

**SOLICITATION FOR REQUEST FOR QUALIFICATIONS  
ARCHITECT-ENGINEER DESIGN SERVICES**

**ANACOSTIA RIVERWALK KENILWORTH TRAIL SECTION**

**INVITATION NO.: DCKA-2007-R-0122**

1. The District Department of Transportation (DDOT) is soliciting Standard Form 330 from experienced Architect – Engineer firms. The forms will be used in selecting an A-E firm to provide Engineering/Architectural Design Services for the Anacostia River Walk Kenilworth Trail Section from Benning Road north to Bladensburg Maryland, along the east bank of the Anacostia River.
2. Consultant selection will be in accordance with the provisions of 27 DCMR Chapter 2620 through 2633. Work consists of the following tasks:
  - Complete design plans and specifications in accordance with the Statement of Work.
  - Program management, including scheduling, preparation of contract documents, scheduling, briefing packages, financial tracking and planning documents, and coordination with adjacent and related projects.
3. The trail will be designed in accordance with the Anacostia Riverwalk Trail Environmental Assessment (EA) which can be found on the DDOT website at: <http://www.ddot.dc.gov/ddot/cwp/view,a,1249,q,621568.asp>
4. This section of the trail design will include all way finding as well as informational signs associated with all three sections of the trail as described in the EA.
5. Award will be made to the highest rated offeror at the conclusion of the evaluation process. A panel of DDOT staff will conduct evaluations and make award recommendations to the Contracting Officer. Final selection will be made by the Contracting Officer in accordance with Title 27 DCMR Chapter 26.
6. Vendors desiring consideration should submit one (1) original and five (5) copies of their Standard Form 330, Architect-Engineer Qualifications. All vendors desiring consideration for Architect-Engineer contracts must include all information relating to the firms qualifications in the standard form. Inclusion by reference to other materials is not acceptable.
7. The evaluation criteria for selection are listed below:
  - a. The professional qualifications of the staff necessary for satisfactory completion of the required services and the ability to assemble a specialized team.
  - b. The firm’s specialized experience and technical expertise in transportation program management, bicycle and pedestrian trail design, and construction.
  - c. The firm’s capacity to complete work within time limitations.

- d. Past performance on contracts of similar nature with the District, other governmental entities and private industry in terms of cost control, quality of work, and compliance with performance schedules; and
  - e. Acceptability under other appropriate evaluation criteria -familiarity of the firm's staff with applicable Federal and D.C. regulations, standards and procedures.
8. "In accordance with the "Small, Local, and Disadvantaged Business Enterprise Development and Assistance Act of 2005" (the Act), Title II, Subtitle N, of the "Fiscal Year 2006 Budget Support Act of 2005", D.C. Law 16-33, effective October 20, 2005, the District shall apply preferences in evaluating bids or proposals from businesses that are small, local, disadvantaged, resident-owned, longtime resident, or local with a principal office located in an enterprise zone of the District of Columbia. The maximum total preference to which a certified business enterprise is entitled under the Act for this procurement is twelve (12) points on a 100-point scale for proposals submitted in response to an RFP. There will be no preference awarded for subcontracting by the prime contractor with certified business enterprises.
9. The Standard Form 330 from all offerors must be received by 2:00 p.m. on February 13, 2008 at the following address:  
Office of Contracting and Procurement Bid Room  
Reeves Center  
2000 14<sup>th</sup> Street, N.W., 3<sup>rd</sup> Floor  
Washington, D.C. 20009
10. A copy of the detailed Scope of Work is accessible via the DDOT website at [www.ddot.dc.gov](http://www.ddot.dc.gov) and OCP website at [www.ocp.dc.gov](http://www.ocp.dc.gov).
11. For technical questions contact Mr. Allen Miller, Project Manager, at (202) 671-4595 or email [allen.miller@dc.gov](mailto:allen.miller@dc.gov)

**THE GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION**

**Anacostia Waterfront Initiative**

**Engineering Design Services For  
The Anacostia River Walk  
Kenilworth Trail Section**

**Solicitation No. DCKA-2007-R-0122**

**SCOPE OF WORK**

**Location of Work and Background**

The project limits included in this Scope of Work for the design of the Anacostia River Walk (ARW) will be comprised of the portions along the east of the Anacostia River and the numerous connection trails to the ARW. The following is a detailed description of each portion of the ARW included in this Scope of Work.

1. The ARW located along the east side of the Anacostia River is broken into two sections.
  - The first section begins approximately a ½ mile north of New York Avenue, near the end of 52<sup>nd</sup> Avenue, where the ARW will connect to the Bladensburg Path. The Bladensburg Path is located across the District of Columbia line into Prince Georges County, Maryland. From the Bladensburg Path connection, the ARW will extend south beneath the New York Avenue (Rte 50) and AMTRACK Railroad Bridges over the Anacostia River. The first section of the ARW will continue along or across the Lower Beaverdam Creek, around the Kenilworth Aquatic Gardens and end at the Kenilworth Parkside Recreation Area near the intersection of Anacostia Avenue NE and 40<sup>th</sup> Street NE.
  - The second section begins at the Kenilworth Parkside Recreation Area and ends at the Benning Road Bridge over the Anacostia River. During a joint agency meeting held at the Anacostia National Park Service (NPS) Headquarters December 30, 2003, a decision was made to avoid the existing reclaimed landfill/superfund site that is currently closed to the public. The NPS is presently developing a National Environmental Policy Act (NEPA) Document for this area. Due to the timing of the NPS NEPA

Document, the decision was made to avoid the landfill/superfund site and perform an engineering feasibility study to place a temporary trail around it. The temporary ARW will not preclude any future trail options through the NPS landfill/superfund site. Therefore, the project limits of the second section included in this Scope of Work begins at the Kenilworth Parkside Recreational Area; will loop to the southeast around the landfill/superfund site through the adjacent neighborhoods; weave between the landfill/superfund site and the DC Transfer Station and PEPCO Power Plant; and will end beneath the Benning Road Bridge over the Anacostia River.

2. The following information describes the location of the connecting trails to the ARW east of the Anacostia River that are included in this Scope of Work.
  - Connect to the Minnesota Avenue Metro Station using the existing tunnel and pedestrian bridge over Kenilworth Avenue NE at Hayes Street NE. From the pedestrian bridge the connecting trail would meander west, through the neighborhood and tie into the ARW.
  - Connect to both the north and south sides of the Benning Road Bridge.

## **SCOPE OF WORK DESCRIPTION**

### **GENERAL**

This project will cover design of the trail from River Terrace north to the Bladensburg Path along the east side of the Anacostia River and will develop from concept design, for the selected alternative, developed for the EA. Including the access to the trail at Minnesota Ave METRO Station and at Nannie Helen Burroughs Ave.

The following information provides a detailed description of the elements or tasks to be provided within this ARW Scope of Work.

### **1. MANAGEMENT**

- 1.1 The contractor shall provide project assessment and coordination with the DDOT and National Park Service (NPS) Project Manager through bi-weekly meetings including the DDOT interagency meeting to be held every 2<sup>nd</sup> Tuesday of the month.

1.2 The contractor shall provide project communication and coordination with DDOT and the design consultant team members through a bi-weekly progress meeting.

1.3 The contractor shall provide project coordination with the following agencies:

- 1.3.1 United States Environmental Protection Agency
- 1.3.2 District of Columbia Department of Environment.
- 1.3.3 District of Columbia Department of Public Works
- 1.3.4 District of Columbia Office of Planning.
- 1.3.5 District of Columbia Department of Parks and Recreation.
- 1.3.6 District of Columbia Water and Sewer Authority
- 1.3.7 Washington Suburban Sanitary Commission
- 1.3.8 PEPCO
- 1.3.9 Verizon
- 1.3.10 Maryland Department of Transportation
- 1.3.11 Prince Georges County Department of Public Works and Transportation.
- 1.3.12 Washington Metro Area Transit Authority.
- 1.3.13 CSX
- 1.3.14 Maryland National Capital Region Parks and Planning Commission.
- 1.3.15 Fine Arts Commission.
- 1.3.16 District of Columbia Sports and Entertainment Authority.
- 1.3.17 AMTRACK
- 1.3.18 Office of the Deputy Mayor for Economic Development
- 1.3.19 United States Army Corp of Engineers
- 1.3.20 Nation Park Service- National Parks East

1.4 The contractor shall participate in public meetings at the 65 and 100 percent submission.

1.5 The contractor shall participate in project review meeting during the design process at 65, and 90 percent submission review.

## **2. DESIGN**

2.1 During the design process the contractor shall provide to DDOT the following submissions:

- 65% - Intermediate Plan Review
- 90% - Correction Plan Submission
- 100% - Plans, Specifications and Estimate Submittal (PS&E)
- 100% - Contract Bid Documents

2.2 During the 65% - Intermediate Plan Review the contractor shall develop cost estimates to be used to delineate the physical limits of the construction package based on available funding.

2.3 The contractor shall provide an updated cost estimate with each subsequent submission.

### **3. Design Criteria**

3.1 The contractor shall provide the design services in compliance with applicable DDOT Manuals and Guidelines.

3.2 In general, the ARW will be comprised of a variety of trail types that may change with each segment. The types may consist of sidewalks shared with pedestrians, off-street shared-use paths, dedicated pathways, and on street bike lanes. When possible, the trail will be 12 ft. wide asphalt with a 2 ft wide grass shoulder on each side of the trail.

3.3 The current edition, including updates, of the following DDOT Manuals, Federal Guidelines and known planning and technical studies shall be used by the Contractor in the performance of this work.

- 3.3.1 Code of Federal Regulations (CFR) 23 CFR 625.
- 3.3.2 NS 23 CFR 630B.
- 3.3.3 Federal Highway Administration (FHWA) Part 1 – Designing Sidewalks and Trails for Access.
- 3.3.4 FHWA Part 2 – Designing Sidewalks and Trails for Access, Best Practices Design Guide.
- 3.3.5 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities.
- 3.3.6 AASHTO Guide for Design of Pavement Structures.
- 3.3.7 Manual on Uniform Traffic Control Devices. (MUTCD)
- 3.3.8 District of Columbia Department of Transportation (DDOT) Standard Specifications for Highways and Structures. 2005
- 3.3.9 DCDPW Downtown Streetscape Regulations, 1999.
- 3.3.10 DDOT Design Standards, 2005
- 3.3.11 DDOT Traffic Calming Policies and Guidelines 2002.
- 3.3.12 District of Columbia (DC) Urban Forestry Administration Guidelines.
- 3.3.13 DC Office of Planning – Anacostia Waterfront Initiative (AWI) Framework Plan
- 3.3.14 DC Office of Planning – Anacostia River Parks Target Area Plan & Riverwalk Design Guidelines.
- 3.3.15 DC Office of Planning – AWI Target Area Plans, Southwest, South Capitol Street, Capitol Hill East, Poplar Point, East of Anacostia River & Kingman Island.

- 3.3.16 DC Office of Planning – Route 50 / Railroad Bridge Study, Louis Berger.
- 3.3.17 DC Office of Planning – Watts Branch Trail Rehabilitation Study, TAMS
- 3.3.18 NPS Draft General Management Plan. (Draft)
- 3.3.19 AWI Streetscape Architecture Design Guidelines

**4. Drainage, Stormwater Management and Wetland Mitigation Design**

4.1 The contractor shall use the applicable District of Columbia storm water drainage criteria for Drainage and Stormwater Management (SWM) design. The design shall include best management practices and low impact storm water management facilities and wetland mitigation sites associated with the trail design. The storm water management design shall consist of developing pre- and post-conditions and evaluating the need for SWM based on criteria.

**5. Soil Erosion and Sediment (E&S) Control Design**

5.1 The contractor shall use the applicable current guidelines for erosion and sediment (E&S) control of the District of Columbia Department of Environment, Watershed Protection Division. For the purposes of the Scope of Work, the contractor shall develop E&S control plans for each of the design/construction sections.

**6. Hydrologic and Hydraulic (H&H) and Scour Analysis and Design**

6.1 The contractor shall perform a Pre and Post construction hydrologic and hydraulic (H&H) analysis and design the scour countermeasures for the structures required along the Anacostia River and Lower Beaverdam Creek located near the New York Avenue (Rte 50) and CSX Railroad Bridges.

**7. Maintenance of Traffic / Sequence of Construction**

7.1 The contractor shall develop detailed maintenance of traffic / construction phasing plans for project.

**8. Signing and Pavement Marking**

8.1 The contractor shall develop signing and pavement marking plans for entire Riverwalk Trail system. This shall include way finding, traffic control, and informational signs. All signage shall be in accordance with MUTCD and National Park Services Requirements.

**9. Lighting and Signalization**

9.1 The contractor shall develop and design lighting and analyze the traffic signal timing to accommodate pedestrians and bicyclists at intersections along the connecting trails.

**10. Landscaping**

10.1 The contractor shall develop landscaping plans as described in the Anacostia Waterfront Initiative (AWI) Framework Plan and the Anacostia River Parks Target Area Plan & Riverwalk Design Guidelines provided by the DC Office of Planning. The cost estimate shall reflect landscaping as a separate bid item.

**11. Interpretive Historic Markers, Nature Informational Kiosks and Art Plans**

11.1 The contractor shall develop and design interpretive historic markers, nature informational kiosks and art plans to be placed at various locations or vistas along the ARW in accordance with the AWI plan and in coordination with National Parks and DDOT requirements.

**12. Utilities**

12.1 There should be no utility work in this project

**13. Structures**

The contractor shall design structural work consisting of the following structures:

**13.1 Boardwalk Trestles North of Benning Road**

13.1.1 The contractor shall design multiple timber boardwalk trestle sections over wetlands to minimize environmental impact of trail. These trestles will be 14 feet wide. Sections include those in Anacostia River Park and under the US 50 and CSX Bridges that span the Anacostia River. The trestles may use augured piles or post and sill construction or fiber reinforced polymer. The deck may also use recycled plastic or fiber reinforced polymer.

**13.2 Bridge over Lower Beaver Dam Creek**

13.2.1 The contractor shall a multi-use trail bridge that will be 14 feet wide by 150 feet long supported on one or two piers and two abutments. The bridge may

have a timber or lightweight concrete deck, metal handrails, continuous span wide flange steel beams, and concrete substructure units on spread footings. A prefabricated truss pedestrian bridge may be used at this site or a fiber reinforced polymer deck and handrail.

**14. Review Field Survey Information**

14.1 The contractor shall provide a field survey. Information gathered from this survey will be reviewed by DDOT to determine its impact on the selection of alternate bridge types.

**15. Review Trail Alignment Plans and Geometry**

15.1 The contractor shall provide the proposed alignment plans and trail geometry that will be reviewed by DDOT for impact on the selection of alternate bridge types.

**16. Review Existing Soil Boring Data**

16.1 The contractor shall review existing soil boring data to determine pile type, tip elevation, and pile length. Pile length is important when working under the existing bridges.

**17. Request Additional Borings**

17.1 If the existing data is lacking or was not collected in the appropriate location, the contractor shall request additional borings. The need for these additional borings will also be reviewed by DDOT.

**18. Develop 90% Plans.**

18.1 After the 65% plans have been reviewed by DDOT and comments received, final plan development will proceed. At a minimum the contractor shall include the following sheets in the final plans:

- 18.1.1 Boardwalk Structures
- 18.1.2 General Plan and Elevation (up to 15 cut sheets for the Anacostia River Park section)
- 18.1.3 Index of Sheets, General Notes, and Quantities
- 18.1.4 Substructure Layout
- 18.1.5 Transverse Section

18.1.6	Deck Plan and Details
18.1.7	Framing Plan
18.1.8	Railing
18.1.9	End Bent Plan, Elevation and Section
18.1.10	End Bent Details
18.1.11	Intermediate Bents
18.1.12	Engineering Geology
18.1.13	<u>Bridge Structures</u>
18.1.14	General Plan and Elevation
18.1.15	Index of Sheets, General Notes, and Quantities
18.1.16	Substructure Layout
18.1.17	Transverse Section
18.1.18	Deck Plans and Details
18.1.19	Framing Plan
18.1.20	Beam Elevations
18.1.21	Beam Details
18.1.22	Diaphragms
18.1.23	Railing
18.1.24	Pedestrian Fencing
18.1.25	Bearings
18.1.26	Abutment Plan, Elevation and Section
18.1.27	Abutment Details
18.1.28	Piers Details
18.1.29	Anchor Bolt Layout
18.1.30	Reinforcing Steel Schedule
18.1.31	Engineering Geology

**19. Develop 100% Plans.**

19.1 After the 90% plans have been reviewed by DDOT and comments received, the contractor shall prepare the 100% bridge plans and construction bid documents as part of the PS&E submittal.

**20. Design Exceptions**

21.1 The contractor shall submit Design Exception Report to the DDOT Project Manager detailing instances where exceptions to the design standards listed in 23 CFR 625 and the design guidelines listed in the AASHTO Guide for the Development of Bicycle Facilities may be required. The Design Exception Report will include justification for design exceptions where field conditions, lack of right-of-way, etc., require the construction of facilities, which do not meet minimum standards. The contractor shall develop and submit this report after the 65% - Plan Review.

## **21. SURVEYS**

The following project survey work will be needed:

### **21.1 Aerial Photogrammetry**

The contractor shall develop aerial photogrammetric mapping to be used in the planning, environmental analysis and design of the ARW. Development of a three dimensional DTM to be used in MicroStation during design. The aerial photogrammetry will include but not be limited to: existing streets, trees, walls, steps, and street level utility appurtenances including manholes, building restriction lines, and other physical and legal features within the limits of the project. All work will be developed according to the District of Columbia plain coordinate system.

### **21.2 Field Survey**

The contractor shall perform a supplementary field survey to be used in the layout and design of the ARW. Adjustment that may be required to the three dimensional DTM developed in Section 5.0.0 Aerial Photogrammetry to be used in Micro Station. All work will be developed according to the District of Columbia plain coordinate system. The field surveys will include:

- 21.2.1 The final alignment of the ARW
- 21.2.2 Delineated Wetlands
- 21.2.3 Staking of geotechnical boring locations.
- 21.2.4 Property and Right of Way monumentation
- 21.2.5 Sub aqueous channel cross sections within the Anacostia River and Lower Beaverdam Creek for the purposes of the H&H analysis required for Structures.

## **23. GEOTECHNICAL**

23.1 The contractor shall perform geotechnical services for the ARW project. This geotechnical scope of work to be performed by the contractor shall include: soil borings, boring logs, pavement cores, laboratory tests, analyses and recommendations for soil slopes: pavement designs: foundations: particle size distribution for scour analysis: and associated exploratory borings required for the environmental process. For the purposes of this Scope of Work of the geotechnical services will include:

- 23.1.1 Five (5) soil borings per design/construction section for a total of fifteen (15)
- 23.1.2 Six (6) borings for scour analysis particle size distribution

- 23.1.3 Six (6) Exploratory borings required for the environmental process.
- 23.1.4 Six (6) pavement cores.
- 23.1.5 Twelve (12) borings for foundations.

## **24. PERMITS**

24.1 The contractor shall provide drawings and calculations to support permit application process, acquiring the appropriate permits for the ARW project such as the United States Army Corp of Engineers 404 Permit, the District Department of Environment wetlands and stream restoration reviews, the National Pollutant Discharge Elimination System (NPDES) 402 Permit and as outlined in the Anacostia Waterfront Initiative (AWI) Framework Plan and the Anacostia River Parks Target Area Plan & Riverwalk Design Guidelines provided by the DC Office of Planning. The contractor shall also apply for the Storm Water, and Erosion and Sediment Control, permits with the District Department of Environment. Applications will be made at the 90% review to allow incorporation of any changes required to obtain the permits.

## **25. SUBMITTAL FORMAT**

### **25.1 Cost Estimate and Special Provision Submittals**

25.1.1 The contractor shall submit hard copies of the Draft and Final cost estimates and special provisions with revisions will be submitted as required typed on 8.5-inch by 11-inch white bond paper. Computer files of the special provisions shall be submitted on a CD-ROM disk in both Microsoft Word and PDF format. The contractor shall develop cost estimates using ESTIMATOR and submitted on CD-ROM disk.

### **25.2 Plan Submittals**

25.2.1 The contractor shall develop design plans in MicroStation format. All design work will be performed using GEOPAK design software. The Plan View scale will be 1"=40'. Areas requiring additional detail will be expanded to 1" = 20' scale. The contractor shall develop plans such as the Maintenance of Traffic Plans at 1" = 100' scale.

## **26. SCHEDULE**

26.1 The contractor shall prepare the PS&E package. It will be prepared within 6 months of Notice to Proceed of the design contract