

Request For Proposal

[Federal]

General
Architectural and Engineering
Consultant Services – Systems
Indefinite Delivery Indefinite
Quantity

RFP No.: FQ15192/MDG

Date: June 12, 2015

Washington Metropolitan Area Transit Authority RFP: FQ15192/MDG

Date: June 12, 2015

SUBJECT: RFP No. FQ15192/MDG

Dear Sir/Madam:

The Washington Metropolitan Area Transit Authority (WMATA) requires the services of a qualified Architectural and Engineering firm to provide professional engineering services to a wide variety of new design and construction related tasks, and maintenance, repair and renovation tasks requiring the full range of engineering services.

If you have any questions, Technical, Contractual, or Administrative, please e-mail them to <u>cominbound-a--e-idiq-gec--systems@procoretech.com</u> no later than Close of Business, June 30, 2015. WMATA will provide written answers, by e-mail to all those who obtain the RFP and provide their e-mail addresses. If an amendment is issued resulting from questions and answers, it will be posted on our website.

Your proposal must be received with all required submittals as stated in the RFP, no later than **2:00PM**, **July 15**, **2015**, at WMATA, Office of Procurement and Materials, 600 Fifth Street, NW, Room 3C-02, Washington, DC 20001-2651. Sincerely,

Richard Owens Contracting Officer

Office of Procurement and Materials

Enclosure: Solicitation FQ15192/MDG

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DIRECTIONS FOR SUBMITTING OFFER

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- 1. Read and comply with the Solicitation Instructions.
- 2. Envelopes containing Technical and Price proposals must be sealed and separately marked and addressed to:

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
600 5th Street, NW
Washington, DC 20001
Room 3C-02
Attn: Michael Glimp/CA

ALL ENVELOPES OR PACKAGES MUST BE SEPARATELY MARKED WITH SOLICITATION NUMBER AS SPECIFIED HEREWITH.

PROPOSAL SHALL BE TIMELY MAILED OR HAND DELIVERED TO REACH WMATA BEFORE 2:00 P.M. (LOCAL TIME) July 15, 2015 ON DAY OF PROPOSAL CLOSING.

NOTICE TO OFFERORS

IN ORDER TO ENSURE THAT YOUR PROPOSAL COMPLIES WITH THE AUTHORITY'S PROCUREMENT REGULATIONS AND THAT IT WILL BE ACCEPTABLE TO THE AUTHORITY, THE FOLLOWING FORMS MUST BE COMPLETED & SUBMITTED AS SPECIFIED BELOW WITH YOUR OFFER:

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- SOLICITATION, OFFER & AWARD FORM (Must be signed.) VOLUME III
- PRICE SCHEDULE- VOLUME I
- REPRESENTATIONS AND CERTIFICATIONS- VOLUME III.
- PRE-AWARD DATA- VOLUME III
- ACKNOWLEDGMENT OF AMENDMENTS (IF ANY)- VOLUME III
- TECHICAL PROPOSAL VOLUME II
- PROOF OF INSURANCE ELIGIBILITY VOLUME III
- APPENDIX B (IF APPLICABLE) VOLUME III

FAILURE TO SUBMIT ANY PORTION OF THESE REQUIREMENTS AS SPECIFIED MAY CAUSE YOUR PROPOSAL TO BE CONSIDERED NON-RESPONSIVE AND SUBSEQUENTLY REJECTED.

If you have any questions, Technical, Contractual, or Administrative, please e-mail them to com-inbound-a--e-idiq-gec--systems@procoretech.com no later than Close of Business, June 30, 2015. WMATA will provide written answers, by e-mail to all those who obtain the RFP and provide their e-mail addresses. If an amendment is issued resulting from questions and answers, it will be posted on our website.

NOTICE TO ALL VENDORS

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Please be advised that all vendors and contractors who do business with the Washington Metropolitan Area Transit Authority (WMATA) must register in the WMATA Vendor Registration System. Registration is located at http://www.wmata.com New Vendor Registration.

If you are a vendor or contractor and *HAVE* done business with WMATA in the past, please electronically request your company's User ID and Password at http://www.wmata.com *Forgot User Id/Password*.

Registered Vendor Benefits:

- Visibility to WMATA contract administrators and/or purchasing agents during the purchasing decision period;
- Visibility to other 17,500 registered vendors for possible business opportunities;
- Opportunity to update online, company information such as an e-mail address or contact person on-line;
- · Sign up for electronic payment option; and
- Ability to electronically reset User Id and Password.

Any questions regarding registration may be addressed to Vendor Relations at (202) 962-1408 or procurement@wmata.com.

RFP SOLICITATION INSTRUCTIONS

1. <u>INTRODUCTION</u>

a. The Washington Metropolitan Area Transit Authority (WMATA) requires the services of a qualified Architectural and Engineering firm to provide professional engineering services to a wide variety of new design and construction related tasks, and maintenance, repair and renovation tasks requiring the full range of engineering services. This effort pertains to both Metrorail and Metrobus. These other services may include professional engineering related services, or incidental services that may be performed by a professional engineer, or individuals working under their direction, who may logically or justifiably perform these services.

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- b. The General Architectural and Engineering Consultant (GAEC) shall assist the Authority by providing certain professional engineering, and surveying services associated with new construction and the renovation, repair and maintenance of Authority facilities located in the District of Columbia, Maryland and Virginia. Professional engineering services will be required in the following disciplines:
 - (1) Automatic Fare Collection
 - (2) Automatic Train Control
 - (3) Communications (excluding IT)
 - (4) Trackwork
 - (5) Power and Mechanical to include Traction Power, Electrical Power and Mechanical disciplines
- c. This solicitation shall be conducted in accordance with the Brooks Act. Award will be made to the offeror who is determined to be the highest qualified, is deemed responsible, whose proposal conforms to the solicitation's requirements, and who is judged, by the Contractor Evaluation Board's (CEB) assessment of the specific criteria, defined in Article 18, to best meet the Authority's requirements at a reasonable price.
- d. It is anticipated that one contract will be awarded from this solicitation for an estimated total aggregate value of \$80,000,000, and will have a 24 month base period plus three (3) twelve (12) month option periods. A Minimum Guarantee amount of \$2,500 will apply to the Base Period only.
- e. Only Architect or Engineering firms may compete for this contract. Firms are required to submit documentation that the firm is an architect or engineering firm and is to provide that documentation in Section H of the SF330. Documentation can be the firm's engineering registration number from a State Board of Professional Engineers if the State in which the firm is located has a firm registration requirement, or it can be resumes of the senior engineers/architects that are managing the firm showing that they are registered engineers or architects.
- f. A pre-proposal conference will be held at 1:00 p.m. on June 26, 2015, in the Lobby Level Meeting Room of the WMATA Jackson Graham Building, 600 5th Street, NW, Washington, DC 20001. Consultant attendance shall be limited to no more than two (2) attendees per consultant. It is requested that offerors submit their questions in writing, whether in advance of the meeting or during the meeting. Questions from the floor, however, are permissible.

g. If you have any questions, Technical, Contractual, or Administrative, please e-mail them to com-inbound-a--e-idiq-gec--systems@procoretech.com no later than 2:00 PM, July 15, 2015. WMATA will provide written answers via an amendment to the solicitation posted on our website.

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h. Your proposal must be received with all required submittals as stated in the RFP, no later than 2:00PM, July 15, 2015, at WMATA, Office of Procurement and Materials, 600 Fifth Street, NW, Room 3C-02, Washington, DC 20001-2651.

2. GOODS TO BE FURNISHED/SERVICES TO BE SUPPLIED

In preparing their Proposals, Offerors are advised that:

- (a) If "Services" are to be performed pursuant to this Solicitation, they must be provided in all respects as specified in the Contract Documents and include the services to be furnished, together with any labor, material or other work necessary for satisfactory and complete performance.
- (b) If "Supplies" are to be provided pursuant to this Solicitation, they must be delivered in all respects as specified in the Contract Documents and include the items to be furnished, together with any labor, service or other work necessary for satisfactory and complete performance.

3. COMMUNICATIONS WITH THE AUTHORITY

Prospective Offerors are advised that any and all communications with WMATA relating to this Solicitation and made by, or on behalf of, a prospective Offeror at any time between release of this Request for Proposals and award of a Contract hereunder, must be directed to the Contract Administrator as follows:

A violation of this provision, deemed willful by the Authority, may result in a determination that an Offeror is not responsible, and thus ineligible for award, for purposes of this and/or future Authority solicitations.

4. PREPARATION OF OFFERS

- (a) Offerors shall furnish all information requested by the Solicitation and, in so doing, are expected to examine the Request for Proposals and all referenced documents carefully. Failure to do so will be at the risk of the Offeror.
- (b) The Offeror shall sign the Solicitation and print or type the name of the Offeror on the Price Schedule and each Continuation Sheet on which an entry has been made. Erasures or other changes must be initialed by the person signing the Offer.
- (c) Offerors must state a definite time for delivery of supplies or for performance of services unless otherwise specified in the solicitation
- (d) In preparing their Proposal, Offerors should be aware that all prices for the Work shall be deemed to include the cost of all work, labor and materials required by the Contract Documents including, without limitation, delivery charges, insurance, bond premiums or

any other expenses required by the Work, as well as expenses associated with compliance with federal, state or local laws or regulatory requirements. All prices are deemed to be F.O.B. delivery point.

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5. EXPLANATIONS TO OFFERORS

- (a) Any Explanation desired by an Offeror regarding the meaning or interpretation of the Solicitation or Contract Documents, including without limitation the general and special provisions, technical specifications or scope of work, and contract drawings, must be requested in writing and with sufficient time allowed for a reply to reach all Offerors before the date set for submission of Proposals. Absent extraordinary circumstances, all such inquiries should be transmitted in a time frame such as to ensure their receipt by the Contracting Officer no later than 2:00 PM, July 2, 2015. All such requests should be submitted via e-mail to com-inbound-a--e-idiq-gec--systems@procoretech.com and include the RFP Number and contract title.
- (b) Any information furnished by the Authority to a prospective Offeror relating to the Solicitation will be provided in writing to all prospective Offerors in the form of an Amendment if, in the judgment of the Authority, the information is necessary to the preparation and/or submittal of Proposals or lack of such information would be otherwise prejudicial to other prospective Offerors.
- (c) Offerors are advised that oral explanations, representations or instructions of any kind relating to the subject matter of this Solicitation and given at any time before award of the Contract by any employee, officer or agent of the Authority, will not be binding upon the Authority; nor does the Authority assume responsibility for the accuracy of any such communication.
- (d) The failure of a prospective Offeror to request an Explanation as here provided will serve to preclude the Offeror from thereafter claiming any ambiguity, inconsistency or error which should have been discovered by a reasonably prudent Offeror.

6. PRE-PROPOSAL CONFERENCE

For the purpose of clarifying the terms, conditions, and requirements of this Request for Proposal, pre-proposal conference will be held at 1:00 p.m. on July 26, 2015, in the Lobby Level Meeting Room of the WMATA Jackson Graham Building, 600 5th Street, NW, Washington, DC 20001. Consultant attendance shall be limited to no more than two (2) attendees per consultant. It is requested that offerors submit their questions in writing, whether in advance of the meeting or during the meeting. Questions from the floor, however, are permissible.

7. AMENDMENTS PRIOR TO DATE SET FOR RECEIPT OF PROPOSALS

- (a) The Authority reserves the right to amend any of the terms of this RFP or the Contract Documents prior to the date set for the opening of Proposals. Copies of any such Amendments as may be issued will be furnished in writing to all prospective proposers.
- (b) If, in the judgment of the Contracting Officer, any such Amendment(s) would require material changes in price proposals and/or other substantive element(s) of the Proposals, the date set for the opening of Proposals may be postponed for such period as in the opinion of the Contracting Officer will enable Offerors to revise their Proposals. In such instances, the Amendment will include an announcement of the new date for the opening of Proposals.

(c) In the event of an Amendment, all other terms and conditions of the Solicitation shall remain unchanged.

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8. ACKNOWLEDGMENT OF AMENDMENTS

Offerors are required to acknowledge receipt of all Amendment(s) to the Solicitation on the designated form to be submitted with their Proposal. Failure to do so may, at the discretion, jeopardize the Offeror's right to have its Proposal reviewed by the Authority.

9. SUBMISSION OF PROPOSALS

Proposals, and any Revisions to Proposal, shall be enclosed in sealed envelopes and addressed to the office specified in the Solicitation. The Proposal shall show the hour and date specified in the Solicitation for receipt, the solicitation number, and the name and address of the Offeror on the face of the envelope. Faxed proposals will not be considered.

10. PROPOSAL FORMAT INSTRUCTIONS/REQUIREMENTS

a. GENERAL

The offeror shall submit documentation illustrating their approach for satisfying the requirements of this solicitation. Proposals must be clear, coherent, and prepared in sufficient detail for effective evaluation of the offeror's proposal against the evaluation criteria. Also, this documentation shall cover all aspects of this solicitation and include the offeror's approach for integration and program management activities. Proposals must clearly demonstrate how the offeror intends to accomplish the project and must include convincing rationale and substantiation of all claims. Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete effective response to the solicitation are not desired.

The offerors shall describe their proposals, through the use of graphs, charts, diagrams and narrative, in sufficient detail for the Authority to understand and evaluate the nature of the approach. In its evaluation, the Authority will consider the degree of substantiation of the proposed approaches in the proposal volumes and in response to any discussions if held.

All correspondence in conjunction with this solicitation should be directed to the Contract Administrator at the following email address:

com-inbound-a--e-idiq-gec--systems@procoretech.com

b. PROPOSAL VOLUME REQUIREMENTS

The original of Volumes I and 2 shall be unbound, all copies of Volumes 1 and 2, as well as Volume 3 will be separately bound and all copies shall have the RFP number, the Proposer's identity, volume number, and volume title printed on the cover page. Volumes shall be submitted in the following order:

(1) Volume I – Technical - One (1) original, one (1) copy, and two (2) electronic copies of the Technical proposal **(Shall not include cost/price information)**

(2) Volume II – Price Proposal - One (1) original, one (1) copy, and two (2) electronic copies of the price proposal (**Shall not include cost/price information**)

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(3) Volume III – Contractual - One (1) original, one (1) copy, and two (2) electronic copies of the completed signed solicitation documents to include Representations, Certificate of Insurance, Pre-Award Data, Signed Amendments, and Joint Venture Agreements (if applicable).

The proposal shall be accompanied by a cover letter (letter of transmittal) prepared on the company's letterhead stationery. The cover letter (letter of transmittal) shall identify all enclosures being transmitted and shall be used only to transmit the proposal and shall include no other information. The first or title page shall be in accordance with FAR 52.215-1, paragraph (c) (2). The following are further descriptions of the information that shall be provided with the proposal.

VOLUME I – TECHNICAL PROPOSAL				
SECTION	Page Limit			
I. Cover Letter	1			
II. Table of Contents	2			
III. Executive Summary	5			
IV. SF 330	No limit			
V. Design Quality Management Plan (DQMP)	No limit			

VOLUME II – PRICE PROPOSAL				
SECTION	Page Limit			
I. Unit Price Schedule Billing Rate Table (Attachment A)	No Limit			
II. Certificate of Current Cost/Price Data (Attachment B)	1			

VOLUME III – CONTRACTUAL DOCUMENTATION				
SECTION	Page Limit			
I. Representations and Certifications	No Limit			
II. Certificate of Insurance	No Limit			
III. Pre-Award Data	No Limit			

VOLUME III – CONTRACTUAL DOCUMENTATION				
SECTION	Page Limit			
IV. Signed Amendments (if any)	No Limit			
V. Joint Venture Agreement (if applicable)	No Limit			

c. PAGE LIMITATIONS

The cover letter, title page, table of contents, table of figures, list of tables and glossary of abbreviations & acronyms do not count against page count limitations. Proposal contents that exceed the stated page limitations will be removed from the proposal by the Contracting Officer, prior to turning the proposal over to the Authority evaluation teams, and will not be considered in the evaluation.

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d. FORMAT

Text shall be single-spaced, on 8½" x 11" paper (except as specifically noted), with a minimum one-inch margin all around. Pages shall be numbered consecutively. A page printed on both sides shall be counted as two pages. Submission as double-sided printing/copying on recycled paper is encouraged. Offerors may use 11" x 17" sized fold-out pages for tables, charts, graphs, or pictures that cannot be legibly presented on 8½" x 11" paper. An 11" x 17" is a two-sheet equivalent (with regards to the page count limitations). Print shall be of a minimum 12-point font size or a maximum 10 characters per inch spacing. Bolding, underlining, and italics may be used to identify topic demarcations or points of emphasis. Graphic presentations, including tables, while not subject to the same font size and spacing requirements, shall have spacing and text that is easily readable.

Each volume in the proposal shall include a copy of the cover letter (letter of transmittal), title page and table of contents. The table of contents shall list sections, subsections and page numbers. Each volume shall contain a glossary of all abbreviations and acronyms used. Each acronym used shall be spelled out in the text the first time it appears in each proposal volume.

In addition to the paper copies identified above, the offeror shall submit all proposal information in electronic format on a USB. Text and graphics portions of the electronic copies shall be in a format readable by Microsoft (MS) Word 2000. Data submitted in spreadsheet format shall be readable by MS Excel 2000. Oral presentation (if conducted) material shall be readable by MS Office 2000 or MS PowerPoint 2000. In case of conflict between the paper copy and the electronic copy of the proposals submitted, the paper copy shall take precedence.

e. Submission Address.

The proposals and all copies shall be sent or hand-carried to the address and POC shown below:

Washington Metropolitan Area Transit Authority Attn: Michael Glimp/FQ15192 600 Fifth St, N.W., Room 403 Washington DC 20001

Phone: 202-962-2086

E-Mail: mdglimp@wmata.com

f. **Submission Due Dates.** Offers must be received prior to 2:00 PM EST, July 15, 2015. Late submissions will not be accepted.

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g. Cross Referencing. Each volume, other than the Cost volume, shall be written to the greatest extent possible on a stand-alone basis so that its content may be evaluated with a minimum of cross-referencing to other volumes of the proposal. Cross-referencing within a proposal volume is permitted where its use would conserve space without impairing clarity. Hyperlinking of cross-references is permissible. Information required for proposal evaluation, which is not found in its designated volume or cross-referenced, is assumed omitted from the proposal.

h. Submittal Requirements

VOLUME I – TECHNICAL PROPOSAL

a. TITLE PAGE (VOLUME I)

b. COVER LETTER (VOLUME I)

The Cover Letter must be signed by an officer authorized to make a binding commitment for the firm(s) making the Proposal. The cover letter shall include:

- 1) The RFP Number
- 2) The name address, telephone and facsimile numbers, and website addresses of the offeror (if applicable)
- 3) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item
- 4) Names, titles, and phone and facsimile numbers and e-mail addresses of persons authorized to negotiate on the offeror's behalf with the Authority in connection with this solicitation; and
- 5) Name title and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office

c. TABLE OF CONTENTS (VOLUME I)

The Technical Proposal must contain a Table of Contents that delineates all the sections in the Proposal.

d. EXECUTIVE SUMMARY (VOLUME I)

The offeror shall provide a short executive summary that describes the significant attributes of its proposal.

e. SF 330 (VOLUME I)

Follow the directions included in the instructions of the SF 330 unless directed otherwise in the solicitation.

SPECIFIC INSTRUCTIONS

Section B. Architect-Engineer Point of Contact.

In block 5, include the Dunn and Bradstreet Number (DUNS) and Taxpayer Identification Number, in addition to the name of the firm.

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Section D. Organizational Chart of Proposed Team.

Note: All individuals listed on the organization chart are not required to have a resume in Section E, such as administrative or lower level engineering positions. Indicate the branch office location of each team member.

Section E. Resumes of Key Personnel Proposed for This Contract.

Complete this section for each key person who will participate in this contract. Group by firm, with personnel of the prime contractor or joint venture partner firms first. At a minimum, all Key Personnel identified in Section 3 of the Statement of Work shall be submitted. Provide brief resumes of Key Personnel, with a maximum of ten (10) specific completed projects that best illustrates the individual member's experience relevant to this contract scope. A project is defined as either a single function contract or a single task order under an Indefinite Delivery Indefinite Quantity or On-Call type contract. IDIQ contract as a whole will not be considered. Projects shall be in the range of \$100,000.00 to \$200,000,000.00.

Block 19: Relevant/Recent Projects. Provide information on up to ten (10) projects, but no less than five (5), within the past five (5) years from the posting of the solicitation, in which the person had a significant role that demonstrates the person's capability relevant to her/his proposed role in this contract. These projects do not necessarily have to be any of the projects presented in Section F for the project team if the person was not involved in any of those projects or the person worked on other projects that were more relevant than the team projects in Section F. Use the check box provided to indicate if the project was performed with any office of the current firm. If any of the professional services or construction projects are not complete, leave Year Completed blank and indicate the status in Brief Description and Specific Role (block (3)).

Section F. Example Projects Which Best Illustrate Proposed Team's Qualifications for This Contract.

Select projects where multiple team members worked together, if possible, that demonstrate the team's capability to perform work similar to that required for this contract. A project is defined as either a single function contract or a single task order under an Indefinite Delivery Indefinite Quantity or On-Call type contract. IDIQ contract as a whole will not be considered. Projects shall be in the range of \$100,000.00 to \$200,000,000.00. Complete one Section F for each project. Present a minimum of 10 and a maximum of 20 projects. At a minimum, present at least two (2) relevant projects for each listed discipline:

- Automatic Fare Collection
- Automatic Train Control
- Communications (excluding IT)
- Trackwork
- Power and Mechanical to include Traction Power, Electrical Power and Mechanical disciplines

Section H. Additional Information.

In Section H Provide the following information:

 Provide documentation that the firm is an architect or engineering firm. Documentation can be the firm's engineering registration number from a State Board of Professional Engineers if the State in which the firm is located has a firm registration requirement or it can be resumes of the senior engineers/architects that are managing the firm showing that they are registered engineers or architects.

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- 2. Provide a narrative describing past performance with Transit agencies, Government agencies, and private industry on projects submitted in Section F, in terms of 1) quality of work, 2) cost control, 3) compliance with project schedules, and 4) contract/project management.
- 3. For each project provided in Section F submit:
 - a. If a federal contract, provide copies of DD Form 2631s, "Performance Evaluation (Architect Engineer)" or other applicable form.
 - b. If not a federal contract, provide facility owner documentation of the firm's performance issued on that contract. If no documentation exists, so state.
 - c. Provide accessible owner points of contact-name, title, address, telephone number, and email.
 - d. Provide copies of awards and letters of appreciation/commendation.
- 4. Please provide the following to demonstrate the offeror's capacity to accomplish the work in the required time and ability to handle multiple projects at the same time:
 - a. For each design team firm, list all <u>current</u> and relevant projects being designed by the Prime offeror, with a current design fee of greater than \$500,000. Present a minimum of two (2), and a maximum of five (5) relevant projects for each listed discipline:
 - (1) Automatic Fare Collection
 - (2) Automatic Train Control
 - (3) Communications (excluding IT)
 - (4) Trackwork
 - (5) Power and Mechanical to include Traction Power, Electrical Power and Mechanical disciplines
 - b. For each project, identify the <u>current</u> design fee, the current stage of design, and the anticipated design completion date.
 - c. Indicate the firm's present workload and the availability of the project team (including subconsultants) for the specified contract performance period.
 - d. For the prime firm, describe experience in successfully delivering projects per performance schedule, how the firm will meet deliverable schedules while working on multiple projects simultaneously, providing timely construction support, and successfully completing multiple projects with similar delivery dates.
 - e. For the prime firm, discuss how increases or surges in workload would be managed.

- 5. Please provide the following to demonstrate the offeror's past performance of Disadvantage Business Enterprise utilization on projects submitted in Section F:
 - a. Provide copies of the most recent Individual Subcontract Report (ISR). (If the project is a task order, provide a summary of the contract's Disadvantage Business Enterprises (DBE) utilization including dollar value and percentage of task order value for each target. Provide the most recent contract ISR under which the task order was awarded.) If targets were not met provide an explanation. If no documentation exists, so state. A firm with no record of relevant past performance information shall be evaluated neither favorably nor unfavorably. The Government may use past performance information from other Government sources as needed.

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6. Please provide a narrative describing the offeror's approach and commitment to the utilization of DBE's on this contract. The narrative shall include (1) the subconsultants identified in the SF330, Part 1, Section D: Organization Chart. Ensure that firms not on the Organization Chart but planned for target utilization are included in the narrative; and (2) a listing of DBE's that are currently on the Firms list of Qualified Sub-contractors that they have worked with in the past who currently have business activity in the VA, DC and MD areas of the National Capitol Region.

Part II - General Qualifications

See the "General Instructions" on page 1 of the SF 330 for firms with branch offices. Prepare Part II for the specific branch office seeking work if the firm has branch offices.

Block 11. Annual Average Professional Services Revenues of Firm for Last 5 Years. Complete this block for the firm or branch office for which this Part II is prepared. Enter the appropriate revenue index numbers to reflect the professional services revenues received annually (averaged over the last 5 years) by the firm or branch office. Indicate Transit Agency work (performed directly for a Transit Agency, either as the prime contractor or subcontractor), non-Transit Agency work, and the total. If the firm has been in existence for less than 5 years, see the definition for "Annual Receipts" under FAR 19.101.

f. Design Quality Management/Quality Control (QC) Plan (DQMP) (VOLUME I)

- Provide an organization chart that identifies the overall relationship and lines of authority of the proposed team, including subcontractors. Include firm names, key personnel and their discipline/specialty.
- 2) Describe the prime's QC program and indicate how the prime firm ensures quality consistently across the entire team.
- 3) Identify the person primarily responsible for the QC program.
- 4) Address the team's QC processes for checking design-build RFPs and verifying plans and specifications for coverage of customer requirements.
- 5) Describe adjustments to prime's QC program to accommodate ongoing lessons learned.

VOLUME II – PRICE PROPOSAL

a. BILLING RATE SCHEDULE / RATE TABLE (VOLUME II)

1) General

i. The proposal must contain an explanation of the offeror's and proposed subcontractors' fully burdened rates, including direct salary rates, overhead rates, and profit; and some information regarding other direct costs. A template Billing Rate Schedule is provided as Attachment A, which shall be included in the proposal. Offerors may submit a modified version of Attachment A, if required.

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2) Specific Requirements

i. Direct Salary Rates:

- (i) The offeror shall list the categories of professional or technical personnel expected to be required in order to perform task orders, to include prime and major subcontractors. A brief definition of the education and experience requirements for a listed category should be provided. Further, if some proposed labor categories are classified by multiple grades within a given discipline (e.g. Architect I and II, or Senior and Junior Engineer), a brief explanation as to how they are differentiated shall be provided. The list of categories of professional or technical personnel shall also be listed in the Billing Rate table with the education and experience requirements.
- (ii) The offeror should provide "Not-To-Exceed" (NTE) rates for professional or technical labor categories expected to be required in order to perform task orders.
- (iii) Rates should be provided by fiscal year, starting with July 1, 2015, and continuing through June 30, 2020. If rates are escalated, the degree (percent) and methodology must be shown. Escalation increases should reflect recent experience or established personnel policy. Types of salary increases given merit, cost of living, etc. should be discussed.

ii. Indirect Cost Rate

(i) Generally, the offeror's accounting system and estimating practices will determine the method used to allocate overhead costs. The offeror's established practices, if in accordance with generally accepted accounting principles, will be accepted. Proposed overhead rates should represent the offeror's best estimate of the rates to be experienced during the contract period as projected by company budgets or by recent experience adjusted for factors which will influence A narrative statement outlining the offeror's policies and trends. practices for accumulating overhead costs and the method used to compute the proposed rate or rates is required. In the case of multibranch firms, joint ventures or affiliates, it is expected that overhead costs applicable to the specific location(s) where work is to be performed will be proposed. Company-wide, joint venture, or affiliate rate averages may not be appropriate. The rates should be tailored to the work location(s).

iii. Profit

(i) The offeror shall provide two (2) fair and reasonable predetermined percentages for profit, required for support tasks and design tasks respectively, including a brief justification for the percentages.

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iv. Markup

(i) The offeror may request a markup on subcontract labor. If it does so, it should state the percentage and provide a justification for that figure.

v. Organizational Policies

- (i) Offeror shall briefly describe organization policies in the following area (published policies may be furnished):
 - Travel/Subsistence
 - Subcontractor use and terms of agreements, including policy on selecting subcontractors, analyzing subcontractor costs or prices, and types of subcontracts utilized.

vi. Audit Reports

(i) If the offeror or any subcontractor has been audited by a Government agency within the last two years, or has approved indirect cost rate, provide a copy of the audit report. Similarly, information on any Government approved indirect cost rates should be provided.

b. CERTIFICATE OF CURRENT COST/PRICE DATA (VOLUME II)

- FAR 15.403-4 specifies when the submission and certification of written cost or pricing date is required. Submission and certification as to accuracy, completeness, and currentness are required prior to award of a negotiated contract or contract modification expected to exceed \$500,000.00. Individual subcontractors whose price proposals exceed \$500,000.00 shall also comply with these requirements.
- 2) "Cost or pricing data" is defined in FAR 15.401. Generally, as related to Architect/Engineer type contracts, "cost of pricing data" means all facts as of the time of price agreement that prudent buyers and sellers would reasonably expect to affect price negotiations significantly. This definition embraces more than historical accounting data; it also includes, where applicable, such factors as vendor quotations, nonrecurring costs, overhead computations, changes in architectural, drafting, or engineering methods, anticipated business volume increases affecting overhead absorption or any other management decisions which could reasonably be expected to have a significant bearing on costs under the proposed contract. Cost or pricing data are factual information which can be verified. In that the offeror's or consultant's certification pertains to "cost or pricing data," it does not make representations as to the accuracy of its judgment regarding the estimated portion of future costs or projections. It does, however, apply to the data upon which the offeror's or consultant's judgment is based.
- 3) The Offeror shall provide a certificate of certified cost or pricing data with the proposal. (Attachment B)

VOLUME III – CONTRACTUAL DOCUMENTATION

a. REPRESENTATIONS AND CERTIFICATIONS (VOLUME I)

1) A completed Representations and Certifications shall be included in the proposal.

b. **CERTIFICATE OF INSURANCE**

1) The Offeror shall provide an ACORD Certificate of Insurance (COI) as evidence that the insurance requirements have been satisfied.

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c. PRE-AWARD DATA

- 1) The Offeror shall provide a completed and signed Pre-Award Evaluation Data Form.
- 2) The Offeror shall provide complete financial statements for the last three years, including Statement of Financial Position (Balance Sheet), Results of Operations (Income Statement), Statement of Changes in Financial Position (Net Change in Resources) and Statement of Current and Retained Earnings. Doubt as to financial strength which cannot be resolved affirmatively may require a determination of non-responsibility by the Contracting Officer.

d. SIGNED AMENDMENTS

1) The Offeror shall submit signed copies of each amendment to the solicitation issued.

11. LATE SUBMISSIONS AND REVISIONS OF PROPOSALS

- (a) Any Proposal or Revision received at the office designated in the Solicitation after the time specified for receipt will not be considered unless it was sent, properly addressed:
 - (1) By registered or certified U.S. or Canadian mail not later than the fifth Day before the date specified for receipt of Proposal (e.g. a Proposal or Revision relating to a Solicitation with a receipt date of the 20th of a month must have been placed in registered or certified mail by not later than the 15th of such month);
 - (2) By first class mail, if the Authority determines that the late receipt was due solely to mishandling by the Authority after delivery on Authority premises; or
 - (3) By U.S. Postal Service Express Mail Next Day Service, not later than 5:00 p.m. at the place of mailing two business days prior to the date specified for receipt of Proposals; or
- (b) A Revision submitted after the date and time set for opening of Proposals will only be accepted if requested, or otherwise authorized, by the Contracting Officer. A submission in the nature of a Best and Final Offer ("BAFO") received after the time and date specified in the Contracting Officer's request for BAFOs will not be considered unless received before award and, in the judgment of the Contracting Officer; the late delivery was not attributable to an act or omission of the Offeror.

(c) The only acceptable evidence to establish the time of receipt by the Authority is the time/date stamp of that event on the bid wrapper or other documentary evidence of receipt maintained by the Authority.

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(d) Notwithstanding sub-paragraphs "a" and "b" above, (i) a Proposal received after the time specified for receipt may be considered if it is the only Proposal received for the Solicitation; and (ii) a late Revision of any otherwise successful Proposal that makes its terms more favorable to the Authority may be considered and accepted, whenever received.

12. WITHDRAWAL OF PROPOSALS

Proposals may be withdrawn by written notice received by the Authority before award. Proposals may be withdrawn in person by an Offeror or an authorized representative if the representative's identity is appropriately demonstrated and the representative signs a receipt for the Proposal before award; except that absent approval of the Contracting Officer a proposal may not be withdrawn prior to 90 days from receipt of proposals.

13. RECEIPT AND REVIEW OF PROPOSALS BY THE AUTHORITY

- (a) There will be no public opening of Proposals in this Solicitation. Proposals will be opened by the designated Authority representative and copies of the three Volumes of the Proposal distributed for review by Authority designated personnel only, as appropriate. All reasonable efforts will be made to ensure confidentiality of the information contained in the proposals, consistent with applicable provisions of law.
- (b) The Authority may elect to award a Contract on the basis of the initial Proposals as received in accordance with the Evaluation Criteria set forth in paragraph, without Discussions. Accordingly, the initial Proposal should contain the Offeror's best terms from both a price and technical standpoint.
 - (i) Notwithstanding a determination by the Authority to proceed without conducting substantive negotiations or Discussions with Offerors, the Authority may elect to engage in communications with one or more Offerors relating to Clarification(s) of their Proposals.
- (c) As an alternative to the procedure described in sub-paragraph b above, the Authority may, in its discretion, determine to engage in oral and/or written Discussions with one or more Offerors involving information essential or useful to the Authority's understanding of the Proposals and/or to address deficiencies in the initial Proposals. In determining those Offeror(s) with which it chooses to engage in such Discussions, the Authority shall first make a determination as to those initial Proposals which it deems to be within the Competitive Range for award of the Contract and thereupon conduct Discussions with the Offerors submitting Proposals within the Competitive Range.
- (d) In the event that the Authority conducts substantive Discussions with one or more Offerors as set forth in sub-paragraph c above, the Contracting Officer may, following such Discussions, direct those Offerors who's Proposals have been deemed within the Competitive Range to submit Best and Final Offers ("BAFOs"). In such instances, the Authority shall render its determination as to award of the contract based upon its review of the BAFOs in accordance with the Evaluation Criteria; except that nothing contained herein

shall be deemed to limit, modify or impair the right of the Authority to engage in any such further or additional oral or written Discussions or other communications relating to the Solicitation as may, in the judgment of the Contracting Officer, be consistent with the best interests of the Authority.

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(e) The Authority maintains the right to waive informalities and minor irregularities in Proposals at any time during the Solicitation process

14. EVALUATION CRITERIA AND BASIS FOR AWARD

This is a competitive source selection conducted in accordance with the Brooks Act. Award will be made to the offeror who is determined to be the highest qualified, is deemed responsible, whose proposal conforms to the solicitation's requirements, and who is judged, by the Contractor Evaluation Board's (CEB) assessment of the specific criteria, defined in Article 18, to best meet the Authority's requirements at a reasonable price.

- a. The following evaluation criteria will be the basis for selection of the most preferred firm, in decreasing order of importance:
 - 1) Professional qualifications necessary for satisfactory performance of required services;
 - 2) Demonstrated specialized experience and technical expertise in the design, engineering and architectural support for an operating rail and bus system, including the expertise, experience, and qualifications of the A/E"s primary designer in each relative discipline for providing the services.
 - Past performance on contracts with the Authority, Government agencies, and private industry in terms of cost control, quality of work, and compliance with performance schedules;
 - 4) Demonstrated success of the Quality Control (QC) program used by the firm to ensure quality products.
 - 5) Demonstrated capacity to accomplish the work in the required time and ability to handle multiple projects at the same time.
 - 6) Firms present location in the general geographical area of the project and knowledge of the locality of the project;
 - 7) Proposed or past DBE participation and approach for selection, utilization, outreach, and reporting on the utilization of DBE's.
- b. SELECTION INTERVIEW REQUIREMENTS: The Authority reserves the right to conduct personal interviews for firms slated as most highly qualified. Firms slated for interviews may be asked to elaborate on selected questions explaining management and the overall firm's abilities.

These interviews may be used for evaluations in addition to the written proposals. Elaborate presentations are not desired. The interview is used to supplement information provided in the evaluation criteria; only applicable supplemental information will be evaluated.

c. Cost will not be a factor in evaluating the offerors, but will be evaluated and negotiated for award for reasonableness. The Unit Price Schedule and Billing Rate Schedule (Attachment A) will be evaluated for reasonableness by performing a cost analysis to ascertain if a fair and reasonable price exists. Reasonableness will also be evaluated by assessing the acceptability of the offeror's methodology used in developing their Billing Rate Schedule.

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15. PRICE PROPOSAL EVALUATION

- (a) Cost will not be a factor in evaluating the offerors, but will be evaluated and negotiated for award for reasonableness, completeness, and realism as appropriate. The Unit Price Schedule and Billing Rate Schedule (Attachment A) will be evaluated for reasonableness by performing a cost analysis to ascertain if a fair and reasonable price exists. Reasonableness will also be evaluated by assessing the acceptability of the offeror's methodology used in developing their Billing Rate Schedule.
- (b) The Offeror shall provide certified cost or pricing data if so requested by the Contracting Officer.

16. TECHNICAL PROPOSAL EVALUATION

The Authority will evaluate the technical proposal in accordance with the elements of the Evaluation Criteria set forth in paragraph 14 and render an assessment as to the overall technical merit of the proposal. The failure of a Proposal to demonstrate that it meets or surpasses an acceptable level with respect to any such element may result in a determination that the Proposal is technically unacceptable and thus ineligible for award.

17. PRE AWARD INFORMATION/CONTRACTOR RESPONSIBILITY

- (a) In order to be eligible for award of a contract, a Proposer must affirmatively demonstrate to the satisfaction of the Authority that it is responsible for purposes of this Solicitation, including a showing that it maintains the requisite integrity, overall technical expertise and experience, including prior performance on other Authority contracts or other government agencies, and sufficient financial resources to perform the Work of the contract in a timely, satisfactory and appropriate manner.
- (b) The Contracting Officer or other Authority Representative(s) may conduct a pre-award survey and/or undertake other actions to obtain information regarding the responsibility of a Proposer whose offer is in the Competitive Range or is otherwise under consideration for award. The Proposer shall promptly supply information requested by the Contracting Officer regarding its responsibility in such manner and form as requested by the Authority.
- (c) Without limiting the general obligations of the Proposer to demonstrate its responsibility to the satisfaction of the Authority as set forth in subparagraphs (a) and (b) above, a Proposer shall furnish the following when so requested by the Contracting Officer or other Authority Representative:
 - (1) A completed and signed Pre-Award Evaluation Data form (copy attached), including all referenced financial statements and information;
 - (2) Evidence of good standing in the System for Award Management (SAM) at www.sam.gov.

Oisadvantaged Business Enterprise data as set forth in Appendix B. Note: As described above, the submittal of certain items and request for waiver (if applicable) are required if the Proposal is \$100,000 or greater. Failure to submit forms B-12, B-13, and/or request for waiver (if applicable) may cause the Proposal to be rejected. A failure on the part of an Offeror to supply the information requested in this paragraph or otherwise fully cooperate with the Authority's inquiry may result in a determination that the Offeror is not responsible for purposes of this Solicitation and thereby ineligible for award.

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(4) Small Business Enterprise (SBE) documentation as set forth in Appendix B-1. A failure on the part of an Offeror to supply the information requested in this paragraph or otherwise fully cooperate with the Authority's inquiry may result in a determination that the Offeror is not responsible for purposes of this Solicitation and thereby ineligible for award.

18. PRE-AWARD MEETING

The Authority reserves the right to require that a pre-award meeting be held with the apparent successful Offeror prior to award of a Contract in order to review the Offeror's understanding of the contract requirements and/or further assist the Authority in determining the Offeror's responsibility for purposes of award. The Contractor shall be represented at such meeting by individual(s) fully familiar with the contractual requirements including, where so requested by the Authority, representative(s) of one or more major subcontractor(s).

19. SITE VISIT/INSPECTION OFFEROR'S FACILITIES – NOT APPLICABLE

20. CONTRACT AWARD

- (a) At the conclusion of the process described in paragraph 14 above, the Authority will award a contract resulting from this Solicitation to the responsible Offeror whose Proposal conforming to the Solicitation will be most advantageous to the Authority based upon its application of the Evaluation Criteria. Such determination shall be based upon the initial Proposals received where the Authority determines not to conduct Discussions in accordance with subparagraph 13(b) or shall be based upon the BAFOs where the Authority directs their submission in accordance with subpargraphs 13 (c) and(d).
- (b) A written award mailed or otherwise furnished to the successful Offeror at any time prior to withdrawal of the Proposal by the Offeror shall result in a binding contract without further action by either party. Discussions conducted after receipt of an Offer do not constitute a rejection or counteroffer by the Authority.
- (c) Notwithstanding the foregoing or anything to the contrary otherwise contained in this Solicitation, the Authority reserves the right to reject and any all Proposals received and decline to enter into a contract pursuant to this Solicitation if it deems such action is in the public interest.

21. PERFORMANCE/PAYMENT BONDS

The successful Proposer shall, within the time established in the Contract Documents and as a condition to issuance of a Notice to Proceed, furnish performance and payment bonds, if applicable, on forms acceptable to the Authority and in the amounts indicated in the Contract Documents. **Performance and payment bonds will be determined with each individual task order.**

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22. DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

Attached as Appendix B of this solicitation are documents outlining the requirements for the Disadvantaged Business Enterprise (DBE) Program: Although WMATA wishes to attain an overall DBE Goal of 25% for this IDIQ contract, a DBE goal will be established at the individual task order level, which will be averaged to reach an attained goal of 25% for federally funded task orders.

23. OPPORTUNITY FOR DISADVANTAGED BUSINESS ENTERPRISES TO PROPOSE

The Washington Metropolitan Area Transit Authority hereby notifies all prospective Offerors that it will affirmatively ensure that disadvantaged minority business enterprises will be afforded full opportunity to submit Proposals in response to this Solicitation and will not be discriminated against on the basis of race, color, or national origin in consideration for award.

24. WMATA'S TAX EXEMPT STATUS

(a) Pursuant to Article XVI, Paragraph 78, of the Washington Metropolitan Area Transit Authority Compact, as adopted by the State of Maryland, the District of Columbia, and the Commonwealth of Virginia, with the authorization and consent of the Congress of the United States, the Authority has been accorded exemption from taxes as follows:

"The Authority and the Board shall not be required to pay taxes or assessments upon any of the property acquired by it or under its jurisdiction, control, possession or supervision, or upon its activities in the operation and maintenance of any transit facility or upon any revenues therefrom, and the property and income derived therefrom shall be exempted from all Federal, State, District of Columbia, municipal, and local taxation. This exemption shall include without limitation, all motor vehicle license fees, sales taxes and motor fuel taxes."

- (b) It has been the practice of the District of Columbia to apply the Authority's tax exempt status to certain purchases of materials required under Authority construction contracts and acquired by contractors for physical incorporation into the project work. This has not been the practice in either Maryland or Virginia. The Authority does not represent or warrant that the District of Columbia practice applies to this project or, if it does, that it will continue in effect during the term of this project. It is the responsibility of the Contractor to determine its liability for any and all taxes applicable to this project. Assessment or payment of taxes by the Contractor, including taxes resulting from changes in existing laws or the application thereof or of new or additional taxes, shall not constitute the basis for an increase in the Contract price, except as otherwise allowed under the General Provisions Article, FEDERAL, STATE AND LOCAL TAXES, of this Contract.
- (c) The Authority's tax exempt numbers are as follows: District of Columbia 5611 0082187001; Maryland -- 30072210; Virginia -- 5280-0067

(d) By submission of its Proposal, the Offeror certifies that none of the taxes as to which the Authority is exempt are included in its cost proposal.

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25. RESTRICTION ON DISCLOSURE AND USE OF DATA

The Authority shall provide all reasonable precautions to ensure that proprietary, technical and pricing information remains within the review process. Offerors shall attach to any proprietary data submitted with the Proposal the following legend:

- (a) "This data furnished pursuant to this RFP shall not be disclosed outside the Authority, be duplicated, or used in whole or in part, for any purpose other than to evaluate the offer; provided that, if a contract is awarded on the basis of that offer, the Authority shall have the right to duplicate, use, and disclose this data, in any manner and for any purpose whatsoever.
- (b) This information does not limit the Authority's right to use information contained in this data if it is or has been obtained by the Authority from another independent legitimate source.
- (c) Except for the foregoing limitation, the Authority may duplicate, use, and disclose in any manner and for any purpose whatsoever and have others so do, all data furnished in response to this solicitation."

26. ENGLISH LANGUAGE AND UNITED STATES CURRENCY

With respect to both this Solicitation and the resultant contract:

- (a) All communications (oral, written, electronic and otherwise including but, not limited to software coding) shall be in the English language.
- (b) All pricing shall be in United States dollars.

27. BRAND NAME OR EQUAL

- (a) If items called for by this RFP and subsequent task orders have been identified in the Price Schedule by a "brand name or equal" description, such identification is intended to be descriptive, but not restrictive, and is to indicate the quality and characteristics of products that will be satisfactory. Proposals offering "equal" products including products of the brand name manufacturer other than the one described by brand name will be considered for award if such products are clearly identified in the proposals and are determined by the Authority to meet fully the salient characteristics (physical, functional, or performance) requirements in the RFP.
- (b) Unless the Offeror clearly indicates in its Proposal that it is offering an "equal" product, the Proposal shall be considered as offering a brand name product referenced in the RFP.
- (c) If the Offeror proposes to furnish an "equal" product, the brand name, if any, of the product to be furnished in the space provided in the RFP, or such product shall be otherwise clearly

identified in the Proposal. The determination as to equality of the product offered shall be at the sole discretion of the Authority.

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CAUTION TO OFFERORS. WMATA is not responsible for locating or securing any information which is not identified in the Proposal and reasonably available to the Authority. Accordingly, to ensure that sufficient information is available, the Offeror must furnish as a part of its Proposal all descriptive material (such as cuts, illustrations, drawings, or other information) necessary for the Authority to determine whether the product offered meets the salient characteristics requirements of the RFP.

The information furnished may incorporate by specific reference information previously furnished or otherwise available to the Authority. If the Offeror proposes to modify a product so as to make it conform to the requirements of the RFP, it shall (i) include in the Proposal a clear description of such proposed modifications, and (ii) clearly mark any descriptive material to show the proposed modifications.

REPRESENTATIONS AND CERTIFICATIONS (FEDERALLY FUNDED SUPPLY/SERVICE/CONSTRUCTION CONTRACTS)

Contract No. FQ15192

Date: June 12, 2015

REPRESENTATIONS

Instruc	tions: (Check or complete all applicable boxes or blocks on this form and submit it with your offer.								
1.	TYPE OF BUSINESS ORGANIZATION									
	By submission of this offer, the offeror represents that it operates as [] an individual, [] a partne [] a limited liability company, [] a joint venture, [] a nonprofit organization, or [] a corpor incorporated under the laws of the State of									
2.	AFFILIATION AND IDENTIFYING DATA									
	Each offeror shall complete (a), (b) if applicable, and (c) below, representing that:									
	(a)	It [] is, [] is not, owned or controlled by a parent company. For this purpose, a parent company is defined as one which either owns or controls the activities and basic business policies of the offeror. To own another company means the parent company must own at least a majority, i.e., more than 50 percent, of the voting rights in that company. To control another company, such ownership is not required; if another company is able to formulate, determine or veto basic business policy decisions of the offeror, such other company is considered the parent of the offeror. This control may be exercised through the use of dominant minority voting rights, use of proxy voting, contractual arrangements or otherwise.								
	(b)	If the offeror is owned or controlled by a parent company, it shall insert in the space below the name and main office address of the parent company:								
		Name of Parent Company								
		Main Office Address (including ZIP Code)								
	(c)	If the offeror has no parent company, it shall provide in the applicable space below its own Employer's Identification Number (E.I.N.), (i.e., number used on Federal Tax Returns or, if it has a parent company, the E.I. No. of its parent company).								
		Offeror E.I. Number: or, Parent Company's E.I. Number:								
	(d)	If a Data Universal Numbering Systems (DUNS), number has not been established for the address entered on the Solicitation, Offer, and Award Form, the Authority will arrange for the assignment of this number after award of a contract and will notify the Contractor accordingly.								
3.	PREVIO	OUS CONTRACTS AND COMPLIANCE REPORTS								
		presentation is applicable to federally assisted contracts. By submission of this offer, the offeror nts that:								
	(a)	It [] has, [] has not, participated in a previous contract or subcontract subject to either the Equal Opportunity Clause of this solicitation, or the clause contained in Parts II and IV of Executive Order 11246, as amended; which prohibits discrimination on the basis of race, color,								

creed, national origin, sex, age; and

- (b) It [] has, [] has not, filed all required compliance reports; and
- (c) Representations indicating submittal of required compliance reports signed by proposed subcontractors will be obtained prior to subcontract awards.

4. DISADVANTAGED BUSINESS ENTERPRISE

This representation is applicable to federally assisted contracts. By submission of this offer, the offeror represents that:

(a) It [] is, [] is not, a disadvantaged business enterprise.

"Disadvantaged Business Enterprise" means a for-profit small business concern that is at least 51% owned by one or more individuals who are both socially and economically disadvantaged individuals or, in the case of a corporation, in which 51% of the stock is owned by one or more such individuals; and whose management and daily business operations are controlled by one or more socially and economically disadvantaged individuals who own it.

"Socially and Economically Disadvantaged Individuals" is defined in Appendix B, Section 4, paragraph I; and

- (b) It [] is, [] is not, currently certified by WMATA as a disadvantaged business enterprise.
- (c) It [] is, [] is not, a small business enterprise.

"Small Business Enterprise" means a for profit small business concern that is at least 51% owned by one or more individual(s) who are economically disadvantaged. "Economically Disadvantaged Individual" is defined in Appendix B-1, Section 3, Definitions.

5. AFFIRMATIVE ACTION COMPLIANCE

This representation is applicable to federally assisted contracts of \$50,000 or more that are awarded to contractors with 50 or more employees. By submission of this offer, the offeror represents that:

- (a) It has a workforce of _____ employees.
- (b) It [] has developed and has on file, or [] has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR Parts 60-1 and 60-2), or
- (c) It [] has not previously had contracts subject to the written affirmative action program requirements of the rules and regulations of the Secretary of Labor.

CERTIFICATIONS

6. COVENANT AGAINST GRATUITIES

By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:

Neither it nor any of its employees, representatives or agents have offered or given gratuities (in the form of entertainment, gifts or otherwise) to any director, officer or employee of the Authority with the

view toward securing favorable treatment in the awarding, amending, or the making of any determination with respect to the performing of the contract.

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7. **CONTINGENT FEE**

By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:

- It [] has, [] has not, employed or retained any company or persons (other than a full-time, bona fide employee working solely for the offeror) to solicit or secure this contract, and
- (b) It [] has, [] has not, paid or agreed to pay any company or person (other than a full-time, bona fide employee working solely for the offeror) any fee, commission, percentage, or brokerage fee contingent upon or resulting from the award of this contract.

8. **CLEAN AIR AND WATER CERTIFICATION**

This certification is applicable if the contract will be federally assisted and the offer exceeds \$100,000. or the Contracting Officer believes that orders under an indefinite contract in any year will exceed \$100,000 or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 7413(c)(1)) or the Water Act (33 U.S.C. 1319(c)) and is listed by the U.S. Environmental Protection Agency (EPA) as a violating facility, and the acquisition is not otherwise exempt:

- Any facility to be utilized in the performance of this proposed contract [] is, or [] is not listed (a) on the EPA list of Violating Facilities;
- (b) Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communications from the Administrator, or a designee of the EPA, indicating that any facility which it proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- Offeror will include a certification substantially the same as this certification, including this (c) paragraph, in every non-exempt subcontract.

9. DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXLCUSION

This certification is applicable to federally assisted contracts over \$25,000.

- (a) Primary Covered Transactions. This certification applies to the offer submitted in response to this solicitation and will be a continuing requirement throughout the term of any resultant contract.
 - (1) In accordance with the provisions of Appendix A to 49 Code of Federal Regulations (CFR) Part 29, the offeror certifies to the best of its knowledge and belief that it and its principals:
 - are not currently debarred, suspended, proposed for debarment, declared (i) ineligible, or voluntarily excluded from covered transactions by any Federal or State department or agency;
 - have not, within a three-year period preceding this offer, been convicted of or (ii) had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(iii) are not currently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(ii) of this Certification; and

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- (iv) have not, within a three-year period preceding this offer, had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the offeror is unable to certify to any of the statements in this certification, the offeror shall attach an explanation to this offer.
- (b) Lower Tier Covered Transactions. This certification applies to a subcontract at any tier expected to equal or exceed \$25,000 and will be a continuing requirement throughout the term of the prime contract.
 - (1) In accordance with the provisions of Appendix B to 49 Code of Federal Regulations (CFR) Part 29, the prospective lower tier subcontractor certifies, by submission of this offer, that neither it nor its principals is currently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal or State department or agency.
 - (2) Where the prospective lower tier subcontractor is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.
- (c) The Certification required by subparagraph (b), above, shall be included in all applicable subcontracts and a copy kept on file by the prime contractor. The prime contractor shall be required to furnish copies of certifications to the Contracting Officer upon the Contracting Officer's request.

10. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION

- (a) By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:
 - (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or with any other competitor, as to any matter relating to such prices;
 - (2) Unless otherwise required by law, the prices which have been quoted in this offer have not been knowingly disclosed by the offeror and will not be knowingly disclosed by the offeror prior to award (in the case of a negotiated procurement), directly or indirectly, to any other offeror or to any competitor; and
 - (3) No attempt has been made or will be made by the offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each person signing this offer certifies that:
 - (1) He or she is the person in the offeror's organization responsible within that organization for the decision as to the prices being offered herein and that he/she has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or
 - (2) He or she is not the person in the offeror's organization responsible within that organization for the decision as to the prices being offered herein, but that he/she has

been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated; and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify.

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11. <u>CERTIFICATION OF NONSEGREGATED FACILITIES</u>

This certification is applicable to federally assisted contracts over \$10,000.

- (a) By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:
 - (1) It does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.
 - (2) The offeror agrees that a breach of this certification is a violation of the Equal Opportunity Clause in the contract.
 - (3) As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin, because of habit, local custom or otherwise.
 - (4) It further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will:
- (a) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;
- (b) Retain such certifications in its files; and
- (c) Forward the following notice to such subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted prior to award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for such subcontract or for all subcontracts during a period (i.e., quarterly, semiannually or annually).

12. NONDISCRIMINATION ASSURANCE

By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, in connection with this procurement that it will not discriminate on the basis of race, color, creed, national origin, sex, age in the performance of this contract. The offeror is required to insert the substance of this clause in all subcontracts and purchase orders. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Authority deems appropriate. The offeror further agrees by submitting this offer that it will include this certification, without modification, in all subcontracts and purchase orders.

13. CERTIFICATION OF RESTRICTIONS ON LOBBYING

This certification is applicable to federally assisted contracts if the offer exceeds \$100,000.

- (a) By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that to the best of his or her knowledge or belief:
 - (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

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- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, the undersigned shall complete and submit Standard Form--LLL, "Disclosure of Lobbying Activities."
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers and that all subrecipients shall certify and disclose accordingly.
- (b) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352, as amended. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

14. BUY AMERICA ACT CERTIFICATION

The Buy America requirements apply to federally assisted construction contracts, and acquisition of goods or rolling stock contracts valued at more than \$100,000.

- (a) By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement it will comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7 Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11.
- (b) An offeror must submit to the Authority the appropriate Buy America certification (below) with all offers on FTA-funded contracts, except those subject to a general waiver. Offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors. Mark the applicable certifications below:
 - (1) Certification requirement for procurement of steel, iron, or manufactured products:
 - [] Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The	offeror	hereby	certifies	that	it will	meet	the	requirements	of	49	U.S.C
5323	8(j)(1) ar	nd the ap	plicable	regula	ations	in 49 (CFR	Part 661.5.			

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[] Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

(2) Certification requirement for procurement of buses, other rolling stock and associated equipment:

[] Certificate	of Compliance	with 49 l	U.S.C.	5323(j)(2)(C)
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The offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 C.F.R. Part 661.11.

[] Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)

The offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11, but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

15. <u>CERTIFICATION OF NON-DELINQUENT TAXES</u>

This certification is applicable to federally assisted contracts.

- (a) By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:
 - (1) It has not been convicted over the past three years of violating any federal criminal tax law or failed to pay any tax.
 - (2) It has certified if it has been notified of an unresolved tax lien or any unsatisfied federal tax delinquency in excess of \$3,000 and that it is paying tax debts through an installment agreement or have requested a collection due process hearing.
 - (3) The offeror agrees that a breach of this certification is a violation of the Federal Acquisition Regulation.
 - (4) As used in this certification, the term "tax delinquency" means an outstanding debt for which a notice of lien has been filed in public records.
 - (5) It further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will:
- (b) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to Federal Acquisition Regulation;
- (c) Retain such certifications in its files; and
- (d) Forward the following notice to such subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Business Associate

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR CERTIFICATIONS OF NON-DELINQUENT TAXES

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Date: June 12, 2015

A Certification of Non-Delinquent Taxes must be submitted prior to award of a subcontract exceeding \$100,000 which is not exempt from the provisions of Federal Acquisition Regulation. The certification may be submitted either for such subcontract or for all subcontracts during a period (i.e., quarterly, semiannually or annually). (RC-116, OCTOBER 08)

16. DISCLOSURES OF INTERESTS OF WMATA BOARD MEMBERS

For purposes of this disclosure, terms in bold are defined by the Code of Ethics for Members of the WMATA Board of Directors a copy of which is available at www.wmata.com. Financial interest includes ownership interests and prospective and actual income. Firm includes parents, subsidiaries and affiliates.

By submission of this offer, the offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that to the best of your knowledge, information and belief in connection with this procurement:

conn	ection with this procurement:	
(a)	interest in this firm, in a Financial T	ousehold Member or Business Associate has a financial ransaction with the Authority to which this firm is a party or Prospective Business Relationship with the Authority
(b)	Associate(s) has a financial interest to which this firm is a party or pro Relationship with the Authority to below a description of the financial interest, the name and address of the equivalent interest of the firm; and Board Member, Household Mem	pard Member(s), Household Member(s) or Business at in this firm, in a Financial Transaction with the Authority spective party, or in an Actual or Prospective Business to which this firm is a party, Include in Nature of Interest I interest and (1) for ownership interests, the value of the firm in which the interest is held, and the total equity or (2) for income, the amount of all income received by the ber or Business Associate in the current and preceding and the name and address of the firm from which the income
	Name of Board Member Household Member or	Nature of Interest

(c) The certification required by subparagraphs (a) and (b) above shall be included in all subcontracts. The prime contractor shall furnish copies of certifications to the contracting officer and retain a copy for inspection upon the contracting officer's request.

SIGNATURE BLOCK FOR ALL REPRESENTATIONS AND CERTIFICATIONS		
Name of Offeror:		
Name and Title of Authorized		

Washington Metropolitan Area RFP FQ15192/MG	Contract No. FQ15192	
KFF FQ 13 192/MG		Date: June 12, 2015
[B		
Representative:		
	Print and Sign Name	
	Title	Date

PRE-AWARD EVALUATION DATA

Contract No. FQ15192

PROJE	ECT DESCRIPTION	ON:
1.	Name of Firm	
2.	۸ ططعمم	
۷.	Address.	
3.	[] Individual [] Partnership [] Corporation [] Joint Venture
4.	Date Organized	·
	State in which in	ncorporated
5.	Names of Office	rs or Partners:
	a	
	b	
	C	
	d	
	e	
	f	

- 6. How long has your firm been in business under its present name?
- 7. Attach as SCHEDULE ONE a list of similar <u>current</u> contracts which demonstrates your technical proficiency, each with contract amount, name of contracting party, character or type of work and percentage of completion.
- 8. Attach as SCHEDULE TWO a list of similar contracts, each with contract amount, name of contracting party, and character or type of work for similar contracts <u>completed</u> in the last two years.
- 9. Attach as SCHEDULE THREE a list of all <u>current</u> WMATA contracts, each with title, description, name of contracting officer, date of award, period of performance/duration, and contract amount.
- 10. In the last two years have you ever been denied an award where you were the offeror?
 - If the answer is YES, attach as SCHEDULE FOUR the full particulars regarding each occurrence.
- 11. Have you ever failed to complete, in the last two years, any contract on which you were the offeror?
 - If the answer is YES, attach as SCHEDULE FIVE, the full particulars regarding each occurrence.

12.	Financial resources available as working capital for the Contract:	
	a. Cash on hand: \$	
	b. Sources of credit:	
13.	Attach as SCHEDULE SIX financial statements and letters from banks regarding credit as required by the Pre-Award Information article.	
14.	What percentage of work (contract amount) do you intend performing with your ow personnel? %.	
15.	Attach as SCHEDULE SEVEN a list of all principal subcontractors and the percentage and character of work (contract amount) which each will perform. Principal items of work sha include, but not be limited to, those items listed in the Pre-Award Information article of the Request for Proposal.	
16.	If the Contractor or subcontractor is a joint venture, submit PRE-AWARD EVALUATION DATA forms for each member of the joint venture.	
	The above information is confidential and will not be divulged to any unauthorized personnel.	
	The undersigned certifies to the accuracy of all information.	
	COMPANY:	
	SIGNATURE:	
	NAME:	
	TITLE:	
	DATE:	

Contract No. FQ15192 Date: June 12, 2015

TERMS AND CONDITIONS

CHAPTER I – GENERAL PROVISIONS

Contract No. FQ15192

Date: June 12, 2015

1. AGREEMENT

The Work to be performed under this Contract may briefly be described as to provide professional engineering services to a wide variety of new design and construction related tasks, and maintenance, repair and renovation tasks requiring the full range of engineering services, including all necessary or incidental work, labor and materials. The Contractor agrees to perform the Work in accordance with requirements and terms and conditions hereinafter set forth in the Contract Documents. In consideration for the complete, satisfactory and proper performance thereof by the Contractor, the Authority agrees to pay to the Contractor, and the Contractor agrees to accept as full compensation therefor, the sums of money set forth in the Price Schedule at the time and in the manner and upon the terms and conditions set forth in the Contract Documents.

2. ARRANGEMENT OF CONTRACTUAL PROVISIONS

For ease of reference, the provisions of these Contract Documents are divided into Chapters, Articles, Paragraphs and Subparagraphs. While the Chapters and Articles are titled, it is understood that both the use of such titles and the manner and overall arrangement of the contractual provisions within the Contract Documents are intended solely for the convenience of the parties and are without independent contractual or legal significance.

3. ORDER OF PRECEDENCE

- (a) Any inconsistency in the Contract Documents shall be resolved by giving precedence in the following order: (a) Special Provisions; (b) General Provisions; (c) the specifications or scope of work; (d) drawings, if any; (e) other documents, exhibits, and attachments generated by the Authority as part of the Contract Documents; (f) the technical proposal, if any, and other submissions of the Contractor generated as part of the Contract Documents. In the event of a conflict within or between provisions entitled to equal precedence pursuant to the foregoing, the more stringent requirement shall apply.
- (b) Notwithstanding paragraph (a), in the event that this Contract is funded in whole or part through funding provided by the Federal Government, all contract terms mandated for inclusion by the Federal Government shall be deemed to supersede any other conflicting or inconsistent provision of the Contract Documents.

4. **REQUIREMENTS CONTRACT**

- (a) This is a Requirements Contract, notwithstanding the foregoing if, as the result of an urgent need, the Authority requires delivery of any quantity of an item before the date otherwise specified under this Contract, and if the Contractor will not accept an order providing for the accelerated delivery, the Authority may acquire the urgently required goods or services from another source.
- (b) In the event that the Contractor is unable or otherwise fails to provide goods or services within the time frames required in the Contract, the Authority reserves the right to procure the goods or services from any other source and in any other manner

it deems appropriate. Nothing contained herein shall be deemed to waive, modify or impair the right of the Authority to treat any such failure to meet a required delivery schedule as a material breach of the Contractor's obligations pursuant to the provisions of the TERMINATION FOR DEFAULT article hereof, or any other right to which the Authority may be entitled pursuant to this Contract or at law or equity.

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5. AUDIT, AVAILABILITY, AND INSPECTION OF RECORDS

- (a) Authorized persons. The Contracting Officer and his or her representatives, including representatives of the Authority's governing jurisdictions and any other federal, state, or local entity providing funding for this Contract and the Comptroller General of the United States, shall have access and inspection rights described in this Article
- (b) Examination of costs. The Contractor shall maintain, and the Contracting Officer shall have the right to examine and audit, all records sufficient to reflect properly all costs incurred or anticipated to be incurred directly or indirectly in performance of this Contract. This right of examination shall include inspection at all reasonable times of the Contractor's facilities engaged in performing this Contract.
- (c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this Contract, the Contracting Officer shall have the right to examine and audit all of the Contractor's records related to: (1) any Bid or Proposal for the contract, subcontract, or modification; (2) any Clarifications or Discussions conducted on the Bid or Proposal; (3) pricing of the contract, subcontract or modification; or (4) performance of the contract, subcontract or modification.
- (d) Availability. The accounts, records and costs information required to be originated under this Contract, and together with all other accounts, records and costs information related to this Contract, shall be maintained and made available by the Contractor and subcontractor(s):
 - (1) At the office of the Contractor or subcontractor(s) at all reasonable times for inspection, audit, reproduction or such other purposes as may be required by the Contracting Officer or by anyone authorized to have access to the records by the Contracting Officer or pursuant to any other provision of this Contract; and
 - (2) Except to the extent otherwise expressly set forth in this Contract, until three years from the date of final payment under this Contract; except that: (i) If the Contract is completely or partially terminated, for a period of three (3) years from either the date of any resulting final settlement or the date of final payment whichever is later; and (ii) If a pricing adjustment is involved in any dispute or litigation related to this Contract, for a period equal to the later of three years from the date of final payment or one year following the final disposition of the dispute or litigation.
- (e) Subcontracts. The Contractor shall insert an Article containing all the terms of this Article, including this paragraph, in all subcontracts that exceed \$100,000.

6. AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR

Funds are not guaranteed for performance under this Contract beyond the current fiscal year. The Authority's obligation for performance of this Contract beyond that date is contingent upon the availability of funds from which payment for contract purposes can be

made. No legal liability on the part of the Authority for any payment may arise for performance under this Contract until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing, by the Contracting Officer. Any option exercised by the Authority that will be performed in whole or in part in a subsequent fiscal year is subject to availability of funds in the subsequent fiscal year and will be governed by the terms of this Article.

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7. CONTRACTING OFFICERS TECHNICAL REPRESENTATIVE (COTR)

- (a) The Work will be conducted under the general direction of the Contracting Officer on behalf of the Authority, who may delegate certain responsibilities to a. Contracting Officer's Technical Representative (COTR). While the COTR will be thereupon authorized to perform such designated functions, the Authority will not be responsible for actions of the COTR or any other Authority employee or representative which exceeds his or her authority.
- (b) The Contractor will be furnished, upon written request, a copy of the delegation, if any, to a COTR for this Contract.

CHAPTER II – TIME/DELAYS/LIQUIDATED DAMAGES

1. PERIOD OF PERFORMANCE

a. The period of performance / ordering period is three (3) years commencing on the date of award, with two (2) 12 month option periods.

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- b. Any services to be furnished under this contract shall be ordered by issuance of task orders by the individuals or activities designated in the Schedule. Such orders may be issued during the ordering period.
- c. Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Authority's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period.
- d. The Authority has the unilateral right to extend the contract by exercising the option or options (as applicable) subject to all terms and conditions herein.
- e. The Authority may exercise the option(s) (if any) by written notice to the Contractor prior to commencement of the option period; provided, that the Authority shall give the contractor a preliminary notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Authority to an extension.
- f. The Authority may extend the term of this contract by written notice to the Contractor within 15 days provided that the Authority gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Authority to an extension.
- g. If the Authority exercises this option, the extended contract shall be considered to include this option clause.
- h. The Contractor recognizes that the services under this contract are vital to the Authority and may be required to continue without interruption and that, upon contract expiration, a successor, either the Authority or another contractor, may continue them.
- i. The Contractor agrees to
 - 1. Furnish phase-in training; and
 - 2. Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.
- j. The Contractor shall, upon the Contracting Officer's written notice,
 - 1. furnish phase-in, phase-out services for up to 90 days after this contract expires and
 - 2. negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required.

k. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

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- I. The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.
- m. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

2. <u>LIQUIDATED DAMAGES FOR DELAY – NOT APPLICABLE</u>

3. EXTENSIONS OF TIME/FORCE MAJEURE

- (a) For purposes of this Article, the term "Force Majeure" shall mean an unforeseen event or circumstance, beyond the control of, and not occasioned by the fault or neglect of, the Contractor (including subcontractors at any tier) or the Authority, which event gives rise to a delay in the progress or completion of the Work of the Contract, including, without limitation, acts of God, acts of war or insurrection, unusually severe weather, fires, floods, strikes, freight embargoes or other events or circumstances of like nature.
- (b) Notwithstanding the provisions of the LIQUIDATED DAMAGES article of the Contract, if the Contractor is delayed at any time during the progress of the Work by the neglect or failure of the Authority or by a Force Majeure, then the time for completion and/or affected delivery date(s) shall be extended by the Contracting Officer, subject to the following conditions:
 - (1) The cause of the delay arises after the award of the Contract and neither was nor could have been anticipated by the Contractor by reasonable investigation before such award;
 - (2) The Contractor demonstrates to the Contracting Officer that the completion of the Work and/or affected delivery(s) will be actually and necessarily delayed;
 - (3) The delay cannot be avoided or mitigated by the exercise of all precautions, efforts and measures reasonably available to the Contractor, whether before or after the occurrence of the cause of delay; and
 - (4) The Contractor makes written request and provides other information to the Contracting Officer as described in paragraph (f) below.

(c) In the event the Contractor shall be delayed at any time or for any period by two or more of the causes above-mentioned in this Article, the Contractor shall not be entitled to a separate extension for each one of the causes but only one period of extension shall be granted for the cumulative effects of the delay.

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- (d) Any reference in this Article to the Contractor shall be deemed to include Suppliers and Subcontractors at any tier, whether or not in privity of contract with the Contractor.
- (e) The Contracting Officer may rescind or shorten any extension previously granted, if the Contracting Officer subsequently determines that any information provided by the Contractor in support of a request for an extension of time was erroneous; provided that such accurate information, if known, would have resulted in a denial of the request for an excusable delay. Notwithstanding the foregoing, the Contracting Officer will not rescind or shorten any extension previously granted if the Contractor acted in reliance upon the granting of such extension and if, in the judgment of the Contracting Officer, such extension was based on information which, although later found to have been erroneous, was submitted in good faith by the Contractor.
- (f) The request for an extension of time pursuant to paragraph (a) shall be made within ten (10) days after the Contractor knows or should know any cause for which it may claim an excusable delay and shall provide any actual or potential basis for an extension of time, identifying such cause and describing, as fully as then practicable, the nature and projected duration of the delay and its effect on the completion of that part of the Work identified in the request. Within thirty (30) days of its receipt of all such information, the Authority shall advise the Contractor of its decision on such requested extension; except that, where it is not reasonably practicable for the Authority to render such decision in the thirty (30) day period, it shall, prior to the expiration of such period, advise the Contractor that it will require additional time and the approximate date upon which it expects to render such decision.
- (g) In no event shall a delay in progress or performance of the Work occasioned solely by a Force Majeure or the acts or omissions of any party outside the control of the Contractor be the basis for a Termination for Default pursuant to Article titled TERMINATION FOR DEFAULT; except that in no event shall a subcontractor at any tier be deemed a party outside the control of the Contractor for purposes hereof.

4. AUTHORITY DELAY OF WORK

(a) If the performance of all or any part of the Work is delayed or interrupted in a material manner or extent by an act or omission of the Authority in the administration of this Contract, which act or omission is not expressly or impliedly authorized by this Contract or by applicable provisions of law, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this Contract caused by such delay or interruption and the Contract modified in writing accordingly. Adjustment shall be made also in the delivery or performance dates and any other contractual provision, as to which compliance was materially affected by such delay or interruption. However, no adjustment shall be made under this Article or otherwise under this Contract for any delay or interruption to the extent that performance was or would have been delayed or interrupted by any other cause, including, without limitation: (i) the fault or negligence of the Contractor or any subcontractor; (ii) the fault or negligence of a third party to the Contract; (iii) an act constituting a Force

Majeure pursuant to Article titled EXTENSIONS OF TIME/FORCE MAJEURE; or (iv) any other cause for which an adjustment is provided or excluded under any other provision of this Contract or otherwise at law.

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- (b) An adjustment pursuant to paragraph (a) shall not be allowed:
 - (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the applicable act or omission claimed; and
 - (2) Unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption and in no event later than 30 days after such termination. Such claim shall be accompanied by appropriate documentation, specifically identifying and supporting the nature and extent of the claimed impact upon the cost and/or time required for performance; except that, in any instance in which it is not reasonably practical for the Contractor to fully determine or project such impact within such 30 day period, the claim shall be accompanied by such supporting documentation as is then reasonably available to the Contractor as well as the anticipated time frame in which the Contractor projects to provide the The Contracting Officer shall maintain the right additional materials. throughout the process to request the preparation and/or submission of such additional materials as it shall reasonably require in consideration of the claim and shall be under no obligation to conclude its consideration of the claim prior to receipt and review of all relevant materials. Any adjustment to the contract price pursuant to this Article must be agreed upon or otherwise determined prior to Final Payment

5. NOTICE TO THE AUTHORITY OF LABOR DISPUTES

- (a) Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.
- (b) The Contractor agrees to insert the substance of this Article, including this paragraph(b), in any subcontract hereunder as to which a labor dispute may delay the timely performance of this Contract.

CHAPTER III - ACCEPTANCE/INSPECTIONS/DEFICIENCIES

1. **INSPECTION OF SERVICES**

(a) The Contractor shall provide and maintain an inspection system acceptable to the Authority covering the Services under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Authority during contract performance and in the manner and in accordance with the time periods set forth in the provisions of the AUDIT AND INSPECTION OF RECORDS article of the Contract.

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- (b) The Authority has the right to inspect and test all Services called for by this Contract, at all times and places reasonably practicable during the term of the Contract. The Authority shall perform inspection and tests in a manner that will not unduly delay the work.
- (c) If the Authority performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, without cost, all reasonable facilities and assistance for the safe and convenient performance of such inspections or tests.
- (d) If any of the Services performed do not conform to contract requirements, the Authority may require the Contractor to perform the Services again in conformity with contract requirements, without additional cost. When the defects in performance cannot reasonably be corrected by such further performance, the Authority may:
 - (1) Direct the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and/or
 - (2) Reduce the contract price to reflect the reduced value of the Services performed.
- (e) If the Contractor fails to comply with the provisions of paragraph (d), the Authority may:
 - (1) By contract or otherwise, perform the Services and charge to the Contractor any cost thereby incurred by the Authority; and/ or
 - (2) In the event that the Contracting Officer deems such failure to comply a material breach, terminate the Contract for default.
- (f) Nothing contained herein shall be deemed to preclude the Contracting Officer from implementing a price reduction arising from the reduced value to the Authority of Services ultimately corrected in conformity with the contract requirements for the period of their non-conformity.

2. <u>INSPECTION OF SUPPLIES – NOT APPLICABLE</u>

3. <u>ACCEPTANCE OF SUPPLIES – NOT APPLICABLE</u>

4. NEW MATERIAL [SUPPLIES] - NOT APPLICABLE

5. CORRECTION OF DEFICIENCIES & WARRANTY

(a) Notwithstanding anything to the contrary otherwise set forth in this Contract, all workmanship, parts and materials furnished for all the Work shall be unconditionally warranted against failures or defects for a period of one (1) year after the _item supplied is accepted, or placed in service, by the Authority, whichever is earlier. The Contractor shall accept the Authority's records with respect to the date the item was placed in service.

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- (b) In the event that any Work covered by the warranty provisions fails during the warranty period, the Contractor shall repair or replace the work within ninety (90) days without cost or expense to the Authority.
- (c) The warranty will not apply to the extent that such failure is caused by user abuse.
- (d) Should the Contractor shall fail to repair or replace any part or do any Work in accordance with the terms of the warranty, or if immediate replacement or Work is necessary to maintain operation of the item supplied, the Authority shall have the right to cause such replacement to be made, utilizing its own forces and/or those of third parties as the Authority shall reasonably deem appropriate, such work being at the expense of the Contractor.
- (e) Each piece of equipment, component or part thereof that is replaced, repaired, adjusted or serviced in any manner under the terms of warranty by the Contractor during the warranty period shall be reported to the Contracting Officer on forms supplied by the Authority. Each report shall indicate in detail all repairs, adjustments and servicing to each and every component, unit or parts thereof.
- (f) Any warranty or retrofit work shall be accomplished with minimum disruption to Authority operations and its maintenance and service facilities. The Authority shall at its sole discretion determine the availability of facilities for warranty or retrofit work.
- (g) The Contractor shall make available adequate service facilities, including spare parts, for all the items supplied. Trained technical service personnel shall be available to the Authority sufficient to meet its warranty obligations.
 - (1) The Contractor shall provide field service representatives who are competent and fully qualified in the maintenance and operation of the supplied items. These field service representatives shall assist the Authority in overcoming any difficulties in the operation or maintenance of the items supplied. They shall further serve as on-site representatives of the Contractor for any component failure claims or warranty claims against the Contract.

(2) During the warranty period, a field service representative shall be available within 24 hours.

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(h) The rights of the Authority set forth in this Article shall be in addition to those set forth elsewhere in this Contract or otherwise at law or equity.

6. FIRST ARTICLE INSPECTION – NOT APPLICALBE

7. F.O.B. DESTINATION

- (a) Unless otherwise specified, the Contractor shall furnish all supplies to be delivered under this Contract "f.o.b. destination". As used herein, "f.o.b. destination" means:
 - (1) Free of expense to WMATA on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and
 - Supplies shall be delivered to the destination consignee's warehouse unloading platform, or receiving dock, at the expense of the Contractor. WMATA shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of WMATA acting in its contractual capacity. If the Contractor uses a rail carrier or freight forwarder for less than carload shipments, the Contractor shall assure that the carrier will furnish tailgate delivery if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall:

- (1) Pack and mark the shipment to comply with contract specification;
- (2) In the absence of specifications, prepare the shipment in conformance with carrier requirements;
- (3) Prepare and distribute commercial bills of lading;
- (4) Deliver the shipment in good order and condition to the point of delivery specified in the contract;
- (5) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the Contract;
- (6) Furnish a delivery schedule and designate the mode of delivering carrier; and
- (7) Pay and bear all charges to the specified point of delivery.

8. QUALITY ASSURANCE/QUALITY CONTROL

The Contractor shall be responsible for quality assurance and for assuring that the Work conforms to the requirements of the Contract Documents. The Contractor shall maintain an effective and economical quality control program planned and developed in conjunction with other Contractor functions necessary to satisfy the Contract requirements. The quality control program shall establish and implement procedures to ensure that only acceptable Supplies or Services are tendered to the Authority for acceptance, and shall demonstrate both recognition of the quality requirements of the Contract and an organized approach to

satisfy these requirements. The program shall ensure that quality requirements are determined and satisfied throughout all phases of Contract performance, including, as applicable, design development, purchasing, fabrication, processing, assembly, inspection, testing, packaging, delivery, storage and systems check and shall provide for the early and prompt detection of actual or potential deficiencies, trends, or conditions which could result in unsatisfactory quality.

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9. DESIGN WITHIN FUNIDNG LIMITATIONS

- a. The Contractor may be required to accomplish the design services required under task orders so as to permit the award of a contract, using standard procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in issued task orders. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Authority if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.
- b. The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Authority may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in issued task orders, or the Authority may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Authority may prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

10. RESPONSIBILITY OF THE ARCHITECT-ENGINEER CONTRACTOR

- a. The Contractor may be required to accomplish the design services required under task orders so as to permit the award of a contract, using standard procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in issued task orders. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Authority if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.
- b. The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is

unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Authority may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in issued task orders, or the Authority may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Authority may prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

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CHAPTER IV—CHANGES/ PRICING ADJUSTMENTS

1. CHANGE ORDERS

- (a) The Contracting Officer may at any time, by a written order, and without notice to the sureties, if any, direct and implement change orders, within the general scope of this Contract, including but not limited to one or more of the following:
 - (1) Nature and/or extent of Services to be performed or Supplies to be furnished;

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- (2) Time of performance (i.e., hours of the day, days of the week, etc.); or
- (3) Place of performance of the Services.
- (b) If, in the judgment of the Contracting Officer or as otherwise determined, any such change causes an increase or decrease in the cost of, or the time required for, the performance of any part of the Work under this Contract, whether or not directly changed by the order, the Contracting Officer shall make an equitable adjustment in the Contract price, the delivery schedule, or both, and shall modify the Contract accordingly.
- In any instance where the Contractor asserts a right to an adjustment in the Contract (c) price or time required for performance as the result of a change directed pursuant to this Article, it must submit a written claim so advising the Authority within 30 days from the date of receipt of the written order directing the change. The claim shall be accompanied by appropriate documentation, specifically identifying and supporting the nature and extent of the claimed impact upon the contract price and/or time required for performance; except that, in any instance in which it is not reasonably practical for the Contractor to fully determine or project such impact within such 30 day period, the claim shall be accompanied by such supporting documentation as is then reasonably available to the Contractor as well as the anticipated time frame in which the Contractor projects to provide the additional materials. The Contracting Officer shall maintain the right throughout the process to request the preparation and/or submission of such additional materials as it shall reasonably require in consideration of the claim and shall be under no obligation to conclude its consideration of the claim prior to receipt and review of all relevant materials. Any adjustment to the contract price pursuant to this Article must be agreed upon or otherwise determined prior to Final Payment.
- (d) If the Contractor's proposed price adjustment includes the cost of property rendered obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.
- (e) Failure to agree to the right of either party to any adjustment in price or time for performance as the result of a change implemented pursuant to this Article shall be subject to adjudication in accordance with the Disputes Article of this Contract. However, notwithstanding any such failure to agree and/or the pendency of any such dispute, the Contractor expressly acknowledges that it shall remain fully obligated to perform the Work of the Contract as so changed.

(f) Notwithstanding any other provision of this Contract, the Contractor shall promptly notify the Contracting Officer of matters, whether implemented as a change order in accordance with this Article or otherwise, which the Contractor believes or asserts may reasonably result in either an increase or decrease in the Contract price or the time required for performance of any part of the Work and shall take action with respect thereto as directed by the Contracting Officer. The Contractor's failure to provide such notification shall constitute a waiver of its right to seek an adjustment in the Contract price or time required for such performance.

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(g) Except to the extent, if any, otherwise expressly set forth in this Contract, in no event shall the Contractor be entitled to payment for change orders, additional or extra supplies or services or other modification to any requirement or term of the Contract unless such has been authorized in writing by the Contracting Officer.

2. PRICING OF ADJUSTMENTS

- (a) The parties agree that, notwithstanding any interpretation of contract cost principles to the contrary, the Authority will not be liable for interest, however represented, on or as a part of any claim, request, bid or adjustment, including equitable adjustments, whether said claim, request, bid or adjustment, including equitable adjustments, arises under the Contract or otherwise.
- (b) As part of its bid for any modification to this Contract requiring a price adjustment involving an aggregate increase or decrease in excess of \$100,000 to the Contact price, the Contractor shall submit to the Contracting Officer, either actually or by specific identification in writing, cost or pricing data under the conditions described in this paragraph and certify that, to the best of its knowledge and belief, the cost or pricing data submitted is accurate, complete and current as of the date of the bid. The Contractor, at the discretion of the Contracting Officer, may be required to submit cost or pricing data for price adjustments less than \$100,000.
- (c) The Contractor shall ensure that the substantive terms of this Article are included in all subcontracts of any tier as to which the value of the subcontracted work exceeds \$100,000.

3. ACCOUNTING AND RECORD KEEPING FOR ADJUSTMENTS

- (a) Applicability. This Article shall apply to any adjustment in the price of this Contract initiated by the Contractor or the Authority
- (b) Forward Priced Adjustments. Unless waived in writing in advance by the Contracting Officer, the Contractor shall furnish to the Contracting Officer a proposed price adjustment in advance of performance of any Work for which a price adjustment is requested. The Contractor shall generate such records as are necessary to substantiate all elements of the proposed adjustment, which records shall be specifically segregated and identified in the Contractor's accounting system as being applicable to the pricing adjustment request.
- (c) Post Pricing Adjustments. This paragraph shall be applicable with respect to price adjustments which either (i) are expected to exceed \$50.000; or (ii) regardless of the value of the adjustment, arise in connection with a Contract with a base sum in excess of \$1,000,000. In addition to the records required pursuant to paragraph (b) above, in

the event pricing of an adjustment under this Contract is not agreed upon between the Contractor and the Contracting Officer prior to the commencement of work for which the pricing adjustment is requested, the Contractor and any subcontractor engaged in work for which the pricing adjustment is requested, shall maintain accounts and original cost records specifically segregated and identified by job order or other appropriate accounting procedures approved by the Contracting Officer of all incurred segregable costs related to the work for which the pricing adjustment is requested. The Contractor shall maintain accounts and records which segregate and account for the costs of all work associated with that part of the project for which the pricing adjustment is requested and shall allocate the costs so accumulated between: (1) work required under the base Contract; (2) work requested to be reimbursed under the pricing adjustment; and (3) work claimed or determined to be related to other actual or proposed adjustments, including but not limited to, changes orders, differing site conditions, and the like. The accounts and records so established shall accumulate such costs under logical costs groups, such as material, labor, equipment, subcontracts, field overhead and the like. The Contractor shall record these costs on a form approved by the Contracting Officer.

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- (e) Access to Records. As a condition to the Authority's obligation to consider any claim for a potential price adjustment under any provision of this Contract, the Contractor shall grant the Authority access to review and ascertain the validity of the accounting records being maintained for segregation of costs, including base cost records, and to audit any such costs as are deemed appropriate by the Contracting Officer.
- (f) Limitation on Pricing Adjustment. In the event the Contractor or any subcontractor fails to generate, maintain, or make available any records required under the Contract, and in addition to any and all additional rights to which the Authority may thereupon be entitled, the Contracting Officer shall determine whether such failure is willful, deliberate or otherwise precipitated by bad faith on the part of the Contractor, in which event the Contractor shall not be entitled to any price adjustment for the Work in question. Where the Contracting Officer determines that the failure was not the result of the Contractor's bad faith, the Contractor Officer shall determine the reasonable direct cost of the work for which records are not available, and add a single mark-up for indirect expenses not to exceed ten percent (10%) of the direct costs based on:
 - (1) An audit of any records of the Contractor or subcontractor made available to the Authority; and/or
 - (2) An Authority estimate as adopted or modified by the Contracting Officer.
- (a) In no event shall the Contractor and/or subcontractor be allowed any profit on claimed work for which records are not made available in accordance with its obligations under this Article and otherwise in the Contract.
- (h) Flow-down clause. The Contractor shall ensure the inclusion of all the provisions of this Article in all subcontracts issued under this Contract, modified as necessary, for proper identification of the contracting parties and the Contracting

CHAPTER V – INVOICES/PAYMENTS/ DEDUCTIONS

1. BILLING AND PAYMENT

- (a) The Authority shall pay and the Contractor shall accept the amounts set forth in the Price Schedule as full compensation for all costs and expenses of completing the Work in accordance with the Contract, including, but not limited to, all labor and material required to be done or furnished under this Contract; all overhead, expenses, fees and profits including the cost of providing storage yard or facilities; all risks and obligations set forth in the Contract; any applicable fees or taxes; and all expenses due to any unforeseen difficulty encountered in the prosecution of the Work.
- (b) Payments will be made following Acceptance of the Services or Supplies to be provided under this Contract and after receipt of a properly completed invoice. WMATA will accept the submittal of invoices in one of the following methods:
 - (1) Email: Invoices may be submitted through email at: apinvoice@wmata.com. Please submit one invoice and supporting documentation per PDF attachment. You may submit more than one PDF attachment per email.

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- (2) Fax: Invoices may be submitted via the following number: 1-866-534-9063. Please submit one invoice and all supporting documentation for this invoice per fax.
- (3) Regular Mail: Invoices may be submitted via U.S. Postal Service to the following address:

WMATA-Accounts Payable PO Box 1910 Beltsville, MD 20704-1910

Note: This address is only for vendor invoices. Correspondence should not be sent to this address.

- (c) Invoices shall contain the vendor name, a unique invoice number for each shipment or service, invoice date, payment terms, total invoice amount, remit to address, Purchase Order Number, freight terms, description of each item being invoiced, quantity, unit item cost, extended cost by item, total freight/handling costs, and contact name and email address. Final invoices must clearly be marked "FINAL" and cite the amount of the contract, amount previously paid, and the balance due totals.
- (d) The Authority shall remit payment, generally within 30 days of its receipt of an invoice satisfying the requirements of paragraphs (b) and (c), at the prices stipulated in the Contract for Supplies delivered and accepted or Services rendered and accepted, less any applicable deductions.

2. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA – MODIFICATIONS

With respect to any modification, change order, or otherwise, of this Contract which involves aggregate increases and/or decreases in costs plus applicable profit in excess of \$100,000, in the event that the Contracting Officer ultimately determines that any price, including profit

or fee, previously negotiated in connection with any such modification was based upon cost or pricing data furnished by the Contractor (including any prospective or actual subcontractor at any tier) which was not complete, accurate or current, such that the amount paid the Contractor for such price adjustment was thereby greater than that to which the Contractor would have been entitled based upon the submission and utilization of accurate and complete data, the Authority shall be entitled to an adjustment in an amount equal to such overpayment. The right granted the Authority hereunder shall be in addition to any other or additional rights it may have under this Contract or otherwise.

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3. SUBCONTRACTOR PAYMENTS

- (a) The Contractor shall, under this Contract, establish procedures to ensure timely payment of amounts due pursuant to the terms of its subcontracts. The Contractor shall pay each subcontractor for satisfactory performance of its contract, or any billable portion thereof, no later than ten (10) days from the date of the Contractor's receipt of payment from the Authority for work by that subcontractor. The Contractor shall also release, within ten (10) days of satisfactory completion of all work required by the subcontractor, any retention withheld from the subcontractor.
- (b) The Contractor shall certify on each payment request to the Authority that payment has been or will be made to all subcontractors in accordance with paragraph (a) above for previous payments by the Authority to the Contractor. The Contractor shall notify the Contracting Officer or other delegated Authority representative with each payment request, of any situation in which scheduled subcontractor payments have not been made.
- (c) In the event of a claim by any subcontractor that the Contractor has failed to comply with the terms of this Article, the Contractor agrees to fully cooperate in any Authority investigation, and, if deemed appropriate by the Authority, to implement appropriate remedial measures to ensure future compliance.
- (d) The Contractor agrees that the Authority may provide information which the Contracting Officer deems appropriate in response to inquiries from subcontractors seeking to determine the status of Authority payments to the Contractor.
- (e) Nothing contained in this Article or elsewhere in this Contract is intended nor be deemed to create a contractual relationship between the Authority and any subcontractor or to alter or affect traditional concepts of privity of contract.

4. GARNISHMENT OF PAYMENTS

Payment under this Contract shall be subject to any garnishment, attachment orders, and or levies issued pursuant to the laws of the United States, Maryland, Virginia, and the District of Columbia.

CHAPTER VI – CONTRACT TERMINATION/STOP WORK ORDERS/DISPUTES

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1. STOP WORK ORDERS

- (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part of the Work for a period of up to 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a STOP WORK ORDER ("SWO") issued under this Article. Upon receipt of the SWO, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the SWO during the period of work stoppage. Within a period of 90 days after an SWO is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either:
 - (1) Cancel the SWO; or
 - (2) Terminate the work covered by the SWO as provided in the TERMINATION FOR DEFAULT or TERMINATION FOR CONVENIENCE articles of this Contract, as appropriate.
- (b) If a SWO is cancelled or its initial period or any extension thereof expires, the Contractor shall resume work. An equitable adjustment shall be made in the delivery schedule or Contract price, or both, and the Contract modified in writing accordingly, if, in the judgment of the Contracting Officer or as otherwise determined:
 - (1) The SWO results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this Contract; and
 - (2) The Contractor submits a written claim for such adjustment within 30 days after the end of the period of work stoppage; provided that, at the sole discretion of the Contracting Officer, the Authority may elect to consider and act upon any such claim submitted at any time before Final Payment under this Contract.
- (c) If an SWO is not cancelled and the work covered by the Contract is terminated for the convenience of the Authority, the Contracting Officer shall allow reasonable costs, if any, resulting from the SWO in arriving at the termination settlement pursuant to the provisions of the TERMINATION FOR CONVEINENCE article of the Contract.
- (d) If an SWO is not cancelled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order; except that, if the Contracting Officer determines that the SWO was precipitated by, or arose from, a material breach of any term or condition of this Contract on the part of the Contractor, such costs shall not be allowed and the rights and obligations of the parties shall be subject in all respects to the Termination for Default provisions of this Contract.

2. TERMINATION FOR DEFAULT

- (a) The Contractor shall be in default if it commits a breach of any of its obligations under the Contract deemed material by the Contracting Officer. Without limiting the generality of the foregoing and in addition to those instances specifically referred to in the Contract, the Contractor shall be in default in the following circumstances:
 - (1) It fails to begin, or abandons, the Work of the Contract in accordance with the contractual requirements;

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- (2) It fails to deliver the Supplies or perform the Services within the time specified in the Contract or any extension approved by the Contracting Officer;
- (3) It fails to progress the Work in a manner deemed unreasonable or unnecessary by the Contracting Officer or so as to endanger performance of the Contract; or
- (4) In the view of the Contracting Officer, the Contractor is willfully violating any of the provisions or obligations of the Contract or is not executing such provisions or obligations reasonably and in good faith.
- (b) In the event of a material breach by the Contractor pursuant to paragraph (a), the Contracting Officer is authorized to direct a written notice to the Contractor, specifying the nature of the breach and providing that, if the Contractor fails to cure such failure(s) within ten days (or such additional time as authorized by the Contracting Officer), the Authority shall proceed to terminate the Contract, in whole or designated part, for default in accordance with the provisions hereof (a "Notice to Cure"). Should the Contractor fail to cure the breach to the satisfaction of the Contracting Officer within the ten day period, or such additional period as may be designated in the Notice to Cure, the Authority may thereupon, immediately upon conclusion of such period or at any reasonable time thereafter, terminate the Contract, in whole or part, by written notice to the Contractor.
- (c) Upon receipt of a notice of default, the Contractor shall immediately cease performance of the Work so terminated. The Authority shall thereupon have the right to take any action necessary to complete the Work, including performing the Work itself, or contracting with another party to do so. In the event the Work is completed directly by the Authority or by a third party, the Contractor shall be liable for the additional costs and expenses necessary to complete the Work, including, without limitation, labor, materials, plant, tools, equipment, supplies and property. The costs and expenses so charged may be deducted by the Authority and paid out of any monies otherwise payable to the Contractor. Nothing contained herein shall be deemed to relieve the Contractor of its continuing obligation to perform any portion of the Work of the Contract which has not been terminated.
- (d) The Authority may, in its sole discretion, waive a default by the Contractor, but such waiver and/or failure by the Authority to take action in respect to any default shall not be deemed a waiver of any subsequent default.
- (e) Upon any termination for default, the Authority may require the Contractor to transfer title and deliver to the Authority, as directed by the Contracting Officer of (1) any

completed Supplies, and (2) partially completed Supplies, components (including data and intellectual property) and contract rights that the Contractor has specifically produced or acquired for the terminated portion of this Contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Authority has an interest.

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- (f) Upon any termination for default, the Authority shall pay for completed Supplies delivered and accepted in accordance with the terms of the Contract, as well as actions reasonably taken by the Contractor at the direction of the Contracting Officer for the protection and preservation of property. The Authority may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Authority against loss because of outstanding or claimed liens, or other pending or anticipated claims under the Contract.
- (g) If, at any time following the Authority's issuance of a termination for default hereunder, it is determined that the Contractor was not in default or that the default was excusable, the termination shall thereupon be deemed a termination for convenience and the rights and obligations of the parties shall be determined in accordance with the provisions of the TERMINATION FOR CONVEIENCE clause of the Contract.
- (h) Any dispute or failure of the parties to agree with respect to any issue arising under this Article shall be subject to review and adjudication in accordance with the provisions of the DISPUTES clause of the Contract relating to Disputes; except that, in no event shall the Authority's issuance of a Notice to Cure pursuant to paragraph (b) be the basis of a Dispute pursuant to the provisions of the disputes article or be otherwise subject to further review under this Contract or otherwise. Nor shall the pendency of any Dispute constitute a basis for the delay or suspension of, or otherwise affect, the right of the Authority to proceed in accordance with the provisions of this Article, including without limitation its right to complete the Work as above described, or the obligation of the Contractor to complete any portion of the Work which has not been terminated.
- (i) The rights and remedies of the Authority in this Article are in addition to any other rights and remedies provided by law or under this Contract.

3. TERMINATION FOR CONVENIENCE

- (a) The Authority may terminate performance of Work under this Contract in whole, or from time to time, in part, if the Contracting Officer determines that a termination is in the Authority's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) Upon receipt of a Notice of Termination, and except as otherwise directed by the Contracting Officer, the Contractor shall immediately proceed as follows:
 - (1) Stop work as specified in the Notice of Termination;
 - (2) Complete performance of the work not terminated;

(3) Place no further subcontracts or orders for materials, services, or facilities, except as necessary to complete the remaining portion of the Contract;

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- (4) Terminate all subcontracts to the extent that they relate to the work terminated:
- (5) Assign to the Authority, as directed by the Contracting Officer, all right(s), title, and interest of the Contractor under the subcontracts terminated; in such event, the Authority shall have the right to settle or pay any termination costs arising out of the subcontracts and have no further liability to the Contractor in connection with the work which was the subject of such subcontracts;
- (6) With approval of the Contracting Officer, settle all outstanding liabilities and settlement costs arising from the termination of subcontracts;
- (7) As directed by the Contracting Officer, transfer title and deliver to the Authority:
 - (i) The fabricated or un-fabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and
 - (ii) The completed or partially completed plans, drawings, information and other property that, if the Contract had been completed, would be required to be furnished to the Authority.
- (8) Take any action that may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this Contract that is in the possession of the Contractor and in which the Authority has or may acquire an interest;
- (9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in paragraph (b)(7); provided, however, that the Contractor (a) is not required to extend credit to any purchaser and (b) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce payments to be made by the Authority under this Contract, credited to the price or cost of the Work, or paid in any other manner directed by the Contracting Officer.
 - (c) The Contractor shall submit complete termination inventory schedules not later than 120 days from the effective date of termination, unless such time is extended in writing by the Contracting Officer.
 - (d) As soon as reasonably practicable, and in any event not later than 20 business days following the Authority's issuance of a Notice of Termination pursuant to paragraph (a), the Contractor shall submit a proposal to the Contracting Officer in the form prescribed by the Contracting Officer detailing the costs to which it asserts entitlement pursuant to this Article. If the Contractor fails to submit the proposal within the time prescribed, the Contracting Officer may determine, on the basis of information available,

the amount, if any, due the Contractor as a result of the termination and shall pay the amount determined.

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- (e) Following submission of the Contractor's proposal pursuant to paragraph (d), the parties shall seek to agree upon the whole or any part of the amount to be paid or remaining to be paid as a result of the termination. The amount may include a reasonable allowance for profit on work completed. However, in no event shall the total amount to be paid the Contractor pursuant to this Article exceed the total contract price as reduced by (1) payments previously made and (2) the contract price of the remaining work not terminated.
- (f) If the parties fail to agree on the whole amount to be paid because of the termination, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed upon under paragraph (e):
 - (1) The contract price for completed Supplies or Services accepted by the Authority (or sold or acquired under paragraph (b)(9)) not previously paid for, adjusted for any saving of freight and other charges.
 - (2) The total of:
 - (i) The costs incurred prior to termination in the performance of the Work terminated, including initial costs and preparatory expenses allocable thereto, but excluding any costs attributable to items compensated or to be paid for under—sub-paragraph (f)(1);
 - (ii) The cost of settling and paying termination costs under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not excluded in sub-paragraph (f)(2)(i); and
 - (iii) A sum, representing profit on the items described in sub-paragraph (f)(2)(i) determined by the Contracting Officer pursuant to Section 49.202 of the Federal Acquisition Regulation, in effect on the date of this Contract, to be fair and reasonable; however if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, the Contracting Officer shall allow no profit under this sub-paragraph and shall reduce the settlement to reflect the projected rate of loss.
 - (3) The reasonable indirect costs of settlement of the work terminated, including:
 - (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals;
 - (ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and
 - (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(g) Except for normal spoilage, and except to the extent that the Authority expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (f), the fair value, as determined by the Contracting Officer, of property that is unavailable or damaged so as to become undeliverable to the Authority or to a third party.

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- (h) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this Contract, shall govern all costs claimed, agreed to, or determined under this Article.
- (i) The Contractor shall have the right of appeal, under the DISPUTES Article, from any determination made by the Contracting Officer under paragraphs (d) or (f), except that a failure on the part of the Contractor to submit the termination settlement proposal within the time provided in paragraph (d), or timely request an extension thereof, shall constitute a waiver of its right to appeal the determination of the Contracting Officer pursuant to the Disputes Article or any otherwise applicable contractual, legal or equitable remedy.
- (j) In determining any sum due the Contractor under this Article, there shall be deducted:
 - (1) All un-liquidated advances or other payments to the Contractor under the terminated portion of the Contract;
 - (2) The value, as determined or reasonably projected by the Contracting Officer, of any claim which the Authority has against the Contractor under this Contract, including any third-party claim as to which the Contracting Officer is not satisfied that sufficient insurance coverage is in place; and
 - (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other items procured by the Contractor or sold under the provisions of this Article and not recovered by or credited to the Authority.
- (k) If the termination is partial and the Contractor asserts that the partial termination has rendered enforcement of the remainder of the Contract at the remaining Contract price inequitable, the Contractor may file a proposal with the Contracting Officer for an adjustment of the price(s) of the continued portion of the Contract, which proposal shall be submitted within 90 days from the effective date of termination, unless extended in writing by the Contracting Officer, and shall be accompanied by appropriate supporting documentation of the claimed inequity.
- (I) The Contractor's responsibilities and obligations under this Article shall apply and remain in full force and effect notwithstanding the pendency of any dispute or other delay relating to determination of the appropriate price adjustment or any other issue arising from the termination for convenience.
- (m) Unless otherwise provided in this Contract or by statute, the Contractor and all subcontractors whose work is encompassed in the termination settlement shall maintain all records and documents relating to the terminated portion of this Contract for three (3) years after final settlement. This includes all books and other evidence bearing on the costs and expenses of the Contractor under this Contract. The

Contractor shall make these records and documents available to the Authority, its governing jurisdictions and any other federal, state, or local entities providing funding for this Contract, and to the Comptroller General of the United States, or the agents or representatives of any of them, at the Contractor's office, at all reasonable times, without any direct charge.

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4. ASSIGNMENT

- Except as otherwise provided in this provision, the Contractor shall not transfer any of (a) its rights and obligations under this Contract to third parties without the prior consent of the Authority. The Authority may recognize a third party as successor in interest to the Contract in the event of a transfer of all or substantially all of the assets of the Contractor, a Division of the Contractor involved in the performance of the Contract, or a Parent company providing a performance quarantee under this Contract, (i.e., sales of assets, transfer of assets pursuant to merger or consolation, or incorporation of a proprietorship or partnership). Such recognition of the transfer shall be within the discretion of the Contracting Officer after review of the facts and circumstances surrounding each request. At the discretion of the Contracting Officer, the Contracting Officer may conduct an evaluation of the successor party's capability to perform the Contract in the same manner and to the same extent the Contracting Officer was empowered to conduct a responsibility determination as part of the original solicitation for this Contract. Should the Contracting Officer, for any reason, not recognize such a successor in interest, it may terminate this Contract for the convenience of the Authority.
- (b) Any attempt to transfer by assignment not authorized by the Contracting Officer hereunder shall constitute a material breach of the Contract on the part of the Contractor and the Authority may thereupon terminate the Contract in accordance with the TERMINATION FOR DEFAULT provisions set forth in the Contract.
- (c) Nothing contained herein shall be deemed to preclude the Contractor's assignment of claims for monies due or to be become due the Contractor under this Contract to a bank, trust company or other financing institution, including any Federal lending agency, upon written notice of such assignment to the Authority.

5. DISPUTES

(a) Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under or related to this Contract which is not disposed of by agreement, shall be decided by the Contracting Officer, who shall reduce his/her decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive unless, within thirty (30) calendar days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written notice of appeal addressed to the Authority Board of Directors. Such notice should indicate that an appeal is intended and should reference the decision and contract number. The decision of the Board of Directors or its duly authorized representative for the determination of such appeals shall be final and conclusive unless in proceedings initiated by either party for review of such decision in a court of competent jurisdiction, the court determines the decision to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or is not supported by substantial evidence. In connection with any

appeal proceeding under this Article, the Contractor, or the Authority, as the case may be, shall be afforded an opportunity to be heard and offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the Contracting Officer's decision. The Armed Services Board of Contract Appeals is the authorized representative of the Board of Directors for final decisions on an appeal.

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(b) This DISPUTES Article does not preclude consideration of questions of law in connection with decisions provided for in paragraph (a) above. Nothing in the Contract, however, shall be construed as making final the decisions of the Board of Directors or its representative on a question of law.

CHAPTER VII - INDEMNIFICATION/INSURANCE/RISK OF LOSS

1. <u>INDEMNIFICATION</u>

a. Contractor shall indemnify, defend and hold harmless the Authority, its directors, officers, employees and agents, from all liabilities, obligations, damages, penalties, claims, costs, charges and expenses (including reasonable attorney's fees), of whatsoever kind and nature for injury, including personal injury or death of any person or persons, and for loss or damage to any property, including the property of the Contractor and the Authority, occurring in connection with, or in any way arising out of the use, occupancy and performance of the work and/or any acts in connection with activities to be performed under this contract, unless the loss or damage is due to the sole negligence of the Authority. Nothing in the preceding sentence shall be deemed to relieve Contractor from ultimate liability for any obligation of Contractor under this Contract.

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- b. Contractor shall indemnify, defend and hold harmless the Authority, its directors, officers, employees and agents, against any and all claims, liabilities, losses, demands, damages, penalties, costs, charges, remedial costs, environmental claims, fees or other expenses including attorneys' fees, related to, arising from or attributable to any effluent or other hazardous waste, residue, contaminated soil or other similar material discharged from, removed from, or introduced on, about or under the job site; provided, however, that the foregoing indemnity does not apply to loss or damage due to preexisting conditions, whether known or unknown.
- c. If any action or proceeding relating to the indemnification required is brought against the Authority, then upon written notice from the Authority to the Contractor, the Contractor shall, at the Contractor's expense, resist or defend such action or proceeding by counsel approved by the Authority in writing, such approval not to be unreasonably withheld, but no approval of counsel shall be required where the cause of action is resisted or defended by counsel of any insurance carrier obligated to resist or defend the same. The Authority reserves the right to use its own counsel under this indemnity at Contractor's sole cost and expense.
- d. Contractor understands and agrees that it is Contractor's responsibility to provide indemnification to the Authority pursuant to this Section. The provision of insurance, while anticipated to provide a funding source for this indemnification, is in addition to any indemnification requirements and the failure of Contractor's insurance to fully fund any indemnification shall not relieve the Contractor of any obligation assumed under this indemnification.

2. INSURANCE REQUIREMENTS

Minimum Insurance Requirements

The following outlines the minimum insurance coverages and limits of insurance for those coverages that Contractor will be required to purchase and maintain. Contractor shall procure, at their sole cost and expense the minimum required insurance as follows:

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General Insurance Requirements

- 1) Contractor is required to maintain the insurance coverage(s) outlined in this Section for a period of time commencing the sooner of the execution of this contract, or the start of Work, and continuing through the completion of all work including any and all punch list and warranty work, without interruption.
- 2) The insurance coverage and limits of insurance outlined herein are minimum coverage and limits. Contractor is encouraged, at its sole cost and expense, to purchase any additional insurance coverages and or limits of insurance that Contractor deems prudent and necessary to manage risk in the completion of this contract.
- 3) Upon written request from WMATA, contractor shall provide copies of any and all policy(s) required by these Minimum Insurance Requirements, including all endorsement(s), within 5 business days of such request.
- 4) Receipt, review and communications regarding Certificates of Insurance (COI), Insurance Policy(s), endorsements or other materials utilized to document compliance with these Minimum Insurance Requirements does not constitute acceptance by WMATA.
- 5) Insurance Policies must be written on admitted paper, (unless otherwise indicated herein) with an insurance company acceptable to WMATA.
- 6) Unless otherwise noted, "Claims Made" insurance policies are not acceptable.
- 7) Any insurance policy utilizing a Self-Insured Retention (SIR) requires written approval from WMATA.
- 8) Contractor is required to incorporate these Minimum Insurance Requirements into contract requirements of all Sub-contractors of every tier. Contractor, at their sole peril may amend the minimum required limits of coverage for Sub-contractors but not the Required Minimum Coverage(s). Doing so does not relieve Contractor from its respective liability to WMATA.
- 9) Compliance with these Minimum Insurance Requirements does not relieve Contractor from their respective liability to WMATA, even should that liability exceed the minimum insurance limits, or minimum coverage requirements outlined herein.

Workers' Compensation and Employer's Liability

Required Minimum Limits of Coverage:

Workers' Compensation	Statutory	
Employers' Liability	\$1,000,000	Each Accident
	\$1,000,000	Disease Policy Limit
	\$1,000,000	Disease Each Employee

Required Minimum Coverage(s):

- 1) Workers' Compensation Statutory Coverage must be provided on an "All States" basis.
- 2) Contractor and Sub-contractors of any tier performing work within 500 feet of navigable water must have their Workers' Compensation Policy endorsed to provide coverage for both Jones Act Liability and Longshore and Harbor Workers' Compensation Act Liability.

Commercial General Liability

Required Minimum Limits of Coverage:

\$5,000,000	Each Occurrence Limit
\$5,000,000	General Aggregate Limit
\$5,000,000	Products and Completed Operations Limit

Required Minimum Coverage(s):

- 1) Commercial General Liability (CGL) coverage form shall be ISO Occurrence Form CG0001 (12/04) or its equivalent. Equivalency determination shall be made in WMATA's sole and unreviewable discretion.
- 2) Required minimum limits of coverage may be achieved through a combination of the aforementioned CGL coverage form and Umbrella Excess Liability coverage form(s), provided that the umbrella excess liability coverage form(s) provide the same or broader coverage than the prescribed CGL coverage form.
- 3) Policy shall be endorsed with Additional Insured Endorsement(s) in compliance with the "Additional Insured" Section below. Commercial General Liability and Umbrella Excess Liability forms must provide defense coverage for additional insureds.
- 4) Policy shall be endorsed with a Waiver of Subrogation Endorsement(s) in compliance with the Waiver of Subrogation" Section below.

5) The definition of "Insured Contract" shall be modified to provide coverage for contractual liability for contracts for construction or demolition operations that are within 50 feet of a railroad, and sidetrack agreements. Evidence must be provided to WMATA.

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- 6) Defense Costs (Allocated Loss Adjustment Expense) must be included and in excess of the policy limits for all Primary Liability and Umbrella Excess Liability Policies.
- 7) Policy shall be endorsed with ISO endorsement CG 25 03 03 97; "Designated Construction Project(s) General Aggregate Limit", and designate "Any and all construction projects" as the Designated Construction project.
- 8) Policy shall be endorsed with ISO endorsement CG 25 04 03 97; "Designated Location General Aggregate Limit", and designate "Any and all locations" as the Designated Location.

Railroad Protective Liability Insurance (RRP)

THIS REQUIREMENT IS ONLY for work within 50 feet of WMATA railroad tracks or work within WMATA rail stations. Each individual project should be clearly identified as to whether it is or is not within 50 feet of WMATA railroad tracks or within WMATA rail stations.

Railroad Protective Liability Insurance is required with the following minimum limits of coverage:

\$2,000,000	Each Occurrence Limit
\$6,000,000	Aggregate Limit

Required Minimum Coverage(s):

- 1) Railroad Protective Liability (RRP) policy on a policy form that is acceptable to WMATA, issued by an insurance company that is acceptable to WMATA.
- 2) WMATA shall be the first Named Insured.
- 3) Cost of RRP shall be the sole responsibility of Contractor.
- 4) The "Wet Ink" original RRP policy shall be sent to WMATA at following address:

Washington Metropolitan Area Transit Authority Office of Insurance, Room 8F 600 Fifth Street, NW Washington, DC 20001

WMATA Blanket RRP Program Option - SEE attached application when selecting this option

WMATA may offer to waive the requirement for the Contractor to procure RRP if 1) the work qualifies for coverage under WMATA's blanket RRP program, and 2) the Contractor prepays the RRP waiver fee which shall be determined by the rate schedule promulgated by the insurer in effect as of the effective date of this Contract. Contractor shall be advised of, and pay the applicable waiver fee, or procure a standalone RRP policy on WMATA's behalf if Contractor decides against the WMATA Blanket RRP Program option.

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Business Auto Liability

Required Minimum Limits of Coverage:

\$2,000,000	Combined Single Limit

Required Minimum Coverage(s):

- Business Auto Liability shall be written on ISO Business Auto Coverage Form CA 00 01 03 06, or its equivalent. Equivalency determination shall be made in WMATA's sole and unreviewable discretion.
- 2) Policy shall be endorsed with Additional Insured Endorsement(s) in compliance with the "Additional Insured" Section below.
- 3) Policy shall be endorsed with a Waiver of Subrogation Endorsement(s) in compliance with the Waiver of Subrogation" Section below.
- 4) Business Auto Liability minimum Combined Single Limit requirements may be obtained through the combination of a Primary Business Auto Liability policy and an Umbrella Excess Liability policy provided that the Umbrella Excess Liability policy complies with items 1 through 3 above.

Additional Insured(s)

Contractor and Sub-contractors of every tier are required to add WMATA and the WMATA Board of Directors as additional insured(s) on all insurance policies purchased by Contractor and Sub-contractors of every tier, including excess liability policy(s), with the exception of Workers' Compensation and Professional Liability.

- 1) Coverage provided to any Additional Insured shall be primary and non-contributory to any other insurance available to the Additional Insured, including coverage afforded to the WMATA as an additional insured by Sub-contractors, and from other third parties.
- 2) Coverage provided to any Additional Insured shall be for claims arising out of both ongoing operations and products and completed operations hazard.

3) Coverage available to any Additional Insured under the products and completed operations hazard can only be limited to the applicable statute of repose in the jurisdiction(s) where the contract scope of work takes place. The coverage provided by the additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured Form CG 20 10 11 85 or CG 20 26 11 85 as determined by WMATA.

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4) Coverage available to the additional insureds shall not be limited to the minimum limits of coverage outlined in this document.

Waiver of Subrogation

Contractor and Sub-contractors of every tier are required to have all insurance policies required under these Minimum Insurance Requirements endorsed to waive the respective insurance company's rights of recovery against WMATA, and the WMATA Board of Directors.

1) Waiver shall be provided on an endorsement that is acceptable to WMATA.

Certificate of Insurance (COI)

Contractor shall provide WMATA an ACORD Certificate of Insurance (COI) and copy of the Additional Insured endorsements as evidence that the insurance requirements of this Section have been satisfied. Certificates of Insurance shall be emailed to COI@WMATA.COM.

The cert holder box should read:

Washington Metropolitan Area Transit Authority Office of Insurance, Room 8F 600 Fifth Street, NW Washington, DC 20001

Additionally;

- 1) Proposed material modifications to insurance required under this Section must be received by WMATA at least 30 days prior to the effective date of the proposed modifications to such insurance.
- 2) WMATA's receipt of copies of any COI, policy endorsements or policies does not relieve PERMITTEE of the obligation to remain in compliance with the requirements of this Section at all times. PERMITTEE's failure to so comply, and to continuously comply with these insurance requirements shall constitute a material breach of this Contract.
- 3) Receipt of the COI does not constitute acceptance of the insurance outlined above.

ADDITIONAL INSURANCE

<u>Professional Liability Insurance.</u> Contractor, any Sub-contractor of any tier or any supplier providing design services or the services of a professional engineer, including, but not limited to stamping, sealing, or certifying blueprints or other related documents are required to maintain Professional Liability Insurance as follows:

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- 1) Minimum Limits of Coverage of \$3,000,000, each claim.
- 2) Actual coverage or tail coverage must be purchased and maintained for a period of time equal to the statute of repose.
- 3) Coverage can be written on an "Occurrence" or "Claims Made" Basis.
- 4) Coverage can be written on 'Non-Admitted" paper.

3. <u>TITLE AND RISK OF L</u>OSS

- (a) Unless this Contract specifically provides for earlier passage of title to deliverables (including documents, reports, and data) or other items resulting from this Contract, title shall pass to the Authority upon Acceptance, regardless of when or where the Authority takes physical possession. Risk of loss, theft, destruction of, or damage to, such deliverables or other items remains with the Contractor until the transfer of title or at the time in which the Authority takes physical possession, whichever is later.
- (b) In the event of loss or damage to any deliverable or other item of Work prior to the time at which the Authority takes physical possession, the Contractor agrees to repair or replace the loss or damage as soon as reasonably practicable so as to restore the item to the same character and condition as pre-existed the loss or damage and in accordance with all requirements of the Contract Documents without cost to the Authority; except that nothing contained herein shall be deemed to require repair or replacement by the Contractor of any loss or damage occasioned solely by the willful or negligent act(s) of the Authority.

CHAPTER VIII – INTELLECTUAL PROPERTY RIGHTS

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1. PATENT INDEMNITY

The Contractor shall indemnify the Authority and its officers, agents and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property under this Contract. This indemnity shall not apply unless the Contractor is informed as soon as practicable by the Authority of the suit or action alleging such infringement, and is given such opportunity as is afforded by applicable laws, rules, or regulations to participate in the defense thereof; and further, such indemnity shall not apply to:

- (1) An infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner or performance of the Contract not normally used by the Contractor;
- (2) An infringement resulting from addition to, or change in, such supplies or components furnished or construction work performed that was made subsequent to delivery or performance by the Contractor; or
- (3) A claimed infringement which is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

2. WITHHOLD/SET-OFF

The Authority shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the Authority's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the Authority with regard to this Contract, any other Contract with the Authority, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the Authority for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The Authority shall exercise its set-off rights in accordance with normal practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the Authority, its representatives, or the Federal Government.

3. RIGHTS IN TECHNICAL DATA- GENERAL – NOT APPLICABLE

4. RIGHTS IN TECHNICAL DATA – UNLIMITED

(a) The term technical data as used in this article means technical writing, computer software, sound recordings, pictorial reproductions, drawings, or other graphic representations and works of a technical nature, whether or not copyrighted, which are specified to be delivered pursuant to this Contract. The term does not include financial reports, cost analyses, and other information incidental to Contract

administration. Computer software as used in this article means computer programs, computer data bases, and documentation thereof.

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- (b) The Authority or any third party designated by the Authority to assist it in the administration of this Contract or the inspection or verification of the product produced under this Contract, shall have the right to use, duplicate or disclose technical data, which includes computer software, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so:
 - (1) Any manuals, instructional materials prepared for installation, operation, maintenance or training purposes;
 - (2) Technical data pertaining to end items, components or processes which were prepared for the purpose of identifying sources, size, configuration, mating and attachment characteristics, functional characteristics and performance requirements ("form, fit and function" data; e.g., specification control drawings, catalog sheets, outline drawing; except for the computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software);
 - (3) Other technical data which has been, or is normally furnished without restriction by the Contractor or subcontractor;
 - (4) Other specifically described technical data which the parties have agreed will be furnished without restriction:
 - (5) All computer software regardless of whether it is technical data as defined in this Article, including the source code, algorithm, process, formulae, and flow charts, which is developed or materially modified by the Contractor for the Authority or for which the Authority is required by federal law or regulation to provide a royalty-free, irrevocable and nonexclusive license to the federal government.
- (c) The Authority shall have the right to use, duplicate, or disclose technical data other than that defined in paragraph a. in whole or in part, with the express limitation that such technical data shall not, without the written permission of the party furnishing such technical data, be
 - (1) Released or disclosed in whole or in part outside the Authority,
 - (2) Used in whole or in part by the Authority for manufacture, or
 - (3) Used by a party other than the Authority except for: (i) emergency repair or overhaul, (ii) where the item or process concerned is not otherwise reasonably available to the Authority to enable timely performance of the work, or (iii) administration of this contract or the inspection or verification of the product produced under this contract where the third party has a written contract with the Authority to perform these efforts. In all cases described in this subsection, the release or disclosure outside of the Authority shall be subject to a written prohibition against further use, release or disclosure by the party receiving the technical data.
- (d) Technical data provided in accordance with the provisions of paragraph c. shall be identified by a legend which suitably recites the aforesaid limitation. Nothing herein shall impair the right of the Authority to use similar or identical data acquired from other sources.

(e) Where any item is purchased as a separate line item in the contract, that purchase includes all integral parts of that item, including any computer software, source codes, algorithms, processes, formulae, and flow charts. As such, the Authority has full rights to use, duplicate or disclose any or all parts of the item, including computer software, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so. Should disclosure of the computer software be required only under this paragraph, then the Contracting Officer may waive the provisions of this paragraph if he certifies in writing that the item is commercially available from multiple sources and the product from any of those sources will be fully compatible with existing Authority property.

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(f) Material covered by copyright:

- (1) The Contractor agrees to and does hereby grant to the Authority, and to its officers, agents and employees acting within the scope of their official duties, a royalty-free, nonexclusive and irrevocable license throughout the world for Authority purposes to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others so to do, all (i) technical data and (ii) computer software covered by subsection (b) (5) now or hereafter covered by copyright.
- (2) No such copyrighted matter shall be included in (i) technical data or (ii) computer software covered by subsection (b) (5) furnished hereunder without the written permission of the copyright owner for the Authority to use such copyrighted matter in the manner above described.
- (3) The Contractor shall report to the Authority (or higher-tier contractor) promptly and in reasonable written detail each notice or claim of copyright infringement received by the Contractor with respect to any (i) technical data or (ii) computer software covered by subsection (b)(5) provided to the Authority.
- (g) Relation to patents: Nothing contained in this Article shall imply a license to the Authority under any patent, or be construed as affecting the scope of any license or other right otherwise granted to the Authority under any patent.
- (h) Any dispute under this A0rticle shall be subject to the DISPUTES article of this Contract.
- (i) Notwithstanding any other payment provision in this Contract, the Contracting Officer may retain from payment up to 10 percent of the contract price until final delivery and acceptance of the technical data defined in this Article and as required to be furnished by the bid schedule or the contract specification.

5. <u>NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT [SUPPLIES]</u>

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Authority on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Authority, when requested by the Contracting Officer,

all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Authority except where the Contractor has agreed to indemnify the Authority.

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(c) The substance of this Article shall be included in all subcontracts.

CHAPTER IX – ADDITIONAL COVENANTS/LEGAL REQUIREMENTS

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1. NONDISCRIMINATION ASSURANCE

- (a) Nondiscrimination Assurance: In accordance with Title VI of the Civil Rights Act, as amended, 42. U.S.C. §2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. §6102, section 202 of the American with Disabilities Act of 1990, 42 U.S.C. §12132, and Federal transit law at 49 U.S.C. §5332, the contractor, sub-recipient, or subcontractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the contractor, sub-recipient, or subcontractor agrees to comply with applicable Federal implementing regulations and other implementing regulations that FTA may issue.
- (b) Equal Employment Opportunity: The following equal employment opportunity requirements apply to this contract.
 - Race, Color, Creed, National Origin, Sex: In accordance with Title VII of the (1) Civil Rights Act, as amended, 42. U.S.C. §2000e, and Federal transit laws at 49 U.S.C. §5332, the Contractor agrees to comply with all applicable equal opportunity requirements of the U. S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Employment Opportunity, Department of Labor, "41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Contract. Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, national origin, sex or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - (2) Age: In accordance with Section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. §623 and Federal transit law at 49 U.S.C. §5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - (3) Disabilities: In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. §12112, the Contractor agrees that it will comply with the requirements of U. S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In

addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

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- (c) The Contractor also agrees to include all of these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.
- (d) Failure by the contractor, sub-recipient, or subcontractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Authority deems appropriate.

2. <u>CONTRACT WORK HOURS AND SAFETY STANDARDS ACT-OVERTIME</u> COMPENSATION

This Contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

- (a) Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, apprentices, trainees, watchmen, and guards shall require or permit any laborer, mechanic, apprentice, trainee, watchman, or guard in any workweek in which he or she is employed on such work to work in excess of 40 hours in such work week on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer, mechanic, apprentice, trainee, watchman, or guard receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of 40 hours in such work week.
- (b) Violation. Liability for Unpaid Wages Liquidated damages. In the event of any violation of the provisions of paragraph (a) the Contractor and any subcontractor responsible therefore shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the Authority for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, apprentice, trainee, watchman or guard employed in violation of the provision of paragraph (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of his standard work week of 40 hours without payment of the overtime wages required by paragraph (a).
- (c) Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Contractor, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may be administratively determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).
- (d) Subcontracts. The Contractor shall insert paragraphs (a) through (d) of this Article in all subcontracts and shall require their inclusion in all subcontracts of any tier.

(e) Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three (3) years from the completion of this Contract.

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3. WALSH-HEALEY PUBLIC CONTRACTS ACT

If this Contract is for the manufacture or furnishing of materials, supplies, or equipment in an amount which exceeds or may exceed \$10,000 and is subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S.C. 35-45), the following terms and conditions apply:

- (a) All stipulations required by the Act and regulations issued by the Secretary of Labor (41 CFR Chapter 50) are incorporated by reference. These stipulations are subject to all applicable rulings and interpretations of the Secretary of Labor that are now, or may be hereafter, be in effect.
- (b) All employees whose work relates to this Contract shall be paid not less than the minimum wage prescribed by regulations issued by the Secretary of Labor (41 CFR 50-202.2). Learners, student learners, apprentices, and handicapped worker may be employed at less than the prescribed minimum wage (see 41 CFR 50-202.3) to the same extent that such employment is permitted under Section 14 of the Fair Labor Standards Act (41 U.S.C. 40).

4. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS

If this Contract is for the construction, alteration, or repair of a public building or public works, it is subject to the Davis-Bacon and Related Acts. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

5. CONVICT LABOR

- (a) Except as provided in paragraph (b), the Contractor shall not employ in the performance of this Contract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam or the U.S. Virgin Islands.
- (b) The Contractor is not prohibited from employing persons:
 - (1) On parole or probation to work at paid employment during the term of their sentence;
 - (2) Who have been pardoned or who have served their terms; or
 - Confined for violation of the laws of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if—
 - (i) The worker is paid or is in an approved work or training program on a voluntary basis:
 - (ii) Representatives of local union central bodies or similar labor union organizations have been consulted;

(iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts or services:

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- (iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
- (v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

6. COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Authority shall have the right to annul this Contract without liability or, in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

7. SEAT BELT USE POLICY

The Contractor agrees to comply with terms of Executive Order No. 13043 "Increasing Seat Belt Use in the United States" and is encouraged to include those requirements in each subcontract awarded for work relating to this contract.

8. <u>SENSITIVE SECURITY INFORMATION</u>

The Contractor must protect, and take measures to assure that its subcontractors at each tier protect, "sensitive information" made available during the course of administering an Authority contract or subcontract in accordance with 49 U.S.C. Section 40119(b) and implementing DOT regulations, "Protection of Sensitive Security Information," 49 CFR Part 15, and with 49 U.S.C. Section 114(s) and implementing Department of Homeland Security regulations, "Protection of Sensitive Security Information," 49 CFR Part 1520.

9. LAWS AND REGULATIONS

The Contractor shall be responsible to fully inform itself of the requirements for and to comply with any applicable State of Maryland, Commonwealth of Virginia, District of Columbia, Federal and jurisdictional laws and regulations governing the service to be provided under the contract. Further, the Contractor shall be responsible to obtain, at its own cost and expense, any and all licenses/permits required to transact business in any political jurisdictions to be serviced.

10. HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA

(a) The Contractor agrees to submit a Material Safety Data Sheet (Department of Labor Form OSHA-20), as prescribed in Federal Standard No. 313B, for all hazardous material five days before delivery of the material, whether or not listed in Appendix A of the Standard. This obligation applies to all materials delivered under this Contract which involve exposure to hazardous materials or items containing these materials.

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- (b) "Hazardous material," as used in this Article, is as defined in Federal Standard No. 313B, in effect on the date of this contract.
- (c) Neither the requirements of this Article nor any act or failure to act by the Authority shall relieve the Contractor of any responsibility or liability for the safety of Authority, Contractor, or subcontractor personnel or property.
- (d) Nothing contained in this Article shall relieve the Contractor from complying with applicable Federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.
- (e) The Authority's rights in data furnished under this Contract with respect to hazardous material are as follows:
 - (1) To use, duplicate and disclose any data to which this Article is applicable. The purposes of this right are to (i) apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous material (ii) obtain medical treatment for those affected by the material; and (iii) have others use, duplicate, and disclose the data for the Authority for these purposes.
 - (2) To use, duplicate, and disclose data furnished under this Article, in accordance with subparagraph (e)(1) above, in precedence over any other provision of this Contract providing for rights in data.
 - (3) That the Authority is not precluded from using similar or identical data acquired from other sources.
 - (4) That the data shall not be duplicated, disclosed, or released outside the Authority, in whole or in part for any acquisition or manufacturing purpose, if the following legend is marked on each piece of data to which this Article applies -

"This is furnished under Authority Contract No._____and shall not be used, duplicated, or disclosed for any acquisition or manufacturing purpose without the permission of This legend shall be marked on any reproduction of this data."

(End of legend)

(5) That the Contractor shall not place the above legend or any other restrictive legend on any data which (i) the Contractor or any subcontractor previously delivered to the Authority without limitations; or (ii) should be delivered

without limitations under the conditions specified in the Article entitled Rights in Technical Data.

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(f) The Contractor shall insert this Article, including this paragraph, with appropriate changes in the designation of the parties, in subcontracts at any tier (including purchase designations or purchase orders) under this Contract involving hazardous material.

11. LIVING WAGE

The Authority's Living Wage Policy and implementing regulations apply with respect to all contracts for services (including construction) awarded in an amount that exceeds \$100,000 in a 12-month period. To the extent this Contract meets those criteria, the following requirements are applicable:

- (a) The Authority's Living Wage Rate is \$13.48 per hour, and may be reduced by the contractor's per-employee cost for health insurance.
- (b) The Contractor shall:
 - (1) Pay the Authority's Living Wage Rate, effective during the time the work is performed, to all employees who perform work under this Contract;
 - (2) Include the Living Wage provision in all subcontracts that exceed \$15,000 in a 12 month period awarded under this Contract;
 - (3) Maintain payroll records, in accordance with the retention and examination of records requirements in the General Provisions, and shall include a similar provision in affected subcontracts that requires the subcontractor to maintain its payroll records for the same length of time; and
 - (4) Certify with each monthly invoice that the Authority Living Wage Rate was paid to affected employees, or if applicable, certify prior to contract award or contract extension, if any, that one or more of the exemptions in paragraph (d) below applies.
- (c) The Contractor shall not split or subdivide a contract, pay an employee through a third party, or treat an employee as a subcontractor or independent contractor to avoid compliance with the Living Wage provisions.
- (d) Exemptions to the Living Wage provisions include:
 - (1) Contracts and agreements subject to higher wage rates required federal law or collective bargaining agreements;
 - (2) Contracts or agreements for regulated utilities;
 - (3) Emergency services to prevent or respond to a disaster or imminent threat to public health and safety;
 - (4) Contractor employees who work less than full-time; and
 - (5) Contractors who employ fewer than ten employees.
- (e) The Authority may adjust the Living Wage Rate effective in January of each year. The adjustment will reflect the average Living Wage Rate among Metro's Compact Jurisdictions with Living Wage provisions. If after contract award the living wage rate increases, the Contractor is entitled to an equitable adjustment to the contract

price in the amount of the increase for employees who are affected by the escalated wage.

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(f) Failure to comply with the Authority's Living Wage provisions shall result in the Authority's right to exercise available contract remedies, including contract termination and/or debarment from future contracts.

12. METRIC SYSTEM

To the extent the Federal Government directs, the Contractor agrees to use the metric system of measurement in its Project activities, in accordance with the Metric Conversion Act, as amended by the Omnibus Trade and Competitiveness Act, 15 U.S.C. 205a et seq; Executive Order No. 12770, "Metric Usage in Federal Government Programs," 15 U.S.C. 205a note; and applicable U.S. DOT or FTA regulations in accordance with applicable Federal directives. As practicable and feasible, the Contractor agrees to supply products and services with dimensions expressed in the metric system of measurement. Metric usage shall not be required to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms.

13. WHISTLEBLOWER PROTECTION

- (a) The Contractor and its subcontractors shall encourage their employees and independent contractors to report information—without fear of actual or threatened discrimination, retaliation or reprisal—that they in good faith reasonably believe is evidence of gross mismanagement; gross misuse or waste of public resources or funds; fraud; violation of law; abuse of authority in connection with the conduct of WMATA operations or contracts; or a substantial and specific danger to health, security or safety. The Contractor and its subcontractors shall notify their employees that they may make reports under this paragraph to:
 - (1) WMATA's Office of Inspector General (OIG), in person, in writing, through the OIG Hotline (888-234-2374) or email wmata-oig-hotline@verizon.net or by any other reasonable means;
 - (2) WMATA's Metro Transit Policy Department (MTPD), in person, by telephone (202-962-2121) or by any other reasonable means, or to the OIG, if the information constitutes a potential violation of criminal law:
 - (3) WMATA's Chief Safety Officer, in person, in writing, through the SAFE Hotline (202-249-7233) or email safety@wmata.com, or by any other reasonable means; or
 - (4) Any other official, office or agency within WMATA or outside WMATA that the employee or independent contractor reasonably believes has the authority to act on the matter.
- (b) The Contractor, its employees, independent contractors and subcontractors shall cooperate with any inquiry or review by an authorized official of WMATA, or by the federal government or any other governmental entity with jurisdiction over WMATA, regarding a matter that would constitute a report under paragraph (a) or a violation of

this or any whistleblower provision of this Contract, and with any enforcement or judicial proceeding arising from such inquiry or review.

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- (c) The Contractor and its subcontractors shall not interfere with or deny the right of any employee or independent contractor of either the Contractor or any of its subcontractors to make a report under paragraph (a). The Contractor and its subcontractors shall not recommend, take or threaten to take any action having a negative or adverse impact on any employee or independent contractor of either the Contractor or any of its subcontractors because he or she:
 - (1) made or is perceived to have made a report under paragraph (a);
 - (2) sought a remedy under applicable law after making a report under paragraph (a);
 - (3) participated in or cooperated with an inquiry or review by an authorized official of WMATA, or by the federal government or any other governmental entity with jurisdiction over WMATA, regarding a matter that would constitute a report under paragraph (a) or a violation of this or any whistleblower provision of this Contract, or with an enforcement or judicial proceeding arising from such inquiry or review;
 - (4) refused to obey an order that would violate law; or
 - (5) refused to work or authorize work when a hazardous safety or security condition presents an imminent danger of death or serious injury, there was no reasonable alternative to refusal, there was not sufficient time to eliminate the danger in absence of refusal and the individual, where possible, notified the Contactor or subcontractor of the condition and of the intent not to perform or authorize work.
- (d) The Contractor shall include, or shall cause to be included, the substance of this Article, including this paragraph (d), in its subcontracts at all tiers.
- (e) The Contractor and its subcontractors shall comply with the National Transit Systems Security Act (NTSSA), which prohibits discharging, demoting, suspending, reprimanding or in any other way discriminating against an employee as a reprisal for the employee lawfully and in good faith—
 - (1) reporting a hazardous safety or security condition;
 - refusing to work when a hazardous safety or security condition presents an imminent danger of death or serious injury, there is no reasonable alternative to refusal, there is not sufficient time to eliminate the danger in absence of refusal and the individual, where possible, has notified the Contractor or subcontractor of the condition and of the intent to not perform work;
 - (3) refusing to authorize the use of any safety or security related equipment, track or structures, if the individual is responsible for their inspection or repair and reasonably believes they are in a hazardous safety or security condition, there is no reasonable alternative to refusal, there is not sufficient time to eliminate the danger in absence of refusal and the individual, where possible,

has notified the Contractor or subcontractor of the condition and of the intent not to authorize use of hazardous equipment or infrastructure unless corrected;

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- (4) providing information for or directly assisting in an investigation of conduct that the individual reasonably believes to be in violation of federal law regarding safety, security or fraud, waste or abuse of funds intended for safety or security;
- refusing to violate or assist in violation of federal public transportation safety or security law;
- (6) cooperating with a safety or security investigation by the U.S. Secretary of Transportation, U.S. Secretary of Homeland Security or the National Transportation Safety Board;
- (7) furnishing information to law enforcement agencies relating to an accident or incident resulting in damage to property, injury or death; or
- (8) filing a complaint under the NTSSA or testifying regarding such complaint.
- (f) The Contractor shall notify the Authority of any instance, related to this Contract, of a report under sub-paragraph (e)(1) or refusal under sub-paragraphs (e)(2), (3) or (5).
- (g) The enforcement, filing and investigation of complaints, and remedies under this section shall be governed by the NTSSA, applicable federal regulations and federal law.
- (h) This Article shall be interpreted in accordance with the NTSSA. If any provision is found to be in conflict with the NTSSA, the NTSSA shall govern.
- (i) The Contractor shall include, or shall cause to be included, the substance of this Article, including this paragraph, in its subcontracts at all tiers.

14. DRUG AND ALCOHOL TESTING

Contractors who perform safety-sensitive functions shall be subject to compliance with a drug and alcohol testing program according to Federal guidelines published in FTA regulations (49 CFR Part 655).

15. EMPLOYMENT RESTRICTION WARRANTY

(a) The Contractor warrants that it will not offer employment to, solicit or discuss the interest of prospective employment of, or otherwise engage in substantive employment-related discussions or communications with, any present or former officer or employee of the Authority who has been involved, directly or indirectly, in any matter of financial interest to the Contractor until at least one (1) year after the officer or employee has ceased involvement in or responsibility for the matter. Nor shall the Contractor knowingly engage in communications of the nature described above with any immediate family member or member of the household of any

Authority employee during the period in which such employee is involved in any such matter of financial interest to the Contractor.

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- (a) The one (1) year requirement described in paragraph (a) may be waived at the discretion of the Contracting Officer if the Authority employee or former employee has been subject to a Reduction in Force; in such case, the Contracting Officer, once he/she has been made aware of the Contractor's interest, will provide the Contractor with a letter to that effect.
- (b) If a waiver is granted, or if a former employee of the Authority is eventually hired, the Contractor shall ensure that the former employee is not involved in negotiating or otherwise dealing with the Authority on any particular matter over which such employee had responsibility during his or her period of employment at Authority.
- (d) Should the Contractor fail to comply with the provisions hereof, the Contracting Officer shall have the right to withhold payment under this Contract in an amount not to exceed 2% of the total Contract amount as liquidated damages to the Authority, such withholding to be in addition to any other withholding or right of the Authority under this Contract. Further, the Contracting Officer shall consider such violation in evaluating the Contractor's responsibility in connection with award of any future Authority contract. Any objections or appeal shall be settled in accordance with the DISPUTE provisions of this Contract.

16. GRATUITIES

- (a) In connection with performance of work required under this Contract, or any changes or modifications relative thereto, the giving of or offering to give gratuities (in the form of entertainment, gifts or otherwise) by the Contractor, or any agent, representative or other person deemed to be acting on behalf of the Contractor, or any supplier or subcontractor furnishing material to or performing work under this Contractor, or any agent, representative or other person deemed to be acting on behalf of such supplier or subcontractor, to any Director, Officer or employee of the Authority; or to any Director, Officer, employee or agent of any of the Authority's agents, consultants, representatives or other persons deemed to be acting for or on behalf of the Authority with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract is expressly forbidden. The terms of this GRATUITIES Article shall be strictly construed and enforced in the event of violations hereof.
- (b) Reported instances of the giving or offering to give gratuities within the context of this GRATUITIES Article will be investigated by the Board of Directors or its duly authorized representative. A preliminary investigation will be made to determine whether there is probable cause to suspect that a violation of this Article has been committed. If such probable cause is found to exist, the Board of Directors, or its duly authorized representative, shall formally notify the suspected donor corporation or individual in writing of the particulars of the event; and provide such donor the opportunity to be heard on the matter. The aims of the investigations and hearing shall be to ensure due process and to preserve the best interests and rights of all parties by the full and fair disclosure of all relevant and material information. Accordingly, the Board of Directors, or its duly authorized representative, shall require production of all pertinent documents and records, and sworn testimony from

witnesses. During the pendency of any investigation or hearing treating with a violation of this GRATUITIES Article, the Board of Directors, or its duly authorized representative may exercise its power granted by the Washington Metropolitan Area Transit Authority Compact, Public Law 774, 80 Star. 1324, Article V, General Powers, Subparagraph (k), by issuing subpoenas to compel the attendance of necessary witnesses, and to compel production of papers, records, accounts, ledgers and documents. The subpoenas shall be enforceable by order of an appropriate United States District Court. If, after notice and hearing, or notice of the opportunity to be heard, the Board of Directors, or its duly authorized representative, finds that a violation of this GRATUITIES Article has been committed, the Authority shall have the right to:

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- (1) Require that the individual(s) giving or offering the gratuity be removed from further participation on any Authority projects (be terminated);
- (2) Deny the Contractor any G & A (general and administrative) mark-ups for all changes and/or modifications found to be tainted by the giving of or offering to give gratuities;
- (3) Preclude the Contractor from bidding on, receiving or participating as joint venturer, subcontractor or otherwise in any Authority project for a period of five (5) years;
- (4) Have complete access to all the Contractor's financial books, records and accounts for the purpose of performing a comprehensive audit of the entire project; and/or
- (5) In the event of repeated violations of this GRATUITIES Article or of gross or extreme conduct indicative of a corrupt intent to gain special advantage, by written notice to the Contractor, terminate the Contract for default in accordance with the provisions of the TERMINATION FOR DEFAULT article of the Contract.
- (c) The existence of the facts upon which the Board of Directors, or its duly authorized representative, makes findings in connection with investigations and hearings in consonance herewith, shall be an issue and may be reviewed in any competent court.
- (d) In the event this Contract is terminated as provided in sub-paragraph (b)(5), the Authority shall be entitled:
 - (1) To pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor; and
 - (2) As a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in any amount (as determined by the Board or its duly authorized representative) which shall be not less than three (3) nor more than ten (10) times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

(e) The rights and remedies of the Authority provided in this Article shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

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17. OFFICIALS NOT TO BENEFIT

- (a) No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Contract, or to any benefit that may arise there from; but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.
- (b) No member, officer or employee of the Authority or of a local public body during his tenure or one year thereafter shall have any interest, direct or indirect, in this Contract or the proceeds thereof.
- (c) Enforcement of this Article shall be consistent with 18 U.S.C. §431.

18. ORGANIZATIONAL CONFLICT OF INTEREST

- (a) An organizational conflict of interest exists when the nature of the work to be performed under a proposed contract or subcontract may, without some restriction on future activities (1) result in an unfair competitive advantage to the contractor or subcontractor; or (2) impair the contractor's objectivity in performing the contracted work. Most typically this would arise when a contractor prepares a design or specification for work that is to be procured competitively. It may also arise when a contractor or one of its affiliates would have an economic interest in the outcome of a contract or project. Conflicts of interest may be either real or apparent.
- (b) In the event that the Contractor believes that it or any of its potential subcontractors may have an organizational conflict of interest, it shall notify the Contracting Officer, in writing, within five (5) work days after it becomes aware of the potential or actual organizational conflict of interest. The written notification shall identify the nature and circumstances of the perceived conflict and propose appropriate measures to eliminate or mitigate the situation. The Contracting Officer will review the circumstances and the proposed mitigation and notify the Contractor accordingly, determining that: (1) no mitigation is required; (2) the conflict cannot be mitigated; or (3) the conflict can be mitigated and accepts the proposed measures, or recommends other and/or additional measures.
- (c) The failure of the Contractor to identify such perceived conflicts may result in the contract award being rescinded or the Contract terminated for default.
- (d) Should the Contractor identify or become aware of a conflict during the term of this Contract, including any extension of the Contract, which it could not reasonably have anticipated prior to award, it shall notify the Contracting Officer in accordance with paragraph (b) above, or request an exception to the restriction with supporting rationale. The Contracting Officer shall consider the Contractor's proposed measures to mitigate or eliminate the conflict, or the request for an exception.
- (e) If the proposed measures are not determined to be feasible or are otherwise not acceptable to the Contracting Officer, the Contracting Officer may terminate the

Contract in accordance with the TERMINATION FOR CONVENIENCE OF THE AUTHORITY provisions of the Contract; or

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- (f) If the request for an exception is not granted by the Contracting Officer, and the Contract is not terminated for convenience, the Contractor shall be notified in writing and be given ten (10) days from the date of the written notification to take all necessary action to comply with the requirements of this provision.
- (g) If the proposed measures are determined acceptable to the Contracting Officer, the Contracting Officer may grant a specific exception to this restriction, when in the Contracting Officer's judgment, the exception will not create a conflict between the Contractor's duties and obligations under this Contract and the duties and obligations imposed on the Contractor under the contractual or other relationship for which an exception is requested.
 - (1) If the Contractor fails to comply with the terms of this Article, the Contracting Officer, may withhold payments due under the contract until such time as the Contractor is in compliance or, should the non-compliance remain uncorrected at the expiration of ten (10) days from written notice from the Contracting Officer as provided in sub-paragraph (d)(2), terminate the contract for default pursuant to the provisions of the TERMINATION FOR DEFAULT Article of the Contract.
 - (2) The Contractor, in performing this Contract, shall avoid any conduct which might result in or give the appearance of creating for Directors, Officers, or employees of the Authority in their relationship with the Contractor, any conflicts of interest or favoritism and/or the appearance thereof and shall avoid any conduct which might result in a Director, Officer, or employee failing to adhere to the Standards of Conduct adopted by the Authority's Board of Directors.
 - (3) Any determination by the Contracting Officer under this Article shall be final and shall be considered a question of fact within the meaning of the Disputes Article of this Contract.

19. <u>CONTRACTOR PERSONNEL</u>

- (a) The Authority may direct the replacement of employees of the Contractor reasonably deemed to be unsuitable by the Contracting Officer, or whose continued participation in the Work is deemed contrary to the best interests of the Work. Except in circumstances deemed exigent by the Contracting Officer, the reason for replacement will be discussed between the Contractor and the Authority before a replacement directive is issued. Upon receipt of a written replacement directive from the Authority specifying the date by which the replacement must occur, the Contractor shall proceed with the replacement and shall do so in a manner that minimizes to the greatest extent practicable any impact upon any aspect of the Work.
- (b) Contractor personnel required to work on WMATA property must obtain a WMATA vendors' badge and successfully complete the mandatory safety training which must be renewed yearly. Affected personnel should be advised by the Contractor that, to obtain a vendor's badge, a signed waiver to perform a background check is required.

20. FALSE STATEMENTS, CLAIMS OR SUBMISSIONS

(a) The Contractor acknowledges its responsibility to undertaken its obligations under this publicly-funded contract with full integrity and, to that end, to take all reasonable steps to ensure that statements, claims and submissions made pursuant to the Contract are provided in good faith and with a reasonable belief as to their truthfulness, accuracy and completeness.

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- (b) In the event that it is finally determined that any statement, claim, submission, or certification made by or on behalf of the Contractor pursuant to a material element of the Contract was knowingly false, fictitious or fraudulent, the Authority shall be entitled to recover from the Contractor an amount equal to not more than two times the monetary value of the benefit derived or sought to be derived by the Contractor through its false statement, claim or submission. For purposes hereof, an element of the Contract shall be deemed material if it impacted or could reasonably have been intended to impact the disposition of any claim, Dispute, proposed or implemented Change Order, proposed pricing or schedule adjustment of any nature, or other substantive issue directly affecting the rights of the parties under the Contract.
- (c) Where the Authority believes that there exist reasonable grounds to conclude that the Contractor has engaged in one or more violations of paragraph (b), it shall so notify the Contractor in writing, describing the nature of the potential violation(s). The Contractor shall thereupon have 30 days following its receipt of such notification to provide its written response. Absent resolution between the parties, the Authority shall be authorized to initiate suit in a court of competent jurisdiction, asserting the Contractor's violation(s) of paragraph (b) of this Article and the Authority's consequent entitlement to monetary relief. Claims relating to an alleged violation of this Article shall be subject exclusively to judicial adjudication and shall not be subject to the Disputes Article of this Contract or other administrative disposition, except as may be expressly agreed upon between the parties

(d) The rights of the Authority set forth in this Article are in addition to any such additional contractual, legal or equitable rights which may arise upon the Contractor's submission of a knowingly false claim or statement, including without limitation the Authority's right to terminate the Contract for default. Nor shall the provisions of this Article serve in any respect to limit, waive or modify any liability, civil or criminal, of the Contractor or any of its officers, agents or employees which such conduct may precipitate.

CHAPTER X – MISCELLANEOUS ADDITIONAL PROVISIONS

1. FEDERAL, STATE, AND LOCAL TAXES

(a) Except as may be otherwise provided in this Contract, the Contract price shall be deemed to include all applicable Federal, State and Local taxes and duties.

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- (b) Notwithstanding paragraph (a), with respect to any Federal excise tax or duty on the transactions or property covered by this Contract, if a statute, court decision, written ruling or regulation takes effect after the Contract date, and:
 - (1) Results in the Contractor being required to pay or bear the burden of any such Federal excise tax or duty or increase in the rate thereof which would not otherwise have been payable on such transactions or property, the Contract price shall be increased by the amount of such tax or duty or rate increase, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the Contract price as a contingency reserve or otherwise; or
 - (2) Results in the Contractor not being required to pay or bear the burden of, or in his obtaining a refund or drawback of, any such Federal excise tax or duty which would otherwise have been payable on such transactions or property or which was the basis of an increase in the Contract price, the Contract price shall be decreased by the amount of the relief, refund, or drawback, or that amount shall be paid to the Authority, as directed by the Contracting Officer. The Contract price shall be similarly decreased if the Contractor, through his fault or negligence or his failure to follow instructions of the Contracting Officer, is required to pay or bear the burden of, or does not obtain a refund or drawback of, any such Federal excise tax or duty.
- (c) Paragraph (b) above shall not be applicable to social security taxes or to any other employment tax.
- (d) No adjustment of less than \$250 shall be made in the Contract price pursuant to paragraph (b).
- (e) As used in paragraph (b), the term "Contract date" means the date the Contract was executed by the Authority. As to additional Supplies or Services procured by modification to this Contract, the term "Contract date" means the effective date of such modification.
- (f) The Contractor shall promptly notify the Contracting Officer of matters which may result in either an increase or decrease in the Contract price under this Article and shall take action with respect thereto as directed by the Contracting Officer.

2. FEDERAL/LOCAL/STATE SALES TAX

The Solicitation Instructions giving rise to award of this Contract advised of the nature and extent of the Authority's exemption from Federal, State, District of Columbia, municipal and local taxation and, by submission of its Bid or Offer, the Contractor certified that none of the taxes as to which the Authority is exempt were included in its bid price(s) or the final Contract

Price. In the event that the Authority learns that, notwithstanding this certification, any taxes to which the Authority is exempt are included in the final Contract Price, the Authority shall be entitled to a reduction in the Contract Price reflecting such amount and a refund of monies paid related to such taxes, plus applicable interest.

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3. PUBLIC COMMUNICATION

The Contractor shall not issue communications to the media, place advertisements, nor publicize through any means the services or goods they are providing WMATA under this Contract without prior written consent of the Contracting Officer. The Contractor shall not publish, in print or online, any communications products such as newsletters, press releases, blogs or other communications to WMATA employees without prior written consent of the Contracting Officer. Approval of any such requests shall be at the sole discretion of WMATA.

4. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE

- (a) This Contract shall be deemed to be executed in the District of Columbia, regardless of the domicile of the Contractor and shall be governed by and construed in accordance with the laws of the District of Columbia except to the extent, if any, superseded by federal law.
- (b) The parties agree that any and all claims asserted by or against the Authority arising hereunder or related hereto shall be heard and determined either in the courts of the United States located in the District of Columbia, the state of Maryland or the Commonwealth of Virginia or in the courts of the District of Columbia, state of Maryland or Commonwealth of Virginia which maintain jurisdiction over such claims and in which venue properly resides.

5. **SEVERABILITY**

If the Contract contains any unlawful provisions, the same shall be deemed of no effect, and shall upon the application of either party be stricken from the Contract without affecting the binding force of the Contract as it shall remain after omitting such provision.

6. SURVIVAL

In addition to any provision expressly set forth as surviving the expiration or termination of this Contract, any provision of this Contract whose purpose would be defeated or rendered meaningless by the expiration or earlier termination hereof shall be deemed to survive any such expiration or termination.

7. BILLING RATES

a. Direct Salary Rates

1. The negotiated and awarded Not-to-Exceed (NTE) direct salary rates for the listed labor categories of professional or technical personnel are fixed for each year of the

contract, starting on the date of award, and continuing through the end of the contract.

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2. The contractor may propose for less than the NTE rate for personnel on individual task orders, but may not exceed the rate for the current option period.

b. Overhead

1. Field and home overhead rate percentages shall be negotiated annually and take effect on the award date, based on an approved audit of the prior fiscal year. The field and home overhead rate percentages will be incorporated into the contract annually via a bilateral modification.

c. Profit

1. Profit percentages shall be negotiated at the time of award for two (2) categories of task orders: Design and Support tasks.

8. ORDERING PROCEDURE

This contract provides for the issuance of Task Orders on a negotiated basis as follows:

a. General

Only the Contracting Officer may issue Task Orders to the Contractor, providing specific authorization or direction to perform work within the scope of the contract and as specified in the Statement of Work. Unless specifically authorized by the Contracting Officer, the Contractor shall not commence work until a fully executed Task Order has been awarded. The Contractor may incur costs under this contract in performance of task orders and task order modifications issued in accordance with this ARTICLE.

No other costs are authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.

b. Requesting Task Order Proposals

- c. The Contracting Officer or a designated official may solicit responses to requirements from Contractors within a technical area covered by a task order requirement in writing. A Task Order Request for Proposals (TORFP) will be prepared and issued for each task order requirement. Generally, the TORFP will include, but is not limited to, the following:
 - 1) Statement of Work;
 - 2) Reporting Requirements and Deliverables (if applicable);
 - 3) Proposal Due Date and how to deliver Proposals;
 - 4) Period of Performance/Duration of Task Order; and
 - 5) Assignment of DBE goals at Task Order Level for federally funded projects only
- d. All contract clauses contained this contract shall be incorporated in the TORFP and the resultant task order. If conflicts exist between the contract clauses and the information outlined in the task order, the contract language takes precedence over the information in the task order. Contractors are not required to propose on all TORFPs.

9. NON-PERSONAL SERVICE STATEMENT

a. Contractor employees performing services under this contract will be controlled, directed and supervised at all times by management personnel of the Contractor. Contractor management will ensure that employees properly comply with the performance work standards outlined in the performance work statement. Contractor employees will perform their duties independent of, and without supervision of, any Authority official or personnel. The tasks, duties, and responsibilities set forth in the contract may not be interpreted or implemented in any manner that results in any Contractor employee creating or modifying policy, obligating appropriated funds, overseeing the work of Authority employees, or providing direct personal services to any Authority employee. The Authority will control access to the facility and will perform the inspection and acceptance of the completed work, pursuant to the terms and conditions of this contract.

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10. NON-DISCLOSURE

- a. The Contractor agrees to enter into a written agreement with any firm whose proprietary data is used in connection with the performance of the contract, to protect all proprietary information from unauthorized disclosure or use for as long as it remains proprietary, to furnish the Contracting officer with executed copies of all such agreement(s), and to refrain from using any proprietary information in supplying to the Authority goods or services, or for any purpose other than that for which it was intended, pursuant to this contract.
- b. The Contractor agrees that any information furnished by the Authority to the Contractor not generally available to other Contractors shall be used only for performance under this contract, and all copies of such information shall be returned to the Authority upon completion of the effort. Any information furnished by the Authority containing trade secrets or commercial or financial data of other Contractors shall be treated as proprietary data. Additionally, the Contractor shall not disclose outside the Authority any information generated in the performance of this contract.

7. <u>ALL NECESSARY PROVISIONS DEEMED INCLUDED</u>

It is the intent of the parties that each and every provision of law required to be inserted in this Contract should be and is inserted herein. Every such provision is to be deemed to be inserted herein, and if any such provision is not inserted or is not inserted in correct form, then this contract shall be deemed amended by such insertion so as to comply strictly with the law and without prejudice to the rights of either party hereunder.

CHAPTER XI – FEDERAL PROVISIONS

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1. NOTIFICATION OF FEDERAL PARTICIPATION

This project is being funded in whole or part with Federal funds.

2. ACCESS TO THIRD PARTY CONTRACT RECORDS

- (a) The Contractor agrees to provide the Authority, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. The Contractor also agrees, pursuant to 49 CFR. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U. S. C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U. S. C. 5307, 5309 or 5311.
- (b) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- (c) The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case the Contractor agrees to maintain same until the Authority, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

3. RIGHTS IN DATA AND COPYRIGHTS — FTA

- (a) The term "subject data" used in this Article means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under this Contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards, magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and associated lists; specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term "subject data" does not include financial reports, cost analyses, and similar information incidental to project administration.
- (b) The following restrictions apply to all subject data first produced in the performance of this contract:
 - (1) Except for its or WMATA's own internal use, the Contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may the Contractor authorize others to do so, without the written consent of

the U.S. Government, until such time as the Government may have either released or approved the release of such data to the public; this restriction on publication, however, does not apply to Agreements with academic institutions;

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- (2) In accordance with 49 C.F.R. § 18.34 and 49 C.F.R. 19.36, the Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, the following subject data for Federal Government purposes:
 - (i) Any subject data developed under this contract whether or not a copyright has been obtained; and
 - (ii) Any rights of copyright to which the contractor purchases ownership with Federal assistance.
- (c) When the Federal Transit Administration (FTA) provides financial assistance for a planning, research, development, or a demonstration project, it is FTA's general intention to increase mass transportation knowledge, rather than limit the benefits of the Project to participants in the Project. Therefore, unless FTA determines otherwise, the Contractor agrees that, in addition to the rights set forth in subsection (b)(2) of this clause, FTA may make available to any FTA recipient, sub-recipient, third party contractor, or third party subcontractor, either FTA's license in the copyright to the subject data derived under this contract or a copy of the subject data first produced under this contract. If this contract is not completed for any reason whatsoever, all data developed under this contract shall become subject data as defined in subsection (a) of this clause and shall be delivered as the Government may direct.
- (d) Unless prohibited by state law, the Contractor agrees to indemnify, save, and hold harmless WMATA and the Government, their officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by the contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under this Contract. The Contractor shall not be required to indemnify WMATA and the Government for any such liability arising out of the wrongful acts of employees or agents of WMATA and the Government.
- (e) Nothing contained in this section on rights in data shall imply a license to WMATA or the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to WMATA or the Government under any patent.
- (f) The requirements of paragraphs (b) and (c), do not apply to material furnished by the Authority to the Contractor and incorporated in the work carried out under the contract provided that the Contractor identifies the incorporated material at the time of delivery of the work.
- (g) Any dispute arising under this Article shall be subject to the Disputes article of this Contract.

(h) Notwithstanding any other payment provision in this contract, the Contracting Officer may retain from payments due and owing the Contractor up to 10 percent (10 %) of the contract price until final delivery and acceptance of the subject data defined in this Article and as required to be furnished by the bid schedule or the contract specification.

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4. BUY AMERICA ACT

The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

5. CHARTER BUS REQUIREMENTS

Contractor shall comply with 49 USC 5323(d) and (g) and 49 CFR 604, which state that recipients and subrecipients of FTA assistance may provide charter service for transportation projects that uses equipment or facilities acquired with Federal assistance authorized under the Federal transit laws (except as permitted by 49 CFR 604), or under 23 U.S.C. 133 or 142, only in compliance with those laws and FTA regulations, "Charter Service," 49 CFR part 604, the terms and conditions of which are incorporated herein by reference.

6. SCHOOL BUS REQUIREMENTS

Pursuant to 69 USC 5323(f) or (g) as amended by MAP-21, 23 USC 133, 23 USC 142, and 49 CFR 605, recipients and subrecipients of FTA assistance shall not engage in school bus operations exclusively for transportation of students and school personnel in competition with private school bus operators unless qualified under specified exemptions. When operating exclusive school bus service under an allowable exemption, recipients and subrecipients shall not use federally funded equipment, vehicles, or facilities. Violations. If a Recipient or any Third Party Participant that has operated school bus service in violation of FTA's School Bus laws and regulations, FTA may: (1) Require the Recipient or Third Party Participant to take such remedial measures as FTA considers appropriate, or (2) Bar the Recipient or Third Party Participant from receiving Federal transit funds.

7. **BUS TESTING**

[APPLICABLE TO BUS ONLY]

Contractor shall comply with 49 USC A5323(c), applicable amendments of Map-21, and FTA's implementing regulation 49 CFR 665 and shall perform the following:

(1) A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient prior to the recipient's final acceptance of the first vehicle.

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- (2) A manufacturer who releases a report under para. 1 above shall provide notice to the operator of the testing facility that the report is available to the public.
- (3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to the recipient's final acceptance of the first vehicle. If configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.
- (4) If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the US before Oct. 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

8. CARGO PREFERENCE

The Contractor agrees:

- (a) To utilize privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, materials, or commodities pursuant to this Contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels;
- (b) To furnish within 20 working days following the date of loading for shipments originating within the United States, or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a) above to WMATA (through the Contractor in the case of a subcontractor's bills-of-lading) and to the Office of Cargo Preference, Maritime Administration (MAR-590), 400 Seventh Street SW, Washington, DC 20590;
- (c) To include these requirements in all subcontracts issued pursuant to this Contract when the subcontract may involve the transport of equipment, material, or commodities by ocean liner.

9. CLEAN AIR

(a) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U. S. C. §§ 7401 et seq. The Contractor agrees to report each violation to the Authority and understands and agrees that the Authority will, in turn, report each violation as required to FTA and the appropriate EPA Regional Office.

(b) Flow-down requirement. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

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10. CLEAN WATER

- (a) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U. S. C. 1251 et seq. The Contractor agrees to report each violation to the Authority and understands and agrees that the Authority will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.
- (b) Flow-down requirement. The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

11. RECYCLED PRODUCTS

The contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

12. ENERGY CONSERVATION

- (a) The Contractor agrees to comply with mandatory standards and policies relating to the energy efficiency which are contained in the applicable state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.
- (b) Flow-down requirement: The Contractor agrees to include the requirements of this clause in all subcontracts under this contract.

13. CHANGES TO FEDERAL REQUIREMENTS

- (a) Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement (Form FTA MA (14) dated October 1, 2007) between the Authority and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.
- (b) Flow-down requirement. The Contractor agrees to include this Article in each subcontract financed in whole or in part with Federal Assistance provided by FTA. It is further agreed that the Article shall not be modified, except to identify the subcontractor who will be subject to its provisions.

14. FLY AMERICA REQUIREMENTS

(a) The Contractor agrees to comply with 49 U. S. C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U. S. Flag carriers for U. S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U. S. flag carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements.

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(b) Flow-down requirement. The Contractor agrees to include the requirements of this Article in all subcontracts that may involve international air transportation.

15. PAYMENT DEDUCTIONS - NONCOMPLIANCE WITH DBE REQUIREMENTS

- (a) For federally funded contracts that exceed \$100,000 and to which the Disadvantage Business Enterprise (DBE) Requirements (Appendix B) apply, the failure to perform in accordance with requirements of Appendix B may result in a partial or full suspension of payment, including progress payments, if applicable.
- (b) If the Contractor is found to be in noncompliance with the DBE requirements of Appendix B, the progress of the work shall also be deemed to be unsatisfactory, and an amount equal to the DBE participation in the Contract shall be retained from payment (or progress payments, if any) made to the Contractor.
- (c) If the contract value is over \$100,000, the prime contractor will be responsible for submitting a monthly report of the status of its DBE subcontractors as outlined in Appendix B to the Contracting Officer.
- (d) If the Contractor fails to submit the required monthly DBE reports, the Contracting Officer may suspend payment (or progress payments) until such time as the monthly reports are submitted and accepted by the Authority.

16. GOVERNMENT-WIDE DEBARMENT OR SUSPENSION

(a) The Contractor is bound by its certification contained in its offer to the Authority that neither the Contractor, its principals, or affiliates, are excluded or disqualified, as defined at 49 C.F.R. 29.940 and 29.945. The certification is a material representation of fact, relied upon by the Authority in entering into this Contract. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to remedies available to the Authority, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The Contractor agrees to comply with the requirements of 49 C.F.R. 29, Subpart C, throughout the term of this Contract.

(b) Flow-down requirement. The Contractor agrees to include this requirement in all subcontracts at all tiers under this Contract.

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17. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

- (a) The preceding provisions include, in part, certain Standard Terms and Conditions required by the U.S. Department of Transportation (DOT), whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F or ay revision thereto, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all DOT or FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Authority requests which would cause the Authority to be in violation of the FTA terms and conditions.
- (b) Flow-down requirement. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to the provisions.

18. NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES

- (a) The Authority and the Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of this Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the Authority, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.
- (b) Flow-down requirement. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal Assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

19. FALSE STATEMENTS OR CLAIMS CIVIL AND CRIMINAL FRAUD

(a) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U. S. C. 3801 et seq and U. S. DOT Regulations, "Program Fraud Civil Remedies," 49 C.F. R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies and affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(b) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U. S. C. 5307, the Government reserves the right to impose the penalties of 18 U. S. C. 1001 and 49 U. S. C 5307 (n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

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Date: June 12, 2015

(c) Flow-down requirement. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to the provisions.

20. RECOVERED MATERIALS

- (a) The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA) as amended (42 U. S. C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.
- (b) Flow-down requirement. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA.

21. LOBBYING

- (a) The Contractor is bound by its certification contained in its offer to the Authority regarding the use of federal or non-federal funds to influence, or attempt to influence any Federal officer or employee regarding the award, execution, continuation, or any similar action of any Federal grant or other activities as defined in 31 U.S.C. 1352, 49 CFR Part 19, or 49 C.F.R. Part 20. The Contractor agrees to comply with this requirement throughout the term of the Contract.
- (b) Flow-down requirement. The Contractor agrees to include these requirements in all subcontracts at all tiers under this Contract.

22. <u>NATIONAL INTELLIGENT TRANSPORTATION SYSTEMS ARCHITECTURE AND STANDARDS</u>

The Contractor agrees to:

- (a) Conform to the National Intelligent Transportation Systems (ITS) Architecture requirements of 23 U.S.C. § 517(d), as amended by MAP-21, unless it obtains an exemption from those requirements;
- (b) Follow:
 - (1) FTA Notice, "PTA National ITS Architecture Policy on Transit Projects," 66 Fed. Reg. 1455, January 8, 2001, and
 - (2) All other applicable Federal guidance, and

(c) Flow this provision down to all applicable subcontracts.

23. CONTRACTS INVOLVING FEDERAL PRIVACY ACT REQUIREMENTS

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

Contract No. FQ15192

Date: June 12, 2015

- (a) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. 552 (a). Among other things, the Contractor agrees to obtain the express consent of the federal government before the Contractor or its employees operate a system of records on behalf of the federal government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.
- (b) The Contractor also agrees to include these requirements in each subcontract involving the administration of any system of records on behalf of the federal government financed in whole or in part with federal assistance provided by the FTA.

CHAPTER XII-WMATA POLICIES

Contract No. FQ15192

Date: June 12, 2015

1. **SAFETY REQUIREMENTS**

- (a) The Contractor shall be responsible for ensuring compliance with the most stringent provisions of the applicable statutes and regulations of the District of Columbia, State of Maryland, Commonwealth of Virginia or political subdivision in which the work is being performed, as well as the METRO Construction Safety Methods Manual (1984 et. seq.) issued by the Authority, and the Department of Labor OSHA standards pertaining to the safe performance of the work. In the absence of a specific Construction Industry Standard, the Contractor would be required to comply with either an established OSHA General Industry Standard, National Institute for Occupational Safety and Health (NIOSH) guidelines, American Conference of Governmental Industrial Hygienists (ACGIH) guidelines, American National Standards Institute (ANSI) guidelines, the WMATA System Safety Program Plan, the WMATA Construction Safety Methods Manual, or the Metrorail Safety Rules and Procedures Handbook. For contracts in which work is performed on, or interfaces with the Metrorail System, the Contractor shall also comply with the publication titled Metrorail Safety Rules and Procedures Handbook. Further, the Contractor shall ensure that all methods of performing the work do not involve danger to the personnel employed thereon, the public and private property, whether or not these methods are cited or indicated in the Contract documents. Should charges of violation of any of the above be issued to the Contractor in the course of the work, a copy of each charge shall be immediately forwarded to the Authority Representative.
- The contractor shall employ and assign full time to the work a Safety Superintendent. (b) The Safety Superintendent shall have specialized training and experience in construction safety supervision and have a working knowledge of all OSHA regulations. He shall have the ability to develop and conduct safety training courses. He shall be familiar with industrial hygiene equipment and testing as required for the protection of all employees. The Safety Superintendent shall be employed exclusively for the purpose of supervising the safety of persons on or about the work and the property affected thereby. The Safety Superintendent shall also be responsible for providing first aid at the site and must have a current Red Cross First Aid Certificate. If, at any time, the work site is without the services of an approved Safety Superintendent for a period of 15 calendar days or more, the work may be closed down at the discretion of the Contracting Officer. The Safety Superintendent must be acceptable to the Contracting Officer and his performance will be reviewed by the Contracting Officer on a continuing basis. If the Safety Superintendent's effectiveness is below standard, the Contractor shall provide immediate replacement at the Contracting Officer's direction. Once employed, the Safety Superintendent shall not be changed without permission of the Contracting Officer.
- (c) The contractor shall provide, at the site of the work, a first aid kit which shall be fully equipped to meet the needs of the anticipated work force.
- (d) The contractor shall follow all appropriate RAIL Operational Rules, OAPs, SOPs and General and Special Orders while on the operational railroad and all Start-Up Rules and Manager's Notices when in a declared start-up area.

2. PRE-EMPLOYMENT CRIMINAL BACKGROUND CHECK REQUIREMENT

Pursuant to Metro Policy Instruction 6.10/5, WMATA requires that all contractor employees and candidates for employment undergo and pass criminal background screenings before being eligible to work on WMATA property and facilities. Contractor employees and candidates who pass the background screenings are eligible to enter WMATA property once WMATA issues them a contractor badge. Contractor employees and candidates who do not authorize background screenings or whose background screenings are unsatisfactory will not be granted contractor badges or access to WMATA property. Successful background checks are valid for one year from the date of inquiry.

Contract No. FQ15192

Date: June 12, 2015

3. WORKPLACE VIOLENCE/ZERO TOLERANCE

Pursuant to Metro Policy/Instruction 7.8.3, WMATA's Chief Procurement Officer is responsible for ensuring that all Metro contracts contain provisions that: (1) establish zero tolerance for acts and Workplace Violence for the employees of contractors and subcontractors at any tier, and (2) Provide that contractors and subcontractors will not retaliate against any of their employees or independent contractors for cooperating with investigations.



MID-ATLANTIC PURCHASING TEAM RIDER CLAUSE

USE OF CONTRACT(S) BY MEMBERS COMPRISING Mid -Atlantic Purchasing Team COMMITTEE

Extension to Other Jurisdictions

The [issuing jurisdiction] extends the resultant contract (s), including pricing, terms and conditions to the members of the Mid-Atlantic Purchasing Team, as well as all other public entities under the jurisdiction of the United States and its territories.

Inclusion of Governmental & Nonprofit Participants (Optional Clause)

This shall include but not be limited to private schools, Parochial schools, non-public schools such as charter schools, special districts, intermediate units, non-profit agencies providing services on behalf of government, and/or state, community and/or private colleges/universities that required these good, commodities and/or services.

Notification and Reporting

The Contractor agrees to notify the issuing jurisdiction of those entities that wish to use any contract resulting from this solicitation and will also provide usage information, which may be requested. The Contractor will provide the copy of the solicitation and resultant contract documents to any requesting jurisdiction or entity.

Contract Agreement

Any jurisdiction or entity using the resultant contract (s) may enter into its own contract with the successful Contractor (s). There shall be no obligation on the party of any participating jurisdiction to use the resultant contract (s). Contracts entered into with a participating jurisdiction may contain general terms and conditions unique to that jurisdiction Including, by way of illustration and not limitation, clauses covering minority participation, non-discrimination, indemnification, naming the jurisdiction as an additional insured under any required Comprehensive General Liability policies, and venue.

Mid-Atlantic Purchasing Team:

Alexandria Public Schools	Frederick, Maryland	Northern Virginia Community College
Alexandria Sanitation Authority	Frederick County, Maryland	Prince George's Community College
Arlington County, Virginia	Gaithersburg, Maryland	Prince George's County, Maryland
Arlington County Public Schools	Greenbelt, Maryland	Prince George's Public Schools
Bladensburg, Maryland	Herndon, Virginia	Prince William County, Virginia
Bowie, Maryland	Leesburg, Virginia	Prince William County Public Schools
BRCPC	Loudoun County, Virginia	Prince William County Service Authority
Charles County Public Schools	Loudoun County Public Schools	Rockville, Maryland
City of Fredericksburg	Loudoun County Water Authority	Spotsylvania County
College Park, Maryland	Manassas, Virginia	Spotsylvania County Government & Schools
District of Columbia Government	City of Manassas Public Schools	Stafford County, Virginia
District of Columbia Public Schools	Manassas Park, Virginia	Takoma Park, Maryland
District of Columbia Water & Sewer Auth.	Maryland-National Capital Park & Planning Comm.	Upper Occoquan Service Authority
Fairfax, Virginia	Maryland Department of Transportation	Vienna, Virginia
Fairfax County, Virginia	Metropolitan Washington Airports Authority	Washington Metropolitan Area Transit Authority
Fairfax County Water Authority	Metropolitan Washington Council of Governments	Washington Suburban Sanitary Commission
Falls Church, Virginia	Montgomery College	Winchester, Virginia
Fauquier County Schools & Government	Montgomery County, Maryland	Winchester Public Schools
	Montgomery County Public Schools	

BOND FORMS

Contract No. FQ15192 Date: June 12, 2015

PERFORMANCE BOND			
Contract No.:	Contract Date:		
Penal Sum of Bond:			
Date Bond Executed:			
Metropolitan Area Transit Authority (here bind ourselves, our heirs, executors, admir are corporations acting as co-sureties, we, only for the purpose of allowing a joint ac- itself, jointly and severally with the Princip	at we, the Principal and Surety(ies) hereto, are firmly bound mafter called the Authority) in the above penal sum for the panistrators, and successors, jointly and severally: Provided, that, the Sureties, bind ourselves in such sum "jointly and severally" action or actions against any or all of us, and for all other purposes al, for the payment of such sum only as set forth opposite the notion of liability shall be the full amount of the penal sum.	where the Sureties as well as "severally" es each Surety binds	
THE CONDITION OF THIS OBLIGATION IS SU	CH, that whereas the Principal entered into the contract identifie	ed above:	
NOW, THEREFORE, if the Principal shall perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Authority, with or without notice to the Surety(ies), and during the life of any guaranty required under the contract, and shall also perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety(ies) being hereby waived, then the above obligation shall be void and of no effect.			
IN WITNESS WHEREOF, the Principal and Surety(ies) have executed this performance bond and have affixed their seals on the date set forth above.			
Principal(s)			
Firm Name and Address:	Con	rporate Seal	
Signature:			
Name and Title:	State of Inc.:		
2. Firm Name and Address:	Con	rporate Seal	
Signature:			
Name and Title:	State of Inc.:		
3. Firm Name and Address:	Con	rporate Seal	
Signature:			
Name and Title:	State of Inc.:		

PERFORMANCE BOND - Page 2

Corporate Surety(ies)					
Surety	Surety Name and Address: Signature:	·		Liability Limit	(Seal)
	Name and Title:			State of Inc.:	Γ
Surety B	Surety Name and Address: Signature: Name and			Liability Limit	(Seal)
	Title:			State of Inc.:	
Surety C	Surety Name and Address: Signature: Name and			Liability Limit	(Seal)
	Title:			State of Inc.:	
	Bond Premium	Attach additional pages as needed.			
	Schedule		Total Premium	\$	

Contract No. FQ15192

Date: June 12, 2015

Instructions

- 1. This form is authorized for use in connection with contracts for construction work or the furnishing of supplies and services.
- 2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.
- 3. Corporation executing the bond as sureties must be among those appearing on the Treasury Department's list of approved sureties and must be acting within the limitations set forth therein. Where more than a single corporate surety is involved, their names and addresses (city and State) shall be inserted in the spaces (Surety A, Surety B, etc.) headed "Corporate Surety(ies)".
- 4. Corporations executing the bond shall affix their corporate seals.
- 5. The name of each person signing this performance bond should be typed in the space provided.
- 6. The date this bond is executed must be the same date as the contract execution date.

	PAYMENT BOND
Contract No.	Contract Date:
Penal Sum of Bond:	Date Bond Executed:

Contract No. FQ15192

Date: June 12, 2015

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety(ies) hereto, are firmly bound to the Washington Metropolitan Area Transit Authority (hereinafter called the Authority) in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally: Provided, that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into the contract identified above:

NOW, THEREFORE, if the Principal shall promptly make payment to all claimants as hereinafter defined supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety(ies) being hereby waived, then the above obligation shall be void and of no effect, otherwise it shall remain in full force and effect, subject, however, to the following conditions:

- 1. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the CONTRACT.
- 2. The above-named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due the claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
- 3. No suit or action shall be commenced hereunder by any claimant:
 - a. Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to the Principal within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal at any place where he maintains an office or conducts business, or his residence or such notice shall be served in any manner in which legal process may be served in the state or District of Columbia in which the aforesaid project is located, save that such service need not be made by a public officer.
 - b. After the expiration of one (1) year following the date of final settlement of said CONTRACT, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - c. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

PAYMENT BOND page 2

IN WITNESS WHEREOF, the Principal and Surety(ies) have executed this payment bond and have affixed their seals on the date set forth above. Principal(s) 1. Firm Name and Address: State of Inc.: Corporate Seal Signature: Name and Title: Firm Name and Address: State of Inc.: 2. Corporate Seal Signature: Name and Title: Firm Name and Address: State of Inc.: Corporate Seal Signature: Name and Title: Corporate Surety(ies) (Seal) **Liability Limit** Surety Name Surety and Address: \$ Α Signature: Name and Title: State of Inc.: Surety Name **Liability Limit** Surety (Seal) and Address: \$ В Signature: State of Inc.: Name and Title: Surety **Surety Name Liability Limit** (Seal) and Address: C Signature: \$ Name and Title: State of Inc.:

Contract No. FQ15192

Date: June 12, 2015

Attach additional pages as needed. Instructions

- 1. This form is authorized for use in connection with contracts for construction work or the furnishing of supplies and services.
- 2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.
- 3. Corporation executing the bond as sureties must be among those appearing on the Treasury Department's list of approved sureties and must be acting within the limitations set forth therein. Where more than a single corporate surety is involved, their names and addresses (city and State) shall be inserted in the spaces (Surety A, Surety B, etc.) headed "Corporate Surety(ies)".
- 4. Corporations executing the bond shall affix their corporate seals.
- 5. The name of each person signing this payment bond should be typed in the space provided.
- The date this bond is executed must be the same date as the contract execution date.

Signature: _

PROPOSAL SECURITY (PROPOSAL BOND FORM)

Contract No. FQ15192

Date: June 12, 2015

	Submit with	Price Proposal	XIVI)
Request for Proposal No.:	Proposal Date:		
Penal Sum of Bond:	5% of Offered Price or A	Amount, \$:	
Date Bond Executed:			
Metropolitan Area Transit Au administrators, and successo we, the Sureties, bind ourselv action or actions against any Principal, for the payment of	thority in the above penal sum forms, jointly and severally: Provided yes in such sum "jointly and sever yer all of us, and for all other provided the provided in the provide	or the payment of which we bir d, that, where the Sureties are of ally" as well as "severally" only purposes each Surety binds itse	firmly bound to the Washington and ourselves, our heirs, executors, corporations acting as co-sureties, for the purpose of allowing a joint elf, jointly and severally with the tif no limit of liability is indicated,
THE CONDITION OF THIS OBL	IGATION IS SUCH, that whereas th	ne Principal has submitted the p	roposal identified above:
specified therein for acceptar any, and give such bond(s) as if no period is specified) after documents and give such bo	nce (ninety [90] days if no period may be required by the terms of er receipt of the forms by him, o	is specified), shall execute such the proposal as accepted within or in the event of failure so to Authority for any cost of procu	entified above, within the period further contractual documents, if in the time specified (ten [10] days execute such further contractual uring the work which exceeds the
acceptance of the proposal thereby waived provided that	hat the Principal may grant to th	e Authority notice of which ext ith respect to extensions aggre	by any extension(s) of the time for cension(s) to the Surety(ies) being gating not more than ninety (90)
	Princ	cipal(s)	
			Corporate Seal
1. Firm Name and Address:			
Signature:		State of Inc.:	
2. Firm Name and Address:			Corporate Seal
Signature:		State of Inc.:	
3. Firm Name and Address:			Corporate Seal

State of Inc.:

Contract No. FQ15192 RFP FQ15192/MG Date: June 12, 2015

PROPOSAL SECURITY (PROPOSAL BOND FORM) - Continued - page 2

Corporate Surety(ies)				
	Surety Name		Liability Limit	(Seal)
Surety	and Address:		\$	
А	Signature:		·	
7	Name and			
	Title:		State of Inc.:	
	Surety Name			(Seal)
Surety	and Address:		Liability Limit	
В	Signature:		\$	
В	Name and			
	Title:		State of Inc.:	
	Surety Name			(Seal)
Surety	and Address:		Liability Limit	
С	Signature:		\$	
C				I
	Name and		State of Inc.:	
	Title:		State of file	

Attach additional pages as needed.

Instructions

- 1. This form is authorized for use whenever a proposal guaranty is required in connection with construction work or the furnishing of supplies and services.
- The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the 2. face of this form. The bond shall be signed by an authorized person. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.
- 3. The penal sum of the bond shall be expressed as either a percentage of the proposal price or in dollars and cents.
- 4. Corporation executing the bond as sureties must be among those appearing on the Treasury Department's list of approved sureties and must be acting within the limitations set forth therein. Where more than a single corporate surety is involved, their names and addresses (city and State) shall be inserted in the spaces (Surety A, Surety B, etc.) headed "Corporate Surety(ies)".
- 5. Corporations executing the bond shall affix their corporate seals.
- The name of each person signing this proposal bond should be typed in the space provided. 6.

PART III TECHNICAL SPECIFICATIONS

Contract No. FQ15192 Date: June 12, 2015

1 GENERAL:

1.1. Purpose:

1.1.1. The Washington Metropolitan Area Transit Authority (known hereinafter as the Authority) desires that certain professional on-call systems engineering consultant (GEC-SYS) services be secured to provide design and review services to support the on-going maintenance program, studies, provide engineering support for new technology development projects, and for additional projects and services as required. The systems covered in this contract include automatic fare collection, automatic train control, communications (excluding IT), hotel power (480 volts and below), trackwork and traction power.

Contract No. FQ15192

Date: June 12, 2015

1.1.2. As described in the following, the GEC-SYS shall assist the Authority by providing certain professional engineering services associated with current and new systems equipment, repair and maintenance procedures and or support for equipment located in the District of Columbia, Maryland and Virginia. This effort pertains to both Metrorail and Metrobus.

1.2. Background:

1.2.1. Automatic Fare Collection

1.2.1.1. Automatic Fare Collection (AFC) System

The Automatic Fare Collection System of the Washington Metropolitan Area Transit Authority ("WMATA" or "Authority") employs a self-service group of Farecard Vendors, Express Vendor (collectively referred to as Ticket Vendor Machines (TVM)), Exitfare Machines, Faregates, Parking Lot Equipment, and Bus Fareboxes to provide the services required for the transit customer to pay the fares and fees associated with the usage of the WMATA Metrobus and Metrorail transportation systems. In MetroRail, the Station Controller PC is located in the Station Managers kiosk on each Rail mezzanine. This allows WMATA staff to configure the mezzanine devices to best suit customer flow, to monitor the operation of these devices, and to transmit operational, statistical and transactional data to a central site.

1.2.1.2. Fare Media

The current Automatic Fare Collection System TVMs allow customers to purchase a magnetically encoded Farecard with value in nickel increments between configurable preset values, (2) a pass valid for a predetermined period starting on first use, or (3) to load funds onto a SmarTrip® Card. The SmarTrip® Card is a "type B" memory Contactless Smart Card (CSC) that uses the Cubic Go-Card application. There is a project underway wherein all rail devices will use the Cubic Tri-Reader 2 (TR2) Card Interface Device (CID or "Target") and the Cubic Nextfare suite of software. The TR2 will be able to read and write to 3 different types of CSCs: Type A, Type B and Go Card. The TR2 can be upgraded with firmware/software to read smart cards complying with the ISO 14443 standard. There are also two Security Access Module

(SAM) sockets that are designed to be programmable for operation in accordance with the latest Eurocard, MasterCard, and Visa (EMV) specifications. Metrobus fareboxes use the earlier generation Cubic Tri-Reader.

Contract No. FQ15192

Date: June 12, 2015

Transactions speeds between smart card and TR2 are to be no greater than 300 msec, this includes reading the information from the card, processing this information and re-encoding the information on the card. Read range between card and target is from 0 to 50 mm; although the customers are advised to "touch" their SmarTrip® card to the target. The stored value and other data required for processing the transaction is stored on the SmarTrip® Card itself.

1.2.1.3. Vendors

A typical mezzanine configuration consists of Farecard Vendors and Express Vendors located on the free (street) side of the faregate array. The customer purchases a magnetically encoded farecard from a Vendor or uploads value onto the SmarTrip® card at a Vendor. The vendor accepts coins, paper currency, credit cards, debit cards and magnetic farecards for payment and issues coins for change. The value or pass-period is encoded on the magnetic card or onto the SmarTrip® Card. A pass may be issued for unlimited rides during either a preset period with pre-defined start and end dates or for unlimited rides during a preset duration starting when the pass is first used. A "Short Trip Pass" may be issued for unlimited rides that are no longer than a pre-set cost.

1.2.1.4. Exit Vendors

If the customer takes a ride longer than the pre-defined short trip, the customer is directed to the Exitfare machine to add additional funds. One or more Exitfare machines are located on the paid (train) side of the faregates. The Exitfare machine allows the customer to add value to his magnetic farecard in the event that the customer does not have enough value to exit that station.

1.2.1.5. Adding Value

Customers may add value to Smartrip or purchase magnetics at Express Vendors using cash, debit/credit, trade in of magnetic cards or Smartbenefits. ISO 8583 debit/credit messages are sent via the existing communications infrastructure from the Express Vendor to the WMATA ACI Base 24 debit/credit switch application on the central computer and then forwarded to the sponsoring bank for online authorization. The Express Vendor checks for valid card BIN numbers as well as controlling limits on maximum credit/debit value purchases. Smartbenefits is a WMATA application used to support the IRS transit benefit program and other electronic transfer of value onto a SmarTrip® card.

1.2.1.6. Fare Gates

The customer then takes the farecard or SmarTrip® card to the faregate which verifies that the card is valid, encodes onto the card the Point-of-Entry, Time-of-Entry and whether the system was in the Peak or Off-Peak period when the entry was made, returns the card to the customer and opens the barriers when the customer retrieves the card. The customer then proceeds to the train to travel to his or her destination. Upon exiting the station, the customer presents the farecard or SmarTrip® card to the faregate which, using the entry data on the Card, the faregate calculates (from a table within the gate) the fare to be deducted, subtracts the fare from the value on the card, encodes the updated data on the card, displays the value deducted from the card and the remaining value. Again, if the customer does not have sufficient Value on the Farecard, the customer must proceed to the Exitfare Machine to add additional value (funds) to the Card. SmarTrip® card customers with insufficient funds to exit can "go negative", i.e., they do not have to use an Exitfare machine to bring the cards stored value up to the required fare but instead are allowed to exit with the stored value indicating negative value. They have to add enough value to bring the stored value positive before the next entry transaction is allowed.

Contract No. FQ15192

Date: June 12, 2015

1.2.1.7. Fare Calculations

Fare calculations are based on the distance traveled and whether the journey commenced during Peak or Off-Peak periods. The system has the capability to allow the use of discount or special fare categories for specified groups (e.g. such as elderly, disabled, students or others). The Fare Structure is configured on the central system and published to the machines where it is stored in memory within each machine for use in fare calculations. Transfer credit is given, based on configurable parameters, for transferring from the regional bus system to the Metrorail system and vice versa. Transfer credit is also given for transfer among various WMATA and regional bus systems.

1.2.1.8. Parking Equipment

The parking lot equipment deducts the parking fee from the customer's SmarTrip® Card. A signal is sent to the barrier to allow the customer to drive into or out of the parking facility after the fee has been paid. Depending on local regulations, the parking fee may be collected before allowing entry into the parking facility or before allowing exit from the facility. Stored value for parking fees is not allowed to go negative.

1.2.1.9. Station Controller

The fare collection equipment on the rail mezzanine, including the parking lot equipment, is connected to a Station Controller located in the kiosk on the mezzanine level. The Station Controller is the hub of the communications for the equipment before the data is transmitted to the central site. Communications from the devices to the station controller is via RS422 multi-drop serial communications. Real-Time-Data is collected for each transaction, on the usage of each machine

through registers, and on the status and operation of each piece of equipment. The transaction data and the register data are used, among other things, to detect missing transactions. Data collected is used for revenue reconciliation, status of the devices ridership statistics, customer service and to ensure all transactions are processed. Communications between the Station Controller and the central site is via Ethernet over a private fiber optic network operated by WMATA. (At the time of writing, conversion from System Network Architecture (SNA) to Ethernet is in process; conversion is expected to be completed by December 2009.) Ethernet from the station controller to the central computer will not be enabled until all stations are converted to Nextfare.

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1.2.1.10. Bus Farebox

Each Metrobus has a farebox which allows customers to pay fares in cash or by use of a SmarTrip® card. The customer may deposit coins or currency into the farebox until an amount equal to the fare is deposited at which time the transaction is complete. Customers who use a SmarTrip® card to pay the fare would present the card to the target on the farebox. The processor would deduct the fare from the value on the card and command the target to encode the new value on the card. Buses of local agencies participating in the Regional Fare System have a bus fare system, including the fareboxes and Garage Controller that is functionally equivalent to the system at WMATA.

1.2.1.11. Negative Transactions

MetroBus SmarTrip® card customers with insufficient value to pay the boarding fee are similarly allowed to go negative. This feature works once each for bus and rail. In both cases, MetroRail and MetroBus, the respective mode of transportation has to be positive before it can go negative. This means only one negative stored value transaction per mode.

Each farebox collects data on each transaction, on the total amount of fares collected and on the operation of the farebox. The data is downloaded to a computer at the garage, the garage controller, via an optically coupled probe and a Radio Frequency Local Area Network (RF LAN) when the Metrobus is serviced upon its return to the garage. Fare policy data and operational data are sent from the central computer to the farebox using the RF transmission. Each Garage Controller is connected to the central site for central consolidation of data.

1.2.1.12. Central Site

Data-Systems at the central site allow operators to produce reports on the use of individual SmarTrip® cards and on the use of each machine. There is an on-line verification of each credit card and each debit card used for the purchase of fare at the Express Vendors. Data on the current value of each SmarTrip® card is maintained in a central data base so that a customer's card may be replaced if it is reported lost or stolen. As appropriate, individual cards may be hotlisted rendering

service facility.

them invalid for use if fraud, loss or theft is reported. When a card is hotlisted, this status is encoded on the card and can only be removed at an appropriate customer

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1.2.1.13. Servers

The AFC data system uses IBM AIX model p590 and p595 servers with Weblogic 10 and Oracle 10g third party software hosting the Cubic Nextfare Central System (NCS) applications.

1.2.1.14. New Electronics Payment Program

WMATA is in the early stages of a program to modernize and replace its current fare collection system. The New Electronics Payment Program (NEPP) will implement a centralized account system that utilizes open payment interfaces for fare payment. The program will replace fare payment equipment and expand customer fare payment options to include: contactless credit cards, mobile phones, personal identification cards, and other technologies that comply with open payment communication standards. The program will also introduce new web and mobile customer tools to provide new account management and access to information.

- 1.2.1.14.1. NEPP implementation includes the development and implementation of:
- 1.2.1.14.1.1. fare payment and fare management applications;
- 1.2.1.14.1.2. business reporting and analytical tools:
- 1.2.1.14.1.3. web based customer sales and account management applications;
- 1.2.1.14.1.4. mobile customer applications;
- 1.2.1.14.1.5. web based system monitoring tools;
- 1.2.1.14.1.6. retail sales applications;
- 1.2.1.14.1.7. a central data system;
- 1.2.1.14.1.8. fare vending devices;
- 1.2.1.14.1.9. faregates:
- 1.2.1.14.1.10. on-board payment targets for buses;
- 1.2.1.14.1.11. hand held sales devices for access services;
- 1.2.1.14.1.12. parking payment targets that integrate with existing parking equipment; and
- 1.2.1.14.1.13. customer service and sales terminals.

- 1.2.1.14.2. NEPP builds on existing infrastructure, software applications, and technological improvements implemented under multiple WMATA projects. NEPP includes the integration of new fare applications, systems, and devices with existing systems, equipment and software applications. NEPP will integrate with the following WMATA systems and software applications:
- 1.2.1.14.2.1. WMATA business software (Maximo and PeopleSoft);
- 1.2.1.14.2.2. SmartBenefits transit benefits administration program;
- 1.2.1.14.2.3. Bank card processing services;
- 1.2.1.14.2.4. Bus integrated system monitoring and CAD/AVL tools;
- 1.2.1.14.2.5. Metrorail network communications systems;
- 1.2.1.14.2.6. Metrorail fire alarm system;
- 1.2.1.14.2.7. Parking lane equipment; and
- 1.2.1.14.2.8. Access service scheduling and trip management tools.
- 1.2.1.14.3. NEPP Engineering support tasks will require subject matter expertise in transit fare payment technology and applications, parking systems, RF and LAN communications systems, device deployment, rail and bus transit infrastructure, ADA compliance, smart card technology, electronic payment technology and customer service technologies and business processes.
- 1.2.1.14.4. Engineering tasks to support NEPP may include:
- 1.2.1.14.4.1. design review for NEPP equipment, systems, and applications;
- 1.2.1.14.4.2. first article and system integration testing;
- 1.2.1.14.4.3. construction support for infrastructure improvements to support new fare equipment and systems;
- 1.2.1.14.4.4. compliance oversight for fare system equipment deployment; and
- 1.2.1.14.4.5. technical support as needed to assist in the implementation of NEPP.

1.2.2. Automatic Train Control

1.2.2.1. The Automatic Train Control System for the first 37 miles of the Regional METRO Rail System, the interlocking control for the major repair facility, the first 150 pairs of cars, and the operation control center were all procured under Contract 1Z2011. This Section briefly describes the ATC system provided by General Railway Signal Company in response to WMATA Contract 1Z2011, and subsequent revisions and additions to the ATC System.

1.2.2.2. The Automatic Train Protection (ATP) System is that part of the ATC System which provides protection against collisions and overspeed conditions. The ATP System also provides control of interlockings, route security through interlockings, and control of train door operation. Principal functions of the ATP System are Train Detection, Speed Command Selection, Speed Command Transmission, Interlocking Control and Security, Train Door Control, and all related carborne equipment to receive, decode, and safely act upon the ATP commands.

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- 1.2.2.3. Train detection is provided by jointless audio frequency track circuits except in certain areas of special trackwork. Mainline track circuits are conventional with tuning unit and impedance bond mounted between the rails at the block boundary. Audio frequency track circuits in special trackwork areas use a shunt bar and loop to inject the signal into the rails and an untuned impedance bond to couple the signal from the rails to the receiver in a center-receive configuration. Balancing impedance type, 60- Hz track circuits are used in the diamond of double crossovers and in the crossover track of single crossovers.
- 1.2.2.4. The audio frequency track circuits use eight frequencies (two sets of four) for train detection purposes. Only one set of frequencies is used on a given track and the same set is not normally used on adjacent tracks. Audio frequency track circuits that have both the transmitter and receiver in the same room are adjusted for a shunting sensitivity. Track circuits that have the transmitter and receiver in separate rooms are adjusted for a shunting sensitivity
- 1.2.2.5. Speed command selection is via vital relay contacts. The selection contacts represent traffic locking, occupancy of track circuit for which the speed command transmitter is effective, occupancy of track circuits downstream of the speed command transmitter. occupancy of track circuits upstream of the speed command transmitter if these circuits are within a more restrictive civil speed zone and the more restrictive civil speed limit is less than 2200 feet upstream of the speed command transmitter, position of switches downstream of the speed command transmitter, status of signal clearing networks downstream of the speed command transmitter, position of switches upstream of the speed command transmitter, when the relative location of such switches can create a more restrictive civil speed limit and condition of temporary speed restriction control. Additional conditions as required to provide safe train separation, speed, and door control and to provide schedule control at station platforms and dispatching locations. Where track circuit occupancy and signal clearing network status must be transferred from one train control room to another for speed command selection purposes, such information transfer is accomplished via polar direct current line circuits. Typical speed command selection networks and typical room-to-room line circuits are shown in the Contract Drawings.
- 1.2.2.6. Speed command transmission is via one of two audio frequency carriers, 4550 Hz and 5525 Hz, ON/OFF AM modulated at one of five discrete frequency code rates. One additional code rate is used for the transmission of door opening commands. The speed selection network selects a code rate generator output to drive the modulator,

and energizes a carrier generator, in accordance with the above code chart, to cause the appropriate command to be transmitted. In all areas, except special trackwork areas, speed command transmission is via the same transmitter as the train detection frequency. The transmitting equipment is shared between the train detection frequency and the selected speed command frequency on a time division multiplexing basis. The multiplexing is controlled by the selected code rate, which alternately keys the train detection and speed command frequencies. In special trackwork areas two speed command transmission methods are used. First, at shunt bar locations transmission is via the same equipment as the train detection frequency with the code rate slaved from the transmitter on the opposite side of the shunt bar. Second, at receive/receive locations and for the loops through 60 Hz track circuits, transmission is via an independent speed command transmitter, the output of which is directed through loop selection networks to energize the proper loop for the routing and position of the train.

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- 1.2.2.7. Interlocking control and security is divided into eight categories 1) route initiation, 2) route completion, 3) time released approach locking, 4) route locking, 5) detector locking,6) switch control and indication, 7) signal control and 8) loop control.
- 1.2.2.8. Route initiation is accomplished by identifying the desired route in terms of the entering signal and the exiting signal. Route initiation by local control panel, in this method of initiation, the first signal button actuated on the local Interlocking Control Panel identifies the entering signal and the second signal button actuated on the local panel identifies the exit. Assuming that the desired exit is available and no conflicts are detected, the result is an energized pushbutton stick (PBS) relay associated with the entering signal and an energized exit stick (XS) relay associated with the exiting signal. Route initiation by central control, in this method of initiation, the central control computer sends a route request, associated with the entering signal, to the local equipment. Receipt of this control causes the same action in the local equipment as the first actuation of a signal button. The local receipt of the first route request control is indicated back to central control. Receipt of the entrance received indication at central control keys the computer to stop sending the route request control associated with the entering signal and to start sending the route request associated with the exiting signal. Receipt of this second route request control causes the same action in the local equipment as the second actuation of a signal button. Route initiation by track circuit occupancy, in this method of route initiation, the presence of a train in certain track circuits causes wired logic to initiate a route which the train will subsequently accept. The wired logic provides for storage of route requests when a desired route cannot yet be initiated, priority determination, and determination of exiting signal when a choice exists. The result of this initiation method is an energized PBS relay associated with the entering signal and an energized XS relay associated with the exiting signal. This method of route initiation is used only at certain locations and can be enabled or inhibited from the local control panel or from central control. While this method of initiation is enabled, all other methods of initiation remain effective. In a variation of this method, the route request is not initiated until a "TRAIN READY" indication is received from the train occupying the track circuit. Route initiation by train identity, this method of initiation is the same

as route initiation by track circuit occupancy, except that the trigger for an initiation request is the receipt of a train destination and the determination of the desired exiting signal is by the destination of the train. When this method is used, the transfer of the detected train destination information to Central must be coordinated with the occupancy of the designated ADVANCE APPROACH area by the train, and with route availability. Route nitiation by wayside pushbutton, in this method of route initiation, the desired route is defined by actuation of a pushbutton located at the entering signal. The entering signal is determined by physical location of the pushbutton box and the exiting signal is determined by which button in the box is actuated. The result is energization of a manual pushbutton stick (MPBS) relay associated with the entering signal and energization of an exit stick (XS) relay associated with the exiting signal. This method of route initiation is used only at certain signals, signals which also have initiation methods described in the preceding two methods, and is active at all times.

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1.2.2.9. The five methods of route initiation described above are coordinated to protect against misrouting and lockups. Coordination includes: 1) Local-remote control to prevent both local control and central control from being active at the same time; 2)

Lockout control to prevent any active initiation method from functioning while another method is being used to initiate a route and; 3) Time-out control to cancel an unidentified entering signal if an exit is not identified in a predetermined time. The initiation circuits also include a search of possible routes associated with a defined entering signal. The result of this search is the energization of an exit (EX) relay associated with each "allowable-exit" signal location. The EX relay associated with a given "allowable-exit" signal location must be energized before the XS relay associated with that signal can be energized to identify it as the exiting signal. All route initiation circuits are considered non-vital. Route completion, after the route initiation is completed by identifying both the entering signal (PBS relay energized) and the exiting signal (XS relay energized), the route completion circuits complete the route by: 1) Requesting the proper switch positions; 2) De-energizing the unselected EX relays; 3) Making a preliminary check of the route integrity; 4) Initiating the vital locking and; 5) Initiating the request for signal clearing.

1.2.2.10. Route completion is accomplished as follows: 1) The state of the search relays (BY and AY relays) and the identification of the exiting signal (XS relay) determines the desired position of each switch in the route. This information is used to request the proper switch positions by energizing the appropriate lever repeater (NLP and RLP) relays; 2) Energizing the lever repeater relays causes the EX relays for unselected exit signals to become de-energized because of the requests for switch positions that would conflict with those exiting signals. Energizing the lever repeater relays also causes the switches to be properly positioned by the switch control and indication circuits if it is safe to do so; 3) The identity of the entering signal, non-vital checks of switch correspondence, occupancy within the route, non-vital check of traffic availability beyond the exiting signal, and the identity of the exiting signal are used to provide a preliminary route integrity check. The result of this check is the energization of the Route Check Relay (RCR) associated with the entering signal and; 4) Energizing the RCR initiates the vital locking and signal clearing requests.

1.2.2.11. Time released approach locking is provided for all mainline signals. One such locking circuit is provided for each signal. This form of locking is initiated when the Route Check Relay (RCR) becomes energized and remains in effect until released by one of the following: 1) The signal is accepted by the train (two track release). 2) The signal is set to stop and no train is within the approach limits. 3) The signal is set to stop and a predetermined time has expired. The approach locking relay (ASR) circuits are arranged such that a momentary interruption of track circuit energy will not release the locking. This is accomplished by using "two track release", with the two track circuits (the last track within the interlocking, and the first track exiting the interlocking) driven from different branch fuses and by cross checking the ASR relays such that, if opposing ASR's are both de-energized, as would be the case with a dc bus failure, time must be run to release the locking.

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- 1.2.2.12. Route locking is provided to maintain security of the route ahead of the train as it progresses through the interlocking. Route locking is initiated by the initiation of approach locking and is released when approach locking is released and there are no occupancies in the route. In some cases the route is divided into contiguous sections for route locking purposes and locking of the section(s) of the route behind the train are released (sectional route release) as the train progresses through the route. Route locking is performed by Route Stick Relays (ASR and RSR).
- 1.2.2.13. Detector locking is established by the track relay for the track circuit in which the switch is located and prevents switches from being thrown under a train. At interlockings with automatic route initiation, loss of shunt protection is provided by requiring track relays to be energized for a predetermined time before locking is released.
- 1.2.2.14. Switch control and indication control relays (NWZ and RWZ) are driven from the switch call relays (lever repeaters NLP and RLP) in the route completion network. The switch control relays are circuited to provide storage of the switch call, provide premature indication prevention, and prevent preconditioning.
- 1.2.2.15. The switch control repeater relays (NWZPR & RWZPR) are vital relays, primarily for maintenance convenience. The switch control repeater relays control pole changed energy to the switch operating relays (NWR and RWR) through lock stick relay (LSR) contacts. The lock stick relay contacts are wired to provide a short circuit across the switch operating relays when the lock stick relay is de-energized.
- 1.2.2.16. The lock stick relay (LSR) is used to provide switch stroke completion in the event that the lock relay (LR) becomes de-energized prior to completion of the switch stroke. Overload protection of the switch machine motor circuit is provided by the overload (stick) relay (OR), which has one coil in series with the motor circuit. The second coil is used as a stick coil and is energized through a front contact of the same (OR) relay from the drive circuit for the switch operating relays. The switch machine motor circuit is a two- wire, pole-changed circuit controlled by magnetic blow-out contacts on the switch operating relays (NWR & RWR). Switch position indication is controlled by a set of switch circuit controller contacts within the switch

machine which are part of a two wire, pole changed circuit, driving a pair of biased switch repeater relays (NWPR and RWPR). Where two switch machines are operated as one, such as at a crossover, the indication circuit is controlled by the switch circuit controllers in both crossover switch machines to drive a single set of switch repeater relays. Switch correspondence relays (NWCR & RWCR) are provided to verify that the switch (position) repeater relays (NWPR & RWPR) are indicating that the applicable switch is in the position called for by it's switch control repeater relays (NWZPR & RWZPR).

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- 1.2.2.17. Signals are controlled by vital home signal relays (HGR) which are energized by vital route check (RC) networks. The following checks are included in these route check networks: 1) Approach locking is in effect. 2) Route locking is in effect. 3) Traffic locking beyond the exit signal is in effect. 4) Lock and lock stick relays are deenergized. 5) Switches are in proper correspondence. 6) Route is not occupied. 7) Timers associated with release of locking are at zero time. 8) There has not been an overrun of a red signal at the interlocking. Where a number of control lines extend past a facing point signal location, route sensitive signal repeater relays are provided for use in the speed circuits. Signal lighting energy is controlled through front and back contacts of the home signal relays (HGR), and the two red lenses of the STOP aspect are independently lighted from different energy buses.
- 1.2.2.18. Loop control and selection circuits are provided to sequence the transmission of speed commands through interlockings. The circuits and sequencing are such that a speed command never appears behind a train and only one loop is energized downstream of the track circuit occupied by the train. Loop control circuits are organized to require that the signal be clear and a train be on the first track circuit in the approach before the sequence can begin. Overrun protection is provided to interrupt the sequence and stop the transmission of all speed commands within the interlocking in the event of an overrun of a red signal.
- 1.2.2.19. Train doors are controlled by commands transmitted via the vital, wayside-to-train command transmission system used for speed commands. Two commands are used; OPEN RIGHT DOORS and OPEN LEFT DOORS. The absence of either of these commands is interpreted as CLOSE DOORS. Door control commands can be transmitted only at block boundaries associated with platform ends. Block boundaries associated with side platform stations are equipped to transmit the OPEN RIGHT DOORS command at the normal traffic-leaving end and the OPEN LEFT DOORS at the normal traffic-entering end. Block boundaries associated with center platform stations are equipped to transmit the OPEN LEFT DOORS command at the normal traffic-leaving end and the OPEN RIGHT DOORS at the normal trafficentering end. Carborne ATP equipment compensates for direction of travel of the controlling "A" car and ensures that it is safe to open the train doors prior to acting upon the commands. One of the safety checks made is the verification that the train is at a passenger station. This check is accomplished by cycling a bit back and forth between the train and the station via the TWC system. The cycling of the TWC bit is used to keep a vital relay (PSCR) on the train energized as long as the train is in

TWC communications with a passenger station. The application of the door control commands is under control of the station dwell control circuits.

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- 1.2.2.20. The carborne ATP equipment is organized to perform the four functions. Receive and decode the speed limit and door control commands. Measure train speed and compare it to the speed limit. Control the door operations and check door position. Apply Full Service Braking in the event of overspeed or system failures which affect safety.
- 1.2.2.21. The carborne ATP System has the capacity to receive and decode 12 commands from the front of the train and two commands from the back of the train. The commands are: 15 mph, 22 mph, 28 mph, 35 mph, 40 mph, 45 mph, 50 mph, 55 mph, 65 mph, 75 mph, open right doors and open left doors. Absence of an ATP command is interpreted by the equipment to mean "STOP" when operating in the Automatic mode and "STOP AND PROCEED at 15 MPH" when operating in the Manual mode.
- 1.2.2.22. ATP command reception is accomplished through two coils mounted on the cab end of each car. The coils are rigidly mounted to the car body with the center of the coils 31.25 inches ahead of the centerline of the lead axle. The bottoms of the coils are nominally 8 inches above the top of rail and the lateral distance between coil center lines is 44 inches.
- 1.2.2.23. Two receivers are provided on each "A" car. One receiver, hereafter referred to as the front-end receiver, receives and demodulates the ATP signals presented to the front of the train while the second receiver, hereafter referred to as the back-end receiver, receives and demodulates the ATP signals presented to the back of the train. The code output of the front-end receiver is monitored by six code-rate detectors, each of which drives a vital relay when its associated code rate is present. The worst case time between removal of a speed command to drop away of the associated code rate and carrier relays is 2 seconds. The normal time required to change speed commands is between 0.5 and 1.0 seconds.
- 1.2.2.24. The contacts of the six code-rate relays and the two carrier relays driven from the front-end receiver are fanned to decode the command. The decoding fans are such that the most restrictive command has priority. The command decoding fans output to the speed selection circuits for overspeed protection, speed selection circuits for automatic speed regulation, automatic door control, limiting speed indicators on the control consoles and brake interface.
- 1.2.2.25. Overspeed protection equipment that compares the speed selected by the command decoding fan, in connection with the automatic-manual circuits, to the actual train speed is provided. Actual train speed is derived from a speed sensor monitoring the rotation of a gear in a gear unit. Wheel wear compensation is provided in discrete steps to correct for variations in wheel diameter on the axle monitored by the ATP speed sensor. The overspeed protection unit energizes a vital relay to indicate that the actual train speed is less than the limiting speed and that the unit is operating

properly. In the event of a failure, or if the actual train speed exceeds the speed limit, this vital relay becomes de-energized.

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- 1.2.2.26. When the train is in automatic operation, an overspeed condition detected by the Overspeed Protection System results in the removal of all calls for positive tractive effort and initiates a Full Service Brake application. The Full Service Brake application is enforced until the overspeed condition no longer exists.
- 1.2.2.27. When the train is in the manual-operation-with-overspeed-protection mode, an overspeed condition detected by the Overspeed Protection System results in the removal of all calls for positive tractive effort and initiates a Full Service Brake application. An overspeed warning in the cab is also sounded and persists until the attendant places the master controller into the Full Service Brake position. The Full Service Brake application is enforced until the attendant has placed the master controller in the Full Service Brake position and the overspeed condition no longer exists. When the train is in the manual-operation-with-ATP-cutout mode, no action shall be taken by the ATC System as a result of an overspeed condition.
- 1.2.2.28. The Overspeed Protection System also includes zero speed detection circuitry. The train is indicated as being at zero speed when the speed is being detected, in a fail-safe manner, to be below 1 mph.
- 1.2.2.29. Signals received by the front-end receiver of the train determine on which side of the train the doors are to open, and also prove that the frontmost side door of the train is within the platform limits. The signal received by the back-end receiver of the train proves that the rearmost side door of the train is within the platform limits.
- 1.2.2.30. The output of the back-end receiver is decoded to detect the presence of code rate 1 (3.0 Hz). The presence of this code rate causes energy to be applied to trainline wires at the back of the train. Door control circuits in the controlling "A" car monitor these trainline wires to provide back-end status.
- 1.2.2.31. A cycle check system is provided in the passenger stations, via the Train-to-Wayside Communications (TWC) System, which is used to confirm that the train is located in a passenger station before doors can be operated.
- 1.2.2.32. The Automatic Train Supervision (ATS) System is that part of the ATC system which provides centralized monitoring and supervision capabilities and certain automatic ATC supervision facilities at wayside. The ATS system consists of five major components. A computer system and central control consoles located at the Operations Control Center (OCC) in the Jackson Graham Building. A Data Transmission System (DTS) linking the equipment at the OCC with that in the TCRs. Remote Terminal Units (RTUs) located at the wayside Train Control Rooms (TCRs) (The RTUs are hard-wired remote control devices dedicated to the monitoring and supervision of certain wayside ATC functions and devices as well as the electrical and support facilities at the location). A Train-To-Wayside Communications (TWC) system to provide a two-way link between the TCR equipment and trains at stations.

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An Automatic Car Identification (ACI) system. This system has optical scanners located at certain points next to the tracks. These scanners read the car numbers from a train as it passes the scanner. The car identification is reported to the central computer, which can then determine the car mileage. This information can be used for maintenance purposes and analysis of operations.

1.2.2.33. The central control facility contains a control computer, a hot backup computer, and a computer for software development, which also serves as the ultimate backup computer. The control computer receives and transmits messages between the operations control center and station locations via the DTS. It communicates with the central control operator by providing displays on a large-scale display and video monitors (CRTs), and by accepting operator input from console trackballs and keyboards. The control computer performs schedule adjustments by changing dwell times and interstation run times, both of which are sent to the station RTUs via the DTS. The METRO system can operate as a stand-alone entity without the computer complex at the OCC. However, without the capabilities provided by the ATS software in the central control computer, the display system, and the DTS, the job of monitoring and controlling the METRO operations, especially to maintain schedules, would be more difficult. This is especially true when an abnormal condition (e.g., a malfunctioning train) is encountered. The general functions provided to aid the central control operators are:

1.2.2.33.1. Display System

1.2.2.33.1.1. Train System Displays

1.2.2.33.1.2. Train and Interlocking Detail Displays

1.2.2.33.1.3. Train Information Displays

1.2.2.33.1.4. Electrical System Displays

1.2.2.33.1.5. Train and Electrical System Alarm Display

1.2.2.33.1.6. Geographic Displays

1.2.2.33.2. Monitoring Traffic Regulation

1.2.2.33.2.1. Schedule Control

1.2.2.33.2.2. Schedule Adjustment Strategies

1.2.2.33.2.3. Schedule linkage of train put-ins

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1.2.2.33.3. Supervisory Capability

1.2.2.33.3.1. Train Control requests to wayside ATP system

1.2.2.33.3.2. Interlocking requests to wayside ATP system

- 1.2.2.34. The software for the central computer has been designed in a building block approach and provides the primary functions of Traffic Regulation and Control and Display.
- 1.2.2.35. All trains in the METRO system under central computer supervision enter revenue service, run, and terminate revenue service according to times provided by predetermined train schedules. These train schedules are the basis for Traffic Regulation control. A train schedule is defined as a set of arrival and departure times at successive locations which completely dictates a train's intended movement from entry into revenue service until lay up. A train schedule defines, among other things, the scheduled arrival time and the scheduled dwell time at every station traversed by a given train. A unique schedule is defined for each train that is in revenue service or is about to enter revenue service. The system schedules are selected by the central control operators at the start of revenue service on a particular day.
- 1.2.2.36. Traffic Regulation automatically maintains the scheduled headway between all of the trains operating in the territory and regulates train movements for time schedule adherence, proper merging of trains at rail line junction points, and optimum utilization of terminal locations. This is achieved by control of both station dwell time, and train performance (speed) and acceleration levels that govern the interstation running time.
- 1.2.2.37. The four main components of the Traffic Regulation software are Put-in Processing, the Line Algorithm, the Terminal Algorithm, and Strategy Selection. Also, statistics of the actual performance of trains are gathered for off-line analysis.
- 1.2.2.38. The Put-in Processing software initiates train entry into revenue service either from a storage point, such as a yard or a pocket track, or from a terminal station after a train reversal. The primary function of the Put-in Processing software is to construct a schedule for the next terminal-to-terminal run of the train so that the Terminal Algorithm and the Line Algorithm can control it. Another function performed is the lighting of warning lamps at yards prior to the scheduled dispatch of a train so that the yard personnel can prepare a train for revenue service.
- 1.2.2.39. The primary function of the Line Algorithm is to attenuate delays due to minor line disturbances as quickly as possible and prior to the arrival of trains in areas where the probability of such delays is high. Line disturbances are events or conditions that

cause a train to be early or late with respect to its schedule. Such events cause the Line Algorithm to affect the dwell time of a train at a station and the performance of a train departing from a station. The Line Algorithm minimizes or eliminates the effects of delays by adjusting the dwell and performance level of a train such that the departure schedule error at a station and the arrival schedule error at the next station are both minimized

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- 1.2.2.40. There are four "Performance Levels" for train operation. Performance Level 1 (PL1) (MAXIMUM) requests the train to run at the maximum safe interstation speed, resulting in the minimum safe interstation run time. The normal schedule for a train is based on PL2 (NORMAL), which is approximately 10 percent slower than PL1. This gives traffic regulation a catch-up capability by allowing it to request PL1 to reduce a train's lateness. PL3 (REDUCED) and PL4 (RETARDED) are approximately 10 percent and 20 percent slower than PL2 and are used when trains are ahead of schedule. The Performance Levels are implemented by imposing applicable maximum ATS speed limits on trains between successive station pairs.
- 1.2.2.41. Each of the four performance levels may be combined with a request for either full or half acceleration, thus providing eight different interstation run times. For each station platform the program can select either a normal dwell time or another value which lies within the range of minimum and maximum dwell times for that platform. Dwell times available for some platforms can be varied with the time of day.
- 1.2.2.42. A special case handled by a part of Traffic Regulation called the Terminal Algorithm is used to avoid conflicts between trains at terminals having a crossover interlocking located between the terminal station and the penultimate station. Since these interlockings are used to reverse trains, conflicts in the use of the interlockings can be generated by trains arriving at and departing from a terminal station at close headway. A route conflict exists whenever two trains attempt to traverse conflicting routes through an interlocking at the same time.
- 1.2.2.43. The central control operators have the capability of providing corrective strategies through the Strategy Selection program whenever required. The control philosophy employed here is that the operator is the best judge of what corrective action is most suitable in any given situation and the computer is most useful as a device to display the options available and to implement the selected option.
- 1.2.2.44. The Strategy Selection programs include Replace Train, Delete Train, Add Train, Eliminate Gap, Create Gap, Offset Schedule, Tilt Schedule and Skip Stop. All act to either modify or maintain the existing schedule.
- 1.2.2.45. The Control and Display software drives the displays and alarm printers and responds to central control operator inputs through the console trackballs and keyboards. The Control and Display software responds to field changes or when requested by an operator input to update train displays. It examines the data returned from the field and marked as changed by the Data Base Processor

software. It then updates displays and alarm messages for the central operator as required.

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- 1.2.2.46. The Control and Display software provides the processing of all operator inputs and coordinates execution of the software required by those inputs. These commands allow the central control operators to manually supervise system operation and to request specific displays.
- 1.2.2.47. The Control and Display software drives the displays and alarm printers and responds to central control operator inputs through the console trackballs and keyboards. The Control and Display software responds to field changes or when requested by an operator input to update train displays. It examines the data returned from the field and marked as changed by the Data Base Processor software. It then updates displays and alarm messages for the central operator as required.
- 1.2.2.48. The Control and Display software provides the processing of all operator inputs and coordinates execution of the software required by those inputs. These commands allow the central control operators to manually supervise system operation and to request specific displays.
- 1.2.2.49. The system hardware is used to perform the required Automatic Train Supervision functions and backup functions. The individual components are integrated to provide the means by which the various software components perform their functions.
- 1.2.2.50. Three interconnected computers comprise this subsystem. Each computer consists of a central processor with byte addressing, floating point and memory protection instructions, a priority interrupt system, and a power monitoring circuit. The computer systems are networked to each other and to the peripheral devices through a dual Ethernet network.
- 1.2.2.51. To handle the specialized data transmission, the central computers are connected to two Front End Processors (FEPs) which are connected to a bank of modems. The modems are connected through the DTS to the various field devices and permit the transfer of data to and from the central control computer. The FEPs receive the raw data from the field and forward change information to the central processors.
- 1.2.2.52. The Control and Display subsystem, used by the central control operators in controlling the system, has as its main functions; the presentation of system status, operational data and alarms to the central operator, and; the execution of system commands from the console trackball and keyboard. Video monitors (CRTs) provide the display facility with: 1) "Closeup" views of the interlockings; 2) System alarms (Train and E&S Alarms); 3) Performance statistics (Train Information); 4) Electrification system (Traction Power) overview and; 5) State of mechanical support equipment at a station selected by the operator (Support Station).

- 1.2.2.53. In the event that a CRT malfunctions, the central control operators have the capability of reconfiguring the displays so that a desired display can be moved to a working CRT. A Large Scale Display System provides an overview display of the METRO System and can also be used to display any of the System's local or special displays.
- 1.2.2.54. All alarm conditions on the METRO System, whether the result of train control indications, calculations, traction power and support system indications or computer indications, are displayed in tabular form on the appropriate alarm display and can be output to a printer. Alarms are also displayed in the alarm area (bottom three lines) of the CRT screen. Each message is accompanied by an audible alarm. The alarm area contains up to three of the most current unacknowledged alarm messages. There is an indication if there are more than three currently unacknowledged alarms.
- 1.2.2.55. There are five elements of ATS located on the wayside, primarily in the Train Control Rooms at passenger stations.
- 1.2.2.55.1. The door and dwell control modules provide the local hardware to implement the controls generated by central control or automatically by normal train operations. This hardware is configured to provide a backup means of door and dwell control in the event that control from central is interrupted. The configuration is such that the local backup provisions are exercised on each train movement to make failures self-evident. The sequence of operation is as follows:
- 1.2.2.55.1.1. When an arriving train completes its station stop a TRAIN BERTHED signal is transmitted to the station via the TWC system. Receipt of this signal causes the speed commands to be removed from the platform block and the block downstream of the platform, the door open commands to be applied at both ends of the platform after a 2 second delay, and energy to be applied to the local dwell timer. The TRAIN BERTHED signal is also transmitted to central control via the DTS.
- 1.2.2.55.1.2. Upon expiration of the preset time of the dwell timer, the door open commands are removed and speed commands restored unless override controls are received from central control.
- 1.2.2.55.1.3. The dwell can be terminated prior to the expiration of the preset time by receipt of the TERMINATE DWELL control from central control or by manually closing the train doors.
- 1.2.2.55.1.4. The dwell can be extended beyond the preset time with the doors held open by receipt of the HOLD WITH DOORS OPEN control from central control.
- 1.2.2.55.1.5. The dwell can be extended beyond the preset time with the doors closed by receipt of the HOLD WITH DOORS CLOSED control from central control. In this case the door open commands are removed but the speed commands are not restored until the HOLD WITH DOORS CLOSED control is no longer received.

1.2.2.55.1.6. At selected stations a local train dispatching system was provided for schedule control in the event of failure of the central control function. At these locations the expiration of the preset dwell time would not terminate the dwell unless it was also time for the train to be dispatched from that station. (The automatic dispatching machines originally installed as parts of this system are no longer being used.)

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1.2.2.55.2. Train-to-Wayside Communications (TWC) system provides the communications link for the ATS functions between revenue trains and the wayside. The TWC System is a continuous-scanning, time-division multiplex transmission system in which communications transmitted to wayside and received from wayside are time-shared. The carborne TWC System is inductively coupled to the wayside TWC System via coils on the cars. At wayside receiver locations other than flyby locations, the area of effective two-way communications is at least 600 feet long. Two message formats are transmitted by the train and received by the wayside, short message format (15 bits) and long message format (51 bits). The prefix bit configuration for the short message mode is MARK-SPACE-MARK. The prefix bit configuration for the long message mode is MARK-MARK. The suffix bit configuration for both long and short message modes is MARK-MARK. The message structure is a nonsynchronous, return-to-zero, serial code at a bit rate of 100 bps. There is a 100millisecond pause between successive message transmissions from the trains. The message starts 60 ms after the transmitter is keyed. The TWC carrier frequency is 9800 Hz. A frequency of 9950 Hz is interpreted as a "MARK." A frequency of 9650 Hz is interpreted as a "SPACE." Parity is "ODD." The existing impedance bonds that are tuned to transmit and receive the TWC signals exhibit impedance of approximately 1.0 ohms at 9800 Hz. With this impedance, the TWC system will work reliably with a receiving bond current of .016A rms to 0.3A rms. The transmit rail current produced by the bond is approximately 1.5A rms with a train adjacent to the bond. Input to the TWC receiver is 400-mV p-p.

Two message formats are transmitted to the trains depending upon the location of the transmitter, short message format (11 bits) and long message format (51 bits). The long messages are transmitted to trains in response to a received message from the train at all locations other than flyby locations. Short messages are transmitted to trains in response to a received message at flyby transmitter locations.

- 1.2.2.55.3. The Automatic Car Identification (ACI) system provides a means of identifying train consists by car serial number. This data is transmitted to central control via a low speed data channel and presented to the central computer where it is associated with the appropriate train I.D. data. The system is an optical scanning system which recognizes color strip labels affixed to the cars. The labels are a short version (7 digits) of the former standard AAR label. The scanners are located in the downtown area such that six scanners are sufficient to read the consist of all revenue service train movements.
- 1.2.2.55.4. The performance level translator converts the two-bit performance level control received from Central Control into a four-bit binary code, which identifies the ATS speed limit required to achieve the desired performance level. The ATS speed limit code produced by the performance level translator for a given performance level

code input is determined by the wiring of a programming plug. The correlation between performance level and ATS speed limit (programming plug wiring) for a given station-to-station run is based on computer simulations of station-to-station runs with each of the ATS speed limits. The performance level translator is a part of the TWC transmitter module. The ATS speed limit code produced by the translator is transmitted to the train via the TWC system. The trains interpret the ATS speed limit code as follows:

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ATS CODE	SPEED LIMIT	ATS CODE	SPEED LIMIT
0000	79	1000	44
0001	79	1001	49
0010	14	1010	54
0011	19	1011	59
0100	24	1100	64
0101	29	1101	69
0110	34	1110	74
0111	39	1111	79

- 1.2.2.55.5. The wayside portion of the data transmission system (DTS) consists of remote terminal units(RTUs) and their associated interface hardware and wiring. Earlier portions of the existing system use model 9600 RTUs manufactured by TRW Controls. These RTUs operate at a bit rate of 1200 or 2400 baud depending on the total number of controls and indications for which the RTU is equipped. The maximum capacity of these RTUs is 836 controls and 892 indications. The model 9600 RTUs are interfaced to a voice grade channel between the RTU and central control via model P1224 modems manufactured by TRW Controls. Newer portions of the existing system use OUTPOST Model 409 RTUs manufactured by Network Management Technologies, Inc., Sugar Land, Texas.
- 1.2.2.56. The Automatic Train Operation (ATO) System is that part of the ATC System which provides automatic train stopping and starting at passenger station platforms and provides speed control compensation for varying conditions of grade and curvature. The wayside portion of the ATO system consists of the markers used to identify grade and curve information and the station stopping markers which provide the distance-to-centerline information as well as the type of stop (long, short, center, or skip) information.
- 1.2.2.57. The markers are tuned circuits, the inductance of which is an air core coil with an inside diameter of approximately 11 inches. The coil is the coupling element to the carborne equipment and is located between the running rails with its axis vertical.

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OFFSET ¹ FROM				
RADIUS OF CURVE	CENTER OF TRACK			
Greater than 8500'	0"			
8500' – 2900'	1"			
2899' – 1750'	2"			
1749' - 1250'	3"			
1249' – 975'	4"			
974' – 800'	5"			
799' – 700'	6"			
Less than 700'	7"			

- 1.2.2.58. Each marker location except the 160 ft. marker consists of two independent tuned circuit members. This configuration is used to provide for double direction running and to provide the required amount of data with fewer frequencies. The carborne portion of the ATO System consists of marker reception and decoding equipment, station stop control equipment, and speed regulation equipment.
- 1.2.2.59. The marker reception and decoding equipment responds to the wayside markers, validates the data and passes the valid data to the speed regulation and station stopping equipment. The station stopping equipment generates a velocity vs. distance profile upon receipt of an initiating marker. The slope of the stopping profile is determined by the grade and curve data also received via the marker system. The stopping point within the station (point at which profile velocity reaches zero) is determined by the type of stop data received via the marker system and the train length determined by the carborne train length measuring circuits. Intermediate station stopping markers are used to correct the velocity vs. distance profile to compensate for differing wheel diameters and the effects of slip and slide.
- 1.2.2.60. The speed regulator measures actual train speed and controls the power and braking to cause the actual speed to approximate the desired speed. The desired speed is defined as the lesser of ATP Speed Command, ATS Speed Limit, or Station Stopping Profile Velocity. In normal running the speed regulator will cause the actual speed to be equal to the desired speed +0 mph, -4 mph. The actual train speed and the distance base for the station stopping profile are derived from axle rotation. Manually adjusted wheel wear compensation is provided to minimize the errors due to changes in wheel diameter over the life of the wheels.

1.2.3. Communications (excluding IT)

CENI-COMM is the department at WMATA responsible for the design, build, operation, and maintenance of communication related systems. Communication related systems at WMATA include the Fire Alarm system; the Access Control system; the Closed Circuit TV (CCTV) systems; the Public Address (PA) system; the Call-For-Aid system; the Radio system (both WMATA and Public Safety of local

¹ Offset from centerline of track is toward the outside of the curve. See the Technical Appendix, "Marker Coil Offset vs. Curve Radius."

jurisdiction); the Chemical Biological Detection system; the KIOSK systems; as well as various other low voltage systems.

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1.2.3.1. Fire Alarm System

The Fire Alarm system consists of Fire Detection sensors, Fire Alarm devices, and local Fire Control panels installed at all WMATA facilities including rail stations, rail yards, bus garages, and other miscellaneous facilities such as CTF, Stone Straw, Material Supply facility etc. Additionally, the Fire Alarm system is monitored remotely at JGB, CTF, and 3421 Pennsy Drive.

WMATA has standardized on the Edwards EST3 Fire Alarm system. The Fire Alarm system interfaces with several other systems such as the Fare Gates, the Elevators/Escalators, and the HVAC system.

1.2.3.2. Access Control System

The Access Control system consists of controllers, card readers, intrusion detection sensors, request-to-exit sensors, door strikes and other devices required to secure WMATA facilities from unauthorized access and report in a timely fashion when security is breached. WMATA plans to use the WMATA ID badges for Access Control in the future. All access control systems report to the PSIM software running in the SOCC at 341 Pennsy Drive.

WMATA has standardized on the ProWatch Access Control system with Oberthur card readers. There is a huge installed base of Edwards EST3 Access Controllers at WMATA.

1.2.3.3. Closed Circuit TV System

The CCTV video surveillance system consists of cameras, recording devices, cabling (both fiber optic and copper), network switches and display systems required for WMATA to conduct real time video surveillance as well as conduct post incident investigations. All camera systems report to the PSIM software running in the SOCC at 341 Pennsy Drive.

WMATA has standardized on Axis IP cameras, Verint Video management Software, Pivot3 recorders, COMNET switches, and Dell Viewing stations.

1.2.3.4. Public Address System

The PA system consists of amplifiers, speakers, microphones, priority mixers, an IP connection to OCC, and other devices required to produce high fidelity announcements to passengers and employees at WMATA rail facilities. The PA system is considered a part of the Fire Alarm system. A head end for the rail system PA system exists at both JGB and CTF.

WMATA has not standardized on a PA system. There is a large variety of PA systems with respect to manufacture, age, and functionality installed at WMATA.

1.2.3.5. Call-for-Aid System

The Call-for-Aid system consists of emergency call boxes, controllers, status indicators and other devices required to provide emergency communications between the traveling public and WMATA. Call-for-Aid stations are installed at platforms, AORA and elevators.

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WMATA has standardized on the Commend platform to provide Call-for-Aid functionality.

1.2.3.6. Radio System

The Radio system consists of above ground infrastructure, below ground infrastructure, and subscriber units. The below ground infrastructure includes the various Public Safety Radio systems (PSRS) of local jurisdictions. In addition to handheld subscribers, there are subscriber units installed on busses, rail vehicles, maintenance vehicles, and police vehicles. WMATA's current radio system, the Comprehensive Radio Communication System (CRCS) is a Motorola digital trunked simulcast system which operates in the 490 MHz frequency range. The various PSRS systems (installed in the underground) for local jurisdictions, generally operates in the 800 MHz frequency range.

The Comprehensive Radio Communication System (CRCS) is a Digital Trunked Simulcast radio system by Motorola that operates above ground from 10 towers and below ground over a Distributed Antenna System. The Distributed Antenna System is shared by both WMATA radio and local public safety radio systems. WMATA is transitioning to a new 700 MHz radio system.

1.2.3.7. Chemical Biological Detection System

The Chemical Biological Detection system consists of the chemical sensors and processing units required to detect and report on chemical agents released within the WMATA underground system. The name for this system is PROTECT. A head end for the PROTECT system exists at both JGB and CTF.

WMATA has not standardized on a single CBEMIS sensor. There is a large variety of CBEMIS systems with respect to manufacture, age, and functionality installed at WMATA.

1.2.3.8. Kiosk System

The Kiosk system consists of the enclosure and embedded electronics used by station managers to monitor and operate each rail station. Embedded electronics include the panels to monitor operation of the elevators and escalators, the Annunciator panels for the Fire and Intrusion system, the display system for the CCTV system, and other systems required by the station manager.

1.2.3.9. Various Low Voltage Systems

In addition to the above mentioned systems, the Communication section is responsible for various low voltage systems that occur within the authority on a limited basis. Examples include LNG gas detection system installed at bus garages that employ LNG servicing and Veeder Root tank level monitoring systems.

1.2.3.10. System Integration

The system integration effort consists of equipment, cabling, and monitoring software required for integrating the operation of WMATA bus and rail operations as well as supporting functions. As such, the communication section must be familiar with other disciplines such as traction power, train control, electrical/mechanical, and fare collection. A thorough understanding of fiber optics and network technology is required to ensure integration between systems.

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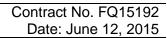
1.2.4. Trackwork

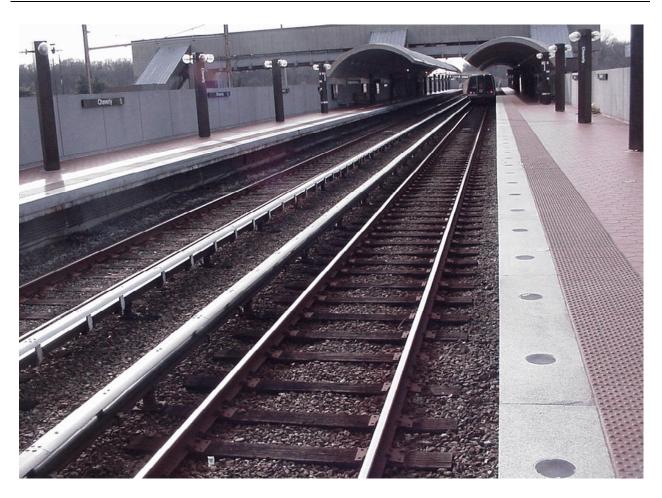
- 1.2.4.1. There are currently four (4) rail support systems within the WMATA system. Ballasted track on wooden ties, direct fixation track, special trackwork and embedded track. A typical track section incorporates 115RE rail. Where necessary, WMATA has optimized current WMATA standard practices to require 132RE restraining rails to be incorporated to guard No. 6 and No. 8 turnouts and critical points along mainline, yard and secondary tracks to protect against misdirected rail wheel movements.
- 1.2.4.2. Turnouts were designed and fabricated to maximize functionality and provide precision installation and attachment to continuously welded rail. Fully guarded turnouts are provided where necessary, and the minimum size within the yard is No. 6. All rail is fully heat treated within the WMATA system. Rail joints within turnouts comply with standard turnout details and dimensioning. All rails within turnouts fasten to the tie plates with type E2056 left-handed Pandrol spring clips. Tie lengths are provided as required by the turnout geometry standard details.
- 1.2.4.3. Main shop floors of service and inspection buildings are a complex concrete structure with dropbeams and include necessary blockouts and attachments that support an inventory of industrial equipment, embedded rail and high shop live loads of 250 pounds per square foot.
- 1.2.4.4.WMATA has revised its standard trackwork designs in Design Release 9 in October 2007. These revisions include changes to the turnout design that improves ride quality and reduces maintenance costs.
- 1.2.4.5. WMATA has operated its Metrorail system for approximately 30 years. As an introduction to the trackwork, one approach is to describe the original trackwork at WMATA, some of which is still in service, and then show the trackwork construction from the latest WMATA contracts.
- 1.2.4.6. Initially, Metrorail trackwork design was heavily influenced by freight railroad trackwork. Unlike parallel designs at BART (San Francisco), early WMATA ballasted trackwork in the mid to late 1970's, including AREMA type geometry turnouts, is close to what you would have seen on a railroad of that period. Direct fixation (concrete slab) trackwork was also relatively simple, consisting of a concrete deck with anchor studs, a relatively thin (1") concrete leveling pad, and early versions of direct fixation fasteners.

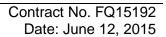
1.2.4.7.As Metrorail expanded in both length and passenger volume through the 1980's, its track began to experience increased wear and tear. Some of this deterioration could be attributed to early design flaws; e.g., premature failure of neoprene base pads in the original Metrorail "floating slab" trackwork, and other track maintenance problems became apparent with the less forgiving truck/wheel combinations on successive vehicle fleet series.

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- 1.2.4.8. Although concrete ties are included in the prior WMATA Design Criteria and are proposed for future segments of Metrorail, WMATA ballasted track is currently a wood tie system. One factor favoring this is that Metrorail has a dedicated right-of-way, and extra corrosion control measures have been limited to relatively heavy coatings and cathodic protection for metallic utility lines located within the property limits.
- 1.2.4.9. In any case, Metrorail trackwork has developed over the past 30 years to handle the ever increasing level of traffic on the system. This evolution is summarized in the outlines and photographs that follow below, organized by major track assemblies.
- 1.2.4.10. Rail Original/Early Construction
- 1.2.4.10.1. Running Rail: 115 RE Rail Section, Control Cooled (260 BHN) and Fully Heat Treated (320 BHN) Rail, some Alloy Rail, Mixed Bolted and CWR
- 1.2.4.10.2. Restraining Rail: Horizontally Mounted 132 RE Rail Section, Web Bolted to Plate Mounted Brackets
- 1.2.4.11. Rail Current Construction
- 1.2.4.11.1. Running Rail: 115 RE Rail Section, Control Cooled (308 BHN) and Head Hardened (360 BHN) Rail, CWR
- 1.2.4.11.2. Restraining Rail: 115 RE Rail Section, Vertically Mounted on Stepped Baseplate, Boltless Braces, Adjustable Split Spacer Blocks
- 1.2.4.12. Ballasted Track Original/Early Construction
- 1.2.4.12.1. Wood Ties, AREMA Rolled Plates, Cut Spikes, Drive Anchors, Box Anchoring Every Other Tie
- 1.2.4.13. Ballasted Track Current Construction
- 1.2.4.13.1. Wood Ties, Pandrol Rolled Plates, Screw Anchor Spikes, Pandrol left hand 'e' Clips
- 1.2.4.14. Photos Original/Early Construction









Ballasted Track, Cheverly Station

1.2.4.15. Current Construction



Ballasted Track, Branch Avenue Station
1.2.4.16. Direct Fixation Track - Original/Early Construction

1.2.4.16.1. Drill & Grout Installation: 3/4" to 1" Thick Concrete Grout Pads, Anchor Studs, Landis/Hixson DFF (Zero Cant) with Rigid Clips







Landis Fastener - Plan View

1.2.4.16.2. Noise & Vibration Control: Floating Slab, Neoprene Pads

1.2.4.17. Direct Fixation Track - 1990 Construction

1.2.4.17.1. Drill & Grout Installation: 3/4" to 1" Thick Epoxy Concrete Grout Pads, Anchor Bolts, Lord DFF (Zero Cant) with Pandrol LH 'e' Clips



Lord Fastener-Oblique View

1.2.4.17.2. Noise & Vibration Control: Floating Slab, Natural Rubber Pads

1.2.4.18. Direct Fixation Track - Current Construction

1.2.4.18.1. Drill & Grout Installation: 1" to 1 1/4" Thick Concrete Grout Pads, Resin Overlay, Anchor Bolts, Lord DFF with Pandrol LH 'e' Clips

1.2.4.18.2. Top-Down Plinth Install: Plinth Concrete (No Grout Pad), Anchor Bolts, Foster F-20 DFF (Zero Cant), Pandrol LH 'e' Clips



F20 Fastener - Section

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1.2.4.18.3. Noise & Vibration Control: Cologne Eggs

1.2.4.19. Third Rail - Original/Early Construction

1.2.4.19.1. 150 lb Rail, Porcelain Insulators at All Locations

1.2.4.20. Third Rail - Current Construction

1.2.4.20.1. Composite Steel-Aluminum 80 lb. Rail, Fiberglass Insulators at all locations (although porcelain insulators still exist in the underground portions of the WMATA system; however are no longer being installed or procured for maintenance replacement)

1.2.4.21. Turnouts - Original/Early Construction

1.2.4.21.1. Turnout Types: No. 4 Equilateral, No. 6 AREMA Geometry (13'-0" Curved Point), No. 6 Equilateral, No. 8 AREMA Geometry (16'-6" Straight Point), No. 10 AREMA Geometry (Modified), No. 15 AREMA Geometry (26'-0" Curved Point)



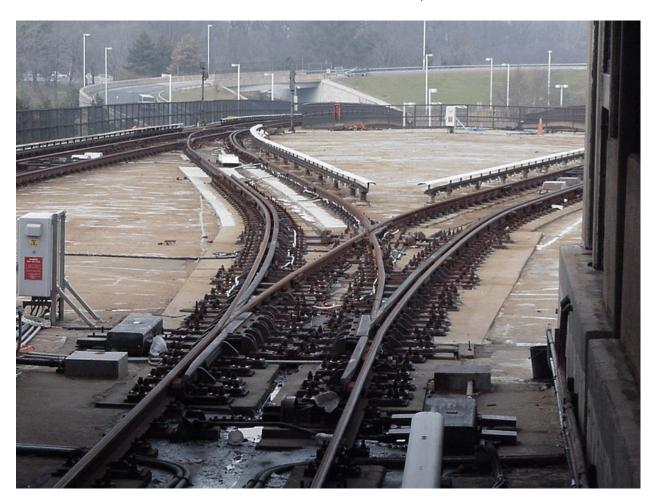
Cheverly Station Interlocking

1.2.4.22. Turnouts - Current Construction

1.2.4.22.1. Turnout Types: Guarded No. 6, Guarded No. 6 Equilateral, Guarded No. 8 Constant Radius (Main Line), No. 8 Straight Point (Yards), No. 10 Constant Radius, No. 15 Constant Radius

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National Airport Station Interlocking

1.2.4.23. Track Gauge:

Horizontal Track Alignment	Main Tracks	Yard & Secondary Tracks
Tangent Track	4' - 8 1/4"	4' - 8 ½"
Radius > 1425'	4' - 8 1/4"	4' - 8 ½"
Radius > 350 ≤ 1425'	4' - 8 ½"	4' - 8 ½"
Radius ≤ 350'	Not Applicable	4' - 9"
Radius ≤ 350'	Not Applicable	4' - 9 1/4"

1.2.4.23.1. WMATA had developed switch guarding and geometric turnout changes for the various turnouts within the system to introduce a constant radius turnout geometry and low switch point entry angles that were incorporated in the TSSM procurements. As the 5000 and 6000 series WMATA vehicles have come on line, it has became increasingly important to include these changes in new Metrorail turnouts and current design criteria.

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- 1.2.4.23.2. Where they exist, differences between the "tangential" geometry turnout developed under WMATA capital construction contracts and the Department of Track Structures and System Maintenance (TSSM) procurement versions are relatively small, primarily involving minor curve radius differences and items such as turnout switch block configuration. One exception is the use of the H-series insulated base plates for the Largo Extension turnouts, but problems in maintaining turnout line and anchor bolt stability for these installations have resulted in, at least for the present, their rejection as a design alternative standard for WMATA.
- 1.2.4.23.3. In general, revisions to the No. 6 guarded equilateral turnout, No. 8 turnout, and No. 8 guarded turnout are relatively minor and deal mostly with component upgrades. The No. 10 and No. 15 turnouts, on the other hand, have been completely reconfigured since initial design conception.
- 1.2.4.23.4. Consolidation of the Office of Track and Structures and Office of Systems Maintenance (Automatic Train Control) in 2005 has led to enhanced teamwork and communication channels in further updates for trackwork design drawings. The reorganization has allowed further engineering designed to accommodate both disciplines. There have been minor revisions in switch tie spacing to not only accommodate switch point protectors in No. 6 guarded turnouts, but also to allow for proper placement and drilling of the switch heater rod(s). There have also been minor revisions to the rail gap for the 1/4 inch insulated one piece end post for the double rail insulated joints.
- 1.2.4.23.5. The standard plastic contact rail insulator has also been replaced with a more durable fiberglass insulator for direct fixation trackage. The cross section of the top housing of fiberglass insulator was broadened to act as an "umbrella" over anchorage hardware. The prior anchorage hardware design (plastic insulators) in the underground tracks required more maintenance to prevent failure from water intrusion falling onto the hardware.
- 1.2.4.24. Drilling patterns for insulated gauge plates (plate insulator) for No. 8 guarded turnouts have also been revised to accommodate the Systems Maintenance discipline.
- 1.2.4.24.1. Insulator fiber washers for the special plate anchorage assemblies (direct fixation trackage) have been re-designed as a one piece sleeve and washer to increase resilience of the anchorage assembly.

1.2.4.24.2. There has also been design modifications to increase the strength of the ductile iron chairs for the No. 8 guarded ballasted turnouts.

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1.2.4.25. Historical Summary, Track Modifications:

- 1.2.4.25.1. By the early 1980's, it became apparent that the original equilateral turnouts at National Airport were inadequate for its use as operational turnback. The No. 4 Equilateral at the Inbound (IB) end of the platform was replaced with a guarded No. 6 Equilateral turnout in 1982 with the intent of increasing the 228 feet radius of the original No. 4 Equilateral turnout closure curve for the turnback operation noted above.
- 1.2.4.25.2. However, the switch point was retained in its existing location, necessitating a shortening of the typical No. 6 Equilateral turnout by 8 feet and a significant short curve immediately beyond the frog heel to keep the track on the underlying box structure. Although the modifications increased the curve radii, the improvements were modest at best. The turnout closure curve was a compound curve with minimum 353 feet radius, and the short curve beyond the frog heel had an approximate radius of 284 feet.
- 1.2.4.25.3. Derailments at Brentwood Yard and the Farragut North pocket track in 1993, attributed to the increased minimum track radius requirements of the then-new Breda cars, necessitated a change to replacement of all No. 4 Equilateral turnouts with guarded No. 6 Equilateral turnouts. Revised locations ultimately included Farragut North, D/G Junction, Grosvenor, and National Airport. As National Airport was no longer a turnback location by that time, turnout replacement was performed after the other more critical locations.
- 1.2.4.25.4. In 1996, the No. 6 Equilateral turnout on the Inbound (IB) side of the National Airport platform was replaced. At the same time, the No. 4 Equilateral turnout on the Outbound (OB) side of the platform was changed to a guarded No. 6 Equilateral turnout as well. The four No. 8 turnouts on the IB and OB Tracks were retained in their original locations. Although there were now guarded No. 6 Equilateral turnouts on both ends of National Airport Center Track, there were differences in the installation of these two turnouts.
- 1.2.4.25.5. The No. 6 Equilateral turnout at the OB side of National Airport was installed with its switch point relocated approximately 22 feet closer to the end of platform. This location permitted the turnout to remain on the existing underlying box structure and the track tangent extension from the frog heel led directly into the PI of the existing connecting track, minimizing track relocation on the structure deck. Turnout closure curve radius (guarded) was 566 feet, and the unguarded curves between the turnouts had 462 feet radii. The relocation of the turnout switch required a reconstruction of the structure deck to accommodate the switch rods and shaving the center platform end (granite edges) by approximately 1/4 inch.

1.2.4.25.6. On the IB side of National Airport, a similar configuration would have required not only new concrete deck slots for the switch rods and platform modifications, but also additional deck slots for a relocated derail. The 1996 retrofit work for the guarded No. 6 Equilateral turnout on the IB side of National Airport thus did not relocate the switch. The turnout was shortened by approximately 8 feet as well, This resulted in a guarded turnout with a closure curve radius of around 450 feet, and retention of the 284 feet radius curve (unguarded) behind the frog heel.

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1.2.4.25.7. The 2003 derailment at National Airport occurred in the vicinity of the above 284 feet radius curve, and the curves beyond the frog heel of the No. 6 Equilateral turnout were subsequently guarded at that location. Current design criteria requires restraining rails to be installed on all main track (revenue service tracks) with curves of radius less than 800 feet. Additional maintenance directives to manually lubricate all No. 6 and No. 8 turnouts were also implemented, although the current closure of the National Airport Center Track has made that requirement unnecessary. A program to retrofit all non-revenue service tracks below 500 feet radius with restraining rail is also being implemented where possible.

1.2.4.26. Future Extensions:

1.2.4.26.1. Currently, the Metrorail is being extended to provide service to the Tysons Corner area of Virginia, with further extension to Dulles Airport. Phase I to Tysons Corner is expected to be completed in 2011. Phase II to Dulles Airport is expected to be completed in 2015. No stations will be opened until the completion of each phase. This will add another color to the Metrorail system, "Silver Line". Drilling began in mid-2006. There are other rumors of a Georgetown Metrorail connector, an extension of the Green Line northward to BWI Airport, another line along I-395 or Columbia Pike in Virginia, and the Purple Line, which is a circular line to go along the Capital Beltway, particularly the portion between Bethesda and New Carrollton. An extension from Franconia/Springfield to Ft. Belvoir is also a possibility due to the BRAC realignment which will place thousands of new jobs at Ft. Belvoir by 2012. While there has been much discussion about all of them, none is in any official planning stage.

1.2.5. Traction Power

- 1.2.5.1.WMATA is a heavy rail transit system. The transit cars shall be propelled by electric traction motors driving steel wheels through appropriate gearing. Electric traction power shall be supplied to the cars by means of a contact rail installed parallel to the running track, upon which one or more collector shoes attached to each car will maintain sliding contact.
- 1.2.5.2. Both running rails of both inbound and outbound tacks shall be used as negative return conductors for the traction power system, except at crossover locations and in service and inspection yards where only one running rail provides the negative return.

1.2.5.3. The entire conductor system including the contact rail, the running rails, and associated cable connections shall be capable of supporting voltages to the transit cars.

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- 1.2.5.4. Direct current traction power shall be provided by rectifiers with rated voltage output of 700 volts at one hundred percent (100%) load. Maximum voltage output at one percent load at the substation bus shall not exceed 742 volts. Substation regulation shall not exceed six percent (6%) from one percent to one hundred percent of rated transformer/rectifier capacity and shall be approximately linear to four hundred fifty percent.
- 1.2.5.5.The WMATA Traction Power System is comprised of strategically located substations ranging from 4MW to 9MW capacities. These substations convert an incoming utility line voltage of 34.5kv ((Dominion Virginia Service Area) or 13kv PEPCO Service Area to 700 V DC nominal for rail cars. The power is distributed via steel or aluminum/steel composite 3rd rail and both running rails are used for traction return current. A minimum of two rectifiers transformers units are used in each substation. Initial modular units were sized at 2MW, but this has recently been changed to 3mw. The running rails are crossed bonded at maximum 200feet intervals to permit return current path over both inbound and out bound tracks. Major components in a traction power substation consist of AC switchgear, dry or oil filled rectifier transformers in 2MW to 3MW,2 OR 2MW rectifiers for converting AC power to DC power, DC feeder breaker switchgear for delivering power to the third rail sections, and finally a negative switchboard for the return cable connection. AC and DC cables as well as AC and DC power busses provides electrical interconnection.
- 1.2.5.6. Tie breaker stations are provided in between two traction power substations, near special track work or crossover and in passenger stations to provide a means to jumper across the acceleration gap in rails. Atypical installation consist of DC breaker switchgear and associated battery and emergency trip panels.
- 1.2.5.7. The original Supervisory Control and Data Acquisition (SCADA) architecture provided status and control functions of Traction Power, Station power and a variety of mechanical systems (tunnel ventilation, chillers, drainage pumps, etc.) to the ROCC through Remote Terminal Units (RTUs) located in Automatic Train Control (ATC) rooms utilizing Data Transmission System (DTS) cables. This architecture did not include the capability for advanced diagnostics of the electrical and mechanical equipment, critical to WMATA engineering and maintenance personnel in responding to issues associated with equipment malfunction and repairs.
 - 1.2.5.8. The new SCADA system is designed to fulfill the requirement of the safe, reliable and economic operation of the Rail Operation Control Center. The new design employs a distributed SCADA architecture, where ROCC and Automatic Energy Management Systems (AEMS) Communicate directly to the facility RTU using Distributed Network Protocol (DNP3) over fiber optical cables.

1.2.5.9.

1.3. Description:

The work effort is composed of providing professional and technical services with qualified personnel. The services to be provided will include expertise in the high voltage AC and DC electrical engineering discipline to include the specialized area of traction power. Consistent with Section 5.2.2, designed work must be approved by an engineer registered in the jurisdiction where the work is to be performed.

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1.4. Confidential Information:

The GEC-SYS shall not divulge any confidential information which is acquired in the course of performing the work under this contract. In this respect, the estimate of the cost of construction, based upon the approved designs, drawings and specifications thereof, shall constitute the -Authority's estimate and, no information pertaining to such estimate or estimating shall be disclosed by the GEC-SYS, associates or employees, except to the extent permitted by the Contracting Officer.

1.5. Relationship with Railroads. Private and Public Utilities and Agencies:

The GEC-SYS shall thoroughly coordinate with railroads, public and private utility companies, adjacent property owners and public agencies, as required. Initial contact with the affected utility companies, owners and agencies shall be the responsibility of the GEC-SYS.

2. INFORMATION FURNISHED BY THE AUTHORITY:

2.1. General Documents:

2.1.1. The Authority shall furnish the GEC-SYS with documents as guidelines for work to be performed under this contract. These documents present information relative to the work to be performed by the GEC-SYS. It is the responsibility of the GEC-SYS, however, to gather all data necessary for the performance of this contract and to develop complete and final documentation.

3. KEY PERSONNEL

3.1.Program Manager

3.1.1. Minimum Qualifications

- 3.1.1.1. Undergraduate Degree in Engineering or Architecture
- 3.1.1.2. Professional Licensure; Professional Engineer, Registered Architect, or certification; and PMP, or equivalent

3.1.1.3. Minimum of 10 years of experience in managing the design of complex multi-discipline projects of a similar type and financial magnitude in the rapid transit industry.

3.2. Quality Assurance Manager

3.2.1.1. Bachelor's Degree in Civil Engineering, Construction Management, Architecture, or equivalent related work experience.

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- 3.2.1.2. Trained as a Lead Auditor in a Registrar Accreditation Board of the American Society for Quality (RABASQ) approved course on the requirements of ISO 9001
- 3.2.1.3. Minimum of 10 years of related experience including a minimum of 5 years of management positions in a production, manufacturing, or construction environment performing QA/QC auditing. Transit industry experience is preferred.

3.3.Chief Cost Estimator

3.3.1. Minimum Qualifications

- 3.3.1.1. Bachelor's Degree in Civil Engineering, Construction Management, Architecture, or equivalent related work experience.
- 3.3.1.2. Professional Certification; American Association of Cost Engineers, Association for the Advancement of Cost Engineering International, or equivalent
- 3.3.1.3. Minimum of 15 or more years estimating or project experience on heavy civil projects
- 3.3.1.4. Minimum of 10 or more years estimating experience in the construction industry
- 3.3.1.5. Demonstrated experience estimating projects of more than \$10,000,000

3.4. Senior ATC Engineer

3.4.1. Minimum Qualifications

- 3.4.1.1. Undergraduate Degree in Electrical Engineering
- 3.4.1.2. Professional Licensure; Professional Engineer
- 3.4.1.3. Minimum of 15 years of experience in design and installation of ATC systems in a rapid transit environment with at least five (5) years in a senior or leading role

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3.5. Senior Traction Power Engineer

- 3.5.1. Minimum Qualifications
- 3.5.1.1. Undergraduate Degree in Electrical Engineering
- 3.5.1.2. Professional Licensure; Professional Engineer
- 3.5.1.3. Minimum of 15 years of experience in the high voltage AC and DC electrical engineering discipline to include a minimum of 10 years in the specialized area of traction power in a rapid transit environment with at least five (5) years in a senior or leading role
 - 3.6. Senior Software Systems Engineer
 - 3.6.1. Minimum Qualifications
- 3.6.1.1. Undergraduate Degree in Computer Science/Engineering
- 3.6.1.2. Professional Certification; Microsoft Certified Systems Engineer (desired)
- 3.6.1.3. Minimum of 10 years of experience in Physical Security Information Management, large complex systems integration, database management, and system disaster recovery in the Windows Operating Systems environment.

3.7. Senior Fire Protection Engineer

- 3.7.1. Minimum Qualifications
- 3.7.1.1.A registered professional engineer (P.E.) who has passed the fire protection engineering written examination administered by the National Council of Examiners for Engineering and Surveys (NCEES); or
- 3.7.1.2. A registered P.E. in a related engineering discipline with a minimum of 5 years of experience, dedicated to fire protection engineering that can be verified with documentation
 - 3.8. Senior Communication Systems Engineer
 - 3.8.1. Minimum Qualifications

- 3.8.1.1. Undergraduate Degree in Electrical Engineering
- 3.8.1.2. Professional Licensure; Professional Engineer
- 3.8.1.3. Minimum of 10 years of experience in managing engineering design of security systems, including video systems, security access control/intrusion detection, telecommunication systems, operations control center, and SCADA systems

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3.9. Senior Systems Engineer (Automatic Fare Collection)

- 3.9.1. Minimum Qualifications
- 3.9.1.1. Undergraduate Degree in engineering
- 3.9.1.2. Professional Licensure; Professional Engineer
- 3.9.1.3.Minimum of 10 years of related verifiable experience in transit fare payment technology and applications, parking systems, RF and LAN communications systems, device deployment, rail and bus transit infrastructure, ADA compliance, smart card technology, electronic payment technology and customer service technologies and business processes

4. SCOPE OF SERVICES:

- 4.1.General:
 - 4.1.1. The GEC-SYS shall provide the professional and technical staff required to perform the tasks, at the times requested by the Authority, in the work locations designated in the succeeding paragraphs.
 - 4.1.2. The GEC-SYS shall provide one senior professional engineer, a backup, and all key personnel listed in section 3: Key Personnel to be the points of contact and to work closely with the WMATA point of contact, approved by the Authority and not subject to change without the Authority's approval, to be assigned full time. The individual will supplement the Authority's technical staff. The individual will serve as liaison between the consultancy and the Authority for larger all tasks requiring related matters, including assessing need for additional resources.

4.2. Technical Direction:

4.2.1. The work will be conducted under the general direction of the Contracting Officer. Specific individuals will be designated as COTR with authority as listed in the Special

Provisions and as set forth in appointment letter(s), a copy of which will be provided to the GEC-SYS.

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4.2.2. During the prosecution of the work, the GEC-SYS shall maintain close liaison with the COTR, who will coordinate the work with the user Department and other offices. The GEC-SYS shall direct all requests, from user, offices and departments of the Authority, to the COTR for appropriate action. Program Management functions will also be the responsibility of the COTR.

4.3. Tasks to Be Performed:

- 4.3.1. The GEC-SYS shall provide professional technical services to a wide variety of new design and construction related tasks and maintenance, repair and renovation tasks requiring the full range of engineering services including, but not limited to, the following:
 - 4.3.1.1. Corrosion Control
 - 4.3.1.2. Electrical
 - 4.3.1.3. Train Control
 - 4.3.1.4. Train Control Studies
 - 4.3.1.5. Track Alignment and Plan/Profile Studies
 - 4.3.1.6. Track Design
 - 4.3.1.7. Track Fastener Design
 - 4.3.1.8. Special Trackwork Design
 - 4.3.1.9. Restraining Rail Design
 - 4.3.1.10. Safety and Security
 - 4.3.1.11. Program and Project Management
 - 4.3.1.12. System Integration
 - 4.3.1.13. Final Design and Contract Document Review
 - 4.3.1.14. Project and Program Management Support
 - 4.3.1.15. Engineering Support

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- 4.3.1.16. Update Engineering Standards
- 4.3.1.17. Preparation and Review of Contract Technical Specifications
- 4.3.1.18. Preparation of Estimates
- 4.3.1.19. Staff Augmentation
- 4.3.1.20. Field Surveys
- 4.3.1.21. Field Inspections
- 4.3.1.22. Constructability Reviews
- 4.3.2. The tasks will be differentiated essentially by urgency. Generally, the tasks can be classified into two categories:
 - 4.3.2.1. Category I -Normal tasks are tasks which comprise the majority of the work effort. They are planned and prosecuted in accordance with established policy.
 - 4.3.2.2. Category II Emergency tasks requiring immediate response and quick reaction which require initiation of critical work effort based on oral guidance from the assigned COTR or the respective alternate COTR to be confirmed in writing as time permits. Category II tasks should rarely occur.
- 4.3.3. Additional Work Efforts: Because of the nature of the work, it may be necessary in unique situations for the GEC-SYS to obtain additional consultant support from specialty firms from time to time.
- 4.3.4. The consultant shall comply with equipment and personnel requirements as defined in WMATA's Manual of Technical Specifications and Requirements for System wide Surveying and Mapping Services (latest version).

4.4. Other Tasks:

- 4.4.1. The GEC-SYS shall participate in other tasks as required such as those listed below:
 - 4.4.1.1. Provide follow-on professional services as required by the Authority during warranty and construction phase.
- 5. Quality Control Program:

- 5.1.1. The GEC-SYS shall develop and be responsible for executing a Quality Control (QC) Program for all Professional Services fully compliant with FTA guidelines.
 - 5.1.1.1. This program shall require internal reviews and checks by supervisors, and independent QC compliance checks by well qualified technical staff to confirm that acceptable quality is provided. The GEC-SYS shall be responsible for signing and sealing each drawing to attest the accuracy and completeness of its contents, and to show evidence of compliance with applicable jurisdictional codes. A Quality Assurance/Quality Control (QA/QC) plan shall be submitted to the Authority for approval.

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6. ADDITIONAL REQUIREMENTS:

6.1. General Requirements:

For all categories of professional services, the following items are required:

- 6.1.1. All services shall be in accordance with the engineering instructions furnished by the Authority.
- 6.1.2. Professional services shall consider employee and customer safety, life cycle costs, arability of resources, new technologies that maintain or enhance the existing system's configuration and that implementation will be accomplished in an operating system with minimal down time.
- 6.1.3. The use of critical and strategic materials not otherwise restricted shall be limited to the minimum amounts required consistent with materials policies. Full consideration shall be given to the use of substitute materials.
- 6.1.4. Specified materials and methods shall comply with the most stringent environmental criteria as defined by Federal Regulations, State of Maryland, Commonwealth of Virginia, and District of Columbia.
- 6.1.5. All engineering manuals, specifications and other data furnished by the Authority, as designated by the Contracting Officer, shall be returned to the Authority at the completion of the contract.
- 6.1.6. After submission of the contract plans and specifications and the quantity surveys and cost estimates, the

GEC-SYS shall make any corrections thereto as may be necessary.

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- 6.1.7. All final estimates of cost shall be transmitted to the CO, in envelopes marked "FOR CO EYES ONLY".
- 6.1.8. All correspondence shall be referenced to the appropriate project number. Matters relating to the contract, change proposals, billings, etc., shall be addressed and sent, in duplicate to the Contracting Officer, and the COTR Correspondence between the GEC-SYS and third parties; one copy each to the Contracting Officer and the COTR.

6.2. Specific Requirements:

6.2.1. For specific categories of GEC-SYS work the following items may be required and will be identified when the task order is approved:

6.2.1.1. Representation:

During the term of this agreement, the GEC-SYS shall attend, or be represented at, meetings and conferences with officials of the Authority, governmental agencies or others interested in the work as may be directed by the Contracting Officer. All such meetings and conferences shall be made a matter of record. The GEC-SYS is responsible for preparing a memorandum stating the time and place of the meeting, the names and identification of those present, and a brief description of the matters discussed and the agreements reached. Memoranda shall be prepared immediately and mailed no more than ten days after the meeting, with two copies being sent to the COTR.

6.2.2. Certification:

The GEC-SYS shall furnish the Authority with a statement signed by the Professional Engineer, Architect or Surveyor whose signature appears on the contract completed drawings, certifying that the drawing and specifications conform to WMATA design criteria and standards and the jurisdictional regulations and ordinances. The person signing must be licensed / registered in the jurisdiction where the work is to be performed.

- 6.2.3. Contract drawings and Specifications:
 - 6.2.3.1. Drawing types, format and sequence are described in WMATA's design criteria and WMATA's cad manual.
- 6.2.4. Project Cost:
 - 6.2.4.1. Project Cost Control:

6.2.4.1.1. The GEC-SYS shall share the responsibility as required for design cost

control with the Authority. Prior to the time of the project intermediate review submittal (70% completion of design), the GEC-SYS shall use the Authority's construction budget cost and schedule as guides in the preparation of the design.

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6.2.4.1.2. Task Orders may include the following language:

"Design Within Funding Limitations

- (a) The Contractor is required to accomplish the design services required under task orders so as to permit the award of a contract, using standard procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in issued task orders. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Authority if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.
- (b) The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Authority may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in issued task orders, or the Authority may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Authority may prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.
- (c) The estimated construction contract price for the project described in this contract is \$."

6.2.4.2. Quantity Survey:

Quantity surveys shall present separate quantities for each line item itemized for individual buildings, facilities and components thereof, as directed by the Contracting Officer. The quantity surveys shall be itemized in units of work, materials and equipment, together with the amounts of the same, in accordance with a breakdown approved by the Contracting Officer. Quantity surveys shall be in sufficient detail to permit proper review and shall not include lump sum items which cannot be readily analyzed. The quantity survey for each building shall also contain a list of the square foot areas by floors and cubages for the buildings, computed in accordance with procedures.

- 6.2.4.3. Cost Estimates:
- 6.2.4.3.1. The Engineering consultant will be tasked with providing estimates based upon the designs that are developed by the GEC. Accordingly, for most projects, WMATA anticipates incorporating estimators into project teams in the design process. Estimators should become intimately familiar with the project and are should be able to provide estimates in a timely manner to inform design decisions and enable timely issuance of contract documents. We anticipate sufficient work so that estimators will work as extensions of staff.

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- 6.2.4.3.2. Any estimate provided by the consultant will comply with the following expectations:
- 6.2.4.3.2.1. The estimates must be prepared by professional estimators not affiliated with the design team
- 6.2.4.3.2.2. The estimates must clearly state the basis of the estimate (drawings the estimate is based upon)
- 6.2.4.3.2.3. The level of risk class the estimate is based upon (ASTM E2516 11 Standard Classification for Cost Estimate) should be clearly stated
- 6.2.4.3.2.4. The estimated costs are consistent with actual construction costs expected in the Washington, DC metropolitan area.
- 6.2.4.3.2.5. Labor is based on current prevailing wages in effect at the time of the estimate
- 6.2.4.3.2.6. Costs are presented in a logical manner consistent in presentation using a standard format, such as, but not limited to:
- 6.2.4.3.2.6.1. CSI Masterformat
- 6.2.4.3.2.6.2. Uniformat
- 6.2.4.3.2.6.3. Work item estimate
- 6.2.4.3.2.6.4. Defined work breakdown structure
- 6.2.4.3.2.7. General conditions costs should be itemized and estimated (Not merely using an arbitrary percentage) including categories for:
- 6.2.4.3.2.7.1. Project Management & Coordination
- 6.2.4.3.2.7.2. Construction Progress Documentation
- 6.2.4.3.2.7.3. Quality Control

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6.2.4.3.2.7.4.	Temporary Facilities and Controls	
6.2.4.3.2.7.5.	Execution and Closeout Requirements	
6.2.4.3.2.7.6.	Safety	
6.2.4.3.2.8. All co	st estimates shall include:	
6.2.4.3.2.8.1.	Prominently displayed descriptive title, e.g.:	
6.2.4.3.2.8.1.1.	"Independent Estimate - Contract No. "	
6.2.4.3.2.8.1.2. Exten	"30% Preliminary Engineering Submittal Estin sion"	nate for the Largo
6.2.4.3.2.8.1.3.	"Conceptual Estimate for (Project Title)"	
6.2.4.3.2.8.2. contra	Name and/or number that clearly ties the estima act, change order, task order, or order for services	ate to a specific project,
6.2.4.3.2.8.3.	Who produced the estimate and contact information	ition
6.2.4.3.2.8.4.	The date the estimate was produced	
6.2.4.3.2.8.5. estim	Scope of the estimate (provide a short description ate, or reference, or attach document(s) which description	
6.2.4.3.2.8.5.1.	Clearly state scope revisions in the case of a rev	vised estimate.
6.2.4.3.2.8.6. estim	The estimates must state the assumptions that vate	were used in producing the
6.2.4.3.2.9. The e	estimates must include the assumed schedule periormance	od of construction
6.2.4.3.2.10.	The scope and amount of any contingencies.	
6.2.4.3.2.10.1.	Notes as needed to explain:	
6.2.4.3.2.10.1.1.	The year dollars the estimate was completed in	(e.g. FY05 dollars).
6.2.4.3.2.10.1.2.	Escalation rate(s) that may have been applied.	

- 6.2.4.3.2.10.1.3. Include expected dates of award, completion, and midpoint.
- 6.2.4.3.3. The quantity surveys shall be priced with unit costs for labor, materials and equipment, presented separately, currently prevailing in the vicinity of the project and

reflecting anticipated labor conditions due to the other work in progress or contemplated in the near future. Pricing of quantity surveys shall include the pricing of square foot areas and cubage. The total amounts for each line item or other directed project components and for the project as a whole shall be computed.

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6.2.4.4. Target Cost:

- 6.2.4.4.1. The GEC-SYS shall report to the Authority with regard to the approved Target Cost at (a) 70% completion of each project design or (b) at any time that the GEC-SYS considers that the approved Cost Target may be exceeded.
- 6.2.4.4.2. In the event that changes to the basic design concept of the project are recommended by the GEC-SYS, these recommendations are to be accompanied by an analysis of their effect on the approved Target Cost.
- 6.2.4.4.3. In the event that changes to the basic design concept are initiated by the Authority, the GEC-SYS shall promptly assess the effects of these changes on the approved Target Cost and report to the Authority.
- 6.2.4.4.4. All other factors which significantly influence the estimated cost of the project, and which become apparent as design progresses, are to be fully documented and the Authority is to be kept well informed.
- 6.2.4.4.5. If, upon completion of the design, the GEC-SYS's final estimate exceeds the current Target Cost and it is shown that the procedures described above have not been followed, the GEC-SYS shall redesign at no additional cost to the Authority the project or elements thereof, as directed by the Contracting Officer, to reduce the estimated project cost to the Target Cost level.

6.2.4.5. Design Schedule:

The design schedule will be prepared by the Authority and issued with the task order. When determining the design schedule the Authority may request input from the consultant as to recourse availability but in general the schedule will be driven by Authority priorities.

6.2.4.6. Utilities and Agencies:

6.2.4.7. Approvals:

The GEC-SYS is responsible for coordination, treatment and design of all utilities or properties owned or controlled by utilities, agencies, or private concerns within the project limits.

6.2.4.8. Review Submittal:

Project Design Review Submittals, unless otherwise required, shall be made for each separate project design contract, at approximately the conceptual, 70%, and 100%

completion of design. The submittal is to include documentation verifying resolution of all comments related to the preceding review.

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6.2.4.9. Reports, Calculations, Drawings and Specifications:

Copies of reports, calculations and drawing and specification sets both paper and electronic shall be described in the task order. Electronic documents will be formatted as described in individual task orders. However, as a minimum, electronic documents shall be in native format, portable document format (PDF) and rich text format (RTF).

6.2.4.10. Review Procedures:

In general, the Authority will complete the review in approximately 21 working days, after which review comments in writing and on marked-up documents will be furnished to the GEC-SYS. The GEC-SYS will meet with the Authority to discuss the review comments. Within ten (10) days after the review conference, the GEC-SYS shall deliver minutes of the conference, responding to all comments.

6.2.4.11. Review Scope:

Specifically, the review submittal shall include, but shall not be limited to, the following items:

- 6.2.4.11.1. Contract drawings in sufficient detail to define the design of all major elements, substantially complete and checked. Schedules of equipment and complete flow diagrams are to be included.
- 6.2.4.11.2. Design computations, substantially complete, indexed and checked.
- 6.2.4.11.3. Project specific specifications in draft form, but otherwise complete.
- 6.2.4.11.4. Statement of actions required of the Authority or by others which must be received to complete the design.
- 6.2.4.11.5. Comprehensive statement individually enumerating specific actions which are required by others to complement the design to enable construction to proceed on schedule, with particular attention to those items of construction indicated in the contract documents to be performed by others.
- 6.2.4.11.6. A complete and well-organized construction schedule shall be submitted showing the consultant's analysis of a probable or technically feasible construction schedule. The schedule shall be prepared to a level of detail consistent with the level of design. A narrative shall accompany the schedule explaining principal assumptions, criteria and production rates upon which the schedule is based.
- 6.2.4.11.7. Engineering estimates of cost of construction on the unit price schedule forms.

6.2.4.11.8. The Authority's review shall be confined to assuring that all assigned tasks were addressed. This review shall not relieve the GEC-SYS of its responsibility for complete and accurate design services.

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- 6.2.4.12. Final Delivery of Contract Documents
- 6.2.4.12.1. After the review comments have been incorporated, or otherwise resolved, the GEC-SYS shall complete and submit the original contract drawings to the Authority. The original full-size contracts drawings shall be checked, bear the professional registration seal, and be signed and ready for reproduction. The original specifications, with the cover, shall be checked, bear the professional registration seals of the various disciplines responsible and ready for reproduction.
- 6.2.4.12.2. The Authority owns all designs, computations, evaluations, investigation reports, and other professional documents and support data produced under this contract.
- 6.2.4.12.3. The following additional items shall be included among the final contract documents to be submitted to the Authority:
- 6.2.4.12.3.1. Engineer's final estimate of construction costs together with a copy of computations and back-up sheets in a sealed envelope marked "FOR CO EYES ONLY" and submitted to the CO.
- 6.2.4.12.3.2. One original copy of all checked design computations, sealed by a Professional Engineer licensed in the local jurisdiction, indexed and bound.
- 6.2.4.12.3.3. Construction planning schedule and related documents.
- 6.2.4.12.3.4. Comprehensive statement individually enumerating specific actions which are required by others to complement the design to enable construction to proceed on schedule. Particular attention is to be given to those items of construction indicated in the contract documents to be performed by others.
- 6.2.4.12.4. Continuation of Professional Services:

As stipulated in the Provisions of the Architect-Engineer contract, the GEC-SYS shall provide follow-up engineering services as may be requested by the Authority during the construction phase of the work for which task orders may have been issued for construction services such as shop drawing review, inspection, etc.. Such services are required to correct errors or omissions in the contract documents, to make changes in the design as directed by revisions to the criteria or standards, to adopt the design to be consistent with modifications in the construction procedure, or for other reasons. Services required to make corrections because of errors or omissions on the original contract documents shall be provided at no extra cost to the Authority; services required for revisions or modifications may be considered to be governed by the provisions of the "Changes" article in the General Provisions of the Architect-Engineer Contract specifications.

7. REPORTING PROCEDURES:

7.1.Reports:

7.1.1. The GEC-SYS shall provide periodic reports to the Authority. The following reports are required:

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- 7.1.1.1. Task Order Status Report
- 7.1.1.1.1 The GEC-SYS shall submit Status Reports on all task orders to the Authority monthly. The report shall be updated and contain current information. The report shall contain the following information:
- 7.1.1.1.1.1. A chronological listing of task orders.
- 7.1.1.1.1.2. The date the task order was received.
- 7.1.1.1.1.3. The task order number.
- 7.1.1.1.1.4. The engineer (s) assigned the task.
- 7.1.1.1.1.5. The scheduled due date.
- 7.1.1.1.1.6. Any revised due date.
- 7.1.1.1.1.7. The task order completion date.
- 7.1.1.1.1.8. The current status/ next action of the task.
- 7.1.1.1.1.9. The amount the task was issued proposed and settled upon for each task.

End of Statement of Work

Contract No. FQ15192 Date: June 12, 2015

LIST OF ATTACHMENTS

ATTACHMENT	
Α	UNIT PRICE SCHEDULE / BILLING RATE TABLE
В	CERTIFICATE OF CURRENT COST/PRICE DATA
С	REPRESENTATIONS AND CERTIFICATIONS
D	PRE-AWARD EVALUATION DATA FORM

Contract No. FQ15192 Date: June 12, 2015

APPENDIX B

ATTACHMENT A

NOTICE OF REQUIREMENTS FOR

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

May 2015

~Applies only if proposal price is \$500,000 or more for a construction contract or \$100,000 or more for a supply and service contract.

~APPENDIX B~

DISADVANTAGED BUSINESS ENTERPRISE (DBE)

1. DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENT:

A. The DBE requirements of the Authority's DBE Program Plan apply to this contract. Accordingly, the Contractor shall carry out the requirements of the Authority's DBE Program Plan and this Appendix in the award and administration of this U.S. Department of Transportation (US DOT) assisted contract.

2. POLICY:

A. It is the policy of the Authority (WMATA), the Federal Transit Administration (FTA) and the US DOT that Disadvantaged Business Enterprises (DBEs) shall compete fairly to receive and participate in performing federally assisted contracts, including contracts and subcontracts at any tier. It is further the policy of the Authority, the FTA and the US DOT that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts. The Contractor hereby agrees to carry out this policy in the award and administration of subcontracts to the fullest extent possible consistent with efficient Contract performance.

3. CONTRACT GOAL:

- A. If the bidder is not a DBE, the bidder agrees that the DBE goal for this Contract shall be met by subcontractors or by joint ventures with DBEs. The goal set forth for this Contract is _____% of the final Contract price, including amendment and modification. The amount of DBE participation will be determined by the dollar value of the work performed and/or supplies furnished by DBE firms as compared to the total value of all work performed and/or supplies furnished under this Contract. The Contractor shall have met this goal if the Contractor's DBE participation meets or exceeds this goal.
- B. In cases where work is added to the Contract by modification such that additional DBE participation is necessary to meet this goal, the Contractor shall increase the participation of one or more firms listed on the "Schedule of DBE Participation" or submit additional DBE certified firms to meet the goal. In cases where work is deleted from the Contract, the goal shall be applicable to the new Contract amount. The Contractor shall be permitted to meet the goal by revising its DBE participation, provided, however, that the revision shall not result in DBE participation that is less than the original goal.

4. **DEFINITIONS**:

A. **Appendix B.** The Notice of Requirements for Disadvantaged Business Enterprise, which when attached to a solicitation, implements the DBE requirements of the Authority's DBE Program Plan in the award and administration of federally funded Authority contracts.

- B. Certified DBE. means a for-profit small business concern (a) that is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it; and (c) whose eligibility is evidenced by a current WMATA Certification letter, a D.C. Department of Transportation Certification letter, or a certification letter issued by the Metropolitan Washington Unified Certification Program (MWUCP).
- C. **Contractor.** One who participates, through a contract or subcontract (at any tier), in a US DOT assisted highway, transit or airport program.
- D. **DC DOT.** The District of Columbia Department of Transportation.
- F. Good Faith Efforts. Efforts to achieve a DBE goal or other requirements of the Authority's DBE Program Plan which by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the goal program requirement.
- G. **Joint Venture.** An association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and shares in the capital contribution, control, management, risks, and profits of the joint venture commensurate with its ownership interest.
- H. **Metropolitan Washington Unified Certification Program (MWUCP).** A unified certification program mandated by 49 CFR §26.81 between two federal transit recipients (WMATA and the D.C. Department of Transportation). The agreement became effective January 2005.
- I. **Pre-certification.** A requirement under 49 CFR §26.81(c) that all certifications by the MWUCP be made final before the due date for bids or offers on a contract on which a firm seeks to participate as a DBE.
- J. Race-conscious. A measure or program that is focused specifically on assisting only DBEs, including women-owned DBEs.
- K. Race-neutral. A measure or program that is, or can be, used to assist all small businesses. For the purposes of the DBE program, race-neutral includes genderneutrality.
- L. **Small Business Concern.** With respect to firms seeking to participate as DBE's in US DOT assisted contracts, a small business concern as defined pursuant to Section 3 of the Small Business Act and Small Business Administration implementing regulations (13 CFR Part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR Part 26.65(b).
- M. **Socially and Economically Disadvantaged Individual.** Any individual who is a citizen (or other lawfully admitted permanent resident) of the United States and who the Authority finds to be a socially and economically disadvantaged individual on a case-by-case basis, and any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged.

- (1) Black Americans, which includes persons having origins in any of the Black racial groups of Africa;
- (2) Hispanic Americans, which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (3) Native Americans, which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
- (4) Asian-Pacific Americans, which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the North Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (5) Subcontinent Asian Americans, which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (6) Women; and
- (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.
- N. US DOT Assisted Contract. Any contract between the Authority and a contractor (at any tier) funded in whole or in part with US DOT financial assistance, including letters of credit or loan guarantees.
- O. Unified Certification Program (UCP). The program mandated by 49 CFR Part 26.81(a), which requires all U. S. DOT recipients of federal financial assistance to participate in a statewide certification program by March 2002.
- P. WMATA. Washington Metropolitan Area Transit Authority, the transit system (rail and bus) serving the metropolitan Washington area, including parts of Virginia and Maryland.

5. HOW DBE PARTICIPATION IS COUNTED TOWARDS THE CONTRACT GOAL:

DBE participation shall be counted towards meeting the DBE goal in accordance with the following:

- A. When a DBE participates in a contract, only the value of the work actually performed by the DBE is counted towards the DBE goal.
 - (1) This amount includes the entire amount of that portion of a construction contract that is performed by the DBE's own forces. This amount includes the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE

- (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).
- (2) This amount includes the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of the contract, towards the DBE goal, provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.
- (3) When a DBE subcontracts part of its work under the contract to another firm, the value of the subcontract work may be counted towards the DBE goal only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count towards the DBE goal.
- B. When a DBE performs as a participant in a joint venture, the portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that a DBE performs with its own forces towards the DBE goal may be counted.
- C. Expenditures to a DBE contractor towards the DBE goal may be counted only if the DBE is performing a commercially useful function on that contract.
 - (1) A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Authority will consider the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.
 - (2) A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.
 - (3) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work, the Authority will presume that the DBE is not performing a commercially useful function.
- D. The following factors will be used by the Authority in determining whether a DBE trucking company is performing a commercial useful function:
 - (1) The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible for on a particular

- contract, and there cannot be a contrived arrangement for the purpose of meeting the DBE goal.
- (2) The DBE must itself own and operate at least one fully licensed, insured and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers, it employs.
- (4) The DBE may lease trucks from another DBE firm, including an owneroperator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- (5) The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.
- (6) The lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the terms of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.
- E. The following factors will be used to count expenditures with DBEs for materials or supplies towards the DBE goal:
 - (1) If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies will be counted towards the DBE goal. A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the contract.
 - If the materials or supplies are purchased from a DBE regular dealer, 60 (2) percent of the cost of the materials or supplies will be counted towards the DBE goal. A regular dealer is a firm that owns, operates or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph if this person both owns and operates distribution equipment for the products. supplementing of regular dealers' own distribution equipment shall be by long-term lease agreement and not on an ad hoc or contract-by-contract

basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph.

- (3) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials and supplies required on a job site, may be counted towards the DBE goal, provided the fees are reasonable and are not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves may not be counted towards the DBE goal.
- F. All DBE firms must be pre-certified. Participation by a firm that is not currently certified as a DBE by the Authority at the time of the due date for bids or offers on a contract, does not count towards the DBE goal. All DBE firms must be in compliance with 49 CFR, Part 26.
- G. The dollar value of work performed under the contract by a firm who has been decertified as a DBE by the MWUCP does not count towards the DBE goal.
- H. The participation of a DBE subcontractor does not count towards the Contractor's DBE goal until the amount being counted towards the goal has been paid to the DBE.

6. BID AND REQUIREMENTS (WITH THE BID):

The bidder shall submit the following with its bid. Any bidder who fails to complete and return this information with its bid shall be deemed to be not responsive and may be ineligible for contract award. Bidders that fail to meet the DBE goal above and fail to demonstrate "good faith efforts" to justify waiver of the DBE goal (see paragraph 6.C. below) shall be deemed to be not responsible and will be ineligible for Contract award.

- A. Completed "Schedule of DBE Participation" (Attachment B-1) sufficient to meet the above goal. If the bidder is a DBE firm and intends to satisfy the appropriate DBE requirement with its own firm, it must indicate in the Schedule the area of work and percentage it will perform to satisfy the goal. All bidders must attach current WMATA, DC DOT or MWUCP certification letters for each DBE listed on the Schedule.
- B. Executed "Letters of Intent to Perform as a Subcontractor/Joint Venture" (Attachment B-2). If the bidder is not a DBE or intends to satisfy the requirements through other DBE firms, then it must attach these letters from each certified DBE listed on the Schedule.
- C. Justification for grant of relief (Appendix B waiver of DBE goal). If in the submittal of its bid, the bidder fails to meet the DBE goal above, the bidder has the burden of furnishing sufficient documentation with its bid of its "good faith efforts" to justify a grant of relief (waiver) from the goal or portion of the goal. Such justification shall be in the form of a detailed report. The following is a list of actions which shall be considered as part of the bidder's good faith efforts to obtain DBE participation. This list is neither a mandatory checklist nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases:

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goal will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) (a) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work. "DBE Unavailability Certifications" (Attachment B-3) shall be completed as appropriate.
 - (b) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as the contract goal into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- (5) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal.

- (6) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- (7) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

7. BID REQUIREMENTS (APPARENT SUCCESSFUL BIDDER):

The bidder shall submit the following items within ten (10) calendar days after notification that they are the apparent successful bidder:

- A. A copy of a current WMATA, D.C. DOT or MWUCP certification letter(s) shall be attached to the DBE Schedule of Participation to evidence DBE pre-certification.
- B. DBE Manufacturer's Affidavit, if applicable, must be submitted in order to receive 100 percent of the allowable credit for expenditures to DBE manufacturers/suppliers (Attachment B-4). By submission of this Affidavit, the bidder certifies this it is satisfied that the manufacturer meets the requirements of 49 CFR Part 26.
- C. Schedule B Information for Determining Joint Venture Eligibility, if applicable (Attachment B-5, pgs. 1, 2, 3, 4). Submittal shall be signed by all parties, dated and notarized.
- D. Copy of Joint Venture Agreement, if applicable. Submittal shall be signed by all parties, dated and notarized.
- E. Certification letter of the DBE regular dealer/supplier, if applicable. If the bidder wants to receive the maximum allowable credit of its expenditures for material(s) or supplies required under this Contract, from DBE regular dealers/suppliers, the DBE must submit a signed and notarized statement on their letterhead, that they are a regular dealer of the material(s) or supplies. By submission of this statement, the bidder certifies that it is satisfied that the subcontractor is a regular dealer/supplier that meets the requirements of 49 CFR Part 26.
- F. For Design-Build contracts, if a DBE goal is specified in Section 00872, DBE GOAL REQUIREMENTS, the bidder shall submit with its initial Bid a list of DBE-certified firms that it intends to enter into subcontract agreements with for this Contract. If no goal is specified in Section 00872 of the solicitation and the offeror still intends to utilize DBEs in the performance of this Contract, the offeror shall submit with its initial Bid a list of those DBE-certified firms. The documentation requirements of Section 00453 of the solicitation shall be completed and submitted at the time set forth for the submittal of Best and Final Offer (BAFO) to the Authority for any Contract in which a DBE goal is applicable or for any Contract in which there was no goal established, but the bidder identified DBE-certified firms that it intends to enter into subcontract agreements with in its initial Bid. Any offeor who fails to complete and return the following information, if applicable, with their BAFO Bid may be deemed to be not responsible and may be ineligible for contract award. Offerors that fail to meet the

DBE goal, if any, specified in Section 00872 and fail to demonstrate a good faith effort and to justify waiver of the DBE goal may be deemed to be not responsible and may be ineligible for contract award.

8. CONTRACT ADMINISTRATION REQUIREMENTS:

The following requirements apply after contract award:

A. The Contractor shall include the following provision in the General Provisions of each subcontract it awards in support of the DBE goal:

"The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in termination of this contract or such other remedy as the Buyer deems appropriate."

- B. (1) The Contractor shall monitor the performance of, collect and report data on DBE participation to the WMATA's DBE office on the attached "Prompt Payment Report-Prime Contractor's Report" (Attachment B-6) which shall be submitted monthly with each payment request. Failure to submit these reports may result in suspension of contract payments. The Contractor shall certify with each payment request that payment has been or will be made to all subcontractors due payment, within ten (10) days after receipt of payment from the Authority for work by that subcontractor. The Contractor shall inform the COR or COTR, with their payment request, of any situation in which scheduled subcontractor payments have not been made and the reason therefore.
 - (2) The Contractor shall require each sub-contractor to complete and forward to the DBE Liaison Officer on a monthly basis a "Prompt Payment Report-Subcontractor's Report" (Attachment B-7). The sub-contractor shall certify that payment has been received.
- C. The Contractor shall have a continuing obligation to maintain a schedule for participation by DBE contractor(s) to meet its goal set forth above in this Appendix. The Contractor shall not have work performed nor the materials or supplies furnished by any individual or firm other than those named in the "Schedule of DBE Participation." If at any time, the Contractor believes or has reason to believe that it needs to obtain a substitute for a DBE contractor named in the "Schedule of DBE Participation", the Contractor shall, within ten (10) days, notify the contracting officer and the DBE office of that fact in writing. Situations which may warrant substitution for a DBE firm include, but are not limited to the following:
 - (1) Evidence of change in ownership or circumstances regarding the firm's status as a DBE.
 - (2) Death or physical disability, if the named subcontractor or DBE partner of the joint venture is an individual.
 - (3) Dissolution, if a corporation or partnership.

- (4) Bankruptcy of the subcontractor, subject to applicable bankruptcy law, and only instances where the bankruptcy affects the Contractor's ability to perform.
- (5) Inability to furnish a reasonable performance or payment bond, if required.
- (6) Inability to obtain, or loss of, a license necessary for the performance of the particular category of work.
- (7) Failure or inability to comply with a requirement of law applicable to contractors and subcontractors on a construction, alteration or repair project.
- (8) Failure or refusal to execute the subcontract in accordance with the terms of an offer submitted to the Contractor prior to the Contractor's submission of its bid, but only where the contracting officer or other delegated authority's representative can ascertain with reasonable certainty the terms of such offer. In the absence of any other factors, such a failure or refusal will be considered an unusual situation only if the bidder obtained, prior to bidding/proposing, an enforcement commitment from the subcontractor involved.
- (9) Failure to comply with the terms and conditions of this Contract or those of its subcontract or joint venture agreement.

Within 30 days thereafter, the Contractor shall, if necessary to achieve the Appendix B goal, make every reasonable effort to subcontract the same or other work equivalent in value to other certified DBE firms. The Contractor must have the prior written approval of the contracting officer and the DBE office before substitution for a DBE subcontractor, regardless of the reason for substitution. Failure to obtain Authority approval could result in the Authority declaring the Contractor ineligible to receive further Authority contracts for three years from the date of the finding.

- D. The contractor shall forward copies of all subcontracts to the DBE office at the time of their execution.
- E. If the contracting officer or other delegated authority's representative determines that the Contractor has failed to comply with this Appendix B, he/she will notify the Contractor of such non-compliance and the action to be taken. The Contractor shall, after receipt of such notice, take corrective action. If the Contractor fails or refuses to comply promptly, the contracting officer or other delegated authority's representative may issue a "stop work order" stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop work order shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. When the Authority proceeds with such formal actions, it has the burden of proving that the Contractor has not met the requirements of this Appendix, but the Contractor's failure to meet its Appendix B goal shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of this Appendix. Where the Contractor, after exhausting all its administrative and legal remedies and procedures is found to have failed to exert a "good faith effort" to involve DBE's in the work as herein provided, the Authority may declare the Contractor ineligible to receive further Authority contracts for three years from the date of the finding.

- F. The Contractor agrees to cooperate in any studies or surveys as may be conducted by the Authority which are necessary to determine the extent of the Contractor's compliance with this Appendix.
- G. The Contractor shall keep records and documents for two years following performance of this Contract to indicate compliance with this Appendix. These records and documents, or copies thereof, shall be made available at reasonable times and places for inspection by any authorized representative of the Authority and will be submitted upon request together with any other compliance information which such representative may require.
- H. If the Authority, the FTA or the US DOT has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements regarding the DBE Program, the matter shall be referred to the WMATA's DBE office.
- I. Failure by the Contractor to carry out the requirements of this Appendix is a material breach of this Contract, which may result in the termination of this Contract under the Default provision of this Contract or such other remedy as the Authority deems appropriate.

SUMMARY OF SUBMITTALS

With the Bid

- 1. Completed "Schedule of DBE Participation" (Attachment B-1) with current certification letters attached for each listed DBE.
- 2. Executed "Letters of Intent to Perform as a Subcontractor/Joint Venture" (Attachment B-2).
- 3. Justification for grant of relief (waiver of DBE goal), if applicable. Include completed "DBE Unavailability Certifications" (Attachment B-3) as appropriate.

Bid Requirements (Apparent Successful Bidder)

- 1. All DBEs must submit a copy of their current WMATA or DC DOT certification letters or a certification letter issued by the MWUCP.
- 2. DBE Manufacturer's Affidavit, if applicable, must be submitted in order to receive 100 percent of the allowable credit for expenditures to DBE manufacturers/suppliers (Attachment B-4).
- 3. Schedule B Information for Determining Joint Venture Eligibility, if applicable (Attachment B-5, pgs. 1, 2, 3, 4).
- 4. Copy of Joint Venture Agreement, if applicable.
- 5. Certification letter of the DBE regular dealer/supplier, if applicable.

After Contract Award

- 1. "Prompt Payment Report-Prime Contractor's Report" Attachment B-6) submitted monthly.
- 2. "Prompt Payment Report-Subcontractor's Report" (Attachment B-7) submitted monthly.
- 3. Request to substitute DBE contractor (see paragraph 8.C.) submitted as required.
- 4. Copies of subcontracts-submitted at the time of their execution.

SUBMIT WITH BID SCHEDULE OF DBE PARTICIPATION

		Contract No.			
	Project Name				
Name of Bid	der				
and price, who have of these firms shall contract price. The b the work and at, or g with the Authority.	agreed to perform work on be at prices amounting to idder agrees to enter into a preater than, the prices listed	tifying only those DBE firms, we this Contract. The prices for at least the DBE percentage formal agreement with the DB in this Schedule subject to an an the DBE percentage goal edule.	the work/supplies e goal of the total E firm(s) listed for ward of a Contract		
Name of DBE Subcontractor	Address	Type of Work (Electrical, Paving, Etc.) and Contract Items or Parts Thereof to be Performed and Work Hours Involved	Agreed Price		
	<u>l</u> Su	Legisland Legisl			
Name of DBE Prime Contractor	Address	Type of Work (Electrical, Paving, Etc.) and Contract Items or Parts Thereof to be Performed and Work Hours Involved	Agreed Price		
	Subtotal \$ DBE Prime Contractor				
TOTAL \$ ALL	TOTAL \$ ALL DBE CONTRACTORS TOTAL				
	Signature of Contractor Representative				
	Title				
	Date				
M 23.26a (Rev	02/12)				

Contract Number:	
Project Name:	

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR/JOINT VENTURE (ALL ITEMS <u>MUST</u> BE COMPLETED)

TO:				
(Name of Bio	dder)			
The undersigned intends to	perform work in conr	nection with the a	above projects as (check	one):
	an individual a partnership		a corporation a joint venture	
Specify in detail particular v	vork items or parts the	ereof to be perfo	rmed:	
at the following price: \$				
Please indicate non-DBE contractors, if app for the above work upon yo	olicable. The undersi	gned will enter in	ito a formal agreement w	
Name of DBE Subcontracto	or/Joint Venture	Phon	e Number	
Address		WMA	TA Vendor ID #/DBE Ce	rt. #
Signature & Title			Date	
The following is to be comp to the DBE subcontractor to			y of this letter must be re	turned
To:(Name	e of DBE)	_		
You have projected your in completion of such work as		such work, and	d the undersigned is pro	jecting
WORK ITEMS	COMMEN	TED DBE ICEMENT ITE	PROJECTED COMPLETI DATE	
(Date)		1)	Name of Prime Contractor Acceptance Signature)	&

SUBMIT WITH BID

DBE UNAVAILABILITY CERTIFICATION

I,		,of
(Name)	(Title)	,of
certify that on(Date) items to be performed on Contra		E contractor to obtain a bid for work
DBE Contractor	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials and Labor Only, Etc.
		ontractors were unavailable (exclusive o this project, or unable to prepare a bid, fo
	Signature:	
	Date:	
(Name of DBE Conti	ractor)	an opportunity to bid on the above
identified work on	by	(Source)
The above statement is true and	accurate account of why I did	I not submit a bid on this project.
		(Signature of DBE Contractor)
23.25 (Rev 10/99)		(Title)

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DBE Certification Instructions

Important Notice

If you do not have a current, official letter of certification from WMATA, D.C. DOT or MWUCP, you are not pre-certified and are therefore not eligible to participate as a Disadvantaged Business Enterprise on the bid.

For those who wish to access the MWUCP certification application, it may be found on the internet at the following address:

https://www.wmata.com/business/disadvantaged_business_enterprise. Go to "Procurement and Contracting", click on "Disadvantaged Business Enterprise", then click on "DBE Application for Certification".

49 CFR Part 26 gives Metropolitan Washington Unified Certification Program (MWUCP) 90 days in which to process a complete DBE application. In order to become certified and participate in the MWUCP, you must comply with the procedures that follow. Certification must be final before the due date for bids or offers on a contract on which a firm seeks to participate as a DBE.

Instructions

49 CFR Part 26.81(d) of the Certification Procedures requires a firm to be certified as a DBE in it's "home state", where it has it's principal place of business, in order to become certified outside such "home state". Therefore, you must attach a copy of a valid DBE Certification letter from your home state Department of Transportation to the MWUCP Application. In addition, submit the pertinent documents for your company listed below. The application should be completed in full and NOTARIZED.

General (All firms must submit documents under General)

Current (unaudited) Financial Statements
Prior three (3) years Federal Tax Returns
Resume of Principal(s) and Key Personnel
Third Party Agreements, such as Rental and Management Agreements
Licenses to Do Business
Personal Net Worth (PNW) Statement
Statement of Disadvantage
No Change Affidavit or Notice of Change (where applicable)

Corporations

Articles of Incorporation
By-Laws
Stock Ownership Options
Copy of Stock Certifications of Each Holder
Copy of Voting Rights
Record of First Organizational Meeting

Partnerships

Partnership Agreement

Proprietorships

IRS Employer ID Number WMATA Vendor ID#

Limited Liability Companies

Operating Agreement Certificate of Formation, Operating Agreement with any amendments U.S. Corporate or Partnership Income Tax Returns

Change of Status Review

On or before each certification anniversary date, you must submit a <u>No Change Statement</u> attesting that there have been no changes in the firm's circumstances affecting its ability to meet the eligibility requirements of 49 CFR Part 26 or WMATA's DBE Program Plan. Those firms which have undergone changes in circumstances must submit a <u>Notice Regarding Change</u> for review by the Office of Procurement and Materials, DBE Unit. A review of these changes shall be made to determine of the firm is in compliance with the 49 CFR Part 26.

Affidavit Enclosure

NOTE: When completing MWUCP Application, complete all information blocks. Type "N/A" if item does not apply to you or your firm.

DBE MANUFACTURER'S AFFIDAVIT

I hereby	declare and affirm that I an	n		(Title
and duly authoriz	red representative of		(Nan	ne of Company),
a			owned and cont	rolled enterprise
whose address is				
same tasks for di		ess having any interest in	s not on the payroll of and/o the affiant's business) opera	
		Equipment		
Туре	Function	Model	Age	Make
The und WMATA may rely the undersigned's undersigned furti Federal or state la	on these statements in de smanufacturing concern is	oregoing statements are termining whether a WM. entitled to a 100% credit naterial misrepresentatio	true and correct and fully u ATA prime contractor purcha of such purchases towards it n will be grounds for initiati Printed Name	sing goods from
	• • •		Printea Name	
Date:	State:		County:	
On this	day of		, 19	
before me appea	red			
	known, who, being duly swrly authorized by	(Name) vorn, did execute the fore	going Affidavit, and did state	that he
	fidavit and did so as his or h	(Name er free act and deed.	of Firm)	
(Seal)	Sworn an	d subscribed before me _		
	Commiss	ion Expires:	(Notary Public)	
			23.29 (1	.0/99) M

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Page 1

Name and address of Joint Venture:	
Contact Person:	
Have you attached a copy of the Joint Venture agreement? [] Yes	[] No
NOTE: Affidavit will not be processed without a copy of the Joint Ve	enture agreement.
Name and address of Joint Venture partner:	
Contact Person:	Telephone:
Status of firm: [] DBE. [] Non-Minority.	
Does firm have current WMATA, DC DOT or MWUCP DBE certifica	
Name and address of Joint Venture partner:	
Contact Person:	Telephone:
Status of firm: [] DBE. [] Non-Minority.	
Does firm have current WMATA, DC DOT or MWUCP DBE certifica	tion? [] Yes [] No
Describe the nature of the Joint Venture business:	
Describe the role in the Joint Venture of each partner listed above:	
Describe the experience and business qualifications of each partner	in the Joint Venture listed above:

			Pag	e 2 			
	ate the percenta ints wherever ap		in the Joint Ve	nture for each Joi	int Ventu	re partner, indicating	dolla
Na	ame of Partner	Ownership	Profit and Loss Sharing	including Equip	ment	Other Agreements	
	ALS:						
contro	ify by name, titl ol of and particip	e, race, sex and pation in this conti	company affiliati ract:	ion those individua	als respo	onsible for the manaç	
1.		•		surety and/or bond			
	Name:			Race: _			-
	Title:			Sex:	[] Male	[] Female	
	Company affil	iation:					_
2.	Management supplies:	decisions, such	as estimating,	marketing and s	ales, hir	ring and firing, purc	hasing
	Name:			Race: _			_
	Title:			Sex:	[] Male	[] Female	
	Company affil	iation:					_
3.	Supervision of	f field operations:					
	Name:			Race: _			_
	Title:			Sex:	[] Male	[] Female	
	Company affil	iation:					_
M	23.06c (Rev 10						••••

P	age 3
The undersigned swear that the foregoing stanecessary to identify and explain the terms and opera	atements are correct and include all material information tions of our following named Joint Venture:
and agree to provide the Authority current, complete work and the payment thereof and any proposed che permit the audit and examination of the books, reconventurer relevant to the Joint Venture, by authorized	er in the undertaking. Further the undersigned covenant and accurate information regarding actual Joint Venture nanges in any of the Joint Venture arrangements and to rds and files of the Joint Venture, or those of each Joint d representatives of the Authority or the Federal funding ands for terminating any contract which may be awarded concerning false statements.
	e Authority's DBE Program shall have access to the ose of establishing eligibility and authenticity of the
It is understood that trade secrets and inform geological and geophysical data furnished will be prot	ation privileged by law, as well as commercial, financial, ected.
(NAME OF FIRM)	(NAME OF SECOND FIRM)
(SIGNATURE OF AFFIANT)	(SIGNATURE OF AFFIANT)
(PRINT NAME)	(PRINT NAME)
(TITLE)	(TITLE)
(DATE)	(DATE)
	23.29 (10/99) M

23.06c (Rev 10/99)

M

Information For Determining Joint Venture Eligibility

Contract No. FQ15192

Date: June 12, 2015

Page 4 Date: _____ State: ____ County: ____ On this ______, 19_____, before me appeared _____ (Name) to me personally known, who, being duly sworn, did execute the foregoing Affidavit, and did state that he or she was properly authorized by _____ (Name of Firm) to execute the Affidavit and did so as his or her free act and deed. Sworn and subscribed before me ____ (Seal) Commission Expires: State: _____ County: ____ On this ______, day of ______, 19_____, before me appeared (Name) to me personally known, who, being duly sworn, did execute the foregoing Affidavit, and did state that he or she was properly authorized by _____ (Name of Firm) to execute the Affidavit and did so as his or her free act and deed. (Seal) Sworn and subscribed before me _____ (Notary Public) Commission Expires:

Washington Metropolitan Area Transit Authority

DISADVANTAGED BUSINESS ENTERPRISE (DBE) MONTHLY PROMPT PAYMENT REPORT

PRIME - CONTRACTOR'S REPORT

This report is required to be submitted to the Office of Procurement, DBE Branch 600 5th Street, NW, Suite 3C, Washington, DC 20001, pursuant to the requirements of WMATA's DBE Program Plan and §26.29 of 49 CFR Part 26.

Contract No.:		Reporting Period:					
Name of Prime Cont	tractor:	DBE – Yes or No					
Prime Contract Amo DBE Goal	ount:	Total Rece	Total Received this Reporting Period:		Total Received to Date:		
Name of Sub- Contractor	DBE (Y/N)	Description of Work	Date of Contract Awarded	Amount of Sub- Contractor Award	Amount Paid This Reporting Period	Cumulative Paid To Sub- Contractor	% of Physical Work Complete
			TOTAL				
I certify the information furnished with respect to DBE subcontractor performance correct to the best of my knowledge and represents a current status of the prime contractor with the DBE subcontractors for the designated period covered by this report. Further, those subcontractors, due payment pursuant to the terms of their subcontracts will be paid within ten days after receipt of payment from WMATA.							
Ву:		Title	e:		Date: _		
			18	36			

Washington Metropolitan Area Transit Authority

Contract No. FQ15192

Date: June 12, 2015

DISADVANTAGED BUSINESS ENTERPRISE (DBE)
MONTHLY PROMPT PAYMENT REPORT

SUBCONTRACTOR'S REPORT

This report is required to be submitted to the Office of Procurement, DBE Branch 600 5th Street, NW, Suite 3C, Washington, DC 20001, pursuant to the requirements of WMATA's DBE Program Plan and §26.29 of 49 CFR Part 26.

Contract No.:	Reporting Period:						
Name of Subcontract	or:	DBE – Yes or No					
Subcontractor Contra	act Amou	nt: Tot	al Received this Rep	porting Period:	Total Re	eceived to Date:	
Name of Sub- Contractor	DBE (Y/N)	Description of Work	Date of Contract Awarded	Amount of Sub- Contractor Award	Amount Paid This Reporting Period	Cumulative Paid To Sub- Contractor	% of Physical Work Complete
			TOTAL				
I certify the information furnished with respect to DBE subcontractor performance correct to the best of my knowledge and represents a current status for the designated period covered by this report. Further, those contractors, due payment pursuant to the terms of their subcontracts will be paid within ten days after receipt of payment from the Contractor.							
Ву:		Title	e:		Date:		

APPENDIX B-1

ATTACHMENT A

NOTICE OF REQUIREMENTS FOR SMALL BUSINESS ENTERPRISE (SBE) PROGRAM

May 2015

~Applies only if proposal price is \$500,000 or less.

SMALL BUSINESS ENTERPRISE PROGRAM (SBE)

SMALL BUSINESS ENTERPRISE PROGRAM (SBE)

SMALL BUSINESS PROGRAM POLICY

It is the policy of the Authority (WMATA), the Federal Transit Administration (FTA), and US Department of Transportation (USDOT) to foster small business participation in federally funded contracts. In order to facilitate competition and maximize participation by small businesses, the Authority will assign small business participation within the established threshold on a contract-by-contract basis on USDOT assisted construction and on non-construction procurements (i.e., contracts for services, supplies and equipment have a total value not to exceed five hundred thousand dollars (\$500,000.00). The threshold may be satisfied by utilizing one or more small business concerns as Primes or Subcontractors or Suppliers of goods and services provided that the small business performs a minimum of fifty-one percent (51%) of the tasks pursuant to the awarded contract. The Contractor hereby agrees to carry out this policy in the award and administration of subcontracts to the fullest extent possible consistent with efficient Contract performance. Refer to Appendix B-1 for more detail on the SBE Program.

QUALIFICATIONS

- (a) A firm that is currently WMATA DBE certified under the Metropolitan Washington Unified Certification Program will automatically be certified as SBE. All other firms that meet the eligibility requirements must apply to the Authority's SBE Coordinator in the WMATA's DBE Program Office (DBEPO) for SBE status. All SBE certified firms will appear in the online WMATA SBE Directory.
- (b) A firm must be a small business as defined by the U.S. Small Business Administration (SBA) by applying current SBA business size standards found in 13 CFR Part 121 that are applicable to the type of work the firm seeks to perform in USDOT-assisted contracts.
- (c) The firm's average gross receipts cannot exceed the overall USDOT size standard for a small business (\$23.98 million averaged over the three previous fiscal years or part of year which the business has been in existence). Set forth in 49 CFR 26.65.
- (d) At least 51% of the firm's ownership must be held by individuals who meet the personal net worth (PNW) cap of \$1.32 million as prescribed by 49 CFR 26.67.
- (e) A firm must be organized for profit in order to be eligible for SBE certification.
- (f) The 51% owner must be a U.S. Citizen or Permanent Resident.
- (g) Each firm must be qualified as a SBE before the solicitation process. Proposals and bids will not be accepted from non-SBE qualified firms.

<u>CERTIFICATIONS</u>

(a) Each certified SBE firm that is a Non-DBE firm must annually submit an affidavit to the WMATA DBEPO affirming its continued eligibility to participate in the SBE program. SBE/DBE firms do not have to submit an affidavit annually as long as they stay in DBE compliance.

Washington Metropolitan Area Transit Authority	Contract No. FQ15192
RFP FQ15192/MG	Date: June 12, 2015

(b) A firm seeking SBE certification and/or annual renewal must cooperate fully with WMATA DBEO's requests for information relevant to the certification and annual renewal process. Failure or refusal to provide such information may result in the denial or removal of certification.

The SBE firm is responsible for listing the North American Industry Classification System (NAICS) Code(s) that is/are the primary activities of the business and ensuring the NAICS Code(s) have been approved by WMATA's SBE Coordinator.

Each SBE firm shall complete and adhere to all requirements in Appendix B-1.

~ APPENDIX B-1

SMALL BUSINESS ENTERPRISE (SBE) PROGRAM

1. SMALL BUSINESS ENTERPRISE (SBE) REQUIREMENT:

The SBE requirements of the Authority's DBE Program Plan apply to this contract. Accordingly, the Contractor shall carry out the requirements of the Authority's DBE Program Plan and this Appendix in the performance of this U.S. Department of Transportation (US DOT) assisted contract.

2. POLICY:

It is the policy of the Authority (WMATA), the Federal Transit Administration (FTA), and USDOT to foster small business participation in federally funded contracts. In order to facilitate competition and maximize participation by small businesses, WMATA will assign small business participation within the established threshold on a contract-by-contract basis on USDOT assisted construction contracts and on non-construction procurements (i.e., contracts for services, supplies and equipment having a total value not to exceed \$500,000). The threshold may be satisfied by utilizing one or more small business concerns as Primes or Subcontractors or Suppliers of goods and services provided that the small business performs a minimum of 51% of the tasks pursuant to the awarded contract. The Contractor hereby agrees to carry out this policy in the award and administration of subcontracts to the fullest extent possible consistent with efficient Contract performance.

3. **DEFINITIONS**:

- A. **Appendix B-1.** The Notice of Requirements for Small Business Enterprise Program, which when attached to a solicitation, implements the SBE requirements of the Authority's DBE Program Plan in the award and administration of federally funded Authority contracts.
- B. **Certified SBE.** Is a for-profit small business concern (a) that is at least 51 percent owned by one or more individuals who are economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; (b) whose management and daily business operations are controlled by one or more of the economically disadvantaged individuals who own it; and (c) whose eligibility is evidenced by a current MWUCP (WMATA or D.C. Department of Transportation Certification letter), or an SBE certification letter issued by WMATA's Disadvantaged Business Office.
- C. **Contractor.** One who participates, through a contract or subcontract (at any tier), in a US DOT assisted highway, transit or airport program.
- D. Commercially Useful Function (CUF). An SBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the SBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether an SBE is performing a commercially useful function, the Authority will consider the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing.
 - (1) An SBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of SBE participation.

(2) If an SBE does not perform or exercise responsibility for at least 51 percent of the total cost of its contract with its own work force, or if the SBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work, the Authority will presume that the SBE is not performing a commercially useful function.

Contract No. FQ15192

Date: June 12, 2015

- E. The following factors will be used by the Authority in determining whether an SBE trucking company is performing a commercial useful function:
 - (1) The SBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible for on a particular contract.
 - (2) The SBE must itself own and operate at least one fully licensed, insured and operational truck used on the contract.
 - (3) The SBE may lease trucks from another SBE firm, including an owner-operator who is certified as an SBE.
 - (4) The SBE may also lease trucks from a non-SBE firm, including an owner-operator. The SBE who leases trucks from a non-SBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
 - (5) The lease must indicate that the SBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the terms of the lease with the consent of the SBE, so long as the lease gives the SBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the SBE.
- F. **DC DOT.** The District of Columbia Department of Transportation.
- G. **Economically Disadvantaged Individual.** Any individual who is a citizen (or other lawfully admitted permanent resident) of the United States and, in general, whose net worth is less than \$1.32 million (excluding equity in personal residence and applicant firm.
- H. Joint Venture. An association of an SBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the SBE is responsible for a distinct, clearly defined portion of the work of the contract and shares in the capital contribution, control, management, risks, and profits of the joint venture commensurate with its ownership interest.
- I. **Metropolitan Washington Unified Certification Program (MWUCP).** A unified certification program mandated by 49 CFR §26.81 between two federal transit recipients (WMATA and the D.C. Department of Transportation). The agreement became effective January 2005.
- J. Race-conscious. A measure or program that is focused specifically on assisting only DBEs, including women-owned DBEs.
- K. Race-neutral. A measure or program that is, or can be, used to assist all small businesses. For the purposes of the SBE and DBE programs, race-neutral includes gender-neutrality.
- L. **Small Business Concern.** With respect to firms seeking to participate as SBE's in US DOT assisted contracts, a small business concern as defined pursuant to Section 3 of the

Small Business Act and Small Business Administration implementing regulations (13 CFR Part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR Part 26.65(b).

- M. **US DOT Assisted Contract.** Any contract between the Authority and a contractor (at any tier) funded in whole or in part with US DOT financial assistance, including letters of credit or loan guarantees.
- N. **WMATA.** Washington Metropolitan Area Transit Authority, the transit system (rail and bus) serving the metropolitan Washington area, including parts of Virginia and Maryland.

4. SOLICITATION REQUIREMENTS:

The proposer shall submit the following with its solicitation package. Any proposer/bidder who fails to complete and return this information with its solicitation package shall be deemed to be not responsive and may be ineligible for contract award. Proposers/bidders that are not SBE certified shall be deemed to be not responsible and will be ineligible for Contract award.

The proposer/bidder shall submit the following items within ten (10) calendar days after notification that they are the apparent successful proposer:

- A. A copy of a current WMATA, D.C. DOT or MWUCP certification letter(s) or SBE certification letter shall be attached to evidence SBE pre-certification. All SBE firms must be precertified. Participation by a firm that is not currently certified as an SBE by the Authority at the time of the due date for offers on a contract, does not count. All SBE firms must be in compliance with 49 CFR, Part 26.
- B. Information for Determining Joint Venture Eligibility, if applicable (Attachment 1, pgs. 1, 2, 3, 4). Submittal shall be signed by all parties, dated and notarized.
- C. Copy of Joint Venture Agreement, <u>if applicable.</u> Submittal shall be signed by all parties, dated and notarized.
- D. Completed "Schedule of Participation for SBE Contracts" (Attachment 2) identifying the area of work and percentage of contract performance for SBE prime contractor and all subcontractors. The SBE must perform, at least 51% of the total contract value, to meet the SBE contract performance requirement.
- E. Executed "Letter of Intent to Perform as Subcontractor on SBE Contract" (Attachment 3) must be submitted for all subcontractors.

5. CONTRACT ADMINISTRATION REQUIREMENTS:

The following requirements apply after contract award:

A. The Contractor shall include the following provision in the General Provisions of each subcontract it awards:

"The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in termination of this contract or such other remedy as the Buyer deems appropriate."

B. The Contractor shall report on SBE performance on the attached, SBE Prime Contractor

Prompt Payment Report (Attachment 4) which shall be submitted monthly with each payment request. Failure to submit these report(s) may result in suspension of contract payments. The contractor shall certify with each payment request that payment has been or will be made to all subcontractors due payment, within ten (10) days after receipt of payment from the Authority for work by that subcontractor. The Contractor shall inform the COR or COTR, with their payment request, of any situation in which scheduled subcontractor payments have not been made and the reason therefore.

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The Contractor shall require each subcontractor to complete and forward to the Small Business Coordinator on a monthly basis a "SBE Subcontractor Prompt Payment Report" (Attachment 5). The subcontractor shall certify that payment has been received.

- C. The Contractor must have the prior written approval of the contracting officer and the SBE office before substitution for an SBE subcontractor, regardless of the reason for substitution. Failure to obtain Authority approval could result in the Authority declaring the Contractor ineligible to receive further Authority contracts for three years from the date of the finding.
- D. The contractor shall forward copies of all subcontracts to the Small Business Coordinator at the time of their execution.
- E. If the contracting officer or other delegated authority's representative determines that the Contractor has failed to comply with this Appendix B-1, he/she will notify the Contractor of such non-compliance and the action to be taken. The Contractor shall, after receipt of such notice, take corrective action. If the Contractor fails or refuses to comply promptly, the contracting officer or other delegated authority's representative may issue a "stop work order" stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop work order shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. When the Authority proceeds with such formal actions, it has the burden of proving that the Contractor has not met the requirements of this Appendix, but the Contractor's failure to meet its Appendix B-1 goal shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of this Appendix.
- F. The Contractor agrees to cooperate in any studies or surveys as may be conducted by the Authority which are necessary to determine the extent of the Contractor's compliance with this Appendix.
- G. The Contractor shall keep records and documents for three years following performance of this Contract to indicate compliance with this Appendix. These records and documents, or copies thereof, shall be made available at reasonable times and places for inspection by any authorized representative of the Authority and will be submitted upon request together with any other compliance information which such representative may require.
- H. If the Authority, the FTA or the US DOT has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements regarding the SBE Program, the matter shall be referred to the WMATA's DBE office.
- I. Failure by the Contractor to carry out the requirements of this Appendix is a material breach of this Contract, which may result in the termination of this Contract under the Default provision of this Contract or such other remedy as the Authority deems appropriate.

Information For Determining Joint Venture Eligibility

Page 1	
Name and address of Joint Venture:	
Contact Person:	Telephone:
Have you attached a copy of the Joint Venture agreement? [] Yes [
NOTE: Affidavit will not be processed without a copy of the Joint Ven	ture agreement.
Name and address of Joint Venture partner:	
Contact Person:	
Status of firm: [] DBE [] Non-Minority [] Female [] Veteran.	
Does firm have current WMATA, DC DOT or MWUCP DBE certification	
Name and address of Joint Venture partner:	
Contact Person:	Telephone:
Status of firm: [] DBE. [] Non-Minority [] Female [] Veteran.	
Does firm have current WMATA, DC DOT or MWUCP DBE certification	
Describe the nature of the Joint Venture business:	
Describe the role in the Joint Venture of each partner listed above:	

Describe the experience and business qualifications of each partner in the Joint Venture listed above:

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Page 2

Indicate the percentage of ownership in the Joint Venture for each Joint Venture partner, indicating dollar amounts wherever applicable.

Name o	of Partner	Percentage of Ownership	Profit and Loss Sharing	Capital Contrib including Equi		Other	Agreements	
TOTAI								
		title, race, sex a		affiliation those in	ndividu	als respo	nsible for the	e management
1.	Financial de	ecisions, such as	payroll, insura	nce, surety and/o	or bond	ding requir	ements:	
I	Name:			Race	:			
-	Title:				_Sex:	[] Male	[] Female	
(Company a	ffiliation:						
2. I	Manageme	nt decisions, suc	h as estimating	, marketing and	sales, l	hiring and	firing, purch	asing supplies:
1	Name:			Race	:			
-	Title:				_Sex:	[] Male	[] Female	
(Company a	ffiliation:						
3.	Supervision	of field operatio	ns:					
I	Name:			Race: _				
-	Title:				_Sex:	[] Male	[] Female	
(Company a	ffiliation:						

M

Information For Determining Joint Venture Eligibility

Page 3

The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operations of our following named Joint Venture:

and the intended participation by each Joint Venturer in the undertaking. Further the undersigned covenant and agree to provide the Authority current, complete and accurate information regarding actual Joint Venture work and the payment thereof and any proposed changes in any of the Joint Venture arrangements and to permit the audit and examination of the books, records and files of the Joint Venture, or those of each Joint Venturer relevant to the Joint Venture, by authorized representatives of the Authority or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal and State laws concerning false statements.

It is recognized and acknowledged that the Authority's SBE Program shall have access to the information provided herein above for the purpose of establishing eligibility of the Joint Venture.

It is understood that trade secrets and information privileged by law, as well as commercial, financial, geological and geophysical data furnished will be protected.

(NAME OF SECOND FIRM)	
(SIGNATURE OF AFFIANT)	_
(PRINT NAME)	
(TITLE)	
(DATE)	
	(SIGNATURE OF AFFIANT) (PRINT NAME) (TITLE)

M

Information For Determining Joint Venture Eligibility

		Page 4	
		County:	
		, 20,	
Soloto illo appo	<u> </u>	(Name)	
to me personall	y known, who, being	duly sworn, did execute the foregoing Affidavit, and did s	state that he o
to execute the A	Affidavit and did so as h	(Name of Firm) is or her free act and deed.	
(Seal)	Sworn ar	d subscribed before me(Notary Public)	
		(Notary Public)	
	Commiss	ion Expires:	
Date:	State:	County:	
this	day of		
before me appe	ared	(Name)	
To me personal	ly known, who, being	duly sworn, did execute the foregoing Affidavit, and did s	state that he o
		(Name of Firm) is or her free act and deed.	
(Seal)	Sworn ar	d subscribed before me	
,		(Notary Public)	
	Commiss	ion Expires:	

Signature & Title of Contractor Representative

Contract No. FQ15192 Date: June 12, 2015

SUBMIT WITH BID/PROPOSAL

SCHEDULE OF PARTICIPATION on SBE Contract

		Contract No	
Name of Pic	Ider/Proposer	Project Name	
The bidder/proposer shagreed to perform work	all complete this Schedule on this Contract. The bid	by identifying those firms, with sco der/proposer agrees to enter into a rices listed in this Schedule subject	formal agreement with the firm
Name of Subcontractor	Address	Type of Work (Electrical, Paving, Etc.) and Contract Items or Parts Thereof to be Performed and Work Hours Involved	Agreed Price
		Subtotal \$ Subcontractors	
Name of Prime Contractor	Address	Type of Work (Electrical, Paving, Etc.) and Contract Items or Parts Thereof to be Performed and Work Hours Involved	Agreed Price
	\$	Subtotal \$ SBE Prime Contractor	
TOTAL \$ ALL	CONTRACTORS	TOTAL	

Date

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR/JOINT VENTURE (ALL ITEMS MUST BE COMPLETED)

Contract No. FQ15192 Date: June 12, 2015

IO:		
(Name of Bidder/Proposer)		
The undersigned intends to perform work in connection with	he above projects as (check one):	
an individual	a corporation	
a partnership	a joint venture	
Specify in detail particular work items or parts thereof to be p	erformed:	
at the following price: \$		
Please indicate% of the dollar value of the subcont undersigned will enter into a formal agreement with you for the Authority.		
Name of SBE Firm's Subcontractor/Joint Venture	Phone Number	
Address	WMATA Vendor ID	
Signature & Title	Date	
The following is to be completed by the Prime Contractor. A indicate acceptance.		ontractor to
To:		
(Name of Subcontractor)		
You have projected your interest and intent for such work, ar follows:	d the undersigned is projecting completion of s	such work as
WORK ITEMS:		
PROJECTED SUBCONTRACTOR COMMENCEMENT DAT	<u>E:</u>	
PROJECTED SUBCONTRACTOR COMPLETION DATE:		
(Name of Prime Contractor & Acceptance Signature)		

Washington Metropolitan Area Transit Authority (WMATA)

SMALL BUSINESS ENTERPRISE (SBE)	
PRIME CONTRACTOR'S PROMPT PAYMENT REPORT	

Page	of
Reporting Period	db
Contract Number	

Contract No. FQ15192

Date: June 12, 2015

This Report is required to be submitted to the DBE Office, Attn: Coordinator, Small Business Programs, 8201 Ardwick Ardmore Road, Landover, MD 20785, pursuant to the requirements of WMATA's DBE Program Plan and 49 CFR Part 26.

Name of SBE Prime Contractor:	
Prime Contract Amount:	

Name of Sub-Contractor	SBE (Y/N)	Description of Work	Date Contract Awarded	Amount of Sub-Contractor Award	Amount Paid This Reporting Period	Cumulative Paid To Sub- Contractor

I certify the information furnished with respect to subcontractor performance correct to the best of my knowledge and represents a current status of the SBE prime contractor with subcontractors for the designated period covered by this report. Further, those subcontractors, due payment pursuant to the terms of their subcontracts will be paid within ten days after receipt of payment from WMATA.

Signature & Title of Authorized Representative:	Date:

Washington Metropolitan Area Transit Authority (WMATA)

Report is required to be submitted to the DBE Offic uirements of WMATA's DBE Program Plan and 49 CF	e, Attn: Coordinator, FR Part 26.	Small Business Progr	rams, 8201 Ardwick Ardmore	Road, Landover, MD 20785,	pursuant to
Subcontractor:					
SBE Prime Contractor:		Subcontrac	t Amount:		
Description of Service/Product Performed	Invoice Date	Invoice Amount	Payment Received From Prime Contractor (Check # or EFT Confirmation #)	Cumulative Payments Received From Prime Contractor	
					_
rtify the information furnished with respect to pwledge.	payment(s) by the pr	rime contractor for	the above services/produc	ets is true and accurate to t	the best of

COMBINED GLOSSARY OF DEFINITIONS

Contract No. FQ15192

Date: June 12, 2015

As used throughout this Contract, except to the extent otherwise expressly specified, the following terms shall have the meanings set forth below:

Acceptance: Acknowledgment by the Authority that the supplies, services, or other Work conform to the applicable contract requirements.

Acceptance Period: The number of Days available to the Authority to award a Contract pursuant to this Invitation from the date of opening of Bids in accordance with the terms of this solicitation, during which period Bidders may not withdraw their Bids.

Agreement: The Authority's form titled "Construction Contract Form" in this Invitation for Bid (IFB) that, upon execution by the Contractor and the Authority, creates the Contract between the two parties.

Amendment: Written instructions issued prior to the date set for receipt of Proposals or Best and Final Offers to clarify, revise, add or delete requirements of the Request for Proposals.

Amendment: Written or graphic instructions issued to clarify, revise, add, or delete requirements issued prior to the Bid opening date.

Approval of a Submittal or any other item shall be solely for the purpose of establishing conformance to the Contract Documents.

Approved equal: An item or service approved by WMATA as equivalent to brand name item or other service originally specified.

Article: One of the provisions of this Contract, each identified separately by number and title, which may contain subdivisions denominated as Paragraphs and Subparagraphs. **!**

As shown, as indicated, as detailed or words of similar import: Shall be understood to mean that the reference is made to the Contract Documents.

As specified, as described, or words of similar import: Shall be understood to mean that the reference is made to the Contract Documents.

Authority or WMATA or Metro: The Washington Metropolitan Area Transit Authority, created effective February 20, 1967, by Interstate Compact by and between Maryland, Virginia and the District of Columbia pursuant to Public Law 89-774, approved November 6, 1966.

Best and Final Offers: A Revision to the initial Proposal submitted at the request of the Contracting Officer, generally following Discussions, upon review of which the Authority will render a determination as to the successful Offeror for purposes of contract award.

Board of Directors: The Board of Directors of the Washington Metropolitan Area Transit Authority.

Brand name: Identification of an item or service that is produced or controlled by one or more entities, including trademarks, manufacturer names, or model names or numbers that are associated with a manufacturer.

Breach: An unexcused and unjustifiable failure or refusal of a party to satisfy one or terms of the Contract which, if material, shall constitute a basis for potential default.

Chapter: one of the eleven principal divisions of the Contract terms, each identified by separate name and roman numeral, and each containing multiple numbered Articles.

Change or **Change Order:** A written alteration issued, upon agreement of both parties or unilaterally by the Authority, to modify or amend the Contract, generally directing changes to the Scope of Work and/or contract terms.

Claim: A written demand or assertion by the Contractor seeking, as a legal right, the payment of money, adjustment or interpretation of Contract terms, or other relief, arising under or relating to this Contract.

Clarifications: Exchanges between the Authority and one or more Offerors of a limited nature, whereby Offerors may be given the opportunity to clarify certain aspects of their Proposals or to resolve minor irregularities, informalities or clerical errors.

Competitive Range: Those initial Proposals which are determined by the Authority to have a reasonable chance of being selected for award and which may thereupon be selected for additional negotiations or Discussions to the extent deemed appropriate by the Contracting Officer. Proposals not in the competitive range are given no further consideration.

Constructive Change: An act or omission by the Authority that, although not identified as a Change Order, does in fact cause a change to the Work of the Contract.

Contract or **Agreement**: The written agreement executed between the Authority and the Contractor awarded pursuant to this Solicitation and covering the Work as set forth in the Contract Documents.

Contract Administrator: the Authority representative designated to serve as its primary point of contact for pre-award activities relating to this Solicitation as well as such post-award activities as are set forth in the Contract Documents.

Contract Documents: All of the documents encompassed within and accompanying this Request for Proposals, including the Offer and Award sheets, Price Schedule, Solicitation Instructions, Representations and Certifications, General and Special Provisions, Scope of Work, Change Orders issued subsequent to award of the Contract, and the Contractor's Proposal to the extent finally accepted by the Authority. $\underline{\bf R}$

Contracting Officer: An employee with authority duly delegated from the powers of the Chief Procurement Officer to legally bind the Authority by signing a contractual instrument. The Contracting Officer is the Authority's primary point of contact for pre-award administration, Modifications above the limits of the Contracting Officer Representative, and Final Settlement.

Contracting Officer Representative: The person to whom the Contracting Officer delegates the authority and responsibility for post award execution of the Contract. The Contracting Officer Representative is the Authority's primary point of contact with its Contractor.

Contractor: The individual, partnership, firm, corporation, or other business entity that is contractually obligated to the Authority to furnish, through itself or others, the Supplies, Services and/or construction services described in the Contract, including all incidentals which are necessary to complete the Work in accordance with the Contract.

Contract Price: The amount payable to the Contractor under the terms and conditions of the Contract based on lump sum prices, unit prices, fixed prices, or combination thereof, with any adjustments made in accordance with the Contract.

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Data: Recorded information, regardless of form or the media on which it may be recorded, including technical data and computer software.

Day: Calendar day, except where the term business day, work day or like term is used.

Designer: The individual, partnership, firm, corporation or other business entity that is either the Contractor, or employed or retained by the Contractor, to manage and perform the design services for the Project.

Disadvantaged Business Enterprise ("DBE"): A for-profit small business concern that has been certified by the Authority to be at least 51% owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51% of the stock is owned by one or more individuals, and whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

Descriptive literature: Information provided by an Offeror, such as cuts, illustrations, drawings, and brochures that shows a product's characteristics or construction of a product or explains its operation. The term includes only that information needed to evaluate the acceptability of the product and excludes other information for operating or maintaining the product.

Discussions: Negotiations or exchanges relating to the Solicitation between an Offeror and the Authority that may occur after receipt of Proposals (generally after establishment of the Competitive Range) and before award, that may, at the Contracting Officer's discretion, result in the Offeror being allowed to revise its Proposal or be followed by a request by the Contracting Officer for receipt of Best and Final Offers.

Evaluation Criteria: Those factors to be considered by the Authority, as set forth in the Solicitation Instructions accompanying this RFP, in determining the successful Proposal.

Explanation: Additional information or clarification provided by an Authority representative to one or more prospective Bidders [**Proposers**] in response to an inquiry relating to the Solicitation, which information or clarification shall be binding upon the Authority only to the extent specified in the Solicitation Instructions.

Equivalent: Of equal or better quality and/or performance to that specified in the Contract Documents, as determined by the Authority.

Final Acceptance: Final acceptance of the work occurs when the work is fully, completely, and finally accomplished in strict compliance with the contract documents to the satisfaction of the Authority.

Final Payment: The last payment to the Contractor for Work performed under the Contract, made following Final Acceptance.

Force Majeure: An unforeseen event or circumstance, beyond the control of, and not occasioned by the fault or neglect of, the Contractor (including subcontractors at any tier) or the Authority, which event gives rise to a delay in the progress or completion of the Work of the Contract, including, without limitation, acts of God, acts of war or insurrection, unusually severe weather, fires, floods, strikes, freight embargoes or other events or circumstances of like nature.

FTA: Federal Transit Administration, an agency within the United States Department of Transportation that provides financial and technical assistance to local public transit agencies.

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General Conditions: A compilation of contractual and legal requirements that lists the rights, responsibilities, and relationships of the parties to a contract and defines duties and limits of authority for design professionals and construction management in performance of contract administration.

Government: The Government of the United States of America.

Industry Standards: Drawings, documents, and specifications or portions thereof published by industry organizations. Industry Standards are not Contract Documents unless specifically listed as such in a WMATA Standard Specification or WMATA Guide Specification.

Jurisdictional Authority: Refers to Federal, State, and local authorities or agencies having approval authority over work to which reference is made.

Legal Requirements: All federal, state and local laws, ordinances, rules, orders, decrees, and regulatory requirements such as: building codes, mechanical codes, electrical codes, fire codes, Americans with Disabilities Act Accessibility Guidelines (ADAAG) regulations and other regulations of any government or quasi-government entity that are applicable to the Project.

Milestone: A specified date in the Contract by which the Contractor is required to complete a designated portion or segment of the Work.

Minor Irregularity: A variation from the Solicitation contained in a Proposal that does not affect the price or other material term of the Contract and does not confer a competitive advantage or benefit not enjoyed by other Offerors or adversely impact the interests of the Authority.

Notice to Proceed: Written notice issued by the Authority establishing the date on which the Contractor may commence Work and directing the Contractor to proceed with all or a portion of the Work.

Offeror: A party submitting a Proposal in response to this Solicitation.

Option: A unilateral right in the Contract by which, for a specified time, the Authority may elect to purchase, at a predetermined specified price, additional Supplies, Services and/or Work called for by the Contract or to extend the term of the Contract.

Organizational conflict of interest: A circumstance in which, because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Authority, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

Paragraph: A subdivision of an Article contained in this Contract, generally introduced through a non-capitalized letter (e.g. "(a)").

Period of Performance: The time allotted in the Contract Documents for completion of the Work. The Period of Performance begins upon the effective date of the Notice to Proceed and ends on the date of Acceptance. Period of Performance incorporates the Milestones established for the Contract. **Pre-award Survey**: An evaluation of a prospective Contractor's capability to perform a proposed Contract, including an assessment of matters relating to its responsibility.

Product Data: Information furnished by the Contractor to describe materials used for some portion of the Work, such as written or printed descriptions, illustrations, standard schedules, performance charts, instructions, brochures, and diagrams.

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Project: The construction of the facility described in the Contract Documents.

Proposal: A submission by an Offeror to the Solicitation that, if accepted by the Authority, would bind the Offeror to perform the resultant Contract.

Punch List: Work that remains to be completed after Substantial Completion. This Work must be completed as a condition of Final Completion and Acceptance.

Records: Books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

Request for Information (RFI): The document by which the Offerors or Contractor request clarification, verification, or information concerning a portion of the RFP or the Work.

Revision: A change to a Proposal made by an Offeror, at the request of or as allowed by the Contract Administration or Contracting Officer, often as a result of Discussions. Best and Final Offers are one form of Revision.

Services: The performance of Work by a person or legal entity under contract with the Authority, including without limitation: maintenance; overhaul; repair; servicing; rehabilitation; salvage; modernization or modification of supplies, systems or equipment; routing recurring maintenance of real property; housekeeping; operation of Authority-owned equipment, facilities and systems; communication services; Architect-Engineering services; professional and consulting services; and transportation and related services.

Subparagraph: A subdivision, at any tier, of a Paragraph contained in an Article of this Contract.

Supplies: The end item(s) required to be furnished by the Contractor in fulfillment of its obligation under this Contract as well as any and all related services and required performance.

Statement of Work/Scope of Work ("SOW"). The portion of a contract or Request for Proposal that describes specifically what is to be done by the contractor. It may include specifications, performance outcomes, dates and time of performance, quality requirements, etc.

Solicitation: This Request for Proposals (RFP) and the accompanying Contract Documents.

Shop Drawings: Fabrication, erection, layout, setting, schematic, and installation drawings prepared by the Contractor for permanent structures, equipment, and systems designed by it to comply with the Contract Documents.

Similar: Generally the same but not necessarily identical; details shall be worked out in relation to location and relation to other parts of the Work.

Site: The areas that are occupied by or used by the Contractor and Subcontractors during performance of the construction of the Project as indicated in the Contract Documents.

Subcontract: An agreement between the Contractor and another party, or between other subcontractors at any tier, to perform a portion of the Work of the Contract through the acquisition of specified supplies, materials, equipment or services.

Subcontractor: An individual, firm, partnership, or corporation that has a contractual obligation with the Contractor or other Subcontractor or Supplier.

Submittal: Written or graphic document or Sample prepared for the Work by the Contractor or a Subcontractor or Supplier and submitted to the Authority by the Contractor, including Shop Drawings, Product Data, Samples, certificates, schedules of material, or other data.

Substantial Completion: Work or a portion thereof that has progressed to the point where it is sufficiently complete in accordance with the Contract Documents (including receipt of test and inspection reports) so that the Work, or a specified portion thereof, can be utilized for the purpose for which it is intended, and only incidental work remains for physical completion of the Work in accordance with the Contract Documents.

Substitution: An item offered by the Contractor of significant difference in material, equipment, or configuration, which functionally meets the requirements of the Contract Documents but is submitted in lieu of item specified therein.

Supplementary Conditions: The term Supplementary Conditions means modifications to the General Conditions for requirements unique to a specific project.

Supplier: A Subcontractor who is a manufacturer, fabricator, supplier, distributor, or vendor having a contract with the Contractor or with another Subcontractor to furnish items, materials or equipment to be utilized or incorporated in the Work of the Contract.

Utility: A public and private facility or installation, other than a WMATA system facility, which relates to (1) the conveyance and supply of water, sewage, gas, chemicals, steam, petroleum products, and other piped installations, or (2) electrical energy, telephone, telegraph communications, radio, television, and cellular or wireless communications.

Utility Standards: Drawings and specifications for Utilities published or issued by municipalities or Utility companies.

Wherever in the Contract, the words directed, ordered, designated, prescribed or words of like import are used, it shall be understood that the direction, requirement, order, designation or prescription of the Contracting Officer is intended and similarly the words approved, acceptable, satisfactory or words of like import shall mean approved by, or acceptable to, or satisfactory to the Contracting Officer, unless otherwise expressly stated.

WMATA Safety Manual: A compilation of the appropriate safety and reporting requirements for the Project as specified in Section 00370, WMATA SAFETY AND SECURITY REQUIREMENTS.

WMATA Safety and Security Certification Program Plan: A compilation of the appropriate System safety and security certification requirements for the Project.

Work: All of the services of any kind, as well as any and all goods, supplies, equipment, labor, material, delivery and other work of any type and nature to be furnished and/or performed pursuant to a Contract awarded through this Solicitation such as to accomplish the Contract's stated objectives in a timely and fully satisfactory manner. **I,R**