plan of outreach activities informing the community of any impacts to the Project Officer for review and approval prior to its implementation.

A3.2.8 Quality Control Generally. The Contractor shall be responsible for all activities necessary to manage, control, and document work to ensure compliance with the Contract Documents. The Contractor's responsibility includes ensuring adequate quality control services are provided by the Contractor's employees and its subcontractors at all levels. The work activities shall include safety, submittal management, document reviews, reporting, and all other functions related to quality of construction.

A3.2.8.1 Quality Control Plan. Within 45 days after the Design Development Documents are approved, the Contractor shall develop a quality control plan for the Project (the "Quality Control Plan"). A draft of the Quality Control Plan shall be submitted to the Project Officer for review and approval. The Quality Control Plan shall be tailored to the specific products/type of construction activities contemplated in the Design Development Documents, and, in general, shall include a table of contents, quality control team organization, duties/responsibilities of quality control personnel, submittal procedures, inspection procedures, deficiency correction procedures, documentation process, and a list of any other specific actions or procedures that will be required for key elements of the Work.

A3.2.8.2 Inspections. During the Construction Implementation Stage, the Contractor shall perform regular quality control inspections and create reports based on such inspections. These quality control reports shall be provided to the Project Officer in E-builder on a monthly basis. The quality control reports shall include a detailed summary of the steps that are being employed to provide quality construction and workmanship, specifically address issues raised during the month and outline the steps that are being used to address such issues. The Contractor shall incorporate a quality control section in the progress meetings to discuss outstanding deficiencies, testing/inspections, and upcoming Work.

A3.2.8.3 Corrective Action Plan. The County shall have the right to direct the Contractor to revise the provisions of its Quality Control Plan if, in the reasonable judgment of the County, the craftsmanship of the Work being installed fails to comply with generally applicable industry standards, requirements of the specifications prepared by the Contractor that are reasonably related to the quality of craftsmanship, or any provisions set forth in the Contract Documents. In such event, the County will provide the Contractor with written notice of its finding and the Contractor shall be required to provide the County with a Corrective Action Plan that is reasonably designed to address the concerns raised in such notice within three (3) days after its receipt. If the County and the Contractor are unable to agree on the terms of such Corrective Action Plan within five (5) days after the issuance of the notice (i.e. within 48 hours after the receipt of the proposed Corrective Action Plan), the County shall have the right to direct such corrective action measures as the County, in its reasonable judgment, deems necessary. Such directive may include adjustments to the procedural provisions set forth in the Quality Control Plan and/or imposing additional requirements on the manner in which Work is being installed. Provided the notice provisions of this Section are complied with, the cost of any such corrective action directed under this Section shall not justify an adjustment to the GMP or the Period of Performance for Substantial Completion.

A3.2.9 Monthly Reports. The Contractor shall provide written reports to the Project Officer, on the progress of the entire Work at least monthly from Construction NTP until Final Completion of the Project. The monthly reports shall include: (i) an updated schedule analysis, including any plans to correct defective or deficient Work or recover delays; (ii) an updated cost analysis; (iii) a monthly review of cash flow; (iv) a quality control report; and (v) progress photos.

A4. COMPENSATION

A4.1 The Contractor's sole compensation for the Work shall be the Design/Build Fee, the General Conditions Fee and reimbursement for the Cost of the Work.

A4.1.1 Cost of the Work. The Cost of the Work shall include, but not be limited to the following costs, which shall be reimbursable at cost and without mark-up of any kind:

1. Payments made by the Contractor to subcontractors and suppliers, but only in accordance with the subcontracts and supply agreements;
2. Design Fee;

3. All amounts due to the Contractor for self-performed Work. If the Contractor self-performs work, the Contractor must submit three quotes by potential subcontractors validating price competitiveness of Contractor's decision to self-perform. The Project Officer may, in their sole discretion, approve self-performed work without competitive pricing submission; in such situation the Contractor must submit the following documentation with applications for payment:
 - A. **Labor.** Properly documented wages actually paid to Project foremen, construction workers, and other personnel in the direct employ of the Contractor while engaged in approved self-performed work, together with contributions, assessments, payroll taxes, or fringe benefits required by the laws or applicable collective bargaining agreements.
 - B. **Incorporated Materials.** The cost, net of trade discounts, of all materials, products, supplies and equipment incorporated into the self-performed work, including, without limitation, costs of transportation and handling.
 - C. **Unincorporated Materials.** The cost of materials, products, supplies and equipment not actually installed or incorporated into the self-performed work, but required to provide a reasonable allowance for waste or spoilage, subject to the Contractor's agreement to turn unused excess materials over to the County at the completion of the Project or, at the County's option, to sell the material and pay the proceeds to the County or give the County a credit in the amount of the proceeds against the Cost of the Work.
4. Royalty and license fees paid for use of a design, process or product, if its use is required by this Agreement or has been approved in advance by the County;
5. Fees for obtaining all required approvals or permits associated with the abatement, demolition, utilities abandonment, and utility relocation, as well as all trade permit fees and the building permit fee;
6. All fees and other costs necessarily incurred to carry out testing and inspections required by the Agreement or applicable laws, or otherwise to maintain proper quality assurance. The costs the Contractor incurs to schedule and coordinate any additional testing and inspections the County may decide to conduct itself shall be reimbursable unless the additional testing establishes that the Work tested was defective or otherwise failed to satisfy contract requirements, in which case the Contractor shall pay the costs, without reimbursement;
7. All bonds to jurisdictional agencies (utilities, storm water management, land disturbance, and grading); and
8. All performance and payment bonds and insurance attributable to the Project.

A4.1.2 General Condition Fee. The General Conditions costs, which are reimbursable, shall include, but not be limited to, the following:

1. The cost of Construction Staff. The term Construction Staff shall mean the Project Executive, Project Managers and superintendents assigned to the Project, administrative staff assigned

on a full-time basis to the Project site, and professional staff performing scheduling, cost estimating and accounting services;

2. Fringe Benefits associated with Construction Staff;
3. Payroll taxes and payroll insurance associated with Construction Staff;
4. Staff costs associated with obtaining permits and approvals;
5. Out-of-house consultants;
6. The field office for the Contractor including, but not limited to: (i) trailer purchase and/or rent; (ii) field office installation, relocation and removal; (iii) utility connections and charges during the Construction Implementation Stage; (iv) furniture; and (v) office supplies;
7. Office equipment including, but not limited to: (i) computer hardware and software; (ii) fax machines; (iii) copying machines; (iv) telephone installation, system and use charges; and (v) job radios;
8. Local delivery and overnight delivery costs;
9. The cost of temporary power and water necessary for construction operations. Such costs include the cost of any temporary construction necessary to provide such power and water during the Construction Implementation Stage; and
10. First aid facility.

A4.1.3 Non-Reimbursable Costs. The following costs are not reimbursable:

1. Fees for any permits or licenses the Contractor requires to conduct its general business operations;
2. Capital expenses and interest on capital employed for the Work;
3. The cost of home or regional offices, it being understood that compensation for such costs is included in the Design-Build Fee;
4. Sales or use taxes, unless the Contractor establishes that applicable law required payment of such taxes;
5. Costs due to the errors or omissions of the Contractor or its subcontractors or suppliers at all tiers, negligent or otherwise;
6. Costs due to breach of Contract by the Contractor or its subcontractors or material suppliers at all tiers, including, without limitation, costs arising from defective or damaged Work or its correction, disposal of materials or equipment erroneously supplied, and repairs to property damaged by the Contractor or its subcontractors or material suppliers at all tiers; and

7. Any costs incurred in performing work of any kind before the Notice to Proceed is issued, unless specifically authorized by the County in writing.

A4.1.4 Design/Build Fee. The Contractor's Design/Build Fee shall be as set forth in Exhibit E (Guaranteed Maximum Price). The Design/Build Fee together with the General Conditions Fee is intended to compensate the Contractor for all costs not properly reimbursable as a Cost of the Work, including, but not limited to, the Design-Builder's home office overhead, profit, and staffing costs.

A4.1.4.1 At Risk Portion of Design/Build Fee. Thirty percent (30%) of the Design/Build Fee is at risk (the "At Risk Portion"), and the Contractor shall only be entitled to the At Risk Portion as set forth below. The Contractor shall be eligible to earn the At Risk Portion of the Design/Build Fee based on its performance pursuant to the factors outlined below:

A4.1.4.1.1 Evaluation Factors

Factor 1: Design Management

- Adherence to Schedule
- Quality Performance: Effectiveness of Contractor and subcontractor Quality Control programs, responsiveness to County concerns regarding quality issues
- Technical Expertise and Experience: Early identification and resolution of design and/or construction problems

Factor 2: Construction Management

- Adherence to Schedule and regular schedule updates
- Quality Performance: Effectiveness of Contractor and subcontractor Quality Control programs, responsiveness to County concerns regarding quality issues
- Technical Expertise and Experience: Early identification and resolution of design and/or construction problems

Factor 3: Safety Performance

- Jobsite Cleanliness
- Injury Record
- Adherence to Safety Plan: Safety performance and management commitment to safety requirements

Factor 4: Project Management

- Coordination with the County:
 - a) Proactive coordination with the County on responding to information requests and Requests for Interpretations
 - b) Assisting the County in responding to community requests and concerns in managing the high profile project
 - c) Minimization and timely submission and resolution of claims or requests for equitable adjustment
- Program Planning/Organization/Management:
 - a) Assignment and utilization of personnel; recognition of critical problem areas

- b) Cooperation and effective working relationships with other contractors and County personnel
- c) Technology utilization
- d) Effective use of Contractor's resources
- e) Planning, organizing and managing all program elements; management actions to achieve and sustain a high level of productivity
- f) Response to emergencies and other unexpected situations
- g) Effectiveness in management of the Request for Interpretations process – minimization of frivolous submissions
- h) Adequacy of contract document review prior to submission of clarification requests
- i) Clarity and quality of recommended solutions
- j) Subcontract direction and coordination
- k) Early identification and resolution of design and/or construction problems
- l) Timely submission and equitable pricing of requested proposals for changed work, when necessary
- m) Efforts and success in mitigating costs for changed conditions
- n) Effectiveness in management of subcontractor proposals
- Timely and accurate information management and reporting

Factor 5: Project Closeout and Post Construction

- Effective scheduling and management of turnover actions
- Minimization and timely resolution of punch list items
- Timely response to warranty calls
- Quality of repairs
- Effectiveness of communication with County representatives
- Cooperation and proactive involvement in problem mitigation and resolution
- Effectiveness in coordination and execution of seasonal and other deferred functional performance testing
- Effectiveness of the issue resolution measurement and verification and timeliness and accuracy of reports

A4.1.4.1.2 Performance Monitoring

1. Project Officer will plan and carry out on-site assessment visits, as necessary.
2. Project Officer will conduct all assessments in an open, objective and cooperative spirit so that a fair and accurate evaluation is obtained. The report provided to the Contractor will ensure that the Contractor receives accurate and complete information from which to plan improvements in performance. Positive performance accomplishments will be emphasized as readily as negative ones.
3. Project Officer will discuss the assessment with Contractor personnel as appropriate, noting any observed accomplishments and/or deficiencies. This affords the Contractor an opportunity to clarify possible misunderstandings regarding areas of poor performance and to correct or resolve deficiencies.

A4.1.4.1.3 Evaluation/Assessment Reports

1. Project Officer will submit the At-Risk Fee Evaluation Report to the Procurement Officer quarterly. In addition, Project Officer may be requested to make verbal reports to the Procurement Officer. Contractor shall be furnished a copy of the At-Risk Fee Evaluation Report.

A4.1.4.1.4 Evaluation Periods

1. At-Risk Fee Award meetings will be held quarterly to discuss Contractor's performance and will include the Contractor and the Project Officer. The Contractor will be provided an opportunity to submit information on its behalf, including an assessment of its performance during the evaluation period. After the meeting, the Project Officer will consider matters presented by the Contractor and finalize its findings.
2. The Project Officer will determine the At-Risk Fee Award percentage earned by the Contractor, determine whether any unearned Fee may be earned back in the following evaluation period if Contractor addresses the issues, and generate a decision letter to the Contractor. The Contractor will submit an invoice for the earned At-Risk Fee upon receipt of the decision letter.
3. If the Project Officer and the Contractor disagree on an item of contention, the Project Officer, at their sole discretion, will determine the appropriate At-Risk Fee Award percentage that will be earned by the Contractor.
4. The County may elect to distribute any unearned Fee to the subsequent period, or to apply any unearned Fee to specific future evaluation period(s) if the County determines that certain period(s) require increased performance incentive(s).
5. The amount available to earn in each evaluation period will be a proportionate percentage of the Cost of Work earned in that period, but the cumulative amount of the At Risk Portion of the Design/Build Fee paid shall at no time constitute more than 30% of the Design/Build Fee paid to date.

A4.1.4.2 Not At Risk Portion of the Design/Build Fee. The Not At Risk portion of the Design/Build Fee is the 70% of the Design/Build Fee remaining after deduction of the At Risk portion of the Design/Build Fee. The Not At Risk portion of Design/Build Fee will be paid proportionately to the percentage of Cost of Work earned in that period.

A4.1.4.3 Changes to the Design/Build Fee. The Design/Build Fee shall not be increased or decreased as a result of Change Orders unless such changes the County makes additions to the scope of work that either individually or in the aggregate cause the GMP to increase. Change Orders related to differing site conditions, hazardous material, or Project delays shall not be considered an increase in the scope of work for this calculation.

A4.1.4.4 Savings. Upon completion of the Work, the Contractor shall provide to the Project Officer a report of the Cost of the Work, and the General Conditions Fee for the Project, subject to audit by the Project Officer if necessary. Should the actual final Cost of Work and General Conditions Fee be less than those amounts listed in Exhibit E as adjusted pursuant to the Agreement, the savings shall accrue sixty percent (60%) to the County and forty percent (40%) to the Contractor. Should, however, the actual final Cost of Work and the General Conditions Fee exceed the Cost of Work and the General

Conditions Fee listed in Exhibit E as adjusted pursuant to the Agreement, then the excess amount shall be borne solely by the Contractor.

A4.1.5 Progress Payments. The Contractor shall be paid its compensation in a series of progress payments and a final payment for Work completed in accordance with the Contract Documents, and for which proper applications for payment have been submitted and approved. Prior to GMP at 60% Design, the Contractor shall be paid compensation for only completed design work.

A5. DIVERSION OF KEY PERSONNEL AND SUBCONTRACTORS

A5.1 Identification of Key Personnel and Subcontractors. The following individuals and organizations shall be considered Key Personnel (whether employed by the Contractor or one of its subcontractors) and Subcontractors:

- A. Design-Build Project Manager (DBPM) – Rick Kumrow
- B. Design Manager (DM) – John Giometti
- C. Construction Manager (CM) – Ren Persaud
- D. Quality Assurance Manager (QAM) – Kathy Poole
- E. Public Artist, Designer, Architect and/or Lighting Designer – Vicki Scuri

The Contractor will not be permitted to reassign any of the Key Personnel and Subcontractors unless the Project Officer approves the proposed reassignment and the proposed replacement.

If any of the Key Personnel must be absent for an extended period, the Contractor must provide an interim Key Personnel, subject to the County's written approval.

UP TO 60% DESIGN FEE PRICING

Position	Hourly Rate
Area Manager	\$ 165.00
Project Manager	\$ 105.00
Project Engineer	\$ 87.50
Field Engineer	\$ 60.00
Estimating Manager	\$ 150.00
Estimator	\$ 125.00
Scheduler	\$ 95.50
Design - Project Manager	\$ 205.50
Design - Engineer IV	\$ 155.30
Design - Engineer III	\$ 123.05
Design - Engineer I	\$ 86.57
CADD Tech	\$ 69.48
Land Surveyor	\$ 164.39
Field Coordinator	\$ 93.41
Survey Crew (2-parson)	\$ 160.84
ROW Manager	\$ 123.31
Appraiser	\$ 99.63
Technician / Specialist	\$ 89.68
Secretary	\$ 60.57
Project Artist	\$ 160.00

Design Fee Up to 60% Design Level*			
Discipline	Amount	Approx. Hours	Notes
Structures	\$ 151,000	1075	Design Development of Each Discipline which includes Project Management, Engineering, CADD, Internal QC & QA, Printing, Meetings, Comment Resolution, etc..
Survey	\$ 4,623	34	
Roadway	\$ 38,000	220	
Drainage	\$ 34,750	198	
Traffic	\$ 7,848	45	
Utility Coordination	\$ 21,280	115	
Right of Way	\$ 14,266	110	
Public Involvement	\$ 6,796	40	2 meeting plus support services
Art Work	\$ 51,635	340	Design, Graphics, Specifications
Contract Management	\$ 99,801	1100	Design Oversight, Constructability Reviews, Quantity Take off, Estimating, Scheduling, etc..
	\$ 430,000		

Scope: Below is a bulleted list of expected services to be performed to achieve 60% design plans.

Structures

- Develop loads
- Design girders and girder spacing to accommodate phased construction/partial demolition
- Identify repair needs
- Develop special details as may be needed to interface the new superstructure with the existing substructure
- Develop quantities
- Prepare 60% Design Plans

Survey

- Property Research
- Check/Re-establish Control
- Confidence Check

- (Assumes No-Borings or Stake-Out)

Roadway

- Team and Stakeholder Meetings
- Submit Plans for Milestone Reviews
- Incorporate Stakeholder Review Comments
- Establish Vertical and Horizontal Alignments
- Incorporate Geotechnical requirements into the Plan Design
- Develop Typical Section and Goepak Criteria
- Design and Evaluate Median Treatments
- Incorporate ADA compliant pedestrian ramps and sidewalks
- Develop Construction Limits and Cross Sections
- Determine ROW and Easement Limits
- Develop Plan Graphics
- Develop Incidental Details
- Develop TMP/MOT Plan
- Develop quantities
- Perform QA/QC

Drainage

- Internal Coordination Team Meetings
- Develop Storm Water Management Plan
- E&S Design
- Perform River Mechanics
- Prepare Calculation Book
- Detailed H&HA
- Develop quantities

Traffic

- Prepare Pavement Marking Design
- Develop Signing Plans
- Prepare Signal Modification Plans
- Develop Lighting Plans
- Develop quantities

Utility Coordination

- Meetings with Utility Owners and County
- Test Hole Request, Analysis & Coordination
- Perform UT9 Calculations
- Conduct UFI Meeting
- Coordination Meetings
- Establish Easements

Right of Way

- Appraisals
- Appraisal Reviews
- Negotiations

Public Involvement

- Presentation to Public at or after 60% Design Submittal Stage
- Assist County with One Citizens Information Meeting and One Public Hearing (2 virtual meetings)
- Prepare Graphics, Displays, Video
- Attend Meeting
- Participate in discussions with Stakeholders

Artwork

- Site Reviews & Community Outreach
- Design Concepts presenting all elements
- Ongoing Coordination with County and Stakeholders
- Present Concepts to County for review and final recommendations
- Coordinate and develop all elements into design plans
- Present to Public at Public Hearing

Environmental

- Coordinate with Regulatory Agencies
- Develop Permitting Packages

OPTIONAL AND ADDITIONAL SERVICES	
Description	Cost
Additional Virtual Meetings	For additional virtual meetings beyond the two (2) virtual meetings included above, the Contractor shall quote the County the cost of all required personnel needed in attendance at the hourly rates above. The additional meetings may be added to the up to 60% Design Fee with a County approved Change Order.