

District of Columbia
Department of Public Works



National Highway System
Asset Preservation Program

Request for Proposals
RFP No: 00-0026-AA-2-0-KA

INTRODUCTION

The District of Columbia, through the DC Department of Public Works (DCDPW), in cooperation with the Federal Highway Administration (FHWA), intends to enter into a contract to maintain and preserve specific roadway assets within the District of Columbia. These roadway assets are part of the National Highway System (NHS).

Through this unique contract, a private firm will assume the responsibility for managing roadway assets along approximately 75 miles of streets and highways. The activities required under this contract include:

- Regularly monitoring and recording the condition of *all* roadway assets within the covered system and informing the District of that condition;
- Repairing, rehabilitating, and maintaining certain of the assets, as defined in this contract, within the covered system; and
- Ensuring that the District is notified in a timely manner of all maintenance needs for which the Contractor is not responsible under this contract.

The contractor's personnel will work with the District and will be held accountable to the same standards of behavior, confidentiality, and workmanship as District personnel. All work performed by contractor personnel must be in accordance with District and other applicable rules, guidelines, and standards.

The successful contractor must supply all of the labor, materials, and equipment necessary to perform all tasks and meet the performance measures under this contract. Offerors are encouraged, however, to propose innovative techniques and materials, including techniques and materials not currently used by the District. By encouraging the use of innovation, the District hopes to enhance safety and the value of the assets under this contract, while minimizing maintenance and other costs.

This RFP describes the scope of the tasks sought by the District. It also includes information about the assets to be maintained, the condition to which the assets should be raised and preserved, and the means by which the District will ensure performance under the contract.

Although the District has attempted to quantify all assets covered by the RFP, offerors are highly encouraged to conduct their own assessment of the assets within the described scope of work, independently evaluate the condition of those assets, and verify actual quantities. Assets may be included in the contract that are not specifically enumerated in this RFP. Moreover, because the roadway system is dynamic, the condition of assets will change over time. Offerors are cautioned that the described condition of a specific asset may not reflect the actual condition of the asset at the time this RFP is published or at the time the contract is awarded.

The Contractor will assume full responsibility for managing, maintaining, and preserving the assets described in this RFP. In conducting these activities, the Contractor will assume full responsibility for ensuring the safety of employees and right of way users, protecting building

and property in and around work zones, and guarding against damage to underground utilities, such as electric and telecommunications cables and pipeline systems.

DCDPW will monitor the contractor's work to ensure compliance with the contract and to ensure that all work conforms to performance measures contained in the contract. Subject to DCDPW oversight, the successful offeror is free to choose the most effective and efficient techniques and materials for meeting those performance measures.

There will be a number of techniques for monitoring contractor performance. The contractor must keep a daily log of activities underway and completed, which will be reviewed by a DCDPW project manager assigned to oversee the contract. At least monthly, DCDPW will conduct a field review of the assets under the contract, noting their general condition and state of repair. There also will be a rigorous annual inspection, during which the entire system will be sampled to ensure compliance with the performance measures.

The District and FHWA view this contract as an opportunity to showcase an innovative approach to roadway asset management that will enhance safety and asset value while, at the same time, may reduce overall costs to the taxpayer. Providing Asset Management services will require extraordinary efforts and cooperation by the contractor and his entire team of subcontractors, suppliers, consultants, and managers. The District is soliciting proposals from qualified, capable, and adequately equipped and staffed contractors (and Teams) to provide the necessary services.

Offerors should note that this is a request for proposals and not an invitation for bids (IFB). Award will not be made solely on cost (see Section M) and the District reserves the right to hold discussions and seek clarifications prior to award.

A Pre-Bid Conference will be held for the purpose of answering any questions relative to the RFP and the scope of services on November 19 at the Reeves Center, 2000 14th Street, NW in Washington, D.C. This conference will be held in the 2nd Floor Conference Room at 10:00 AM.

Documents referenced in this RFP but not included as an attachment will be made available for public viewing in the bid room, which will be located on the 2nd floor of the Reeves Center.

A. BACKGROUND

Like many urban areas, the District of Columbia (DC) has an aging transportation infrastructure that is required to safely and efficiently meet increasing demands for transportation services. DC also faces increasing fiscal constraints, requiring District officials to find innovative ways to enhance service quality to residents, businesses, and visitors.

At the same time, DC faces unique challenges, and enjoys unique opportunities, in its capacity as the nation's capital. DC's transportation systems receive unparalleled visibility by the millions of visitors and countless dignitaries who visit the District each year. Although these visitors enjoy the sights and cultural offerings of the District, they also recognize that DC's transportation systems are part of a regional transportation network that is one of the most congested in the nation.

DC also has a unique relation with the United States Congress. Established by the Constitution as a federal district, the Congress retains significant oversight authority over the District. Unlike other urban areas, DC has a national constituency and political prominence that raises the profile of District functions. DC is the site of Presidential inaugurations and national parades and celebrations. It is a focal point for much of our nation's history and serves as the page upon which national and world history often is written.

DC also is experiencing political change within local government. There is a new Administration headed by Mayor Williams and a renewed emphasis on providing quality District services quickly and efficiently. DC's core business district is being revitalized, and District improvements have become a national priority.

It is against this backdrop that the District is seeking to enter into this innovative asset management and maintenance contract. DCDPW is a diverse agency with many different functions, including providing environmental, transportation, and parking services to every resident and visitor to the District of Columbia. Transportation services include planning, designing, constructing and maintaining the District's physical infrastructure of streets, alleys, sidewalks and bridges. Through this contract, the District intends to have the private sector, rather than DCDPW, manage the assets along the roadways defined in this RFP, thus allowing DCDPW to focus its limited assets on other parts of the system and its other responsibilities.

1. Overview of the National Highway System (NHS) and the Assets and Functions Covered by this RFP

The National Highway System Designation Act created the NHS, a national network of interconnected urban and rural principal arterials and highways which includes all of the Interstate Highway System. The NHS connects people and communities by linking population centers, rural areas, international border crossings, ports, airports, and public transportation facilities. It also meets national defense requirements by providing a network to facilitate military mobilization.

Federal funds may be used for a wide variety of projects on the NHS. For example, federal funding is available for construction, reconstruction, resurfacing, restoration, and rehabilitation of NHS routes. Federal funding also is available for operational and safety improvements, research and planning, traffic management and control, and a variety of other activities.

The NHS segments in the District make up approximately 75 miles of the District's most important and heavily traveled roadways. Except for several route segments not under DCDPW jurisdiction, all NHS assets within the District are included in this RFP. In addition, a segment of non-NHS roadway has been added to the project. The complete list of highway segments covered under this RFP is contained in Appendix A.

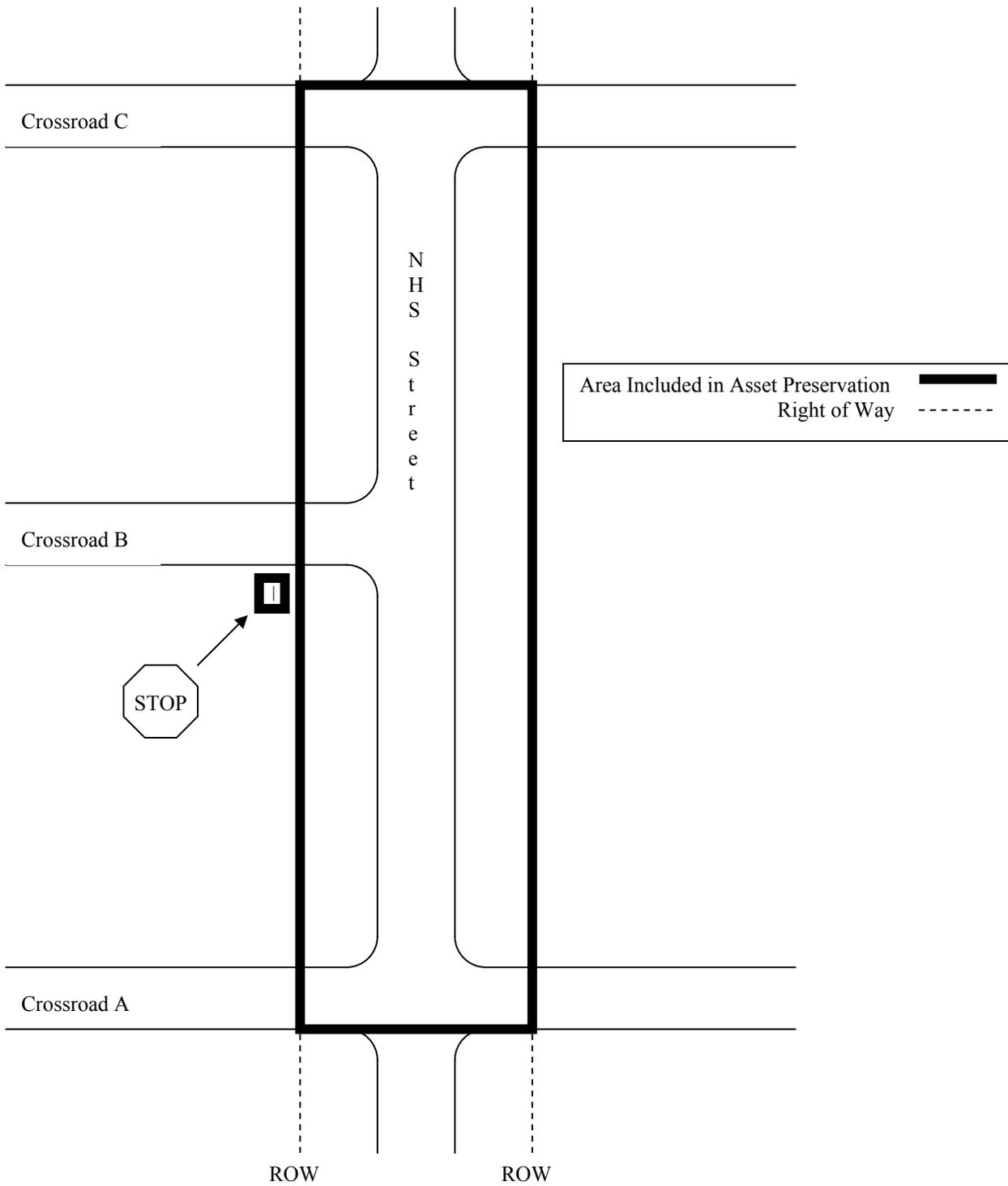
Figure 1 on the following page depicts the typical boundaries for the project. Generally, the project limits extend from the upstream (near side) curb return at the start of a segment to the downstream (far side) curb return at the end of the segment. The width of the segment covers the entire right-of-way width (as outlined by right-of-way fencing or building lines or as stated below in areas under the Architect of the Capitol (AOC) jurisdiction) throughout the segment. At intersecting streets, highways, or alleys, the asset management areas shall extend across the right-of-way line of the primary NHS highway, street, or alley (except for inclusion of R1-1 (STOP) signs outside these limits but approaching an NHS highway). Where segments do not meet these coverage areas or limits, the asset management coverage area will represent a reasonable depiction of these criteria. For areas under the AOC jurisdiction, the width of the segment will be from the back of the curb on one side of the street to the back of curb on the opposite side of the street.

In addition, the coverage area shall include all ramps (similar definition as above) at interchange areas, underpasses and/or frontage road areas, and traffic circles along the designated highway segments.

The following is a general list of the assets that must be maintained under this contract:

Pavement Surface	Fencing
Shoulders	Guiderails
Manhole	Barriers
Open Drainage Structures (paved and unpaved ditches and swales)	Attenuators
Catch Basins	Street Trees, Shrubs and Other Plantings
Drains	Grass
Inlets	Pavement Markings
Curbs	Pavement Striping
Gutters	Raised Pavement Markings
Sidewalks	Highway and Sign Lights
Medians	Tunnels
Signs (all DC-maintained traffic signs including variable message)	Bridges
Weigh-in-Motion Detectors	Overheight Detectors
	Oil/grit Separators on Bridges

**Figure 1. Typical Project Limits Depicted on an Imaginary Roadway Segment
NHS Street From Crossroad A To Crossroad C**



Note: the covered segments extend to the curb returns.

The following is an outline of the types of asset management activities that may be performed on these assets. This list is for informational purposes and is not intended to set forth all required maintenance activities. Rather, this list is intended to illustrate the types of activities the successful offeror likely will conduct to meet the performance measures set forth in this RFP.

Successful performance will be determined by whether the performance measures in Appendix B have been achieved, regardless of the specific maintenance activities conducted by the Contractor. The performance measures in Appendix B constitute the minimum acceptable performance by the Contractor. Pursuant to section H.2., the Contractor will be eligible for an annual performance award only if the performance measures are exceeded.

Pavement Structure

- A- Pavement Patching and Repair (incl. skip paving- 1000lf/lane or less)
- B- Crack Sealing (concrete and asphalt) and Chip Seals (asphalt)
- C- Milling/Grinding
- D- Thin Overlays
- E- Joint Sealing/Repair
- F- Spall Repair (concrete pavements)
- G- Shoulder Maintenance
- H- Sweeping and Cleaning
 - Debris (tires, auto parts, etc.)
 - Seasonal leaf removal
- I- Manhole Maintenance
- J- Vibration Complaint Investigation and Repair

Roadway Cleaning

- A- Ensure that roadways remains clear of debris

Drainage

- A- Grade & Clean Ditches (incl. debris removal)
- B- Maintain Swales (paved and unpaved)
- C- Maintain Storm Drain Systems (incl. catch basin cleaning and repair, underpass and tunnel drainage system, e.g. pump equipment cleaning and repair))
- D- Slope Repairs
- E- Erosion Control
- F- Retention/Detention Pond (if applicable)
- G- Oil/grit Separator

Roadside Cleaning

- A- Trash and Debris Pickup
- B- Curb and Gutter Repair & Maintenance
- C- Curb Cut/Driveway Repair & Maintenance
- D- Sidewalk Repair & Maintenance
- E- Fencing Maintenance & Repair
- F- Graffiti Removal

Roadside Vegetation

- A- Weed/Vegetation Control
- B- Mowing
- B- Median Maintenance (paved or unpaved)
- C- Control of Vegetation Obstructions (incl. tree trimming)
- D- Landscape Maintenance (incl. trees)

Bridge Maintenance

- A- Bridge Deck Repair
- B- Bridge Cleaning and Washing (incl. graffiti removal)
- C- Bridge Spot Painting
- D- Bridge Railing Painting
- E- Bridge Railing Replacement & Repair
- F- Median Barrier Repair & Maintenance
- G- Joint Repair (Compression and Expansion) Seal, where required
- H- Retaining Wall, Abutments and Back-Walls Repair & Maintenance (incl. weep holes)
- I- Crack Repair and Sealing
- J- Approach Slab Repair
- K- Debris Removal from around Piers and Bents

Tunnel Maintenance

- A- Ventilation System Preventative Maintenance, Repair, & Replace/Upgrade
- B- Wall/Ceiling Cleaning (incl. graffiti removal)
- C- Wall/Ceiling Repair
- D- Maintain Lighting
- E- Maintain Video, Fire Detection, Carbon Monoxide Detection Systems
- F- Drainage Pump System

Snow & Ice Control

- A- Snow Plowing
- B- Loading, Hauling and Disposal of Snow, where required
- C- Treating with Abrasives and Chemicals
- D- Post-Storm Cleanup

Traffic Control & Safety Maintenance (incl. traffic control)

- A- Pavement Markings
- B- Raised Pavement Markers
- C- Repair/Replace Signing (incl. warning, regulatory, informational/guide, and parking)
- D- Guiderails, Guiderail Terminals and Transitions, Barrier & Attenuator Maintenance
- E- Highway Lighting Maintenance
- F- Weigh-in-Motion (WIM) and Permanent Automatic Traffic Recorders Maintenance
- G- Variable Message Sign Maintenance
- H- Overhead Sign Structure Maintenance (incl. structure, signs, lighting, and peripherals)
- I- Pedestrian Crossing Structure Maintenance

Traffic signal and related activities are excluded from this program.

2. Exclusions for Work Performed Under Other Contracts

DCDPW currently has a number of contracts in place and/or planned for maintenance and preservation and reconstruction and rehabilitation activities potentially covered by this contract. The work under those contracts generally will be excluded from the work required under this RFP. Once those other contracts are completed, the successful offeror will become responsible maintaining and preserving the assets covered by those contracts.

A list of the relevant contracts is contained in Appendix L. The list is representative only, and the successful offeror must coordinate with DCDPW to ensure a current list over the life of this contract is maintained.

Asset management of other sectors of the highway segment to be managed under this contract may be suspended from time to time over the life of the project, generally for short periods (i.e. less than one week) for various reasons (e.g. temporary closures, special utility work, etc.). Upon reinstatement by the Project Manager into the program of any section of the roadway on which work has been temporarily suspended by formal notice from the Contracting Officer, the Contractor will be responsible for asset management of these segments to the levels specified in this RFP. It is expected that the condition of any segment of the highway temporarily removed from the scope of work of this contract as described above will be similar to the condition it was in prior to the time of suspension.

B. BID FORMS

This section contains all of the forms that offerors must return with their proposals. All tables and forms in this section must be detached, filled out, and returned with the offeror's proposal. Failure to submit all forms may result in a proposal being deemed unresponsive.

Most line items must be bid on a fixed price basis. There are three line items, however, that must be bid on a per event basis: special event cleaning, removal of non-functional poles, and snow and ice control.

In comparing cost proposals, the total of the firm fixed price items of each offerors' Firm Fixed Price and Additive Alternate bids will be considered. In addition, the per event bid items will be evaluated as follows:

Special event cleaning: it will be assumed that 25 special events will occur per year.

Removal of non-functional poles: it will be assumed that 50 non-functional poles will be removed over the life of the contract, most of which should occur in years 1 and 2.

Replacement of knocked down street light poles: it will be assumed that 45 poles will be replaced in the first year, which includes an estimated 11 knockdowns and an estimated backlog of 34 poles. It also will be assumed that 11 poles will be replaced per year for years 2-5, for a total of 89 poles replaced in years 1-5. For the option years, it will be assumed that 11 poles will be replaced per year for five years, for a total of 55 poles.

Snow and ice control: the average price for each event will be multiplied by the average number of days each event is expected to occur over the period of the contract, based upon the 23 years of data contained in Appendix I. These products then will be totaled, providing a single number for evaluation purposes. Where an event did not occur over the 23 years of data contained in the appendix, a probability of 0.1 per year will be used.

C. SPECIFICATIONS

This section outlines the scope of work for all tasks under this RFP. The Contractor will be responsible for providing all materials, equipment, and labor necessary to complete the tasks to the appropriate standard. There will be no government furnished labor, materials, equipment, office space, storage areas, or other items necessary to complete the work.

The latest released version of each specification listed below effective on the date of award of this contract shall apply. The Contractor is responsible for determining and obtaining the correct version of any documents specified herein, or referenced in the documents listed, that is not furnished in accordance with Section J as an attachment to this solicitation.

The Contractor must exhibit a “safety first” approach to performance of this contract, placing the highest priority on tasks that have a potentially imminent and deleterious effect on public safety. Offerors must describe how they will prioritize and address activities to ensure safety, including activities or issues that may not be specifically addressed in this Scope of Work. Offerors also must describe how they will respond to emergencies -- such as downed trees and poles, traffic accidents, water main breaks, and sink holes – and make the roadway safe for the travelling public.

The Contractor also must ensure coordination with other right-of-way owners, utilities, and others that may be affected by Contractor’s work, including railroad companies, PEPCO, and the Washington Metropolitan Area Transit Authority (WMATA). Coordination must include agreements for entry upon these rights-of-way and any special provisions that may be necessary to ensure public safety.

C.1. SCOPE OF WORK

This scope of work describes the assets covered by this RFP, the approximate condition of those assets at the time this RFP was developed, and the standards to which the assets must be maintained. The scope includes pavement, drainage, lighting, roadside and vegetation, bridges, tunnels, snow and ice control, and traffic control and safety (excluding traffic signals and related assets

Offerors should note that this is an asset management contract and not just a maintenance and repair contract. As such, the Contractor must monitor the condition of all assets within the covered roadway system, provide the District with information regarding that condition and, where required under this contract, perform maintenance, repair, and rehabilitation work, as appropriate. **As stated in section B, the Contractor must *manage* all of the assets under this RFP, even though the Contractor may not be required to *maintain* all of the assets in this RFP. This management responsibility includes monitoring the condition of the assets, provide DCDPW with condition reports, and alert DCDPW when maintenance is required. The management responsibility covers all fixed price items, additive alternates that are awarded, additive alternates that are not awarded, and any equipment or condition near or within the right-of-way -- such as traffic signals, METRO signs or shelters, and fire hydrants -- that may affect safety or the effectiveness of the roadway system.**

All completed projects under this scope of work will be assessed to determine whether they meet the performance measures set forth in Appendix B. These performance measures are derived from field experiences and reflect the minimum acceptable maintenance condition for each asset. Performance that exceeds the minimum levels set forth in Appendix B will make the contractor eligible for a performance award, as set forth in section H of this RFP.

All work performed under this contract must meet or exceed the standards contained in the *District of Columbia Department of Public Works Standard Specifications for Highways and Structures- 1996* and the *District's Standard Design Manual*, where applicable.

Contractors are highly encouraged, however, to propose new and innovative technologies, processes, and materials that may not be encompassed within the *Standard Specifications* or the *Standard Design Manual*. These innovations must be highlighted in the contractor's Quality Assurance/Quality Control plan and in the contractor's Work Plan (see Sections D and L of this RFP). The contractor should consider using HITEC (a service center of the Civil Engineering Research Foundation (CERF)) for assistance on products, materials, services, equipment, and other potential innovations.

Prior to the installation or deployment of any innovation, the contractor must request and receive DCDPW approval. To facilitate this approval, offerors must propose an approval process that will minimize costs and encourage the use of innovation while, at the same time, provide assurances to DCDPW that performance measures will be achieved or exceeded. The District anticipates that the following information will be provided regarding all innovations:

- the purpose of the proposed innovation;
- advantages/disadvantages of the proposed innovation;
- impact on cost and service life (i.e. life cycle costs) over the project life;
- use or application in similar successful situations or conditions; and
- detailed specifications (where appropriate) or other data that will assist the District's Project manager in evaluating the potential innovation and its potential use in the project.

C.1.a. ROADWAY

C.1.a.1. Pavement

The contractor will be responsible for maintaining approximately 75 miles of roadways, encompassing roughly 2.1 million square yards of pavement surface. There are approximately 344 lane-miles of pavement, with travel lanes varying in width from 7 to 16 feet.

Existing Conditions

Pavement studies and surveys were conducted during June 1999. These studies include assessments for roughness, rutting, and pavement distress. The results of the studies are summarized in Appendix C. These studies are provided as guidance only – offerors should conduct their own assessment of the assets under this RFP.

Asset Management Standards and Guidelines

The Contractor will be responsible for management of pavement (including shoulder, parking lanes, and concrete bus pads) to the performance measures and levels defined in Appendix B.

To accomplish these performance measures, the Contractor may perform any of several activities including: pavement patching and repairing, crack sealing and chip seals, milling/grinding, thin overlays, joint seal/repair, spall repair, shoulder maintenance (patching, repair, crack sealing, etc.), manhole-related maintenance, and vibration complaint investigation.

Other Management Criteria

Several additional issues will need to be handled within this Section of the RFP: (1) manhole-related maintenance, (2) vibration complaint investigation, and (3) utility cuts.

Manhole-related maintenance

There are roughly 5,300 manholes in the roadway system covered by this RFP. Where a manhole exceeds the performance measure noted in Appendix B, the Contractor shall, within five working days of notice or as part of the Contractor's approved Work Plan, conduct a preliminary survey or investigation.

The contractor shall produce a brief technical memorandum within two working days of the field survey/investigation describing the location, condition (extent and severity), reason or cause of problem, and recommended solution (e.g. maintenance need, reconstruction by others, or responsibility by others). The technical memorandum shall contain sketches as necessary to describe the condition, cause, or recommended solution and be provided to the District's Project manager.

Within two working days of receipt of the technical memorandum, the District Project manager shall either review and approve the Contractor's recommendation (and provide written notice to the Contractor) or arrange for a field review/investigation by responsible parties (i.e. District, Contractor, other agencies where appropriate, etc.).

The field review/investigation, if required, shall take place within five working days following receipt of the technical memorandum from the Contractor. Based on the field review and the recommendation from the District Project manager, the action and responsibility will be defined at the field review.

Where responsibility for the work is determined to be the Contractor's, the Contractor shall be responsible to meet the performance measure for the asset within ten (10) working days. This work shall be included in the fixed price proposal.

Where responsibility for the work is determined to be other than the Contractor's, the asset will be suspended from the list of items to be maintained under this contract until it has been restored to acceptable condition by the responsible party, at which time it will be reinstated hereunder.

Pavement vibration complaints

The Contractor must coordinate with the DC DPW to obtain the list of “vibration complaints” impacting the NHS. The Contractor shall coordinate weekly to obtain a list of vibration complaints. The procedure shall be as follows:

The Contractor shall contact Mr. Wasi Khan (202-939-8077), DC DPW, on a weekly basis for identification of pavement vibration complaints along the NHS.

Within two working days of notification of a complaint, the Contractor shall investigate the site of the alleged problem and conduct a preliminary survey or investigation to identify a reason or cause for the complaint.

The Contractor shall produce a brief technical memorandum within two working days of the field survey/investigation describing the location, condition (extent and severity), reason or cause of problem, and recommended solution (e.g. maintenance need, reconstruction by others, or responsibility by others). The technical memorandum shall provide sketches, as necessary, to define the condition, cause, or recommended solution and be provided to the District’s Project manager.

Within two (2) working days of receipt of the technical memorandum, the Project manager shall either review and approve the Contractor’s recommendation (and provide written notice to the Contractor) or arrange for a field review/investigation by responsible parties (e.g., District, Contractor, other agencies).

The field review/investigation, if required, shall take place within five (5) working days following receipt of the technical memorandum from the Contractor. Based on the field review and the recommendation from the District’s Project manager, the action and responsibility will be defined at the field review.

Where responsibility for the work is determined to be the Contractor’s, the Contractor shall be responsible to meet the performance measure for the asset within ten (10) working days. This work shall be included in the fixed price proposal.

Where responsibility for the work is determined to be other than the Contractor’s, the asset will be suspended from the list of items to be maintained under this contract until it has been restored to acceptable condition by the responsible party, at which time it will be reinstated hereunder.

Utility cuts

Although the Contractor will not repair utility cuts, the contractor must monitor utility work and report to the District whenever a utility cut has not been repaired immediately following completion of the work by the utility.

C.1.a.2. Roadway Cleaning

Existing Conditions

The Contractor must clean all 75 miles of roadway to the standards set forth in Appendix B. Of this mileage, approximately 45 miles has curb and gutter. The remaining mileage has paved shoulders.

Based upon District records, from January 1, 1999 through May 31, 1999, approximately 70 roadkill pickups were conducted along the project highway system. During 1998, approximately 170 such events were responded to along the proposed highway system by District forces.

Asset Management Standards and Guidelines

To meet the performance standards in Appendix B, the Contractor must perform roadway cleaning and sweeping activities, including seasonal leaf removal, graffiti removal, debris/roadkill removal (including debris from illegal dumping), and special event cleanup of the roadway.

Other Management Criteria

The District has parking prohibitions for roadway cleaning as well as street cleaning maps displaying the routing plan and schedule for its current street cleaning activities. The maps for manual street cleaning are available for viewing in the Bid Room and Appendix D contains current parking prohibition information. The Contractor must work with the District to develop a parking prohibition notification system for the portions of the system not covered under these prohibitions.

The Contractor also must work with the District to remove abandoned or illegally parked vehicles. In advance of the street sweeping/cleaning operation, the Contractor shall contact the Washington D.C. Parking Services Division at 202-645-5800 for removal of an abandoned vehicle or 202-541-6065 for illegally parked vehicles. Contractors should note, however, that Parking Services may not respond promptly to towing requests, and towing generally should be avoided, where possible.

The Contractor will be responsible for roadway and sidewalk cleanup following special events, such as parades, festivals, concerts, and other activities. Contractors may assume that there will be 25 events. Each event typically occurs over a three-day period, such as Friday-Sunday. The contractor will be responsible for any pre-cleanup of the area, cleanup maintenance during the event, and post-cleanup to meet the performance measures.

Offerors shall propose these clean-up activities on a fixed price basis per event.

C.1.a.3. Pavement Markings

Existing Conditions

Hot thermoplastic is used as permanent striping on all streets. Additional details on a block or segment level and their condition are provided in Appendix F.

Asset Management Standards and Guidelines

The contractor will be responsible for management of these assets to the standard of the performance objectives identified in Appendix B.

To accomplish these performance objectives, the Contractor may perform any of several activities including: cleaning, replacement, upgrade and/or maintenance.

Other Management Criteria

All pavement markings shall conform to the Manual on Uniform Traffic Control Devices, except as designated by the District project manager. Exceptions include:

- Pennsylvania Avenue, from 15th Avenue to the Capitol area, where centerline markings are white; and
- Connecticut Avenue, from north of U Street to south of Military Road, where a “special” reversible lane striping design is used.

C.1.b. DRAINAGE

Existing Conditions

The system contains 7.21 miles of unpaved ditches and approximately 2950 catch basins. Sideslopes exist along portions of the system. Information on the location of these assets along the highway system are contained in Appendix E. Offerors should conduct their own inventory and assessment prior to submitting a proposal.

Asset Management Standards and Guidelines

The Contractor must maintain the following drainage facilities: paved and unpaved ditches, swales, catch basins, drains and inlets, sideslopes, and oil/grit separators. These assets will be maintained to the performance measures specified in Appendix B.

To accomplish these performance measures, the Contractor may perform any of several activities including: grade and clean ditches, grade and clean swales, remove debris and silt, etc. from catch basin and inlet, sideslope repair (to facilitate drainage), erosion control of sideslopes, graffiti removal, removal of debris and vegetation, including weeds, at the edge of shoulders and around guiderails, and cleaning of oil/grit separators.

Other Management Criteria

An important consideration in the asset management of the catch basins will be an annual cleaning of each catch basin, inlet and drain to permit free movement of drainage within the asset. The Contractor must commence cleaning all catch basins within 30 days of Notice to Proceed, and then each year during the latter part of the fall/early winter season. Prior to cleaning, the Contractor must erect temporary no parking signs and register these signs with the local police precinct.

Where an illegally parked or abandoned vehicle obstructs or prohibits drainage asset management activities, the procedures identified above for handling illegally parked or abandoned vehicles during roadway cleaning activities shall be employed.

C.1.c. ROADSIDE

C.1.c.1 Curbs, Gutters, Sidewalks, Medians (paved), Fencing, Front Slopes, Structures

Existing Conditions

The system contains approximately 460,000 linear feet of curb and gutter of which 259,000 lineal feet are concrete, 197,000 lineal feet are granite, and 4000 lineal feet are bituminous. There are approximately 810,000 linear feet of sidewalk, most of which is concrete. London Paver block, brick, and exposed aggregate exists along small portions of the highway system. Other decorative sidewalks are maintained by private parties and are not part of this program. Median paving material is primarily concrete with minor amounts of brick.

There are approximately 180,000 feet of right-of-way fencing. Most of this fencing is located along freeway sections of the system, although some fencing exists along isolated sections of arterial roadways. There also are roughly 178,575 square feet of retaining/sound walls. These walls are located along 9th Street (between Mall area and Interstate 395), 12th Street Expressway (between Mall area and Interstate 395), and along I-395.

Based on current studies and surveys, the following conditions are assumed to exist for these assets. Over 452,000 linear feet of curb and gutter are in 'good' condition (i.e., meet or exceed performance measures) and approximately 3000 linear feet are in 'fair' condition (i.e., marginal adherence to performance measures). Over 5000 linear feet are in 'poor' condition (fail to meet performance measures).

For sidewalks, over 795,000 linear feet are in 'good' condition. Over 5000 linear feet are in 'fair' condition. Nearly 9000 linear feet are in 'poor' condition.

For fencing, over 174,000 linear feet are in 'good' condition. Approximately 1000 linear feet are in 'fair' condition. Over 4500 linear feet are in 'poor' condition.

Additional detail on the assets and their quantity and location is contained in Appendix F. Offerors, however, should conduct their own assessment and inventory of assets.

Asset Management Standards and Guidelines

The Contractor will be responsible for management of these roadside assets to the performance measures and standards shown in Appendix B.

Other Management Criteria

The contract will not include maintenance for parking meters, METRO transit bus shelters, benches, and signing, and traffic signals and related signal equipment (i.e. signal heads, poles, cabinets). Graffiti removal of traffic signals and related equipment, however, is included as part of this project. Moreover, the contractor must promptly notify the District Project manager of any deficiencies observed on items not included in the contract.

Where the roadside surface (e.g. sidewalk, brick, grassy area- permanent or temporary) from a utility or “plumbers” cut does not meet the performance criteria or results in the overall roadside section failing to meet the performance criteria in Appendix B, the contractor shall notify the District Project manager.

Within five working days of receipt of notice from the contractor, the District Project manager shall contact the original permit party responsible for the roadside cut and its maintenance needs relative to the repair/upgrade requirements and a planned acceptable schedule for its maintenance.

If the roadside cut maintenance is not performed by the original permit party within the planned schedule period, the contractor must immediately inform the Project Manager.

The contractor is also required to remove all non-functional fire alarm and police call boxes plus other miscellaneous items (e.g. pole vents, poles, foundations, etc.) as part of its fixed price bid. It is estimated that there are approximately 50 of these items within the project area. The contractor will be responsible for removal and disposal of the item and repair of the pavement or surface with suitable material similar to the material adjacent to the removed item. The Contractor must price these items on a per removal and repair basis.

The contractor must use caution in working on any curb damaged by adjacent tree roots. All actions must be discussed with the District’s Tree Division (Ms. Sandra Hill (202) 727-5559) prior to commencing any work.

C.1.c.2. Roadside Cleaning

Existing Conditions

The roadside area that must be cleaned includes all sections from the outside edge of the right-of-way line to the pavement surface edge, except as noted earlier for specific areas maintained by the National Park Service or the Architect of the Capitol (AOC). Unpaved median areas also are included.

Asset Management Standards and Guidelines

The contractor will be responsible for management and conduct of roadside cleaning activities (including median area) to the performance measures identified in Appendix B.

To accomplish these performance measures, the Contractor must remove litter, trash, graffiti, posters or non-District certified material, debris, roadkill, and any other material that does not belong in the roadside area. Assets within the roadside area that must be kept clean include signage, traffic signals and related equipment, barriers/retaining walls, noise/sound walls, and other assets that may be determined by the District.

Other Management Criteria

Roadside cleaning activity may include the removal of abandoned or illegally parked vehicles from the impacted area. In advance of the street cleaning operation, the Contractor shall contact the Washington D.C. Parking Services Division at 202-645-5800 for removal of abandoned or illegally parked vehicles.

The Contractor will be responsible for roadway cleanup following special events, such as parades, festivals, concerts, and other activities. Contractors shall assume that there will be 25 events covering approximately 1 mile of roadway. It will be assumed that each event will occur over a three-day period (typically Friday-Sunday). The contractor will be responsible for any pre-cleanup of the area, cleanup maintenance during the event, and post-cleanup to meet the performance measures. Offerors shall propose these clean-up activities on a fixed price basis per event.

C.1.c.3. Roadside Vegetation

Existing Conditions

Roadside vegetation must be maintained in all sections highway right-of-way where it exists, including unpaved median areas, such as along 16th Street, Connecticut Avenue, and New York Avenue in the area of the Convention Center. Specific areas under the maintenance of the National Park Service or the Architect of the Capitol (AOC) are excluded.

Vegetation required to be maintained includes trees (including curb trees), shrubs, grass, and various other plants. Further reference should be made to the District's Tree Inventory which contains an inventory of all trees along the NHS system (as well as other DC-maintained highway facilities) by type, condition, and location. Further information about the inventory and other tree issues is available from Bill Beck in the District's Tree Division at (202) 727-5319.

Offerors should take special note of the tree maintenance special provisions contained in Section I of this RFP, which contain detailed requirements for all tree work to be performed under this contract.

Asset Management Standards and Guidelines

The contractor will be responsible for roadside vegetation maintenance to the performance measures identified in Appendix B. The Contractor may perform any of several activities along the roadside and median areas, including weed/vegetation control, mowing, care of plantings, grading, mulching, fertilizing, liming, seeding, pruning, trimming, and removal of dead or decaying vegetation.

The Contractor should note that maintenance of curb trees (including planting, trimming, and removal) and weed control and eradication are top priorities for the District. The Contractor must work closely with the Project Manager to prioritize tree activities and to ensure weed control along pavement and sidewalks, guiderails, and other areas. The District did not survey the total number of trees within the system but believes there may be thousands.

The contractor must remove any tree stumps or decaying vegetation from the tree boxes or space area fronting the highway. Upon removal, the contractor must fill in any holes with suitable material, grade the area, and re-plant (upon approval of the District's Tree Division) with a tree or vegetation similar to adjacent vegetation. For all stump removals, the contractor shall report the resulting empty tree box or area to the District's Tree Division.

The contractor will not be required to maintain tree boxes if they have been modified and/or are actively maintained by a property owner. For other tree boxes, the contractor must remove all weeds, trim grass, and keep the tree box area up to grade with suitable materials.

A "tree box" is defined as the outlined planted area typically 2' - 4' in width and less than 20' long. All other areas are considered "tree space" and will follow the trimming, weed control, and grading performance measures outlined in Appendix B of the RFP.

The Contractor should note that PEPCO will trim all tree limbs around PEPCO's electric transmission wires. Where wires are in the vicinity of a dead tree, the Contractor must work with PEPCO, which generally will remove the portion of the dead tree within the wires. The Contractor then must remove the remainder of the tree.

Other Management Criteria

The Contractor should note that some of the trees along the system are American elm trees. Any American elms afflicted by Dutch elm disease must be prioritized for removal and all infected wood must be properly disposed, subject to approval of the District's Tree and Landscape Division. The primary contact in that office is Bill Beck (202 727-5319). The Contractor also may wish to contact Ms. Sandra Hill at 202-727-5559.

Due to the special requirements associated with this activity, a horticulture specialist must be defined as Key Personnel for this task. The Contractor must ensure that all plantings, including trees, grass, and shrubs, are approved by the District's Tree and Landscape Division.

C.1.d. BRIDGES

Existing Conditions

There are 114 bridges covered by this RFP. The bridges typically contain scuppers requiring frequent cleaning as well as oil/grit separators that will require maintenance and cleaning.

Specific details of the District's biennial bridge inspection reports are provided in files contained in the District's Bridge Engineer's office. These inspection reports contain photographs and report information documenting the findings of the District's Study Teams. A summary of the maintenance or reconstruction improvements based on these inspections is provided in Appendix G of this RFP.

Most bridges are either in relatively good condition or are programmed for rehabilitation. A number of bridges, though, have a backlog of maintenance needs, particularly cleaning. Offerors should conduct their own assessment and inventory of bridge assets.

Asset Management Standards and Guidelines

The contractor will be responsible for all bridge maintenance activities, including:

- maintaining the deck, approach slabs, and railings, barriers, and parapets;
- ensuring adequate drainage;
- maintaining bridge structure surface and underside, including navigation lights; and
- aesthetic maintenance of the bridge superstructure and sub-structure.

The assets will be maintained to the standards of the performance measures identified in Appendix B. To meet these performance measures, the Contractor may perform any of several activities, including:

- bridge deck repair;
- bridge cleaning and washing;
- joint repair seal;
- cleaning/maintenance of bearings;
- crack repair and sealing;
- approach slab repair;
- bridge spot painting (complete repainting will not be required);
- bridge railing repair and/or replacement;
- bridge railing painting;
- median barrier repair and replacement;
- retaining wall and abutment repair and replacement;
- scupper and drainpipe cleaning and flushing;
- bridge underside washing;
- debris removal from piers and bents;
- graffiti removal;

- cleaning oil/grit separators; and
- other activities that may be required to meet the performance measures set forth in Appendix B.

Other Management Criteria

A number of bridges are proposed for reconstruction and rehabilitation under the District's Transportation Improvement Program (TIP). Appendix L contains a preliminary listing of the planned bridge TIP activities and the construction period. The Contractor will be responsible for coordinating with the District Project manager to identify the start and end dates for the reconstruction/rehabilitation, and will not be responsible for maintenance of the bridge assets while this work is taking place. Upon notice from the Contracting Officer of successful completion of the bridge reconstruction/rehabilitation project, the Contractor will resume responsibility for ongoing bridge asset maintenance.

C.1.e. TUNNELS

Existing Conditions

There are eight tunnels that must be maintained:

- the Mall Tunnel over I-395 (completed in the early 1970s);
- the Air Rights Tunnel over I-395 (approximately 20 years old);
- the 9th Street Tunnel under the Mall (built in the early 1970's);
- the 12th Street Tunnel under the Mall (built in the late 1950's/early 1960's);
- the E Street Expressway Tunnel (near I-66);
- the I-66 extension Tunnel under Virginia Avenue (north of I-66);
- the Dupont Circle Tunnel; and
- the Barney Circle Tunnel.

A list of tunnel assets that must be maintained is contained in Appendix H. Mechanical and electrical systems condition assessments, as well as rehabilitation and maintenance recommendations, also are contained in the Appendix H. Offerors should conduct their own assessment and inventory of these assets.

Tunnels were included in the latest bridge inspection cycle (1998/1999). A partial rehabilitation of the Third Street Mall Tunnel was completed in 1997. However, significant work remains. The 9th Street and 12th Street Tunnels are now being rehabilitated under a Federal Aid Project (FAP NH-9999(775)). The project will be completed in the Spring of 2000. All motors and controls are to be replaced. Specific details on the FAP project is provided in the Bid Room.

Offerors should note that significant rehabilitation and repair work is required on the other tunnels and that this work should be completed as early as possible in the term of this contract. At the same time, the contractor is expected to conduct routine maintenance and meet the performance measures in Appendix B, to the extent possible prior to completing the

rehabilitation work. Consequently, two bid items are included in Section B for tunnels: one for the rehabilitation work, and one for maintenance.

Asset Management Standards and Guidelines

The contractor will be responsible for a range of rehabilitation, repair, and maintenance activities, including:

- mechanical systems (ventilation system and water /drainage pump system);
- electrical systems (highway/tunnel lighting, lighting in control rooms, video/CCTV system, fire detection system, and carbon monoxide warning system);
- tunnel walls and ceiling (cleaning, repair and maintenance); and
- the overheight vehicle detection system.

The assets will be maintained to the standards set forth in Appendix B for tunnels. To accomplish these performance objectives, the Contractor may perform any of several activities, including:

- ventilation system preventative maintenance, repair, replacement, and upgrade;
- drainage pump system preventative maintenance, repair, replacement, and upgrade;
- wall/ceiling cleaning and repair;
- lighting and bulb replacement and repair;
- computer equipment repair and replacement;
- CCTV/video system repair, replacement and maintenance;
- fire detection system repair, replacement and maintenance;
- carbon monoxide detection system repair, replacement, and maintenance; and
- overheight vehicle detection system upgrade, repair, maintenance, operation, and enforcement.

Other Management Criteria

A key consideration in the asset management program for tunnels is the maintenance, operation, and enforcement of an overheight vehicle detection and enforcement system. Six overheight detection stations currently exist. They are located at:

- WB New York Avenue approaching Freeway & Air Rights/Mall Tunnel;
- EB New York Avenue approaching Freeway & Air Rights/Mall Tunnel;
- Entrance from New York Avenue to I-395;
- SB 3rd Street Entrance to Mall Tunnel (off of Massachusetts Avenue);
- EB Southeast/Southwest Freeway exit to Mall Tunnel; and
- WB South east/Southwest Freeway to Mall Tunnel.

In addition, there are three planned stations:

- EB Southeast/Southwest Freeway- 10th Street Overpass;
- Thomas Circle Underpass (Mass. Ave./14th St.); and
- Thomas Circle Underpass (Mass. Ave./14th St.).

The stations consist of an overhead detector connected to a variable message sign (VMS) containing a fixed message turned “On” or “Off” to report when an overheight vehicle is detected. The Contractor will be responsible for providing and installing an automated enforcement system for each of the existing detection stations, as well as each of the planned stations, that can record vehicle DOT numbers and damage caused by particular vehicles.

The Contractor also will be required to maintain and operate the system, including, after appropriate coordination with the District, sending out tickets for moving violations and, where feasible, property damage claim notices. The Contractor must meet with the Metropolitan Police, the Corporation Counsel, and others to develop a plan for producing, issuing, and enforcing tickets developed by the automated enforcement system.

Details on the existing detection systems are contained in Appendix M.

C.1.f. SNOW/ICE CONTROL

Existing Conditions

Typical snowfall and accumulations in the DC area are recorded relative to Reagan National Airport readings. Using National Weather Service data from 1975-1998, snowfall data were compiled and are shown in Appendix I. An average of 24 snowfall days occurred per year, of which 15 were of 0.01 inches or less accumulation. Snowfall days by intensity per November to April period for 1975-1998 are also provided in the Appendix.

For the 1998-99 winter season, the DC DPW anticipated 8 winter events, each seven hours in duration. The actual number of hours spent in response to snow was on the order of 250 hours. A typical event includes four hours to mobilize and two twelve hour shifts to conduct operations. The actual requirements will depend upon the level and severity of the storm.

Asset Management Standards and Guidelines

The Contractor will be responsible for snow and ice control services along the NHS routes in accordance with the performance measures contained in Appendix B. These performance standards are derived directly from the *Penguin Guide*, a publication of the Metropolitan Washington Council of Governments, which can be reached at (202) 962-3200.

To accomplish these objectives, the Contractor may perform one of several activities, including: plowing; loading, hauling and disposal; surface treatment with abrasives and chemicals; and post-storm cleanup. Generally, the Contractor will not mobilize and commence operations until directed by the District.

The District currently hauls snow to a number of locations, including: (1) the Carter Barron Amphitheater in NW Washington, D.C.; (2) the DC Stadium Parking Lot in east D.C.; (3) under the South Capitol Street Bridge north of Interstate 295; and (4) the Navy Yard SE section of Washington, D.C. The precise location of hauling areas will be determined in the snow plan, discussed below.

Offerors must bid a fixed price for all snow removal activities on a per event basis, with the total amount of the payment dependent upon severity of the event. An “event” is defined as anytime the DCDPW mobilizes the Contractor for snow and ice control, regardless of whether snow and ice actually accumulates.

A single event may require some or all of the snow and ice control activities discussed above, or may result in no snow and ice control activities if the storm fails to materialize. Generally, abrasive spreading will be required whenever there is less than 2 inches of precipitation, and plowing, hauling, and other activities will be required when there are more than two inches of precipitation. More detail is provided in the *Penguin Guide* contained in Appendix B. If the District requires the Contractor to conduct snow and/or ice control activities in anticipation of a winter weather event, and the winter weather does not occur, the District may reimburse the Contractor for the amount bid in the greater than 0” but less than 2” category.

Other Management Criteria

Snow and ice control for Fiscal Year 2000 will not be included in this effort. Not later than July 1 of each subsequent calendar year, the Contractor shall furnish the District with a plan for snow and ice control. This plan shall demonstrate that the Contractor has sufficient resources under contract (including equipment, materials, supplies, and personnel) to fully carry out snow and ice control for the following Fiscal Year.

The District shall accept, reject, or provide comments on the plan within five business days. If the Plan is not accepted, the Contractor will be asked to adjust and re-submit the plan.

In preparing the plan, the Contractor must bear in mind the need to maintain continuous contact (via two-way radio or other approved communication means) with the DC DPW Event Coordinator (Mr. Clarence Cotton: 202-671-2235) during each event, and for one hour following completion of the work related to the event.

The Contractor also must ensure that abandoned or illegally parked vehicles are removed. In advance of snow and ice control operations, the Contractor shall contact the Washington D.C. Parking Services Division at 202-645-5800 for abandoned vehicles or 202-541-6065 for illegally parked vehicles.

Offerors should note that the District will provide no facilities for storage of materials or equipment required for snow and ice control.

C.1.g. TRAFFIC/SAFETY

C.1.g.1. Guidedrails, Guiderail Terminals and Transitions, Barriers, and Attenuators

Existing Conditions

There are approximately 108,270 linear feet of guiderail and 51 attenuators. Additional details on a block by block level are provided in Appendix F. Offerors should conduct their own inventory and assessment of these assets.

An Impact Attenuator Inventory is available in the Bid Room. The inventory contains location, roadway class, speed limit along roadway, average daily traffic (ADT), attenuator type, number of units, installation date, and cost. A map displaying the attenuator locations also is provided.

In addition, protective bollards, such as those adjacent to the median-mounted signal poles on Connecticut and Pennsylvania Avenues, exist at several locations and will require maintenance.

Asset Management Standards and Guidelines

The contractor will be responsible for management of these assets (including end treatments and connectors, where applicable, and the necessary hardware to accommodate the assets) to the standard of the performance objectives identified in Appendix B. The Contractor may perform any of several activities, including repair, replacement, and/or maintenance.

Other Management Criteria

Most of the attenuator models in the field are no longer manufactured. The Contractor must upgrade attenuators to meet the requirements of NCHRP Report 350 and to meet or exceed the performance characteristics of the currently deployed attenuators. Similarly, when guiderail transitions are replaced, the replacement must be made with an FHWA approved unit.

C.1.g.2. Traffic Signs

Existing Conditions

There are approximately 12,500 traffic sign assemblies that must be maintained. In addition, there are approximately 280 overhead signs and roughly 15 variable message signs. Lane control signs that are connected to the traffic signal system are not included.

Sign posts for ground mounted signs include Unistrut, U-channel (various weights), metal posts, and timber posts. Overhead sign structures (cantilever and bridge) are used for the overhead signs and variable message signs typically are mounted on sign structures. Additional details on a block by block level are provided in Appendix F.

Based on current studies and surveys, over 8000 traffic sign assemblies are considered in “good” condition (meet or exceed performance measures). Nearly 2500 signs are in “fair” condition (marginal adherence to performance measures), and approximately 1200 signs are in poor condition (failure of performance measures).

Over 245 overhead signs were reported in “good” condition, thirty overhead signs were reported in “fair” condition, and approximately 5 were reported in “poor” condition. For variable message signs, most were reported in “good” condition.

Asset Management Standards and Guidelines

The contractor will be responsible for management of these assets (including sign and post/pole/structure/attachment and attachment materials assembly) to the standard of the performance measures identified in Appendix B. To accomplish these performance objectives, the Contractor may perform any of several activities including: cleaning, repair, upgrade, or replacement.

Other Management Criteria

All traffic signs shall conform to the Manual on Uniform Traffic Control Devices.

The contractor will be responsible for straightening sign posts if the sign extends beyond the face of curb and for remounting signs that are not at the proper height. The contractor also must maintain and replace faded, broken, or missing street name (D3-1) signs. These signs must be District standard with white lettering on a green background. The work may require coordination with the City’s Traffic Engineering division (Mr. John Payne- 202-671-2710) to ensure proper street names are used on the signs.

C.1.g.3. Lighting

Existing Conditions

For purposes of this project, lighting refers to highway lighting and guide sign lighting. Although traffic signals are not included, lighting that is part of the traffic signal installation (i.e. combination poles) are included. For repairs to these combination poles, the contractor must make any and all coordination with the traffic signal contractor. Bridge lighting is included. Tunnel lighting and lighting of tunnel facilities, such as control rooms, is included as part of the tunnel maintenance program.

There are approximately 4100 non-signal highway lighting poles that must be maintained. Each light pole contains a luminaire and ballast that also will require maintenance. In addition, the 280 overhead signs have lighting. Additional details on a block level are provided in Appendix J. Hardcopy files defining the lighting circuits can be viewed by contacting the street light division. Seventy-two 1000W HPS high mast lights are also being added to the system and will be in place when this contract begins. The lights will be 6 per pole on 12 poles ranging in height from 70-100’ along New York Avenue from 36th Place to the District Line. These are included in the 225 poles listed for New York Ave. from N St., North Capitol St. to Maryland Line and will be replacing 38 existing poles (There were 251 poles).

A current maintenance contract exists for maintenance of the all street/highway lighting maintained by the District (excluding tunnel or underpass lighting). This contract includes requirements for: group re-lamping, cleaning, broken glassware replacement, missing photoelectric controls, and all other parts of lighting fixtures and response to streetlight repairs, and will continue to be in force until the period of performance under this contract begins.

Asset Management Standards and Guidelines

The contractor will be responsible for all lighting assets for streetlights and overhead signs necessary to provide lighting for the facility. This includes the foundation, pole, arm, luminaire, lamp, photoelectric control, wiring, feeder cable, conduit, pull boxes, manholes, and taps. To meet the standards set forth in Appendix B, the Contractor may perform any of several activities, including cleaning, re-lamping, repair, or replacement, and “making safe” immediately following a knock-down. All materials used in re-lamping, repair or replacement must meet District specifications.

On the total D.C. system of 66,000 lights, there were 170 knock-downs in 1996 and 161 in 1995. Thus, the contractor could expect to see an average of 0.25% of the light poles under this contract knocked-down each year (approximately 11 poles per year). A backlog exists for repairing knocked-down poles on the NHS segments. The contractor shall be responsible for repairing knocked-down poles (including the backlog) in order to meet the performance measures found in Appendix B.

Required street light repairs are reported to DC DPW through their One Call Center. The contractor will be responsible for modifying DC DPW’s One Call Center’s SLIM software to differentiate between street light repairs that are on the covered NHS segments (the contractor’s responsibility) and those that do not fall under the scope of this contract. The contractor shall not rely solely on this system for notification of needed repairs. The contractor’s proposed approach for timely identification of needed repairs shall appear in the QC/QA plan.

On most streets, if a mercury vapor or incandescent light is knocked down, it shall be replaced with high-pressure sodium or metal halide, as appropriate. The contractor shall notify DC DPW of any wattage or light style changes so PEPCO can be notified.

Over the life of the contract, the contractor shall change over/convert the cobra style fixtures to cut-off style luminaires, to meet the standards set forth in Appendix B.

For wooden poles, there are three scenarios. The first scenario is a D.C. owned pole, D.C. owned secondary, and a D.C. owned arm and fixture. Under this scenario, the contractor shall be responsible for the pole, arm, luminaire, wire, overhead wires and taps. The second scenario is a PEPCO owned pole with D.C. owned secondary, D.C. owned arm, and D.C. owned luminaire. Under this scenario, the contractor is responsible for the secondary, arm and luminaire. The third scenario is a PEPCO owned pole, PEPCO owned secondary, a PEPCO owned tap, a D.C. owned arm, D.C. owned wire and D.C. owned luminaire. Under this scenario, the contractor is responsible for the arm, wire and luminaire.

For situations in which there is no current to the streetlight(s), if the feed source to the affected lights on an NHS segment is beyond the project limits, it is still the responsibility of the contractor to make needed repairs.

For situations where there is no current at the pole and the feed source is in a PEPCO manhole the contractor will need to coordinate with PEPCO for repair. Four basic scenarios exist (costs are approximate and are subject to change):

Scenario 1:

There is no current in the conduit system. There will be a \$75 fee for a safety inspection for the contractor to enter the manhole. PEPCO will give the contractor the right to enter the manhole and make repairs on D.C. owned cable. There will be a \$75 fee for final inspection by PEPCO.

Scenario 2:

The splice on PEPCO's system is bad. There will be a \$75 fee for a safety inspection. Upon verification that there is no power on the D.C. owned cable, PEPCO will correct the splice problem at no cost.

Scenario 3:

D.C. owned cable burned off at tap. There will be a \$75 fee for a safety inspection. Contractor will verify that it is a burn off at the tap. Contractor will pay PEPCO for a re-tap (approximately \$500).

Scenario 4:

Correction of lead cable or new conduit system. Note – a fault or defect in lead cable should not be repaired, but replaced with conduit system. There will be a \$75 fee for a safety inspection. There will be a \$75 fee for conduit spotting on the manhole wall. PEPCO will charge time and materials for re-racking cables, as necessary. There will be a \$500 tap fee and a \$75 fee for final safety inspection. The contractor shall also supply the conduit/cable.

For high voltage series lighting, the contractor must notify PEPCO to de-energize the feed source. The replacement of high voltage series cable must be PEPCO approved before they will re-energize.

Other Management Criteria

Decorative lighting is not included in this contract. Specifications for street lighting are contained in Appendix I. Additional information may be obtained by contacting Jama Abdi at (202) 671-0581.

C.1.h. Miscellaneous Assets

Existing Conditions

The Contractor must maintain six pedestrian crossing structures, which are located:

- Over Suitland Parkway at Stanton Road;
- Over Kenilworth Avenue near Lane Street;
- Over Kenilworth Avenue near Nash Street;
- Over Kenilworth Avenue near Douglas Street;
- Over Kenilworth Avenue near Hayes Street; and
- Over the Anacostia Freeway and the railroad crossing.

Assets to be maintained include the walking surface, railings and enclosure, and lighting. Details on the pedestrian crossing structures are provided with the Bridge Inventory in Appendix G.

In addition, there are three Weigh-in-Motion stations (at the Sousa Bridge and at the 11th/13th Street bridge across the Southeast/Southwest Freeway) and a third just constructed on New York Avenue, N.E. near the District border. A fourth is planned on the Anacostia Freeway (at I-295 near Oxon Hill).

Based on current studies and surveys, the condition of these assets is assumed to be as follows. The two older Weigh-in-Motion stations are currently non-functional. The one at the Sousa Bridge was hit by a passing vehicle and rendered inoperable.

Asset Management Standards and Guidelines

The contractor will be responsible for management of these assets to the standard of the performance measures identified in Appendix B. To accomplish these performance objectives, the Contractor may perform any of several activities, including cleaning, repair, or replacement.

C.2. Underground Damage Prevention

The Contractor is required to take all reasonable precautions to protect underground utilities from damage that may be caused by activities conducted under this contract. Underground facilities include, but are not limited to, electricity and telecommunications cables, water, sewer, and natural gas pipelines, and steam piping and tunnels. Reasonable precautions include, but are not limited to:

- contacting “Miss Utility” at an appropriate time before proceeding with excavation or demolition work;
- providing “Miss Utility” sufficient time to mark the location of underground utilities prior to commencing excavation or demolition activities;
- coordinating with PEPCO, Bell Atlantic, Washington Gas, DCDPW, and others who may operate underground facilities; and

- ensuring that all Contractor and subcontractor personnel performing excavation or demolition activities understand the requirements for underground damage prevention and have adequate training regarding underground damage prevention.

The following telephone numbers are provided for informational purposes only:

Name	Telephone
“Miss Utility”	800 257-7777
DCDPW	202 673-6604 (water mains) 202 727-5698 (sewer) 202 727-5867 (fire alarm electrical system) 202 727-5666 (steam piping and tunnels) 202 727-5668 (electrical facilities in public space)

Offerors should note that coordination with utilities may include payment, at the Contractor’s expense, for access to utility property.

C.3. Vandalism (excluding graffiti) and Force Majeure Events

The District recognizes that certain damage to the assets under this RFP could be so extensive that the contractor should not be required to make repairs under the firm fixed-price portion of the contract. This includes:

- damage caused by natural forces that requires major structural repairs and that significantly impairs or prevents public use of the affected section of right-of-way (e.g., major damage caused by hurricanes, floods, earthquakes, fires, tornadoes, etc.);
- damage caused by human activity that requires major structural repairs and that significantly impairs or prevents public use of the affected section of right-of-way (e.g., a train derailment, an aircraft crash into a bridge, a gasoline tanker truck fire, terrorism, etc.).

“Major structural repairs” refers to repairs that are necessary to ensure the integrity of the damaged asset and to permit normal use of the affected portion of right-of-way.

“Major structural repairs” does not include roadway resurfacing, spot painting, cleaning, debris and vegetation control, and other activities that may be required by an event, but do not threaten the structural integrity of an asset. The Contractor will be responsible, under the firm fixed price portion of this contract, for damage that does not require major structural repairs and that does not significantly impair or prevents public use of the affected section of right-of-way. Examples include repair or replacement of:

- pavement, pavement markings, curbs, and shoulders
- signs, sign posts and poles, and sign structures (including overhead sign supports);
- light poles, light fixtures, and luminaires;
- guiderails, guiderail terminals and transitions, barriers, and attenuators; and

- vegetation, including trees, grass, and shrubs.

C.4. Emergency Response

The Contractor will be responsible for coordinating with DCDPW, the Metropolitan Police, and other emergency response personnel to respond to emergency incidents, such as vehicle crashes, downed poles, trees or tree limbs, hazardous materials spills, adverse weather, water main breaks, floods, sink holes, and other conditions that could create a safety hazard to the travelling public. The Contractor may be required make the roadway safe by establishing emergency traffic control, removing debris, making emergency repairs, and conducting other activities. The contractor also may be required to ensure that the public is informed of the situation. The Contractor must be available for emergency response 24 hours per day, 7 days per week.

In the event of trees damaged by storms, the Contractor must mobilize within 4 hours of notification, providing all necessary personnel and equipment. Work shall include removing downed or dangerous trees and stump removal where trees have become uprooted. All storm damaged tree and stump removal shall be in accordance with the ANSI Z-133.

D. DELIVERABLES

The Contractor will be required to provide, in a format to be specified, the following deliverables for submission to the District Project Manager.

D.1. Staffing/Management Plan

Within 30 days from the Agreement Date, the contractor shall submit a Staffing/Management Plan defining the key staff for each of the asset management areas (e.g. pavement surface, roadway cleaning, roadside vegetation, etc.) and the Project Management Team. Where planned staff differs from that proposed in the Contractor's proposal response, a current resume and justification for any differences shall be included. During the project life, changes to the key staff and Project Management Team shall require approval of the District Project manager prior to use of the staff on the project.

Other information that must be included in the staffing/management plan includes:

- Location of primary office to centralize project activities and in which the Contractor's Project manager will reside;
- Location of resources (offices, equipment, manpower, and materials) to be utilized for each asset management area;
- Proposed plan for communication and coordination among the Team and key staff; and
- Safety Plan for the project (In all activities, the Contractor is required to follow all applicable safety laws, regulations, and DC standard safety procedures. The Safety Plan shall ensure compliance to the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), OSHA, and others as appropriate. Appropriate safety attire for personnel in the field and clear markings and functional lights on vehicles must be part of the safety plan.).

The District will review the Staffing/Management Plan and, within two weeks, provide approval or comments for further discussion. The Contractor will be responsible to develop a mutually agreeable Management Plan.

D.2. Work Plan

No later than 30 days after the Agreement Date, the Contractor shall deliver to the District Project manager a Work Plan, in form and substance satisfactory to the DCDPW, covering the period from the Agreement Date through the first year anniversary of the Agreement Date. The Work Plan will describe the initial work dates and manner in which the Contractor will assume responsibility for the specified assets.

In preparing the Plan, the Contractor must consult with appropriate DCDPW staff. It is anticipated, however, that the Plan will contain the following elements:

- Detailed plans for ensuring that labor, material, and equipment are available and ready to perform under the contract; and

- For each asset to be maintained, a detailed plan describing how the Contractor intends to meet the performance measures for that asset, including allocations of labor, materials, and equipment, key milestones, and timelines for completion.
- An emergency response plan to meet the requirements of section C.4. and other relevant sections of this RFP.
- The Contractor's plan for replacing old or obsolete equipment with new or reconditioned equipment, particularly in tunnels.

It is anticipated that the work plan will describe how the Contractor will ensure that assets meet the performance measures within the first year of the contract, particularly tunnels, which will require substantial rehabilitation work. The work plan also will describe assets that cannot reasonably meet the performance measures within the first year and will set forth a timeframe for achieving the performance measures.

No later than 30 days prior to the Anniversary Date for the first year, the Contractor shall prepare and submit to the DCDPW for its review and comment, a Work Plan covering the next twelve-month period. On every three-month period following and through the last period of the Agreement, the Contractor shall submit a rolling twelve-month period Work Plan.

D.3. Quality Assurance/Quality Control Plan

Within 30 days from the Agreement Date, the Contractor shall submit a detailed Quality Assurance/Quality Control Plan that describes how the Contractor will monitor its own performance to ensure that performance measures are achieved. The Plan will define the procedures to ensure that all work meets or exceeds performance standards. The Plan also will define reporting procedures to the District to ensure approval of proposed work, services, and products.

In preparing the Plans, the Contractor must consult with appropriate DCDPW staff. It is anticipated that the following elements will be required:

- The offeror's plan to ensure that quality work is performed.
- The offeror's plan to monitor quality after work has been completed.
- The offeror's facilities, equipment, and materials available to perform all tasks set forth in this RFP.
- The offeror's plan to ensure that all equipment remains in good working order and is available to perform routine and emergency maintenance.
- The offeror's plan to ensure that all materials meet appropriate specifications for strength, density, temperature, and other factors.
- The offeror's plan to conduct regular public surveys to determine the public's satisfaction with the overall quality and condition of the assets covered under this contract.
- The offeror's plan for managing all assets under this RFP, including assets that the offeror will maintain and additive alternate items that are not awarded for maintenance.

Innovations that deviate from the specifications set forth in the *District of Columbia Department of Public Works Standard Specifications for Highways and Structures- 1996* and the District's

Standard Design Manual must be highlighted in the Quality Assurance/Quality Control Plan. If approved, these deviations will become the specifications for this contract. Otherwise, the standard specifications will govern all work performed under this contract.

D.4. Traffic Control Plan

Within 30 days from the Agreement Date, the Contractor shall include a Plan for control of traffic in and around work maintenance areas. The Plan will ensure that highway safety and traffic operations are efficiently maintained during the maintenance activities. The Plan must outline the traffic control plans needed for the primary maintenance activities that the Contractor anticipates during the project life, define the procedure(s) planned for approval of other traffic control plans that may become necessary, will identify the available resources for traffic control needs, and will define the standard references planned for use and availability during the project. All traffic control plans and standards will be in compliance with Part VI of the Manual on Uniform Traffic Control Devices. In preparing the Plan, the Contractor must consult with available DC DPW staff.

D.5. Reports

During the course of the project, a number of periodic reports or documents will be required. These reports will be in a format specified by the Project Manager, which may include existing formats or a format suggested by the Contractor. Reports will include the following.

D.5.1. Quarterly Update of Assets

On a quarterly basis (i.e. 90 days from the Agreement Date or another similar period and for every quarter thereafter), the Contractor shall provide a record reporting the status of the highway asset management system used by the Contractor and a status of all assets under the Contractor's management, regardless of whether the Contractor is responsible for maintenance of that asset. Of major relevance to the District will be the update of the account/record of the inventory and condition of the assets. The format may require that the District purchase similar software to operate the system.

D.5.2. Monthly Report of Repair and Maintenance

On a monthly basis (i.e. 30 days from the Agreement Date or another similar period and for every month thereafter), the Contractor shall provide a report documenting the maintenance activities conducted for the previous month's period. The information will be summarized by asset, activity within asset, highway/street location, quantity of work, status (i.e. underway, completed, etc.), work date, and material and staffing requirements.

D.5.3. Weekly Status Report

On a weekly basis (i.e. 7 days from the Agreement Date and for every week thereafter), the Contractor shall provide a memo documenting the activities conducted for the previous week's period. The information will be summarized by asset, highway/street location, and status (i.e.

underway, completed, etc.). In addition, the Contractor shall note any other issues or concerns related to proper conduct of the project and/or work activities.

D.5.4. Manhole Technical Memorandum

As stated in Section C , the contractor shall provide DCDPW with a brief memorandum describing each manhole found to be noncompliant with the performance standards of this RFP. The memorandum is due within within two working days of the field survey/investigation and must describe the location, condition (extent and severity), reason or cause of problem, and recommended solution (e.g. maintenance need, reconstruction by others, or responsibility by others). The technical memorandum shall contain sketches as necessary to describe the condition, cause, or recommended solution. The memorandum is deliverable to the District Project manager.

D.5.5. Vibration Technical Memorandum

As stated in Section C , the contractor shall provide DCDPW with a brief memorandum describing the location, condition (extent and severity), cause, and recommended solution (e.g. maintenance need, reconstruction by others, or responsibility by others) for each investigated vibration complaint. The technical memorandum shall contain sketches as necessary to describe the condition, cause, or recommended solution. The memorandum is deliverable to the District Project manager and is due within two working days of the investigation.

D.6. Meetings

The Contractor shall provide oral briefings (in person or by phone based on agreement with the District Project manager) to DC DPW on a weekly basis during the 1st year of the project. For the subsequent years, an oral briefing shall be provided every two weeks. Meeting/briefing minutes shall be prepared by the Contractor and submitted to the District Project manager for review and comment. Following incorporation of comments and review, the meeting/briefing minutes will be approved and stored electronically by the Contractor for documentation purposes.

D.7 Highway Asset Management System

In providing the Asset Management Services, the Contractor shall develop and carry out an asset management system and services which will include an Asset Inventory (updated annually), Condition Assessments(updated annually), a pavement management program (including survey information provided by DC/FHWA), a bridge management program (using surveys provided by the DC DPW), and a snow and ice control operations program, each as described in this RFP. The Asset Inventory and Condition Assessments and the pavement, bridge, and snow and ice control operations programs shall utilize a format that can be easily integrated to meet the District's future GIS programs. At this time, the Washington D.C. GIS goals and vision are under development. At the end of the first year, the Contractor shall provide the software and data files to the DC DPW. For each following year, the Contractor shall provide updates to the

data files to DC DPW plus any software updates developed or used for the asset management system.

E. INSPECTION AND ACCEPTANCE

Performance monitoring is a key component of this contract. Both DCDPW and the contractor must actively monitor performance to ensure that the performance standards are met. The contractor is free to use any reasonable method it believes appropriate to monitor the system, discover problems, and take remedial action as appropriate to meet the performance standard.

The District's primary concern is not how the contractor chooses to monitor its own performance, but rather that the contractor is meeting the performance standards set forth in this RFP. As a result, this section discusses the District's performance monitoring program. The contractor must have its own performance monitoring program, which must be described in the contractor's quality assurance/quality control plan.

Performance monitoring by the District will take place daily, monthly, and annually. The combination of these three monitoring levels will ensure progress and acceptable performance throughout the term of the contract.

Performance monitoring will be conducted by a Project manager assigned by the District, or by the Project manager's designee. The District Project manager will confirm that maintenance and preservation activities continue throughout the term of the contract and that needs are met in a timely manner. The District Project manager will not become involved in the contractor's staffing or equipment requirements nor in individual work activities. The District Project manager's role is to verify that the desired outcome is produced and that the system's assets are being preserved as specified in the contract and this plan.

E.1. Daily Monitoring

The contractor will maintain a daily log for the project. The log will contain information regarding:

- activities of the contractor's crews, including the locations where work is performed;
- complaints received from the general public for which contractor response is required;
- unusual or unexpected conditions uncovered in the course of maintenance and preservation activities; and
- incidents involving safety either of the general public or contractor work forces.

The District Project manager will track the daily activities against the annual program of maintenance and preservation and advise the contractor of any variations. The District Project manager also may redirect contractor efforts when priorities established within the District dictate.

The contractor will monitor the daily activities of the field crews, noting:

- Types of work being performed and location;
- Problems encountered or reported by the public and actions taken to mitigate problems;

- Conditions that warrant more extensive work than is envisioned under the terms of the contract, recommendations to address those conditions, and short-term actions the contractor has taken, or intends to take, to alleviate the conditions and ensure that no safety problems exist;
- Coordination among contractor staff, District personnel, utility operations, and others whose work impacts the assets under this RFP.

The contractor's daily reports must be available to the District Project manager to assist in verifying daily progress under the contract.

E.2. Monthly Inspections

At least once monthly, the District Project manager or his designee, members of the Project Team (includes FHWA, DCDPW, and their representatives) and the contractor (or his representative) will travel through the system to review contractor progress and performance. Generally, these field inspections will entail a windshield survey, with asset conditions rated "good," "fair," or "poor."

A "good" rating indicates that, based upon the windshield survey, the asset appears to meet the performance standard set forth in the contract. A "fair" rating indicates that the asset may not meet the performance standard. A "poor" rating indicates that the asset clearly appears to be "below" the performance standard.

Ratings will be summarized and compared against the ratings for previous months. Ratings also will be compared against either the baseline condition, in the case of the first year of the contract, or the previous annual inspection, in the case of subsequent years.

Generally, the District expects that the ratio of "poor" ratings to "fair" and "good" ratings will decline from year to year. At any location where the contractor recently completed work, all assets must fall into the "good" category, unless a crash, storm, or other unpredictable event caused the asset to deteriorate since the previous inspection.

Periodically, the District Project manager may visit sights where deficiencies have been reported and for which remedial work is required within a fixed time period. Inspectors, for example, may go to a site at which an animal carcass has been reported to confirm that the carcass has been removed within the requisite time frame.

The results of the monthly inspections will be discussed with the contractor. A general level of performance satisfaction will be reported along with recommendations and concerns. The contractor also may bring issues to the attention of the project manager, along with suggestions for future activities.

E.3 Annual Inspection

At least once annually, the District Project manager or his designee (or representatives) will conduct a comprehensive evaluation of the contractor's performance. During this evaluation, the

inspectors may travel through the entire system covered by this RFP and sample one-tenth mile segments for all roadways on the system. Within those segments, each asset will be evaluated for compliance to the performance measures. Measurements will be made to confirm that assets are within the tolerances and parameters specified in the performance standards. The results of the inspection will be summarized and compiled in an annual report that will be made available to the contractor. The report will describe the contractor's overall performance and note exceptional performance.

The results of the annual inspection will be compared with prior years' inspections and with the baseline conditions. All assets must meet the performance standards for the level of service assigned to those locations. All failures to meet those standards will be reported. The contractor will advise the project manager of the actions proposed to remedy any deficiencies along with the time frame for taking those actions.

F. Period of Performance.

The basic period of performance will commence on the date of Notice to Proceed and continue for five (5) calendar years. The District may unilaterally extend the term of this agreement for a period of one (1) year by providing written notice to the Contractor before the expiration of the period of performance then in effect. This option provision may not be exercised more than five (5) times. The total duration of this agreement, including the exercise of any options under this provision, shall not exceed ten (10) years.

When the option to extend the term of this agreement is exercised, the following conditions will be applicable:

- (a) The Contracting Officer may exercise each option by providing written notice to the Contractor thirty (30) calendar days before the expiration of the agreement.
- (b) The pricing of each option year shall be as set forth in Section B of this agreement.

G. CONTRACT ADMINISTRATION DATA

Technical. The Contracting Officer's Technical Representative (COTR) for the District of Columbia, Department of Public Works (DCDPW) is the single point of contact for all technical issues that may arise during the term of this contract. This individual is empowered to give technical direction to the Contractor that is consistent with the terms and conditions of this agreement, and is within the scope of the Section C Statement of Work, provided that such direction does not alter the contract in any manner which affects the agreed-to schedule, deliverables, or price. The following person shall be the COTR, unless otherwise directed by the Director, DCDPW:

Mr. Gary Burch
District of Columbia
Department of Public Works
Tel. (202)939-8060
Fax (202)939-8746

Administrative. The Contracting Officer for DCDPW is the single point of contact for all contractual and administrative issues that may arise during the term of this contract. Only this individual (or those to whom he or she delegates such authority in writing), or the person holding the office, is empowered to give contractual direction to the Contractor, and to make changes that affect the terms and conditions of this agreement, or the scope of the Section C Statement of Work, and otherwise impact the agreed-to schedule, deliverables, or price. To be binding on the District, all such changes must be made in writing by the Contracting Officer or his or her designee(s) named below.

Kevin A. Green
Agency Chief Contracting Officer
Department of Public Works
District of Columbia
Tel. (202) 939-8040
Fax (202) 939-7133

H. SPECIAL TERMS AND CONDITIONS

This section contains special terms and conditions related to this Contract. In addition, Contractors must be aware of the following policy regarding participation by disadvantaged business enterprises:

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

1. Policy - In accordance with 49 CFR Part 26, it is the policy of the United States Department of Transportation to ensure nondiscrimination in the award and administration of DOT assisted contracts in the Department's highway¹ transit and airport financial assistance programs. Consequently, the DBE requirements contained in the above cited regulation are applicable on this contract and shall be complied with by all Contractors.

2. DBE Obligation - The prime Contractor agrees to ensure that DBEs, as defined in 49 CFR Part 26, have the maximum opportunity to participate in the performance of subcontracts on this federally⁴unded contract and that he/she shall not discriminate on the basis of race, color, national origin, age, sex or handicapped in the prosecution of this contract.

All bidders are required to submit a written certification that they have read, understand and will comply with these requirements. A bidders failure to submit this certification or submission of a false certification may render the bid non-responsive.

3. Definitions - The following definitions apply to this contract:

- A. "Disadvantaged business" means a small business concern, (a) which is at least fifty-one percent (51%) owned by one or more socially and economically disadvantaged individuals or in the case of any publicly owned business, at least fifty-one percent (51 %) of the stock of which is owned by one or more socially and economically disadvantaged individuals; and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- B. "Small business concern" means a small business as defined pursuant to Section (3) of the Small Business Act, as amended, including all applicable and relevant rules and regulations promulgated pursuant thereto.
- C. "Socially and economically disadvantaged individuals" means those individuals who are citizens of the United States (or lawfully admitted permanent residents) and who are:
 - (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, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (3) "Native Americans", which includes persons who are American Indian, Eskimos, Aleuts, or Native Hawaiians;

- (4) "Asian-Pacific Americans", which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, Burma, Thailand, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and the Northern Marianas;
- (5) "Asian-Indian Americans", which includes persons whose origins are from India, Pakistan, and Bangladesh;
- (6) Women (of all races); and
- (7) "Any other minorities or individuals found to be economically and socially disadvantaged by the Small Business Administration under Section 8(a) and 8(d) of the Small Business Act, as amended, (15 U.S.C. 637(a)).

The Contracting Officer shall make a rebuttable prerogative that individuals in the above groups are socially and economically disadvantaged. This prerogative shall be based on criteria set forth in 49 CFR Part 26. The Contracting Officer also may determine, on a case-by-case basis, that individuals who are not members of one of the above groups are socially and economically disadvantaged.

4. Goal

Open Market:

The Department of Public Works has set an overall goal for DBE participation. While no specific contract goal has been established, contractors are encouraged to utilize certified DBE firms to perform work on this project. For each participant the following information should be provided;

(1) Name and Address of OBE Firm (2) Dollar Amount of Participation (3) DBE Certification Number

Bidders are advised that each proposed DBE participant must have valid certifications at the time of the bid opening. Bidders list of proposed DBE firms must be submitted within five (5) working days to DPW, Office of Contracting and Procurement, 2000 14th Street, N.W., 6th Floor, Washington, D.C 20009.

5. DBE Directory

Information pertaining to lists of certified DBEs may be obtained by contacting:

**DC Department of Public Works
Office of Contracting and Procurement
Office of Contract Administration
2000 14th Street, N.W., 6th Floor
Washington, DC 20009**

H.1 Definitions

Offerors should refer to section 101.03 of the Standard Specifications for Highways and Structures for definitions of many common terms relevant to this contract.

As used in this contract, the terms "Mayor," "Contracting Officer", "Contract Appeals Board," and "District" or "City" shall mean the Mayor of the District of Columbia, the Contracting Officer of the District of Columbia (or his or her designated alternate), the Contract Appeals Board of the District of Columbia and the Government of the District of Columbia, respectively. The term "DCDPW" shall mean the District of Columbia Department of Public Works. The terms "Contractor," "offeror," or "supplier" shall all mean the contract awardee at any tier; provided that, if the Contractor is an individual, the term "Contractor" shall mean "the Contractor, his or heirs, executor, and administrator," and if the Contractor is a corporation, the term "Contractor" shall mean "the Contractor and its successor".

In addition, the following terms shall have the following meanings:

Asset Management Services. The term shall mean the services to be performed by the Contractor as described in this RFP, including all work, labor, materials, services, and equipment necessary to meet the requirements of the outcome and performance measures, regardless of whether such work is generally considered to constitute ordinary, preventive, or replacement maintenance.

Assets. The term shall mean those elements of the transportation facilities described in Appendix A. Assets shall include all DC-maintained assets (excluding traffic signal and related assets) within the right-of-way and within the segment limits. Assets maintained by non-DC agencies are not considered part of the project excepting those assets damaged while maintaining the DC-maintained assets.

Claim. The term shall mean any and all claims, disputes, disagreements, causes of action, demands, or suits arising from the contract.

FHWA. Federal Highway Administration.

Force Majeure. The term shall mean any event or occurrence arising out of circumstances which are beyond the control of the Contractor, constitute an imminent threat to life or property, or give rise to a declaration of a state of emergency by the Mayor of the District.

Highway Quality Management System. The term shall mean the software system which utilizes the maintenance database; which records infrastructure features; which allows for the identification of maintenance requirements, performance of maintenance ratings, level of service criteria and establishment of priority programs and planning for short and long-term needs in a fully integrated manner; and which contains geographic information capability providing a spatial index to infrastructure features and relates them to a District-compatible highway reference system (with future compatibility to a future District-maintained GIS (geographic information system)).

Laws, Regulations, and Ordinances. The term shall mean all applicable laws, codes, rules, ordinances, restrictions, and regulations of the federal, regional, District or any government

agency and judicial or administrative orders which affect the design, construction, operation, or maintenance of the transportation facilities including without limitation those relating to fire, safety, land use, employee health, labor, environmental protection, seismic design, conservation, traffic control, parking, handicapped parking, zoning and building, as they may be amended or supplemented from time to time.

Performance Measure. Standard that a specific asset shall be maintained to during a specified time period. Performance measures may be quantitative or qualitative are outcome-based.

Special Events. An event or occurrence that requires contractor action but that falls outside of the scope of work as defined in Section C. Final determination of activities constituting special events shall be made by the Contracting Officer.

TIP. Washington Metropolitan Region Transportation Improvement Program.

H.2 Firm Fixed Price Performance Award

Except for special events, the Contractor will be reimbursed for all work under this contract on a firm fixed price performance award basis. The use of a firm fixed price performance award is intended to encourage and reward the contractor for excellence in performance, timeliness, and for effective communication with the District.

The Contractor's performance shall be evaluated monthly by the District Project manager and annually by a Performance Evaluation Board (PEB). The PEB shall be composed of DCDPW staff, FHWA staff, and others that DCDPW may designate.

The payment structure consists of the base firm fixed price amount and a performance award pool.

(a) Firm Fixed Price and Per Event Amounts

The Contractor shall bill the District on a monthly basis an amount equal to 1/12 of the annual base contract amount for the fixed price items set forth in Section B. In addition, the Contractor shall bill the District on a monthly basis for all per event items contained in Section B that were performed in the previous month.

Each monthly invoice shall be supported by a statement of the work performed by the contractor for that month and the materials and other goods and services used to complete that work. Each monthly invoice must be submitted in a manner and form determined by the District.

Final invoice payment shall be made upon the Contracting Officer's determination that all of the requirements for the contract have been completed.

(b) Performance Award

The Contractor shall be eligible for an annual performance award based upon performance throughout the year. This award is designed to reward performance that exceeds the levels set forth in the performance measures. No performance award will be provided for merely meeting the performance measures in Appendix A, even if all of the measures are met.

The amount the Contractor is eligible to receive for performance in a given year shall not exceed three percent (3%) of the fixed price amount for that year. The amount of the total performance award pool received by the Contractor shall be determined by the PEB.

In determining the amount of the award pool to be received, the PEB shall examine each of the levels of service contained in Appendix B and, based upon the Contractor's reports and reports by District personnel, determine the extent to which the levels of service have been achieved. The award pool will then be provided to the Contractor in accordance with the following rating scale:

<u>Adjective</u>	<u>Grade Range</u>	<u>Definition</u>
Superior	97-100	Achievement of extremely distinguished results; more than half of the levels of service exceeded throughout the year; all other performance measures met; no significant deficiencies noted.
Excellent	93-96	Performance of exceptional merit; at least one quarter of the levels of service exceeded; all other performance measures met; no significant deficiencies noted.
Good	90-93	Very effective performance; up to one quarter of the levels of service exceeded; all other performance measures met; no significant deficiencies noted.
Fair	80-89	Effective overall performance; most performance measures met; where performance measures not met, only minor deficiencies noted and contractor is taking remedial action.
Poor	70-79	Ineffective overall performance; significant failures to meet performance measures throughout the year; contractor taking significant remedial actions required to achieve performance measures.
Unsatisfactory		Totally inadequate results; failure to meet a significant number of performance measures; immediate remedial action required.

In determining the performance award amount, the following table shall be used:

<u>Numerical Score</u>	<u>Adjective</u>	<u>Percentage of Performance Award Pool Awarded</u>
100		100
99		95
98	Superior	90
97		85
96		70
95	Excellent	65
94		60
93		55
92		30
91	Good	20
90		10
89		0
88		0
87		0
86		0
85	Fair	0
84		0
83		0
82		0
81		0
80		0
79		0
78		0
77		0
76		0
75	Poor	0
74		0
73		0
72		0
71		0
70		0
69 or below	Unsatisfactory	0

The Contractor's performance shall be evaluated informally on a monthly basis by the District Project manager, and formally on an annual basis by the PEB. The Contractor may prepare and submit a monthly self-appraisal. The Contractor also may submit an annual self-appraisal, addressing both positive and negative aspects of performance, as well as any actions taken to

address the negative aspects. At the option of the District, the Contractor may provide an oral presentation to the PEB regarding the Contractor's performance for the year.

The PEB shall evaluate performance in accordance with the criteria listed above and make a recommendation to the Contracting Officer. Within 10 days of receiving the notification, the Contracting Officer shall notify Contractor.

The Contractor may submit written comments regarding the recommended fee amount within 15 days of receiving notification from the Contracting Officer. Within 15 days of receiving the Contractor's written comments, the Contracting Officer shall issue a decision regarding the performance award level.

The Contractor agrees that the final performance award determination is binding and not subject to dispute.

H.3 Time

If stated in a number of days, time as used in this contract shall include Saturdays, Sundays, and holidays, unless otherwise stipulated.

H.4 Insurance Requirements

(a) General

Prior to commencement of any contract, work of any nature, and in addition to other insurance bonds or securities required by law or under the terms stipulated herein, the Contractor shall procure and maintain during the life of this contract the following types of insurance in the minimum indicated amounts:

(b) Bodily Injury Liability and Property Damage Liability Insurance

The Contractor shall furnish evidence satisfactory to the District that, with respect to the operations it regularly performs, the Contractor carries in its own behalf insurance that meets the requirements of Section 107.12 of the Standard Specifications. The Contractor also must demonstrate that it carries insurance satisfactory to other entities upon whose property the Contractor may be required to enter, such as the railroads.

(c) A specimen copy of the Contractor's complete insurance policy shall be furnished to and approved by the District prior to the Contractor's commencement of any work hereunder.

H.5 Obligations of the District

(a) The District is not obligated to order any products, goods, commodities, or services as a result of this solicitation or any subsequent agreements awarded hereunder

(b) As a baseline for proposal preparation in response to this solicitation, the District shall provide the Contractor with a copy of the document entitled "National Highway System Asset Management Plan," prepared by Michael J. Baker, Jr., Inc. (June 1999). While this document reflects the most complete, current, and accurate data available as of the date of this solicitation, the District makes no warranty, either express or implied, as to its comprehensiveness or fitness for purpose; the Contractor is expected and encouraged to verify, enhance, and expand the information contained therein.

(c) Within five (5) business days of the initial authorization to proceed, the District shall furnish the successful bidder with a letter permit granting it the right to work on public streets, and defining the types of work and places of performance being approved (which will be consistent with the scope of work contained in this RFP). The contractor and all subcontractors at any tier will be required to display a copy of this letter in all of the vehicles and construction equipment assigned to this project, and to produce it on demand as evidence of the District's authority.

(d) The District shall designate a project manager for the term of this contract. The project manager shall have the authority to provide technical direction and surveillance, to monitor and facilitate Contractor compliance with the technical requirements of this contract, to answer questions and provide clarification of issues related to the Contractor's technical performance hereunder, and to approve the substitution of key personnel. The project manager does not have the authority to make changes to the contract of a material nature (affecting price or schedule), nor to direct the contractor to perform tasks that are not within the boundaries of the contract statement of work. If the contractor is uncertain as to whether compliance with technical direction given by the project manager constitutes a change within the definition of the "Changes" clause of this contract, he or she must submit it to the Contracting Officer for a determination prior to proceeding.

(e) The District shall not unreasonably withhold any documentation, specifications, data, reports, policies, guidelines, regulations, standards, or other information that would assist the Contractor in the performance of its duties under this contract.

H.6 Contractor Responsibilities

(a) The Contractor agrees that the District's inspection, review, acceptance, or approval of the Contractor's work shall not relieve the Contractor of responsibility for negligent acts, errors, omissions, or failures to act on the part of the Contractor or its subcontractors at any tier.

(b) The Contractor shall be responsible for independent verification of any data or information it receives from the District with respect to the assets of that segment of the National Highway System that is to be maintained in accordance with the specifications of this contract. Neither the District nor any of its consultants, agents, or employees makes any warranty, express or implied, with respect to data supplied to the Contractor.

(c) The Contractor shall be responsible for obtaining all necessary authorizations and otherwise coordinating with the National Park Service or other affected government agency, local utilities, communications companies, businesses, or residents, or any other public or private entity on whose systems or property its work under this contract may have an impact.

(d) All work will be performed by individuals qualified to accomplish it, and to the highest level of workmanship standards set or maintained by the industry.

(e) All work shall be performed in such a manner as to cause minimal annoyance to occupants of adjacent premises or interference with the normal flow of traffic.

(f) Except for “special events,” work under this contract performed after regular working hours, on Saturdays, Sundays, or on legal holidays, shall be performed at no additional expense to the District.

(g) The Contractor shall protect existing public and private property from damages by approved means (such as planking, covering, etc.) and shall be responsible for repair or replacement of any public or private property damaged in the course of its performance of this contract.

H.7 Failure to Perform and Right to Stop Work

To ensure public safety and public receipt of critical services, the District reserves the right to stop work, perform any of the tasks under this RFP, and seek reimbursement from the Contractor for those tasks, if the Contracting Officer determines that any of the following conditions exist:

- The Contractor’s failure to perform creates an imminent risk to public safety;
- The Contractor has failed to remedy significant non-performance after notice from the Contracting Officer.

H.8 Permits, Licenses, and Certificates

(a). All permits, certificates, and licenses required shall be applied for and obtained by the Contractor from the Permit Processing Division, 2000 14th Street, N.W., 5th Floor, Washington, DC.

Those permits required to be obtained by the Contractor shall be applied for by the Contractor well in advance of need. If the Contractor experiences any difficulty in obtaining a permit, it shall immediately request assistance from the Department of Public Works project manager.

Application shall be made by the Contractor or its authorized representative to the Office of Licenses and Permits, which will issue the necessary permits and authorizations without charge, provided that the application references the District of Columbia project number.

(b) Permits, licenses, and certificates which may be required include (but are not limited to) the following:

Permits and Certificates	Licenses
Plumbing	Master Plumber
Electrical	Master Electrician
Public Space - to work in, excavate in, or occupy*	
Signs and Temporary Fences	
For work on Sunday and/or after 6:00 p.m. on weekdays	

*Note: This permit will be issued by the District via a letter of authorization. Please see H-10(d) above.

(c) Permits will only be issued to persons duly licensed to work in the District of Columbia, except as provided below. Commencement of work requiring permits and licenses will not be authorized until the Contractor can demonstrate that all such permits and licenses have been obtained.

(1) Where electrical or plumbing contractors and their craftspersons perform work under contract with the District of Columbia and where said work is physically located in areas outside the District of Columbia, it shall be sufficient if any such contractor and its craftspersons are licensed either by the District of Columbia or by any governmental agency having jurisdiction over the area adjoining the site on which the work is being performed.

(d) The Contractor shall prominently display all permits within the confines of the worksite.

H.9 Limitation on Subcontracting

At least fifteen percent of the cost of contract performance incurred for personnel shall be expended for employees of the prime contractor.

The Contractor is required to submit a written request for approval by the Contracting Officer for any subcontractors not included in the Contractor's proposal. A separate request must be submitted for each new subcontractor at the following address:

District of Columbia
Department of Public Works
Office of Contracting and Procurement
2000 Fourteenth Street NW, Sixth Floor
Washington, D.C. 20009



Copies of all subcontracts issued under this prime contract, together with their supporting data, shall be made available for review on demand by the Department of Public Works or the Federal Highway Administration.

H.10 Prime and Subcontractor Points of Contact

The prime contractor and all subcontractors under this contract shall designate a single point of contact for administrative matters who is authorized to negotiate contracts on behalf of the firm he or she represents, and who shall be the recipient and custodian of all notices issued hereunder. The prime and all subcontractors under this contract shall further designate a single point of contact for technical matters, who is authorized to accept and issue technical direction on behalf of the firm he or she represents.

Each proposal submitted in response to this solicitation shall identify such individuals as key personnel, and provide their names, titles, telephone and fax numbers, in addition to their e-mail addresses, if appropriate.

H.11 Restriction Against Use of Used, Reconditioned, and Remanufactured Material

(a) Definitions

New, as used in this clause, means composed of previously unused components, whether manufactured from virgin material, from recovered material in the form of raw material, or from materials and by-products generated from, and reused within, an original manufacturing process; provided that the materials meet the requirements of this contract, including but not limited to performance, reliability, and life expectancy.

Reconditioned, as used in this clause, means restored to the original normal operating condition by readjustment and material replacement.

Recovered Material means waste materials and by-products that have been recovered or diverted from solid waste, including post-consumer material, but such term does not include those materials and by-products generated from, and commonly used within, an original manufacturing process.

Remanufactured means rebuilt to original specifications.

(b) Unless this contract requires virgin material or supplies composed or manufactured from virgin material, the Contractor shall provide supplies that are new, as defined in this clause.

(c) A proposal to provide used, reconditioned, or remanufactured supplies (or supplies that are designed or developed subsequent to the date of this contract that the Contractor wishes to substitute for the equivalents specified herein) shall include a detailed description of such supplies, and shall be submitted to the Contracting Officer in writing for his or her written approval prior to actual use.

(d) Used, reconditioned, or remanufactured supplies shall not be utilized in the performance of this contract unless the Contracting Officer has granted his or her prior written approval for their use.

H.12 Inspection Of Supplies:

(a) Definition. "Supplies," as used in this clause, includes, but is not limited to raw materials, components, intermediate assemblies, end products, and lots of supplies.

(b) The Contractor shall provide and maintain an inspection system acceptable to the District covering supplies under this contract and shall tender to the District for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Contractor to be in conformity with contract requirements.

(c) As part of the system, the Contractor shall prepare records evidencing all inspections made under the system and the outcome. These records shall be kept complete and made available to the District during contract performance and for as long afterwards as the contract requires. The District may perform reviews and evaluations as reasonably necessary to ascertain compliance with this paragraph. These reviews and evaluations shall be conducted in a manner that will not

unduly delay the contract work. The right of review, whether exercised or not, does not relieve the Contractor of the obligations under this contract.

- (d) The District has the right to inspect and test all supplies called for by the contract to the extent practicable, at all places and times, including the period of manufacture, and in any event before acceptance. The District shall perform inspections and tests in a manner that will not unduly delay the work. The District assumes no contractual obligation to perform any inspection or test for the benefit of the Contractor unless specifically set forth elsewhere in this contract.
- (e) If the District performs inspection or test on the premises of the Contractor or subcontractor, the Contractor shall furnish, and shall require all subcontractors to furnish, without additional charge, all reasonable facilities and assistance for the safe and convenient performance of these duties. Except as otherwise provided in the contract, the District shall bear the expense of District inspections or tests made at other than the Contractor's or the subcontractor's premises; provided, that in case of rejection, the District shall not be liable for any reduction in the value of inspection or test samples.
- (f) When supplies are not ready at the time specified by the Contractor for inspection or test, the Contracting Officer may charge to the Contractor the additional cost of inspection or test.
- (g) The Contracting Officer may also charge the Contractor for any additional cost of inspection or test when prior rejection makes reinspection or retest necessary.
- (h) The District has the right either to reject or to require correction of nonconforming supplies. Supplies are nonconforming when they are defective in material or workmanship or otherwise not in conformity with contract requirements. The District may reject nonconforming supplies with or without disposition instructions.
- (i) The Contractor shall remove supplies rejected or required to be corrected. However, the Contracting Officer may require or permit correction in place, promptly after notice, by and at the expense of the Contractor. The Contractor shall not tender for acceptance corrected or rejected supplies without disclosing the former rejection or requirement for correction, and when required, shall disclose the corrective action taken.
- (j) If the Contractor fails to promptly remove, replace, or correct rejected supplies that are required to be replaced or corrected, the District may either (1) by contract or otherwise, remove, replace, or correct the supplies and charge the cost to the Contractor or (2) terminate the contract for default. Unless the Contractor corrects or replaces the supplies within the delivery schedule, the Contracting Officer may require their delivery and make an equitable price reduction. Failure to agree to a price reduction shall be a dispute.
- (k) If this contract provides for the performance of District quality assurance at source, and if requested to do so by the District, the Contractor shall furnish advance notification of the time (i) when Contractor inspection or tests will be

performed in accordance with the terms and conditions of the contract and (ii) when the supplies will be ready for District inspection.

- (l) The District request shall specify the period and method of the advance notification and the District representative to whom it shall be furnished. Requests shall not require more than seven (7) workdays of advance notification.
- (m) The District shall accept or reject supplies as promptly as practicable after delivery (which in this case shall include application of paints and finishes, and other use of materials in the maintenance, repair, or refurbishment requirements of this contract) unless otherwise provided herein. District failure to inspect and accept or reject the supplies shall not relieve the Contractor from responsibility, nor impose liability upon the District, for nonconforming supplies or nonconforming work products in which such supplies have been utilized.
- (n) Inspections and tests by the District do not relieve the Contractor of responsibility for defects or other failures to meet contract requirements discovered before acceptance. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or as otherwise provided in the contract.
- (o) If acceptance is not conclusive for any of the reasons in paragraph (k) hereof, the District, in addition to any other rights and remedies provided by law, or under provisions of this contract, shall have the right to require the Contractor (1) at no increase in contract price, to correct or replace the defective or nonconforming supplies at the original point of delivery or at the Contractor's plant at the Contracting Officer's election, and in accordance with a reasonable delivery schedule as may be agreed upon between the Contractor and the Contracting Officer; provided, that the Contracting Officer may require a reduction in contract price if the Contractor fails to meet such delivery schedule, or (2) within a reasonable time after receipt by the Contractor of notice of defects or noncompliance, to repay such portion of the contract as is equitable under the circumstances if the Contracting Officer elects not to require correction or replacement. When supplies are returned to the Contractor, the Contractor shall bear the transportation cost from the original point of delivery to the Contractor's plant and return to the original point when that point is not the Contractor's plant. If the Contractor fails to perform or act as required in (1) or (2) above and does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure, the District shall have the right to contract or otherwise to replace or correct such supplies and charge to the Contractor the cost occasioned the District thereby.

H.13 Recovery Of Debts Owed The District

The contractor hereby agrees that the District of Columbia may use all or any portion of any consideration or refund due to it under the present contract to satisfy in whole or part, any debt due the District.

I. CONTRACT CLAUSES

I.1. Incorporation by Reference

The following contract clauses are incorporated herein by reference and copies of the documents are included in Appendix N:

- (a) The clauses contained in the document entitled "GENERAL PROVISIONS (Federally Funded Agreements) February 19, 1981," revised 18 October 1993, and designated "Attachment 'B'";
- (b) The clauses contained in the document entitled "Required Contract Provisions Federal Aid Construction Contracts," Form FHWA-1273, Revised 5/97
- (c) The clauses contained in Standard Contract Provisions, 1973, and amendments thereto.
- (d) The D.C. Department of Public Works, Standard Specifications for Highways and Structures, 1996.

I.2. Supplemental Contract Clauses

These Special Provisions supplement and modify **STANDARD CONTRACT PROVISIONS**, 1973, and amendments thereto; **STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES**, 1996. Reference to Division Numbers, Section Numbers, and Article Numbers refers to the **STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES**, 1996.

As stated above, the offerors are highly encouraged to propose exceptions to the standard specifications where those exceptions will allow the District to take advantage of innovative materials, techniques, or processes. In the absence of approved exceptions, however, the standard contract provisions and the standard specifications shall apply.

(a) PRE-AWARD APPROVAL:

"In accordance with the Council Contract Approval Emergency Amendment Act of 1995, D.C. Code § 1-1181.5a, the Mayor must submit to the Council for approval any contract action over one million dollars, and in accordance with the regulations adopted pursuant to the District of Columbia Financial Responsibility and Management Assistance Act of 1995, P.L. 104-8, the Mayor must submit to the District of Columbia Financial Responsibility and Management Assistance Authority (control board) the contract action for approval."

(b) COORDINATION WITH OTHERS:

The Contractor is alerted that other contracts either associated with this project or of different scope either have been, will be, or may be let for work in the vicinity of the project area.

The Contractor shall coordinate his work and cooperate fully with all others in order to eliminate or curtail delays and interference of any kind. Particular attention shall be made with regard to proper maintenance of highway traffic through the project area. The Contractor shall perform

his lane closings and reopenings so as not to cause interference with others or to be in conflict with performance of traffic maintenance by others. The District assumes no liability for contract delays or costs resulting from performance or non-performance of others.

The District will not consider any claims for compensation due to delay, other than written authorized time extensions.

(c) PAYMENT BONDS:

Article 12C of the Instructions to Bidders of the STANDARD CONTRACT PROVISIONS, 1973 is amended to incorporate the provisions of Section 504(b) of the District of Columbia Procurement Practices Act of 1985, which requires payment bonds to be in an amount not less than fifty percent (50%) of the total amount payable by the terms of the contract.

(d) MAYORS ORDER 92-138:

The Mayor's Order 92-138 does not apply to Federal-Aid contracts and contractors will not be required either to comply or make any efforts to comply with Mayor's Order 92-138.

(e) LIQUIDATED DAMAGES:

Replace 108.07 with the following:

For each calendar day that contract work remains incomplete after expiration of the specified construction completion time, or main part thereof, the sum of \$0 has been set by the Contracting Officer as liquidated damages from any money due the Contractor. The Contractor's operation after expiration of construction completion time as extended will in no way waive the District's rights under the contract.

(f) CONTRACTOR IDENTIFICATION:

All contractors doing business with the District of Columbia Government shall have a DUNS (Data Universal Numbering System) or RUBS (Reserve User Block System) number. The following information shall be provided prior to award:

1. Incorporated and Unincorporated Business: DUNS number and tax number.
2. Individuals: Social Security Number, RUBS number, which will be established by the Vendor Information Unit of the D.C. Controller's Office.

A DUNS number can be obtained at no cost to the Contractor via telephone from the local or national Dun and Bradstreet Corporation. The requirements are that the Contractor must give its legal or proper business name, business or remittance address and Standard Industry Classification (S.I.C.). No additional information is required, and Dun and Bradstreet will forward the number, by mail, within three (3) days.

Please refer any questions regarding this matter to the Office of the Controller, (202) 939-8020, of the D.C. Department of Public Works.

(g) BID GUARANTY:

This S.P. supplements Article 12, Bond requirements, Part A, of the INSTRUCTIONS TO BIDDERS, STANDARD CONTRACT PROVISIONS, 1973.

Add the following paragraph:

The Bid Guaranty period shall be ninety (90) calendar days after opening of the bids.

(h) AWARD OR REJECTION OF OFFERS:

This S.P. supplements Article 18 of INSTRUCTIONS TO BIDDERS, STANDARD CONTRACT PROVISIONS, 1973 and subsequent revisions.

Add the following new paragraphs:

EACH OFFEROR SHALL BID ON ALL ITEMS IN THE PAY ITEM SCHEDULE and in accordance with the instructions below. Failure to bid on all items will give the District the option to reject the offer.

The Contracting Officer reserves the right to:

- waive any informalities;
- reject any or all offers;
- reject certain items on the pay item schedule and accept other items on the pay item schedule;
- hold discussions and seek clarifications on offers determined to be within the competitive range; or
- to re-advertise this RFP to seek other offers.

Awards, if made, will be to the lowest responsible and qualified offeror whose proposal is responsive is most advantageous to the District of Columbia, price and other factors considered.

(i) RECORD OF MATERIALS, SUPPLIES AND LABOR (FHWA 47 SUBMISSION):

This S.P. Supplements REQUIRED CONTRACT PROVISIONS, FEDERAL AID CONSTRUCTION CONTRACTS.

Under Section VI, Record of Materials, Supplies and Labor, delete the first paragraph and replace it with:

- " The provisions of this section are applicable to all contracts for Federal-aid primary, urban and Interstate highway projects involving construction performed under contract

awarded by competitive bidding, except projects for which the total final construction cost of roadway and bridge is less than \$1,000,000, and projects consisting primarily of:

1. The installation of protective devices at railroad grade crossings: or
2. Highway beautification."

For contracts of \$1,000,000.00 or more, the completion and submission of the FHWA 47 report is a contract requirement. The form must be completed and submitted as soon as field work is completed. Final payment will not be made until the contractor files this report.

(j) APPLICABLE WAGE DECISION/WAGE RATES:

In accordance with the applicable provisions of 29 CFR, Part 1 which require that the correct wage determination and the appropriate wage rates therein be incorporated into this contract, General Wage Decision No. DC 990001 is bound in the appendix and contains the specific applicable wage rates which are:

1. All work commonly recognized in the construction industry as "Bridge Construction" is to be performed utilizing:

HEAVY CONSTRUCTION RATES

2. All work commonly recognized in the construction industry as Road or Highway Rehabilitation or Upgrading is to be performed utilizing:

PAVING AND INCIDENTAL GRADING RATES

Further, as set forth in 29 CFR, Part 1, Section 1.6(c)(3)(IV), if the intent to award letter is not issued within ninety (90) days of bid opening, all intervening modifications (or new wage decision) are made a part of this contract. The contractor will be reimbursed this added labor cost monthly upon submission of sufficient documentation with his/her monthly request for payment.

(k) PROTESTS:

Any aggrieved person may protest this solicitation, award or proposed contract award. The protest shall be filed, in writing, with the Contract Appeals Board within ten (10) working days after the basis of the protest is known. The address of the Contract Appeals Board is 717 14th Street, N.W., Suite 430, Washington, D.C. 20005. The aggrieved person shall also mail a copy of the protest to the Contracting Officer.

(l) ANTI-DISCRIMINATION CLAUSE:

The Contractor: (1) shall not discriminate in any manner against any employee or applicant for employment in violation of Section 211 of the District of Columbia Human Rights Act (D.C. Law 2-38; D.C. Code Anno. Section 1-2512); (2) shall include a similar clause in every subcontract, except subcontracts for standard commercial supplies or raw materials; and (3) shall, along with all subcontractors, post in a conspicuous place, available to employees and applicants for employment, a notice setting forth the provisions of the non-discrimination clause set out in Section 251 of the District of Columbia Human Rights Act (D.C. Code Anno. Section 1-2522).

(m) WORK HOURS:

This S.P. supplements and modifies Article 17.C of the General Provisions, 105.10 and 105.11.

Work may be performed outside of the following hours only when required or allowed by contract specifications or with the advanced notice to and approval by the Contracting Officer:

Monday through Friday 7:00 AM to 7:00 PM

It is expected that an extension of this time period from 6:00 AM to 10:00 PM will be granted, however work hours beyond these limits may be granted for only maintenance of traffic activities, emergencies, work stipulated to be performed at night and other activities specifically granted in writing by the Engineer.

(n) NIGHT WORK:

This S.P. supplements and modifies Article 17.C of the General Provisions and 105.11.

(1) GENERAL - The Contractor shall be subjected to area noise ordinances for night work from 7 P.M. to 7 A.M. and to the restrictions on equipment as indicated below except as permitted by a variance. The Department will support the Contractor's efforts in applying for a variance permitting reasonable day and nighttime noise levels. The Department gives no guarantee concerning the noise levels granted in any waiver, nor whether or not a variance will be granted.

D.C. MAXIMUM PERMITTED NOISE LEVEL*

<u>Zone</u>	Maximum Noise Level, dBA	
	<u>Daytime</u>	<u>Nighttime</u>
Residential, Special Purpose or Waterfront Zone	60	55
Commercial or Light Manufacturing Zone	65	60

* D.C. Law 2-53, District of Columbia Noise Control Act of 1977.

For this project, the area will be classified as Special Purpose. The Contractor shall also maintain sufficient light illumination levels for safe operations in all active work areas during evening and night work. Temporary lighting for the Contractor's operations shall comply with OSHA regulations, Section 1926.56, task requirements and as specified elsewhere in these Special Provisions.

(2) RESTRICTIONS - The use of all mechanical impact demolition equipment will be absolutely prohibited between the hours of 10:00 PM and 7:00 AM.

(o) UTILITY PROTECTIVE ALERT:

This S.P. supplements and modifies 107.15

GENERAL - The Contractor shall be responsible for the maintenance, protection and continuance of service for any utilities encountered in the performance of their work within the project limits for the duration of the contract.

Traffic Signal System Facilities - The Contractor is forewarned that the utility drawings included in this contract are not guaranteed to be an accurate representation of actual field conditions. This is particularly true in the case of underground electrical conduits and manholes constructed throughout the city between 1985 and 1991 for traffic signal system communication cable. The contract plans for this project may have limited or no information of the placement, quantity or depth beneath the finished grade of such facilities.

The Contractor shall contact the Traffic Signal System Division at (202) 939-7113 before undertaking any excavation within the project limits to review drawings showing the location of these underground conduits and manholes. The Contractor is further forewarned to exercise extreme care when excavating in the vicinity of such facilities, since conduit depth and degree of protection may not be accurately represented on the plans. All direct and indirect damage to these facilities encountered during excavation shall be repaired at the Contractor's expense in accordance with the specifications of the Traffic Signal System Division. Such repairs may include conduit and manhole repairs and replacement of communications cable conduit which may extend far beyond the project limits.

(p) PLANTINGS:

This S.P. supplements and modifies 611.02 and 822.

(1) GENERAL - Work consists of furnishing and installing deciduous and evergreen trees, including excavation and preparation of planting pits, furnishing and placing planting mix, hauling and disposing of waste and other incidentals needed to complete planting work.

(2) MATERIALS:

(A) Plant Materials -

Quality - All plants to be supplied shall be first class representatives of their normal species or varieties unless otherwise specified. All plant material shall conform in size, grade and nomenclature according to the current edition of "American Standards of Nursery Stock", and "Standardized Plant Names", prepared by the Editorial Committee of the American Joint Committee on Horticultural Nomenclature. Nearly all of the tree species will be derived from the following list:

Quercas robur, fastigiata	Upright English Oak
Quercas borealis	Northern Red Oak
Quercas phellas	Willow Oak
Quercas Acutissima	Sawtooth Oak
Quercas Coccinea	Scarlet Oak
Quercas biocolor	Swamp White Oak
Quercas palustris	Pin Oak
Acer rubrum	Red Maple and named varieties
Acer saccharum	Sugar Maple and named varieties
Acer platanoides	Norway Maple and named varieties
Ulmus Americana	American Elm and named varieties
Ulmus hollandica	European Elm and named varieties
Ulmus parvifolia	Chinese Elm
Platanus acerifolia, Bloodgood	Bloodgood Planetree
Prunus serrulata "Kwanzan"	Kwanzan Cherry
Prunus yedoensis	Yoshino Cherry
Pryus calleryana Cleveland Select	Cleveland Select Pear
Ginkgo biloba, Male	Male Ginkgo
Zellkova serrata	Japanese Zellkova and named varieties
Tilia cordata	Littleleaf linden and named varieties
Tilia tomentosa	Silver linden
Tilia euchlora	Crimean linden

All plant materials unless otherwise specified shall be nursery grown, free from irregularities, typical of the species and variety, well formed, uniformly branched and have a vigorous root system. They shall be healthy, vigorous plants, free from defects, decay, sunscald injuries, bark abrasions, plant diseases, insect pest eggs, borers, and all forms of infestations or objectionable disfigurements. Plant materials that are weak or which have been cut back from larger grades to meet certain specified requirements will be rejected. All plants shall be freely dug; no heeled-in plants from cold storage will be permitted. Shade trees shall be symmetrically balanced according to their normal habit of growth.

Plant Pest Control - Plant materials, represented by each shipment, invoice or stock order shall be declared and certified free from disease of any kind. All applicable required

Federal and State Inspection certificates shall accompany each shipment, invoice or order of stock. It shall be the responsibility of the Contractor to comply with all applicable Federal and State plant pest regulations.

Plant Care and Transportation - Special precautions shall be taken to avoid any unnecessary injury to, or removal of fibrous roots. Each species or variety shall be handled and packed in the approved manner for that plant, with proper regard to the soil and climatic conditions and the time that will be consumed in transit or deliver. Precautions that are customary in good trade practice shall be taken to insure arrival of plants at their destination in good condition for successful growth. Plants shall be covered and protected from desiccation during transport.

All plants which are required to be balled and burlaped previous to shipment are designated B & B. B & B plants shall be lifted so as to retain as many fibrous roots as possible. The biodegradable burlap shall be firmly held in place by carefully wrapping with stout cord or wire.

Plant materials marked B & B shall be balled and burlaped and all balls over 28" diameter shall then be platformed. B & B plants shall be securely tied with stout biodegradable rope to sturdy platforms equal in size to the outer diameter of the ball. Ball diameters specified are the minimum permitted and apply to nursery grown plants only. Depth of balls shall be sufficient to comply with standard horticultural practices. Oversized and exceptionally heavy plants are proportionally increased to comply with standards of the American Association of Nurserymen.

Plant material budding into leaf or with new soft growth at time of digging shall be sprayed with a wilt preventative, anti-desiccant spray material before delivery and preferably before digging.

All shipments shall be accompanied by an invoice furnished to the Engineer giving detailed descriptions of the plant materials, the date of shipment, a certification that all plants in leaf, including all evergreens, have been sprayed with an approved wilt preventive spray material and any other pertinent information.

Upon receipt of nursery stock at the project, the Contractor shall notify the Engineer.

Plant materials shall not be planted until they have been inspected and approved by the Engineer at the receiving site. Any plant material which does not meet the specifications for the quality herein stated or shows improper handling or arrives on the site in an unsatisfactory condition will be rejected. Materials arriving with broken seals, broken or loose balls, insufficient protection of roots or of roots or tops, shriveled, dry or insufficiently developed roots, or roots which are weak and thin, damaged, defective, or which do not comply with specifications will be rejected. All rejected plants shall be immediately removed and disposed of by the Contractor and approved nursery stock of like variety, size, age, etc. shall be furnished by him without additional expense to the

District. Final acceptance of all plant materials will be given only after materials are planted and after meeting all requirements prescribed herein.

All plants heeled-in shall be properly maintained by the Contractor until planted.

The balls of B & B plants shall, if not immediately planted after delivery and inspection, be adequately protected by covering with suitable mulch and or topsoil, and the rootballs shall be kept constantly moist until removed for planting in a manner appropriate to prevailing conditions and in accordance with accepted horticultural practice. The Engineer may reject any plants whose rootballs are allowed to dry out prior to installation. The Contractor shall, in loading, unloading, or handling plants, exercise utmost care to prevent injuries to the branches or roots of plants. The solidity of the ball of B & B plants shall be carefully preserved. Handling of the plant by parts other than the ball shall be cause for rejection of such plant.

- (B) Planting Soil Mix - Shall be three (3) parts of volume topsoil as specified, thoroughly mixed with one (1) part by volume of peat moss or stable composted manure, one part native soil, and one (1) part clean sand plus five (5) pounds of granular form 5-10-10 fertilizer with trace elements such as iron, manganese and boron shall be added per cubic yard of prepared topsoil. Ingredients shall be delivered separately to the approved mixing site and mixed completely before backfilling.

Stakes - For tree bracing shall be of acceptable hardwood, free from unsound or loose knots, rot, injurious cross grain and sap wood, or other defects. Stakes shall be two inch (2") by two inch (2") by six (6') feet.

Deadmen - Shall be 8" diameter, (3) foot length hardwood timber.

Tree Wrapping - Wrapping for trees shall be waterproof paper 30-30-30 in 4 inch wide rolls. Wrapping shall be tied with approved quality jute twine.

(3) CONSTRUCTION METHODS - All plant materials shall be planted according to the schedule approved by the Engineer.

Planting periods in the schedule may be extended or reduced according to weather and soil conditions at the time, only if authorized by the Engineer. No plants shall be planted during periods of below freezing temperatures. Preparations for planting may begin earlier than the specified seasons, provided the plant locations have been approved by the Engineer.

Excavation - Tree pits shall be nine (9) feet long and four (4) feet wide and excavated to a depth of a ball, with vertical sides and a flat bottom, unless otherwise directed by the Project Manager, if sufficient tree space is available.

The Contractor is responsible for ensuring against damage to underground utilities and must call "Miss Utility," have all underground utilities marked, and take any other reasonable measures before tree pits are dug. See the S.P. for SITE MAINTENANCE.

Backfill for tree pits consist of half existing soil from the tree pit, mixed with an equal volume of previously prepared planting soil mix (50-50 existing soil plus prepared planting soil mix). All excess soil and waste material shall be removed from the area as each location is planted.

No wire baskets shall be allowed to remain around rootballs during the planting process. Wire baskets shall be removed completely. Burlap and twine shall be removed from the top 1/3 of the rootballs. Treated burlap shall be removed completely.

Plant pits and trenches shall be backfilled immediately with the mixed amended/planting soil mix, specified herein.

Under no circumstances shall any plant pit remain open overnight unless it is properly protected. Backfill shall be watered in at 12" intervals throughout the entire pit area so that air pockets will be eliminated and excessive settling will not occur.

If any tree pits are found to be low due to insufficient backfilling and/or settling, the Contractor shall note such locations and shall immediately make each tree pit conform to the drawings and eliminate any unsafe conditions.

If the Contractor fails to comply with above request, the District shall take steps to make each tree pit safe by barricading or placing topsoil in the low areas. The entire cost of such work shall be deducted from any monies due the Contractor.

All disturbed areas not designated to receive woody plants or sod shall be prepared and seeded. Any damage to existing grass area shall be acceptably repaired, as required by the Engineer, at no expense to the District.

Planting - Planting will not be permitted when ground is frozen or wet.

The Contractor shall dig a test pit in each area to receive woody plants no later than 24 hours prior to undertaking planting. He shall fill test pits with water and erect barricades. Should any drainage problems be evident he shall notify the Engineer prior to initiating any planting.

All seals and tags shall be removed before final inspection and furnished to the inspector. All plants shall be set at such a level that after settlement their depth will be the same as grown in the nursery and as shown on the Standard Drawings.

All plants shall be set vertically and plumb. When a tree is placed in a tree pit, it shall be situated in a stable and well-aligned position. The soil mix shall then be filled in around the tree ball to 12" and thoroughly watered. Any burlap, wrapping cord or wire at the top 1/3 of the tree trunk shall be removed. The remainder of the pit shall then be filled with soil mix, flooded in 12" intervals and tamped, all within the same planting day.

Care shall be taken during backfilling, tamping, and watering to avoid damage to roots and to prohibit air pockets. Any root bruised or broken before or during planting shall be pruned immediately to sound tissue with a clean cut as directed by the Engineer.

Watering shall consist of full and thorough saturation of all backfill in the pits on the day the plants are planted. Water shall be applied only by an open end hose at very low pressure. In no case shall hoses from tank trucks be laid across ramps, roadways or other pavements.

Where shown on the drawings saucers shall be constructed from soil prior to the placement of mulch.

The Contractor shall install time-release fertilizer packets for trees in accordance with 624.06(B)(17) and 624.06(C)(7) at the rate and depth recommended by the manufacturer. The packets shall be located as far from the trunk at the edge of the hole as possible. In trench plantings of trees, the packets shall be located midway between trees. Do not break or open the packets prior to installation.

Mulching - All plant area pit beds and areas shown on the drawings shall be mulched. Mulch shall be spread to a thickness of 3 inches over the entire area of the pits, beds and plant areas. Mulch shall be raked to an even surface to limits as directed. All mulch shall be applied within four (4) days after planting.

Staking and Guying - All stakes and guys shall be installed within 24 hours of the day trees are planted. Stakes and guys shall be neat and secure and shall be evenly spaced 120 degrees apart as shown on the drawings.

Guying - Material shall be attached as shown in the drawing. Wrap wire through hose pieces directly around the tree trunk. Place hose as shown on the drawings.

Pruning - Prior to planting and up to four (4) days after planting, trees and shrubs shall be pruned only to remove any damaged wood, care being taken to preserve natural appearance. Broken or badly bruised branches shall be removed with a clean cut and treated with tree wound dressing. Trees with pruned terminal leaders will not be accepted. Prune only as directed by the Engineer.

Cleanup - During the course of planting, excess and waste materials shall be removed daily. Lawn areas shall be kept clean and all reasonable precautions taken to avoid damage to existing structures, plants and grasses. When planting in an area has been completed, the area shall be thoroughly cleaned up. Existing grass areas which have been injured by the work shall be re-graded and seeded according to 624.02 and these Special Provisions, and the entire areas when completed shall be neat and clean.

(4) CARE AND REPLACEMENT DURING CONSTRUCTION:

The Contractor shall be responsible for the care and replacement, if necessary, of all plantings beginning with the satisfactory completion of planting operations and continuing throughout the entire construction period. The Contractor shall maintain all plants in a vigorous, thriving condition by watering, cultivating, weeding, pruning, spraying and other operations necessary. No plants will be accepted unless they are healthy and show satisfactory foliage conditions.

Plants which have died back 25%, or into the crown, or beyond normal pruning limits, shall be replaced by the Contractor at no additional expense to the District. The cost of all care and replacement of planting shall be included in the contract prices.

(5) GUARANTEE AND PLANT ESTABLISHMENT PERIOD:

The Contractor shall also be responsible for the care and replacement, if necessary, of plant material for one full year beyond the date of final inspection and acceptance of the project by the District. This one year period represents the guaranty period.

The Contractor shall, during the life of the guarantee period, properly care for all trees planted, performing such watering, cultivating, or other work as shall be necessary to keep the trees in a live, thriving, healthy condition.

Locations of trees that the Contractor may consider to be affected by adverse conditions are still the responsibility of the Contractor. These areas may be tree locations with any unusual physical properties in the surrounding soil such as pH, water table factors, or areas the Contractor considers poorly drained. The Contractor must keep the trees alive and healthy, or replacement will be made at no additional cost to the District.

Trees that die, or show 25% dead wood shall be considered dead or unhealthy as determined by the inspector, shall be replaced by the Contractor at no additional expense to the District.

A guarantee letter for all plant material shall be submitted by the Contractor to the Tree and Landscape Division at the time of the Contract Completion Date.

A minimum of two (2) guarantee inspections will be made during the guarantee period. A letter will be sent to the Contractor listing dead trees and trees in an unhealthy condition. A time schedule will be given as to the removal of the dead trees.

Plants to be replaced shall be replaced during the current planting season. If trees die outside of the planting season, they shall be replaced the following planting season.

During the guarantee period, sufficient funds will be retained to ensure that the plant material is properly cared for and dead or unhealthy plants are promptly replaced. If the Contractor, upon receipt of the written request, fails to respond in a timely manner, the District reserves the option to perform the required work by other means. The cost of such work shall be deducted from any future payments to the Contractor.

During the final month of the guarantee period, the Contractor shall remove and dispose of all stakes and guys (wire and hose) from all trees except for replacement trees planted during the last planting season.

(6) TREE AND STUMP REMOVAL

This S.P replaces 611.01.

Work under these items consists of removing trees and stumps as designated by the District, including cutting trees, removing stumps and roots from the ground, and properly disposing of the material. The Contractor is responsible for adhering to all applicable ANSI and OSHA standards.

All stumps and roots must be removed to a depth of at least two feet below the surface. The Contractor must ensure that underground facilities are protected when removing stumps. All work must be in accordance with ANSI Z-133, "Safety Requirements for Tree Pruning, Trimming, or Removal."

Whole trees and/or trunks must not be dropped on street or sidewalk. When removal requires the use of a traffic lane, the Manual on Uniform Traffic Control Devices must be adhered to. The Contractor is responsible for working with the District to ensure that emergency no parking signs are posted, as appropriate.

Tree removal must be coordinated with the appropriate utilities and care must be exercised to protect public and private property. The Contractor is solely responsible for any damage to property caused by its activities and must repair and/or replace any damaged property, at the Contractor's sole expense. All work must conform to the National Arborists Association procedures for safe tree and stump removal, unless otherwise approved by the Project Manager.

No tree parts may be left on the job site for more than 48 hours from the start of work on any tree.

Stumps to be removed include all diameter sizes, from approximately 3" to over 42". Stumps must be removed completely to a minimum depth of 22" below ground level.

Stump removal includes the removal of all visible surface roots, regardless of their distance from the main stump. The grinding method shall be used and any exception to this method must be approved by the District. Shavings must be removed within 24 hours of any grinding operation. Prior to removal, shavings must be piled in a neat and orderly manner and must not block pedestrian or vehicle traffic. Safety cones must be placed at the stump location.

Removed trees, stumps, brush, chips, and other material must be disposed of at the Contractor's expense. All diseased elm wood must be disposed of by proper burial in a landfill and dump vouchers must be provided to the District. "Totally" dead elm wood does not need to be buried in a landfill.

Once a stump has been removed, the remaining hole and any scarred areas caused by the removal must be filled with topsoil, tamped, finely raked to remove stones and other debris, seeded, and lightly raked to get seeds into the top .2 inch of soil. Seed must be %100 K-31 from a currently available crop with a test date not older than nine months prior to the sowing. Sowing must be at the rate of three pounds per 1,000 square feet. Topsoil must meet the requirements of 822.01.

After work has been completed at any location, the area shall be cleaned, including sweeping of all surrounding pavement and removal of all debris generated by the work, including sawdust and twigs.

PEPCO will assist in removing trees in electric wires by providing clearance so that a professional tree trimmer who is not qualified to work near electric wires can safely complete the job. The Contractor must remove all limbs, brush, and debris from PEPCO operations within 48 hours.

The Contractor shall work with the Project Manager to develop a schedule of all work to be performed.

(7) TRIMMING

This S.P. supplements 611.04.

The Contractor must keep all street trees within the system neatly and appropriately trimmed and pruned. Tree trimming shall be done in accordance with the Standard Pruning of Shade Trees as described by the National Arborist Association and as specified in ANSI Z133. Tree or lineman's climbers (spikes) must not be used on any tree being pruned.

All work will be classified as Class II Medium Pruning (removal of dead, dying, diseased, interfering, objectionable, and weak branches). A copy of the Pruning Standard for Class II Pruning is included in Appendix B.

Medium pruning shall consist of the removal of the described branches on the main trunks and limbs inside of the leaf area and any that extend beyond this area. Branches less than one inch thick may remain within the leaf area for their full length.

Under-clearance pruning shall provide for the safe passage of pedestrian and vehicular traffic. Minimum clearance heights are 8 feet over sidewalks and 15 feet over roadways.

All cuts must be made sufficiently close to the parent stem so that healing can be readily started under normal conditions. Pruning shall be made to a substantial lateral if only a portion of a branch is removed.

All limbs 1-inch or greater in diameter must be pre-cut to prevent splitting. All branches over 3.5 inches in diameter must be lowered by proper ropes to the ground.

All tools must be disinfected with alcohol after each cut and prior to trimming another tree. Scars not healing properly must be traced where callous growth is not already established, unless the District designates another treatment.

The Contractor must remove girdling roots, branches with structural weakness, decayed wood, and split crotches or branches. The Contractor must dispose of all wood, regardless of size, at Contractor's expense.

The Contractor must ensure that trees retain a balanced symmetry. Objectionable branches may be over roofs and buildings, streetlights, signs, and other obstructions. Elevations of tree's lower limbs will be necessary on many trees. Emergency no parking signs must be provided by the Contractor, where necessary.

q. MAINTENANCE OF HIGHWAY TRAFFIC:

This S.P. modifies 104.02 and 616.

(1) GENERAL - Work consists of proper maintenance of vehicular and pedestrian traffic within and adjacent to the project and includes, but is not limited to the following for contract duration: flaggers and watchmen; public convenience and safety; furnishing, placing, maintenance, removal and disposal of all traffic control devices as defined in the MUTCD (Manual on Uniform Traffic Control Devices for Streets and Highway, 1988, U.S. Department of Transportation, Federal Highway Administration and subsequent revisions).

Minimum requirements are presented below. Work includes all operational needs for proper traffic maintenance and coordination with the District of Columbia Department of Public Works (DCDPW) traffic requirements outside the project area.

- A. The Contractor shall submit to the Engineer for approval, a Traffic Control Plan (TCP) for each typical work location based upon requirements and intents of the contract documents, the MUTCD and the Traffic Flow Restrictions prior to starting any construction. These plans shall be submitted as Shop Drawings and shall include all appropriate warning signs, their size and location and the arrangement of Type III Barricades, PCC Jersey Barrier, etc. and any other devices deemed necessary. The Contractor shall furnish, install, maintain and remove all traffic controls required for the traffic management in accordance with MUTCD and/or the Traffic Control Plan and Contractor Storage Area/Street Marking Detail sheets of these contract documents.
- B. With the exception of emergency work or other work specifically authorized, all work shall be performed within daylight hours. The Contractor shall obtain approval from the Engineer before working at any other times. Normal traffic flow shall be maintained during these times unless otherwise specified. The time required to implement and remove closures and install and remove traffic control devices shall be included within the stated time periods.
- C. The Contractor shall coordinate his maintenance of traffic work with other Contractors and utility companies working in the same general location to maintain continuity of traffic flow and minimize congestion.
- D. The work sites shall be made safe for traffic. Warning shall be provided by installing advance warning signs, electronically illuminated traffic control devices and warning lights. These devices shall be used in conjunction with other traffic control devices.

- E. Construction work zones shall be made safe for traffic as shown on the approved TCP. Work areas shall be delineated by barriers of type and size necessary to provide adequate protection of workers, motorists and pedestrians. Except when necessary to provide ingress and egress for construction vehicles and equipment to/from the work area, open spaces between adjacent barrier sections shall not be permitted.
- F. Where traffic must travel adjacent to a lane during excavation, placing soils base, and placing and curing PCC base, the Contractor shall place temporary PCC safety barriers near the edge of the traveled lane.
- G. At no time shall the approach ends of portable PCC safety barriers be left unprotected. The Contractor shall protect the approach ends of portable barriers with temporary impact attenuators.
- H. During asphalt surfacing operations, traffic drums or cones shall be used in lieu of PCC barrier to delineate the work area.
- I. The Contractor shall furnish and install temporary pavement markings and shall remove these markings and existing markings without damaging the finished pavement surface, in accordance with this TCP and/or as directed by the Engineer.
- J. The Contractor shall furnish, install and maintain (clean, repair and replace damaged parts) all necessary, required and specified construction warning signs, flashing arrow boards, and all other necessary and required traffic through the construction areas.
- K. The Contractor shall give seventy-two (72) hours prior notice to the District when making a change in traffic flow patterns.
- L. Detours shall be designated with appropriate signing, as shown in the TCP and meeting requirements of the MUTCD.
- M. All traffic control devices used for maintenance of traffic shall remain the property of the Contractor and shall be removed from the project site upon completion of work.
- N. The Contractor shall furnish all necessary flaggers that may be required during the course of construction activities. They shall be equipped with safety vests, hard hats and hand signaling devices per section 6F-2 of the MUTCD. The cost of these devices is incidental. No measure will be made. Payment shall be reflected in the bid for Construction Lane Closing.

(2) TRAFFIC FLOW RESTRICTIONS:

The duration of construction at each work site shall be minimized to reduce exposure to potential hazards. With the exception of approved lane closures, the Contractor's operations shall present no interference to traffic during the rush hour periods listed below.

When working on freeway entrance or exit ramps, the contractor shall maintain a minimum of one 11 foot lane for ramp traffic and, whenever possible, shall not work on the traveled portion of the ramp.

Rush Hour Periods - Rush hour and non-rush hour periods shall be as presented below:

- AM Rush Hour - 6:30 AM to 9:30 AM, Monday through Friday.
- PM Rush Hour - 3:30 PM to 7:00 PM, Monday through Friday.
- Non-Rush Hours - 9:30 AM to 3:30 PM and 7:00 PM to 6:30 AM, Monday through Friday.
- 7:00 PM Friday through 6:30 AM Monday.

Maintenance of traffic lane requirements for holidays shall be as determined by the Engineer on an individual basis, but shall not be less than the requirements for non-rush hours as stated herein.

All traffic lanes shall be a minimum of 10 feet wide.

Construction lane closings, with the exception of approved closures, will not be permitted during rush hour periods. The Contractor may temporarily close no more than one through traffic lane during non-rush hour periods with the approval of the Engineer.

No material or equipment shall be placed or stored on the designated roadway during any phase of construction unless otherwise authorized.

Pavement marking operations in the traveled way shall be performed only in non-rush hour periods 9:30 a.m. to 3:00 p.m. Monday through Friday, and holidays and weekends. When existing pavement markings are removed, the area shall be painted with emulsified or cut back asphalt. Traffic staging for each construction phase shall be completed in a continuous operation during the hours stated above.

During the entire construction period, the Contractor shall minimize interference, as determined by the Engineer, with the adjacent neighborhood, including pollution, noise, safety and other effects. The Contractor must immediately remedy all interference determined by the Engineer.

Traffic access for all cross streets shall be maintained at all times.

Where traffic must travel adjacent to a lane under construction, the Contractor shall place temporary PCC safety barriers or moveable barriers near the edge of the traveled lane. Temporary PCC barriers located on the bridge between a travel lane and the construction work zone shall be bolted to the deck as shown on the plans.

During asphalt resurfacing operations, PCC barriers are not necessary; safety barrels or traffic cones shall be employed.

During all phases of construction, at no time shall the project be left unattended. Proper security measures shall be taken to keep unauthorized persons from entering into the opened construction areas of the bridge.

The work sites shall be made safe for traffic and warning shall be provided by installing electronically illuminated traffic control devices such as Sequential Arrow Boards and warning lights. These devices shall be used in conjunction with other traffic control devices, and their flashing sequence and light intensity shall meet the requirements as outlined in this S.P.

(3) TRAFFIC SAFETY OFFICER - The Contractor shall have a competent, full time, Traffic Safety Officer in accordance with the requirements of 616.02(B)(1).

(4) TRAFFIC CONTROL DEVICES:

CONSTRUCTION WARNING AND DETOUR SIGNS

This S.P. supplements and modifies 616.06 and 823.02.

Flourescent Orange High Performance Wide Angle Retroreflective Sheeting shall be used for all construction warning and detour signs on the project and shall conform to the requirements of FHWA Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, D 4956 and the following retroreflective specifications:

MINIMUM REFLECTIVE INTENSITY VALUES FOR HIGH PERFORMANCE WIDE ANGLE PRISMATIC LENS SHEETING [Minumum Coefficient of Retroflection (R_a) cd/fc/ft ² (cd lx ⁻¹ m ⁻¹)]								
Observation Angle	Entrance Angle	White	Yellow	Red	Orange	Green	Blue	Fluorescent Orange
0.2	-4	800	660	215	450	75	43	200
0.2	+30	400	340	100	250	30	20	120
0.2	+50	35	23	6.6	16	1.8	1.0	50
0.5	-4	200	160	45	120	18	9.8	80
0.5	+30	100	85	26	70	10	5.0	50
0.5	+50	30	20	6.4	16	2.5	2.0	20

(r) THERMOPLASTIC LANE MARKINGS:

This supplements 616.15

(1) GENERAL - Work under these items consists of furnishing all materials for and installation of permanent Thermoplastic Lane Markings meeting the requirements of AASHTO M249.

(2) MATERIALS - All materials for this work shall meet the requirements of AASHTO M249.

(3) APPLICATION PROPERTIES:

- A. The thermoplastic material shall readily extrude at temperature of $211 \pm 7C(425 \pm 12.5F)$ from approved equipment to produce a line 3 to 5 mm thick which shall be continuous and uniform in shape having clear and sharp dimensions.

The width of the line shall be as shown on the plans $\pm .25$ inch.

The material shall be extruded at a minimum temperature 400 - 440 degrees F.

The material shall be applied when the ambient temperature is not less than 45 degrees F and the pavement temperature is no less than 55 degrees F.

- B. The material shall not exude fumes which are toxic, obnoxious or injurious to persons or property when it is heated during application.
- C. The application of additional glass beads by drop on methods shall be at a rate specified by the purchaser and agreed upon by the applicator.

(4) CONSTRUCTION METHODS - Prior to application, the pavement surfaces to which the marking material will be applied shall be completely cleaned and allowed to dry. The material shall be applied to the road surface in a molten state by mechanical means with surface application of glass beads at the rate of 0.72 kilograms per liter. The newly applied markings shall be protected from intrusion by traffic by means of traffic cones, safety barrels or other approved means. Upon cooling to normal pavement temperature, it shall produce an adherent reflectorized stripe or surface of specified surface and width capable of resisting deformation by traffic.

(5) PACKAGING AND MARKING

The thermoplastic material shall be packaged in suitable containers to which it will not adhere during shipment and storage. The blocks of cast thermoplastic material shall be approximately 12 by 36 by 2 inch and shall weigh approximately 50 pounds. Each container label shall designate the color, manufacturer's name, batch number and date of manufacture. Each batch manufactured shall have its own separate number. The label shall warn the user that the material shall be heated to $211 \pm 7C(412.5 \pm 12.5F)$ during application.

**(s). SINGLE-FACE WHITE RAISED REFLECTIVE PAVEMENT MARKERS:
SINGLE-FACE YELLOW RAISED REFLECTIVE PAVEMENT
MARKERS:**

This S.P. supplements and modifies 616.14.

(1) GENERAL DESCRIPTION - Raised Reflective Pavement Markers shall be installed as shown on the plans, as specified in these Special Provisions and in the Appendix and as directed by the Engineer.

Markers shall consist of a replaceable prismatic retroreflector, set in a steel protective saddle encased in concrete. All as shown in attached drawings "Raised Reflective Pavement Markers", marked Fig. 1 included in the Special Provision. The concrete casing shall be shaped to deflect the blade of a snow plow driven from either direction. The entire casing shall fit into a groove cut into the roadway surface. Fastening to the roadway surface shall be by the use of epoxy adhesive.

(2) CASTING:

- A. Dimensions - Overall dimensions shall be approximately 8 inches long by 6 inches wide by 1.875 inches high at its widest point. The reflector shall be approximately even with the roadway surface.
- B. Materials - The steel protective saddle for the reflector shall be of abrasive resistant steel plate AR 360 or AR 380. The crossbar shall be of one inch by 0.125 inch stock and the longitudinal bar shall be one inch by 0.375 inch stock.
- C. Surface - The surface of the casting shall be free of scale, oil, dirt, or any contaminant which might reduce the bond to the pavement material.
- D. Weight - The weight shall be no more than four (4) pounds.
- E. Concrete - The concrete for the casting shall be mixed as follows:

One (1) bag of Type III cement

Four (4) bags of Concrete Sand per 804.02.

Three (3) gallons of water

One (1) fluid ounce of Air-Entraining Admixture per AASHTO M 154.

(The amount of Air-Entraining Admixture shall be adjusted to maintain 5-8% air content for the concrete)

Sixteen (16) fluid ounces of superplasticizer per AASHTO M 194, Type F.

(The proportion of superplasticizer admixture shall be varied to comply with manufacturer's and workability requirements.)

The mixture makes 63 units (7 Pallets).

Operate vibrator for not less than 5 seconds.

Clean machine after each batch.

- F. Identification - Casting shall be marked with manufacturer's name and model number of the marker.

(3) REFLECTORS:

Reflectors shall consist of an acrylic plastic shell filled with tightly adherent potting compound. The shell shall contain one prismatic reflective face as required to reflect incident light from a single direction. The reflector shall be in the shape of a shallow frustrum of a pyramid. The bottom of the reflector shall be equipped with pressure sensitive adhesive to permit its attachment to the primed surface of the casting.

A. Design and Fabrication:

1. Construction Details:

Dimensions..... 4" x 2" x 0.460
Slope of reflecting surface.....30 degrees.
Area of the reflecting....1.7 square inches.

The outer surface of the shell shall be smooth except for purposes of identification.

2. Material: shall be molded of methyl methacrylate conforming to Federal Specifications L-P-380A, Type I Class 3. Filler shall be a potting compound selected for strength, resilience and adhesion adequate to pass the necessary physical requirements.
3. The adhesive shall be pressure-sensitive, 100%, .040" thick with closed cell release paper on the bottom. Pressure-sensitive adhesive shall possess adhesion and physical qualities necessary to pass test requirements as specified under "Strength Requirements - Pressure- Sensitive Adhesive."

B. Physical Requirements and Testing for Reflectors:

1. From the markers supplied a random sample of 10 shall be selected.
2. A reflector shall be placed top side up on a steel plate not less than one half-inch (1/2") thick.
3. The load to the top of the marker shall be applied slowly through a one (1) inch diameter, one (1) inch high metal plug, centered on top of the marker.
4. Breakage or deformation of the marker at any load less than 2000 pounds shall constitute failure of the marker. Failure of more than six (6) of the markers tested shall be cause for rejection of the lot.

C. Optical Requirements:

1. Definitions:

Horizontal entrance angle shall mean the angle in the direction of incident light and the normal to the leading edge of the reflector.

Observation angle shall mean the angle at the reflector between observer's line of sight and the direction of the light incident on the reflector.

Specific intensity (S.I.) shall mean candlepower of the returned light at the chosen observation and entrance angle for each foot candle of illumination at the reflector on a plan perpendicular to the incident light.

2. Optical Performance:

Steel Wool Abrasion Procedure - Form a 1" diameter flat pad using #3 coarse steel wool per Federal Specifications FF-W-1825. Place the steel wool pad on the reflector lens. Apply a load of 50 pounds and rub the entire lens surface 100 times.

Specific Intensity - After abrading the lens surface, using the above steel wool abrasion procedure, the specific intensity of each crystal reflecting surface at 0.2 degrees observation angle shall not be less than the following when the incident light is parallel to the base of the reflector.

HORIZONTAL ENTRANCE ANGLE	S.I.
0 Degrees	3.0
20 Degrees	1.2

For the yellow reflectors, the specific intensity shall be 60% of the value for crystal.

Optical Testing Procedure - A random lot of 10 reflector shall be tested. The reflector to be tested shall be located with the center of the reflecting face at a distance of 5 feet from a uniformly bright light source having an effective diameter of 0.2 inches.

The photocell width shall be an annular ring .37" I.D. - .47" O.D. It shall be shielded to eliminate stray light. The distance from light source center to the photocell center shall be 0.21 inches. If a test distance of other than 5 feet is used, the source and receiver dimensions and the distance between source and receiver shall be modified in the same proportion as the test distance.

Failure of more than six (6) of the reflecting faces tested shall be cause for rejection of the lot.

D. Pressure-Sensitive Adhesive:

1. Strength Requirements - Pressure-sensitive adhesive, when applied with minimum application pressure of 60 PSI, must possess a minimum tensile or shear strength of 15 PSI at 70 degrees F (21C) ambient.
2. Strength Testing Procedure - A standard 4" x 2" x 46" reflector with pressure-sensitive adhesive on the bottom shall be adhered to appropriate flat 12" carbon steel test plate, properly primed with 60 PSI (480 pounds) minimum application pressure. Both top of the reflector and bottom of the flat plate shall have fastened to it an appropriate coupling device to ensure compatibility with the tensile testing device. The test sample shall be tested in the tensile mode at 2"/minute pull rate. Minimum load to produce failure shall be 125 pounds at 70 f(21 C). Any figure below 125 pounds constitutes system failure.

E. Primer:

1. Strength Requirements - The primer shall provide for the proper surface condition to promote optimum adhesion between the substrate and pressure-sensitive adhesive.
2. Strength Testing Procedure - Prime test plate with primer and allow to dry. Apply pressure-sensitive adhesive between primed test plates with 60 PSI application force. The primer shall be judged as acceptable if after subjecting specimen to tensile loading at 70 degrees F (21 C) ambient, the failure is cohesive.

(4) FASTENING REFLECTOR:

Fastening shall be accomplished by bonding the reflector to the casting through use of the pressure-sensitive tape permanently adhered to the reflector. Bonding shall be done at ambient temperatures of 50 degrees F (10 C) or higher.

- A. Casting Preparation - Clean casting in reflector pad area. Apply a thin coat of primer to clean, dry area and allow it to dry.
- B. Bonding Reflector - Remove the reflector release paper from the bottom of the reflector and place the reflector on the casting with the proper lens facing traffic. Apply a load of 1,000 pounds to 2,500 pounds for 3 seconds minimum.

(5) INSTALLATION OF THE RAISED PAVEMENT MARKERS:

A. Spacing:

Unless otherwise shown on the plans or directed by the Engineer, the pavement markers shall be spaced forty (40) feet center along lane lines and edge lines.

Along lane line the markers shall be installed centered between skip lines, and along edge lines markers shall be installed along the travel side of the edge line. Where double white markers are indicated, the markers shall be installed to the right and left of the line and two (2) inches between line and marker.

B. Color:

On ramp roadways, sharp radius horizontal curves, care is to be exercised that the markers are installed at right angles to direction of headlight beam. The color of the pavement markers shall be white along the right side of all traveled roadways and along the lane lines, and yellow along the left side of all traveled roadways, unless otherwise indicated or directed. The barrier markers on the concrete median barrier shall be yellow.

C. Method of Installation:

The pavement markers shall be installed by the use of any epoxy adhesive. The epoxy adhesive shall be of the type, prepared, and used in strict accordance with the manufacturers instructions.

The markers shall be installed in the pavement by cutting a groove in the pavement to fit the casting, and the casting shall be held in place by epoxy bonding compound poured into the groove.

A self-propelled concrete cutting machine shall be used for making the saw cuts in the pavement.

The machine shall be designed to utilize either a local or tank supplies water source for cooling the blades, to act as a lubricant and to clean the saw cuts.

The saw cuts shall be flushed clean by means of a water steam, then cleared of water and dried by means of an air stream. The blown air from the compressor shall be free of oil or water. The saw cuts shall be cleaned immediately after the cutting operation.

After the saw cuts have been cleaned and dried, the cuts shall be filled with an approval epoxy compound, which shall be kept warm until it is poured into the saw cuts. After the marker casting is pressed into the saw cuts, any excess epoxy shall be removed from under the sides of the casting and from the pavement.

Excess adhesive around the edge of the markers, excess adhesive on the pavement, and adhesive on the exposed surfaces of the markers shall be immediately removed. Soft rags moistened with mineral spirits, conforming to Federal Specification TT-T-291, or kerosene may be used, if necessary, to remove adhesive from exposed faces of exposed faces of pavement markers. No other solvent shall be used. The marker shall be protected against impact until the adhesive has hardened to the point where the marker will not be dislodged by traffic, but in no case less than one hour. Any marker dislodged before completion of the contract shall be replaced by the Contractor at no cost to the District.

The marker shall be placed so that in all cases the plane of the reflective surface shall be at right angles to the direction of traffic.

No pavement marker shall be placed over longitudinal or transverse pavement joints.

(t) REFLECTIVE BARRIER MARKERS:

This S.P. supplements 616.14(C)(2).

(1) GENERAL DESCRIPTION - Raised reflective barrier markers shall be installed on the traffic face of new sidewalk and median barriers at a 40 foot minimum spacing. The reflective markers shall also be installed on temporary barriers. Reflective markers installed on temporary barriers shall be properly maintained to retain their reflective properties and shall be promptly replaced if damaged or removed for any reason at no additional cost to the District.

The marker shall consist of a trapezoidal shaped plastic body with a flat acrylic plastic retro reflective lens, hermetically sealed to it, capable of reflecting incident light from wide angles. The marker shall be fitted with pressure-sensitive adhesive for use in attaching it to the barrier.

(2) PHYSICAL REQUIREMENTS - Body dimensions shall be 2.6" x 2.3" x 5.7" high. Angle of reflecting face shall be 11 degrees. Projected reflecting surface area shall be 7.5 square inches. Body surface shall be smooth except for identification.

(A) Mounting - Pressure-sensitive adhesive shall be fitted to the base of the marker for use in attaching to the concrete barrier. If a primer is required for preparing the barrier surface prior to attaching the marker, the primer shall be that recommended by the manufacturer. A pressure of not more than 50 pounds applied to the marker for not longer than six (6) seconds shall be sufficient to securely attach the marker to the concrete surface.

The marker shall be mounted twenty four (24) inches above the roadway surface, with the reflecting surface normal to the direction of traffic and the long axis vertical.

(B) Material - The material for the body and lens shall be methyl, methacrylate plastic and must conform to Federal Specification LP-380C, Type 1, Class C.

The pressure-sensitive adhesive shall be 100% solids. Minimum allowable shear stress shall exceed 6 psi at 21 degrees C (70 degrees F.). Shelf life of parts shall not exceed one year.

- (C) Temperatures - After exposure for one hour to an ambient temperature of 52 degrees C. maximum (125 degrees F.) the assembly shall meet all optical and physical requirements.
- (D) Color - The color of the marker shall be yellow when placed to the left of approaching traffic and white when placed to the right of approaching traffic.

(3) OPTICAL SPECIFICATIONS:

A. Definitions:

- (1) Horizontal entrance angle shall mean the angle in the horizontal plane between the mounting plane (concrete barrier or guiderail) and the incident light. The horizontal entrance angle shall be considered as plus in the direction from the mounting plane (concrete barrier or guiderail) toward the normal to the reflector face. Only plus angles shall be measured.
- (2) Observation angle is the angle formed between the line from the light source to the reflector and the line from the reflector to the observer's eye.
- (3) Specific intensity shall mean candlepower of the returned light at the chosen observation and entrance angles for each foot candle of illumination at the reflector face on a plane perpendicular to the incident light.

B. Optical Performance - When the marker is oriented in the photometric device with its long axis vertical and mounted to simulate mounting on the vertical side of a concrete barrier, the specific intensity of the crystal (white) reflecting surface at 0.1 degrees observation angle shall be as follows:

HORIZONTAL ENTRANCE ANGLE	S.I.
+ 0 degrees	119
+ 15 degrees	119
+ 35 degrees	50

For yellow markers, the specific intensity shall be 60% of the value for white.

C. Optical Testing Procedures - the markers to be tested shall be located with the center of the reflective area at a distance of 100 feet from a uniformly bright light source having an effective diameter of 2 inches. The photocell shall have an aperture of 0.5 inch diameter, and shall be shielded to eliminate stray light. The distance from the center of the light

source to the center of the photocell aperture shall be 2.09 inches. If a test distance of other than 100 feet is used, the source and receiver dimensions along with the distance between source and receiver shall be modified in the same proportion as the test distance. In no case shall the test distance be less than 10 feet.

Determination of acceptability shall be based on MIL-STD-105D using an AQL of 2.5.

u. GUIDE SIGN PANELS:

This supplements and modifies 620.02.

(1) GENERAL - Work under this item includes furnishing, fabricating and erecting all guide signs shown on the contract plans.

(2) MATERIALS - The entire face of all signs shall be Type III, High Intensity Reflective Sheeting. Reflective sheeting for sign faces shall meet the requirements of AASHTO M268 for Type III. Reflector buttons shall not be used.

v. TRAFFIC SIGN PANEL:

This S.P. modifies and supplements 620.02.

Modifying 620.02(B), reflective sheeting for Traffic Sign Panels shall meet the requirements of AASHTO M268, Type III High Intensity.

w. PAVEMENT PROFILING (MILLING):

This S.P. supplements 621.

(1) GENERAL - The Contractor shall perform pavement profiling on existing asphaltic concrete roadways to the depth specified or as directed by the Engineer. Asphalt concrete millings removed by this process shall remain the property of the District and shall be hauled to any designated locations within the District. Asphaltic concrete millings may become the property of the Contractor if selected for use under 401.12.

Equipment to be used for the milling process shall be inspected and approved prior to use and must pass all air quality regulations of the District of Columbia. The milling machine must have the capability of milling a path a minimum of one meter wide and must have baffles attached to direct the milled material to the center point of the machine. It is desirable that the machine be equipped with a truck loading conveyor.

If the areas adjacent to utility structures, corners, gutters, and all similar roadway projections are inaccessible to the milling machine, the Contractor shall remove these areas to grade by other methods approved by the Engineer. The total completed process shall leave a finished surface which does not vary more than 1/4 inch along a 10 foot straightedge.

x. STREET LIGHTING:

This S.P. revises and supplements 618.

SCOPE

1. Furnish and install conduit, pole foundations, Streetlight standards with luminaires, cables in poles, conduits, manholes and all necessary electrical splices.
2. Modifying of existing casings, and light controls, rod-cleaning existing conduits, repair of existing conduit, pulling existing traffic signal cable back to the manholes and reinstalling them in shared conduit with street light cables and removal and reinstallation of existing traffic signals.
3. Removal of the existing street lighting system including luminaires, poles, cables, foundations, existing manholes, as directed by the Engineer.
4. Other essentials necessary for the satisfactory installation of the roadway lighting system shown on the plans, whether specifically mentioned or not.

The Potomac Electric Power Company currently supplied power to the existing streetlight system from its manholes and overhead wires. PEPCO will supply the power to the permanent roadway lighting system. The Contractor shall install the new feeder cables into Pepco's facilities, under Pepco's supervision and inspection.

The contractor shall cut when required the existing D.C. cables for new connections inside Pepco's manholes after the service tap to Pepco's distribution system. Pepco owns the service tap onto their electrical system. D.C. owns the cable after the service tap to the street light(s).

All new service taps onto Pepco's electrical system will be done by Pepco forces.

It should be noted that the D.C. streetlight system is unfused, unprotected with no disconnecting means other than cutting the cable from the feed source.

The Contractor shall be expected to perform the street light cable work on D.C. cables with the knowledge that the circuits are energized.

The Contractor shall be responsible to field check all existing conditions and make necessary adjustments to the new work as required and as approved by the Engineer at no additional cost to the District.

The direct Contractor's payment to Pepco will be for the following work only: disconnections, new service connections, manhole wall clearing by Pepco forces during the preparation of the manhole wall for the new conduit penetrations, inspection and supervision by Pepco during the

wall penetration, installation of the new conduits and pulling the new feeder cable by the contractor.

All work involved with PEPCO facilities shall be performed in conformance with PEPCO requirements.

Before any electrical work is performed, the electrical contractor must be licensed and bonded in the District of Columbia and must apply for an electrical permit to perform electrical work in public space. This application must be signed by a Master Electrician or an Electrical Engineer who is required to be licensed in the District of Columbia.

The Contractor's employees installing the electrical work must be licensed in the District of Columbia as a Master Electrician, Electrician or Apprentice Electrician. When Apprentice Electricians are working, a Master Electrician or an Electrician must be on the project site for personal supervision.

All electrical work must be inspected by the Electrical Inspectors of the Department of Public Works. Twenty-four (24) hour advance notice is required for inspection. The offices of the electrical inspectors is located at the Rear of 1338 G Street, S.E. Washington, D.C. 20003, Telephone Number (202) 727-5666.

The Contractor shall have a copy of the drawings, Electrical Permit and all approved Catalog Cuts on the job at all times when electrical work is being performed.

The Contractor shall as part of his bid submit all catalog cuts for the posts, that he proposes to use on this project. The Contractor is also put on notice that due to the long lead times required to obtain the posts from the manufacturers, that the Contractor shall not be given additional time for completion of the project, if the cuts are not submitted with his bid.

The Contractor shall coordinate the removal and installation of streetlights with the Streetlight Branch Telephone No. (202) 939-8089, and must submit a schedule for the removal & installation of the street light poles for approval prior to the commencement of this project. The approval of this schedule will have a direct bearing on the Notice to Proceed for this contract.

The above schedule must reflect the dates for every street light under this contract the following:

- 1) Removal date of each street light pole & fixture (putting it out of service)
- 2) The date of the complete operational installation of the street light pole & fixture
- 3) The time between the removal date & the complete operational installation must not exceed 8 calendar days for any underground fed light
- 4) On overhead fed lights the removal & the complete operational installation must be completed on the same day

The Contractor shall coordinate with Pepco the following:

- 1) Payment to Pepco for manhole entry before any entry into their manholes.
- 2) Payment to Pepco for any Pepco forces work (SLF- work orders)

- 3) To have each APEPCO MANHOLE@ inspected by Pepco forces in the presents of the Electrical Contractor on this contract for safety, clearing of the cables racked on the walls, spotting of the wall for new conduit penetrations and the knowledge of the location of each feed manhole for the street lights.
- 4) Calling Pepco when it is necessary for Pepco Forces to make the taps onto their Electrical System to energize the lights
- 5) Calling Pepco for the final inspection of their manholes after all street light work is complete in the Pepco manholes as called for in this contract

Material removed as part of this project shall be returned to the District of Columbia, Department of Public Works Warehouse, located at 1735 15th Street, N.E., Washington, D.C. as directed by the Project Engineer. All poles/pole parts returned to the District shall be disassembled and stacked/shelved at the warehouse under DPW warehouse personals direction and supervision. All HPS luminaires/conversion kits shall be tested, proved functional, in good reusable condition, then they will be wrapped in bubble wrap, boxed, sealed, the boxes marked with the date, size, voltage and shelved at the warehouse under DPW warehouse personals direction and supervision. All other material not returned to the District shall become his property and be disposed of at no additional cost to the District.

The Contractor upon completion of the project shall submit a complete set of as-built drawings of the streetlight portion of the project to the Streetlight Section, Department of Public Works. The set of drawings shall bear the signature of an officer of the Contractor's organization, certifying compliance with as-built conditions.

Located on some streetlights within the limits of this project are radios, which are owned by Metricom. They are attached to the arm behind the luminaire, with a power feed connected to the photocell receptacle . The Contractor shall call Metricom, Mr. Jeff Bernard, phone no. (703) 928-5799 48 hours in advance of removing the arm and luminaire

MATERIAL SPECIFICATIONS

MATERIALS - All materials and equipment used in the performance of the work shall meet requirements as specified herein and requirements of 618. All materials shall be as follows:

Anchor Bolts - Steel for anchor bolts shall conform to ASTM A36 Grade C of the size shown on the plans. Anchor bolts, nuts and washers shall be galvanized in accordance with ASTM A153.

Splices - in 618.17 shall be revised as follows:

Splices in wires and cables shall be accomplished by means of compression pressure connections. The connector shall be suitable for the size wire used and shall be of one piece tubular tinned copper or bolted type copper construction. The indenture shall be such as to assure maximum electrical connection and sufficient physical strength. The connection shall be covered with cross linked polyoltin shrinkable tubing. The tubing shall be heavy wall rated 600V 90c and conform to UL 486D, CSA C22.2 No. 198.2 and ANSI C119.1 and Western Underground Guides 2.4, 2.5. If shrinkable tubing is not feasible for a particular connection, the connection

shall be covered with No. 99 Scotch plastic electric tape manufactured by Minnesota Mining and Manufacturing Company, or type CW as manufactured by Plymouth Manufacturing Company, or other approved equal halflapped into a thickness not less than 50 percent greater than the conductor insulation. An approved waterproof coating shall be applied on the outer cover. Wires shall be tagged as specified in 618.18.

GROUNDING AND BONDING - Grounding shall be accomplished as soon as materials are in place to which the grounding wires are to be attached.

The grounding electrode conductor shall be sized in accordance with Table 250-94 on the National Electric Code, and the equipment grounding conductor shall be sized according to table 250-95, however, the smallest size conductor shall be #8 AWG.

All ground rods shall be copper-clad steel, size as noted.

All sizes specified in these specifications or shown on the plans are American Wire Gauge sizes.

The grounding wire or cables shall conform to the requirements of ASTM B33 or ASTM B189. Standard cable shall conform to the requirements of ASTM B8.

All noncurrent-carrying metal parts for the roadway lighting system shall be solidly grounded.

Each metal lighting standard shall be grounded to the adjacent manhole with a No. 8 copper wire, which shall be connected to the pole shaft and the manhole with a solderless bolted connector post or lug, with non-corrosive components. In all the Fiberglass posts connect the grounding wire from the manhole to the ground rod at the base of the post and the frame of the conversion kit.

The Contractor shall in each District owned manhole bond the neutral conductor to the manhole grounding electrode.

Any DC Manhole that is worked in under this contract will be checked to affirm the existence of a existing ground rod , if no ground rod is found, a ground rod must be installed through the floor of the manhole in such a way as to have a minium soil contact of eight (8) foot, the diameter of the ground rod must be 3/4". The Contractor must make the electrical connections between the GROUND ROD-NEUTRAL CONDUCTOR AND ANY GROUND WIRES in the existing DC manholes.

EXISTING LIGHTING POLES AND EQUIPMENT

Existing lighting posts will be removed, disassembled and returned to the District storage yard as directed by the project Engineer. All globes, kits and luminaires will be boxed and returned to the District. All equipment not returned to the District will become the property of the Contractor and will be removed from the job site and disposed of at no additional cost to the District.

ELECTRICAL TESTS

Applicable test shall be performed in accordance with 618. Defects in materials or workmanship in the installation as disclosed by the test shall be corrected or replaced by the Contractor without additional compensation. A written report shall be submitted for approval. **ALL GROUND RODS WILL BE TESTED AND APPROVED.**

MERCURY VAPOR

400 WATT GE Cat # H33GL400/DX or equal

METAL HALIDE

400 WATT GE Cat # MVR400/U or equal

HIGH PRESSURE SODIUM VAPOR

- A) 70 WATT Sylvania Cat # 67512 LU70 or equal
- B) 100 WATT Sylvania Cat # 67514 LU100 or equal
- C) 150 WATT Sylvania Cat # 67516 LU150/55 or equal
- D) 250 WATT Sylvania Cat # 67520 LU250 or equal
- E) 400 WATT Sylvania Cat # 67523 LU400 or equal

All lamps are to be new unused and in manufactures wrappers. The Contractor will submit all lamp data to the Engineer for approval before ordering. The Contractor will supply the Engineer with copies of all manufactures lamp warranties. The Contractor will store all lamp according to manufactures specifications until installed and accepted by the District.

ELECTRONIC PHOTOCONTROL AND CYCLE DETECTION DEVICE

Photo electrical controls shall meet or exceed all requirements of ANSI C 136.24 and shall meet the following:

- 1) Turn ON light level: 1.5 ± 0.5 ftc.
- 2) Turn OFF light level: 3.0 ftc. (Maximum)
- 3) Turn-off ration: 1.5 : 1
- 4) Operating Voltage: 105 to 305 VAC @ 60 Hz.
- 5) Control shall remove power from ballast and lamp after detecting 5 lamp cycles per night
- 6) Control shall reset each dust. Red flasing LED shall be visible in control window afer the control detects HPS lamp cycling.
- 7) Operating Temperatures: -40 deg C to 70 deg C (-40 deg F to 158 deg F)
- 8) Moisture Resistance: 98 % RH
- 9) Maximum Fixture Size: 400 Watt HPS
- 10) Power consumption: 1.2 watts average
- 11) Method of Failure: Fail-off

- 12) Surge Protection: Shall be in the form of a Metal Oxide Varistor (MOV) wired line to neutral. MOV shall be a minimum of 160 Joules.
- 13) Housing Cover: High impact, UV Stabilized Polypropylene, Black in color.
- 14) Housing marking: Year of installation permanently marked, Serial Number, Voltage Range, Loading Rate to be clearly indicated.
- 15) Guarantee: 3 years for defective materials or workmanship.
- 16) Manufacturer: DTL DD-121.5-STMA or approved equal. ANSI Standard C136.10

ELECTRONIC BUTTON TYPE PHOTO CONTROL:

- 1) Photoelectric control must meet or exceed all requirements of proposed ANSI C136.24.
- 2) Line voltage operating range: 105-130 VAC @ 60 Hz.
- 3) Turn ON: Calibrate at 1.5 ± 0.5 ftc.
Turn OFF: Maximum turn OFF 3.0 ftc.
- 4) Photosensor: Cadmium Sulfide cell shall be sealed to prevent moisture and contamination damage.
- 5) Failure mode (per ANIS): Control will fail on.
- 6) Time delay: Control must have instantaneous AON@ A 5 - 10 seconds AOFF@ delay is required.
- 7) Surge protection: Shall be in the form of a Metal Oxide Varistor (MOV) wired line to neutral. MOV shall be a minimum of 100 joules.
- 8) Calibration: Each unit must be calibrated in production using a photometer whose accuracy is traceable to the NIST. 100% quality control inspection must be preformed after calibration and final assembly.
- 9) Chatter: contract A chatter@ on opening of contacts (turn OFF of photoelectric control) shall not exceed 5 milliseconds.
- 10) Housing: Housing of photoelectric control shall be opaque and of an impact and UV resistant material. Impact resistance of greater than 0.5 ft-lbs at -40 deg C is required. Maximum size, excluding nipple, is 2.3" x 1.3" x 1.3".
- 11) Drop test: Control must be cable of withstanding a drop of 3 feet to a concrete floor without causing damage to the housing or changing the electric operation.
- 12) Nipple: 3/8 - 18 straight pipe thread (NPSM). Length is .80". Two plastic lock nuts and O-ring shall be supplied.
- 13) Lead wires: Leads shall be 18" long. #18 AWG stranded, type 1015 rated for 600 volts and 105 deg C. Color code is as follows: Black = line, Red = load, White = neutral.
- 14) Markings: The following must appear on the control: month, year of manufacture, individual serial numbers, complete model description, operating voltage rage, load range, and country of origin.
- 15) Warranty: 4 years, one for control replacement.
- 16) Manufacturer: DTL DB 120 - 1.5 - ST18 or approved equal.

SHORTING CAP Ripley Cat. # 6005 or equal

The cap shall fit into a standard Photo cell receptacle and be gasketed so as to form a seal to keep rain and snow from entering the receptacle. The cap should Prevent a fixed "on" or shorted contact to the luminaire.

LUMINAIRES HIGH PRESSURE SODIUM VAPOR

70 Watt GE Cat # M2AC07S1M2GMC21 or approved equal
100 Watt GE Cat# M2AC10S1M2GMC31 or approved equal
150 Watt GE Cat# M2AC15S1M2GMC31 or approved equal
250 Watt GE Cat# M4AC25SOM2GMC32 or approved equal
400 Watt GE Cat# M4AC40S0M2GMC32 or approved equal

All Cut-off type luminaires shall be two door type with the ballast mounted on a door that can be removed. The ballast shall be prewired to the lamp socket and dead back terminal block, requiring that the customer make only the connection of the phase conductors to the terminal block. The one piece pipe clamp shall contain 4 bolts that do not pass through the housing. The clamp must be able to except 1 1/4 to 2 inch pipe braket with out having to rearrange the clamp.

The ballast shall be a 120 volt magnetic regulator type for all 70W thru 150 W luminaires and a magnetic regulator multi tap 120/208/240/277 Volt for all 250W and 400W luminaires. The ballast shall start and operate the lamp in ambient temperatures down to -40 F The ballast shall be in full compliance with lamp-ballast specifications from the lamp manufacturer at the time of manufacture. The luminaire shall contain a formed aluminum reflector and a flat heat/impact resistant glass lens. the optical assembly shall not allow light above 90 degrees The luminaire shall contain a non-wicking felt gasket for all 70W thru 150W luminaires and a filter for all 250W and 400W luminaires.

400 WATT METAL HALIDE LUMINAIRE GE Cat# M4AC40M1A2GMC21 or approved equal

The cut-off luminaire shall be a two door type with the ballast assembly mounted on a separate removable door. The ballast shall be prewired to the lamp socket and the dead back terminal block, requiring that the customer make only the connection of the phase conductors to the terminal block. The one piece pipe clamp shall contain 4 bolts that do not pass through the housing. The clamp must be able to except 1 1/4 to 2 inch pipe bracket with out having to rearrange the clamp. The ballast shall be a 120/208/240/277 volt Auto-regulator type, capable of starting and operating one 400W Metal Halide lamp within the limits specified by the lamp manufacture. The ballast must start and operate the lamp in ambient temperatures down to -20 degrees F for the rated life of thee lamp. Ballast primary current during starting must not exceed normal operating current. The lamp current crest factor shall not exceed 1.8 for +10 percent line voltage variation at and lamp wattage form nominal through life. Lamp ballast system power factor shall not drop below 90 percent for +10 percent line voltage variation at any voltage form nominal through life. The luminaire shall contain a formed aluminum reflector and a flat

heat/impact resistant glass lens. the optical assembly shall not allow light above 90 degrees. The luminaire must contain a filter to keep out contaminants

SODIUM VAPOR CONVERSION KITS

100W GE Cat # KITS10S7MO99 or approved equal
150W GE Cat # KITS15S1M098 or approved equal
250W GE Cat # KITS25S1H071 or approved equal
400W GE Cat # KITS40S1H076 or approved equal

The kits shall be for 120 Volt operation and must fit into a #14 and #16 casing for 100W thru 150W kits and #16 casing for the 250W and 400W kits. The kit shall include a completely prewired magnetic regulator ballast for 100W thru 150W kits and a High Power Factor Reactor ballast for 250W and 400W kits, with Mogal base lamp socket, terminal block and the necessary brackets for mounting the kits into the casing. The ballast shall be a magnetic regulator type capable of starting the lamp at -30 F. The lamp wattage shall not vary more than 18% over a +10% voltage spread. The power factor shall not be less than 90%. The crest factor of lamp current shall not exceed 1.7 for +-10% line voltage variation at any lamp voltage form nominal through life for 100W thru 150W kits.

The ballast for the 250W and 400W, lamp wattage for nominal line voltage and nominal voltage the ballast design center will not vary more than 5% from rated lamp watts. At any lamp voltage, form nominal through life, the lamp wattage regulation spread at that lamp voltage shall not exceed 25% for +-5% line voltage variation. The ballast must reliably start and operate the lamp in ambient temperatures down to -30 F for the rated life of the lamp. ballast primary current during starting may exceed normal operating current. The lamp current crest factor shall not exceed 1.8 for +-5% line voltage variation at any lamp voltage, from nominal through life. The power factor of the lamp ballast system shall not drop below 90% for +- 10% line voltage variations at any lamp voltage from nominal through life. The ballast shall be capable of starting and operating one 250W (250w Kit) or one 400W (400w kit) watt High Pressure Sodium Vapor lamp from a nominal 120 volt 60 Hz power source within the limits specified by the lamp manufacturer. the ballast, including the starting aid, must protect itself against mogal lamp failure modes. The ballast shall be capable of operation with the lamp in an open-or short circuit-condition for six months without significant loss of ballast life.

400 WATT MEDAL HALIDE CONVERSION KIT GE Cat# KITS40M1A140 or approved equal.

400 Watt metal halide conversion kit for 120 volt operation for use with #16 casing. The kit shall include a completely prewired auto-regulator ballast with mogal base lamp socket, terminal board and brackets for mounting kit into the casing. The ballast shall be capable of starting and operating (1) 400 watt metal halide lamp from a nominal 120 volt 60 hertz power source and shall be capable of starting and operating (1) 400 watt metal halide lamp within the limits specified by the lamp manufacture. Regulation at any lamp voltage from nominal through life, lamp wattage regulation spread at that lamp voltage shall not exceed 20 percent + 10 percent line voltage variation. The ballast must start and operate the lamp in ambient

temperatures down to - 20 degrees F for the rated life of the lamp. Ballast primary current during starting must not exceed normal operating current. The lamp current crest factor shall not exceed 1.8 for + 10 percent line voltage variation at and lamp wattage from nominal through life. Lamp ballast system power factor shall not drop below 90 percent or +- 10 percent line voltage variation at any voltage from nominal through life.

REPLACEMENT POWER DOOR

70W GE Cat# M2AR07S1M
100W GE Cat# M2AR10S1M
150W GE Cat# M2AR15S1M
250W GE Cat# M4AR25SOM
400W GE Cat# M4AR40SOM

70W THRU 150W

The power door assembly must be compatible with existing GE luminaires. It shall include a die cast aluminum housing, hinge, latch and locking screw. The complete electrical package shall include a 120V magnetic regulator ballast, a plug-in ignitor and a terminal block. The assembly shall be easily removable and replaceable through the use of quick disconnect plugs. The terminal block shall connect the lamp socket, the photo - electric control and the power supply leads.

250W AND 400W

The power door assembly must be compatible with existing GE luminaires. It shall include a die cast aluminum housing, hinge, latch and locking screw. The complete electrical package shall include a multi-volt magnetic regulator ballast, a plug-in ignitor and a terminal block. The ballast shall come from factory wired for 120 volt operation. The assembly shall be easily removable and replaceable through the use of quick disconnect plugs. The terminal block shall connect the lamp socket, the photo-electric control and the power supply leads.

GLOBES AND GLASSWARE

GLOBE NO. 118

The No. 118 globe shall be one piece blow molded high impact strength polycarbonate. The globe shall sit in the No. 16 D.C. Casing. A returnable casing is available to prospective bidders. The globe shall be shatter proof and ultra-violet stabilized. It shall be stippled clear glass in appearance with initial 90% light transmission. Formed Plastic Cat. No. FP-118-9-DC or approved equal.

GLOBE NO. 192

The No. 192 globe shall be one piece blow molded high impact strength polycarbonate. The globe shall sit in the No. 14 D.C. Casing. A returnable casing is available to prospective bidders. The globe shall be shatter proof and ultra-violet stabilized. It shall be stippled clear glass in appearance with initial 90% light transmission. Formed Plastic Cat. No. FP-192-DC or approved equal

GLASSWARE

The replacement glassware must match the original in both size and pattern. In areas where the original glassware was broken due to vandalism the replacement glassware will be polycarbonate. In designated historic districts replacement globes on incandescent fixtures will be glass.

NEMA DECALS

The decals must meet NEMA standards for use in marking roadway and alley streetlighting luminaires, fixtures and kits.

CONDUCTORS

Wire - All current carrying conductors used for street lighting as part of this contract shall be copper, stranded type, RHW-2 90 C, conforming to IPCA pub. no. S-68-516/ NEMA WC8 for ethylene- propylene-rubber insulated cable. The jacket shall conform to IPCA pub. no. S-19-81, and have a HYPALON outside jacket. All cable used for 6.6 Amp series circuits shall be stranded, copper, single conductor shielded 5,000 volt meeting the requirements of AEIC C56 MV-90. This cable will be used in duct, direct burial, aerial and within posts.

CONDUIT

All conduit used in this contract for direct burial and concrete encasement will be PVC Type 40 Heavy Wall Rigid conduit. The conduit will meet the requirements of NEMA TC-2 and WC-1094 specifications, UL listed and rated for 90 C cables.

Conduit for use on building walls and on wood poles as channel riser will be hot dipped galvanized rigid steel conduit, U L listed. The smallest size for use in this contract will be 3/4"

POLES

All streetlighting poles that carry any type of traffic signal equipment or are mounted on structures will be metal either Cast Iron for upright type poles or Galvanized steel for pendent type poles. All other streetlight poles will be made of fiberglass reinforced plastic. All underground fed alley light pole will be concrete.

SPECIFICATION FOR FIBERGLASS #16 UPRIGHT POST

The post shall match D.C. Department of Public Works Drawing No. DPW-93-FG-16 and DPW-93-FG-16C. The base, post and casing with the exception of the tenon shall be molded of non corrosive fiberglass reinforced composite material and shall be pigmented gray throughout and shall remain maintenance free throughout the life of the pole, the color shall match Federal Color Chip # 16099. The material used in this product shall confirm to ASTM D 4923 Standard Specifications for Reinforced Thermosetting Poles, class 2(stiff pole).

The pole shaft shall be constructed by the open mold process using specialized contact molding technique, It shall be reinforced with a combination of high strength triaxial fiberglass reinforcement, chopped fiberglass strands and milled fiberglass filaments. The fiberglass shall be uniformly impregnated with thermosetting non-corrosive polyester resin pigmented throughout to match the final color of the finished pole. The pole shaft shall be fluted, round, tapered and hollow with a uniform taper and a minimum 2" internal clearance extending its length to permit the installation of wiring. The shaft shall be non-conductive, chemically inert and free of mold flash.

The handhole in the base shall include of cover made of the same material as the base. The opening shall be centered between 2 anchor bolts and shall be a minimum of 6" wide and 6" high. The cover shall attach to the base with two stainless steel flat countersunk hex socket head screws. Stainless steel threaded inserts shall be incorporated into the pole base to except these screws.

The tendon shall be 4" diameter (3 1/2" sched 40 pipe) 6" long aluminum and shall be securely bonded to the inside top of the shaft. The shaft/tendon transition shall incorporate a decorative ring and match the drawing.

The mounting flange shall be molded in one piece of FRP with a minimum thickness of 3/4". the flange shall be permanently bonded flush with the bottom of the base. There shall be four holes 1 1/4" diameter on an 11" both hole circle. The center of the plate shall have a 7" diameter hole for the installation of wiring.

The surface of the pole shall be coated with a highly weather resistant gray pigmented polyurethane. The coating shall have a minimum dry film thickness of 1.5 mills. The finish shall resemble cast iron.

The pole shall include 4- 1" by 40" anchor bolts with washers and nuts. the top 6" of the anchor bolts along with the washers and nuts shall be plated so as not the rust. The pole shall be designed to withstand the force of a 80 MPH wind (calculated per ASTM D4923) with luminaire having a maximum size of 7.0 sq. ft. and weighing up to 300 pounds. With the pole securely mounted at the base a load shall be attached 12" from the top and at 90 degrees to the longitudinal axis of the pole. The load shall be applied such that the handhole will be in compression during the test. Deflections and minimum breaking strength shall be: @ 100 lbs a deflection of 5 inch, @ 200 lbs a deflection of 15 inch, and a minimum breaking strength of 450 lbs.

The surface shall be tested for a minimum of 2500 hours of accelerated testing in accordance with ASTM G53.84 (UV-B Lamp 313 NM wavelength 130 F, cycle lamp 4 hours on 4 hours off) with the following results: there will be no fiber exposure, crazing, checking or chalking and the color shall show only slight dulling. The bidder will submit as part of his bid, test result certified by a registered professional engineer showing full compliance with this specification. The pole shall be individually packaged and shipped in a wooden crate of sufficient strength to insure transport without damage.

SPECIFICATION FOR FIBERGLASS #18 UPRIGHT POST

The post shall match D.C. Department of Public Works Drawing No. DPW-93-FG-18 and DPW-93-FG-16C. The base, post and casing with the exception of the tenon shall be molded of non corrosive fiberglass reinforced composite material and shall be pigmented gray throughout and shall remain maintenance free throughout the life of the pole, the color shall match Federal Color Chip # 16099. The material used in this product shall confirm to ASTM D 4923 Standard Specifications for Reinforced Thermosetting Poles, class 2(stiff pole).

The pole shaft shall be constructed by the open mold process using specialized contact molding technique, It shall be reinforced with a combination of high strength triaxial fiberglass reinforcement, chopped fiberglass strands and milled fiberglass filaments. The fiberglass shall be uniformly impregnated with thermosetting non-corrosive polyester resin pigmented throughout to match the final color of the finished pole. The pole shaft shall be fluted, round, tapered and hollow with a uniform taper and a minimum 2" internal clearance extending its length to permit the installation of wiring. The shaft shall be non-conductive, chemically inert and free of mold flash.

The handhole in the base shall include of cover made of the same material as the base. The opening shall be centered between 2 anchor bolts and shall be a minimum of 6" wide and 6" high. The cover shall attach to the base with two stainless steel flat countersunk hex socket head screws. Stainless steel threaded inserts shall be incorporated into the pole base to except these screws.

The tendon shall be 4" diameter (3 1/2" sched 40 pipe) 6" long aluminum and shall be securely bonded to the inside top of the shaft. The shaft/tendon transition shall incorporate a decorative ring and match the drawing.

The mounting flange shall be molded in one piece of FRP with a minimum thickness of 3/4". the flange shall be permanently bonded flush with the bottom of the base. There shall be four holes 1 1/4" diameter on an 11" both hole circle. The center of the plate shall have a 7" diameter hole for the installation of wiring.

The surface of the pole shall be coated with a highly weather resistant gray pigmented polyurethane. The coating shall have a minimum dry film thickness of 1.5 mills. The finish shall resemble cast iron.

The pole shall include 4- 1" by 40" anchor bolts with washers and nuts. the top 6" of the anchor bolts along with the washers and nuts shall be plated so as not the rust.

The pole shall be designed to withstand the force of a 80 MPH wind (calculated per ASTM D4923) with luminaire having a maximum size of 7.0 sq. ft. and weighing up to 300 pounds. With the pole securely mounted at the base a load shall be attached 12" from the top and at 90 degrees to the longitudinal axis of the pole. The load shall be applied such that the handhole will be in compression during the test. Deflections and minimum breaking strength shall be: @ 100 lbs a deflection of 5 inch, @ 200 lbs a deflection of 15 inch, and a minimum breaking strength of 450 lbs.

The surface shall be tested for a minimum of 2500 hours of accelerated testing in accordance with ASTM G53.84 (UV-B Lamp 313 NM wavelength 130 F, cycle lamp 4 hours on 4 hours off) with the following results:there will be no fiber exposure, crazing, checking or chalking and the color shall show only slight dulling. The bidder will submit as part of his bid, test result certified by a registered professional engineer showing full compliance with this specification. The pole shall be individually packaged and shipped in a wooden crate of sufficient strength to insure transport without damage

SPECIFICATION FOR FIBERGLASS TWIN 20 UPRIGHT POST

The post shall match D.C. Department of Public Works Drawing No.DPW-93-FG-T20 sheets 1 and 2 of 2. The base, post shaft, crossarm and casing with the exception of the tenon shall be molded of non corrosive fiberglass reinforced composite material and shall be pigmented gray or black throughout and shall remain maintenance free throughout the life of the pole, the color shall match Federal Color Chip # 16099. (see purchase order for color required). The material used in this product shall confirm to ASTM D 4923 Standard Specifications for Reinforced Thermosetting Poles, class 2(stiff pole).

The pole shaft shall be constructed by the open mold process using specialized contact molding technique, It shall be reinforced with a combination of high strength triaxial fiberglass reinforcement, chopped fiberglass strands and milled fiberglass filaments. The fiberglass shall be uniformly impregnated with thermosetting non-corrosive polyester resin pigmented throughout to match the final color of the finished pole. The pole shaft shall be fluted, round, tapered and hollow with a uniform taper and a minimum 2" internal clearance extending its length to permit the installation of wiring. The shaft shall be non-conductive, chemically inert and free of mold flash.

The handhole in the base shall include of cover made of the same material as the base. The opening shall be centered between 2 anchor bolts and shall be a minimum of 6" wide and 6" high. The cover shall attach to the base with two stainless steel flat countersunk hex socket head screws. Stainless steel threaded inserts shall be incorporated into the pole base to except these screws.

The tendon shall be 4" diameter (3 1/2" sched 40 pipe) 6" long aluminum and shall be securely bonded to the inside top of the shaft. The shaft/tendon transition shall incorporate a decorative ring and match the drawing.

The mounting flange shall be molded in one piece of FRP with a minimum thickness of 3/4". the flange shall be permanently bonded flush with the bottom of the base. There shall be four holes 1 1/4" diameter on an 11" both hole circle. The center of the plate shall have a 7" diameter hole for the installation of wiring.

The surface of the pole shall be coated with a highly weather resistant gray pigmented polyurethane. The coating shall have a minimum dry film thickness of 1.5 mills. The finish shall resemble cast iron.

The pole shall include 4- 1" by 40" anchor bolts with washers and nuts. the top 6" of the anchor bolts along with the washers and nuts shall be plated so as not the rust.

The pole shall be designed to withstand the force of a 80 MPH wind (calculated per ASTM D4923) with luminaire having a maximum size of 7.0 sq. ft. and weighing up to 300 pounds. With the pole securely mounted at the base a load shall be attached 12" from the top and at 90 degrees to the longitudinal axis of the pole. The load shall be applied such that the handhole will be in compression during the test. Deflections and minimum breaking strength shall be: @ 100 lbs a deflection of 5 inch, @ 200 lbs a deflection of 15 inch, and a minimum breaking strength of 450 lbs.

The surface shall be tested for a minimum of 2500 hours of accelerated testing in accordance with ASTM G53.84 (UV-B Lamp 313 NM wavelength 130 F, cycle lamp 4 hours on 4 hours off) with the following results:there will be no fiber exposure, crazing, checking or chalking and the color shall show only slight dulling. The bidder will submit as part of his bid, test result certified by a registered professional engineer showing full compliance with this specification. The pole shall be individually packaged and shipped in a wooden crate of sufficient strength to insure transport without damage.

SPECIFICATION FOR 28' 6" PENDENT POST WITH ARM

The post will be octaflute monotube 11 gauge steel, 8"x 4" x 28' 6" with a continuous 0.14 inches per foot taper. The post will be according to D.C. Streetlighting Drawing No. 2 dated June 6, 1965.

The post will include a single welded simplex to accommodate 1 or 2 eight (8) foot single member arm, or a double welded simplex to accommodate 1 or 2 eight (8) foot truss type arm for post installed on structures.

The shaft will be fabricated from 11 gauge steel meeting ASTM-A595 GR A with a yield point of a no less than 55,000 psi. A cast steel anchor base will be welded to the bottom of the shaft in an scalloped pattern. The base will have four (4) bolt holes per the drawing. The base will be complete with ornamental bolt covers and the attaching screws. Poles that are not mounted on a transformer base will have a 3" x 5" hand hole with reinforced frame and cover will be provided 12 inches above the base. All lighting standards for use on bridge structures will be provided with a vibration damper and damper pads. A vibration damper consisting of a weighted device will be attached inside the pole to dampen the vibration of the pole. The vibration damper will be

suitable for mounting in steel poles and will be fabricated from corrosion-resistant materials. The dampers will be factories installed and blocked in place during shipping. A damper pad will be provided at the base of each pole. The vibration and damper pads will be tested and approved design and certified copied of test reports will be submitted together with installation details for approval. All posts will have a strain cable grip installed to support the post cables.

The arms will be fabricated from steel. The post and arm will be cleaned of all rolled-in mill scale, impurities and nonmetallic foreign materials. The welds will be cleaned of all weld flux. The post and arm to be degreased by immersion in a heated caustic solution, then pickled in a heated sulfuric acid solution. The base will then be rinsed in a fresh water bath to remove any residual effects of the caustic or acid baths. The post and arm will then be immersed in a concentrated zinc ammonium chloride solution and allowed to air dry before being galvanized. The post and arm are to be hot-dip galvanized to the requirements of either ASTM A123 or ASTM A153. The galvanized coating will be free of any debris or flux ash.

All galvanized exterior surfaces visually exposed are to be coated with a Urethane or Triglycidyl Isocyanurate (TGIC) polyester powder to a minimum dry film thickness of 2.0 mils. Prior to application, the surfaces to be powder coated are to be mechanically etched by brush blasting (ref. SSPC-SP7) and the zinc coated substrates preheated to 450 F for a minimum of one (1) hour in a gas-fired convection oven. The coating will be electrostatically applied and cured by elevating the zinc coated substrate temperature to a minimum of 350 F in a gas-fired convection oven. The color will match Federal Color Chip # 16099.

The pole will be wrapped in either a 3/16" U.V. inhibited plastic backed packing foam or cradled in a 1" rubberized foam base. The arms will be wrapped in a 3/16" U.V. inhibited plastic packed packing foam.

As part of the catalog cuts the contractor shall submit copies of the following certifications:

1. That the welds meet the requirements of AWS D1.1.
2. Material will be provided for all ASTM numbers referred to in this specification.
3. Copy of factory certification that it meets the requirement of American Institute of Steel Construction (AISC) category.

SPECIFICATION FOR 40' PENDENT POST W/ ARM

The post shall be octaflute monotube 11 gauge steel, 9.5"x 5.65"x 38'-6" with a continuous 0.10 inch per foot taper. The post shall be according to D.C. Streetlighting Drawing No. 2 dated 5/25/65. The post shall include a double welded simplex to accommodate an 8,10,12 or 15 foot truss type arm.

The shaft shall be fabricated from 11 gauge steel meeting ASTM-A595 GR A with a yield point of no less than 55,000 pounds per square inch. A cast steel anchor base shall be welded to the bottom of the shaft in an escalloped pattern. The base shall have four (4) bolt holes per the drawing. The base shall be complete with ornamental bolt covers and the attaching screws. Poles

that are not mounted on a transformer base will have a 3" x 5" hand hole with reinforced frame and cover shall be provided 12 inches above the base.

All lighting standards for use on bridge structures shall be provided with a vibration damper and damper pads. A vibration damper consisting of a weighted device shall be attached inside the pole to dampen the vibration of the pole. The vibration damper shall be suitable for mounting in steel poles and shall be fabricated from corrosion-resistant materials. The dampers shall be factory installed and blocked in place during shipping. A damper pad shall be provided at the base of each pole. The vibration and damper pads shall be tested and approved design and certified copies of test reports shall be submitted together with installation details for approval. All posts will have a strain cable grip installed to support the post cables.

The arms shall be fabricated from steel. The post and arm shall be cleaned of all rolled-in mill scale, impurities and non-metallic foreign materials. The welds will be cleaned of all weld flux. The post and arm is to be degreased by immersion in a heated caustic solution, then pickled in a heated sulfuric acid solution. The base will then be rinsed in a fresh water bath to remove any residual effects of the caustic or acid baths. The post and arm will then be immersed in a concentrated zinc ammonium chloride solution and allowed to air dry before being galvanized. The post and arm are to be hot-dip galvanized to the requirements of either ASTM A123 or ASTM A153. The post and arm galvanized coating shall be free of any debris or flux ash.

All galvanized exterior surfaces visually exposed are to be coated with a Urethane or Triglycidyl isocyanurate (TGIC) polyester powder to a minimum dry film thickness of 2.0 mils. Prior to application, the surfaces to be powder coated are to be mechanically etched by bursh blasting (ref. SSPC-SP7) and the zinc coated substrate preheated to 450 F for a minimum of one (1) in a gas-fired convection oven. The coating is electrostatically applied and cured by elevating the zinc coated substrate temperature to a minimum of 350 F in a gas-fired convection oven.

The pole will either be wrapped in a 3/16" U.V. inhibited plastic backed packing foam or cradled in a 1" rubberized foam base. The arms will be wrapped in a 3/16" U.V. inhibited plastic backed packing foam. The color will match Federal Color Chip # 16099.

SPECIFICATION FOR #716 POST

The post shall be octaflute monotube 11 gauge steel 6.5" x 4.82" x 12' with a continuous 0.10 inch per foot taper. The post shall be according to D.C. Streetlighting Drawing No. 716 dated may 25, 1963.

The shaft shall be fabricated from 11 gauge steel meeting ASTM-A595 GR A with a yield point of no less than 55,000 pounds per square inch. A cast steel anchor base shall be welded to the bottom of the shaft in an escalloped pattern. The base shall have four (4) bolt holes per the drawing. The base shall be complete with ornamental bolt covers and the attaching screws.

The post shall be cleaned of all rolled-in mill scale, impurities and non-metallic foreign materials. The welds will be cleaned of all weld flux. The post is to be degreased by immersion in a heated caustic solution, then pickled in a heated sulfuric acid solution. The posts will then be

rinsed in a fresh water bath to remove any residual effects of the caustic or acid baths. The posts will then be immersed in a concentrated zinc ammonium chloride solution and allowed to air dry before being galvanized. The posts are to be hot-dip galvanized to the requirements of either ASTM A123 or ASTM A153. The posts galvanized coating shall be free of any debris or flux ash.

All galvanized exterior surfaces visually exposed are to be coated with a Urethane or Triglycidyl isocyanurate (TGIC) polyester powder to a minimum dry film thickness of 2.0 mils. Prior to application, the surfaces to be powder coated are to be mechanically etched by bursh blasting (ref. SSPC-SP7) and the zinc coated substrate preheated to 450 F for a minimum of one (1) in a gas-fired convection oven. The coating is electrostatically applied and cured by elevating the zinc coated substrate temperature to a minimum of 350 F in a gas-fired convection oven.

The pole will either be wrapped in a 3/16" U.V. inhibited plastic backed packing foam or cradled in a 1" rubberized foam base. The arms will be wrapped in a 3/16" U.V. inhibited plastic backed packing foam. The color will match Federal Color Chip # 16099.

SPECIFICATION FOR 16 UPRIGHT POST

The post shall be similar in appearance to D.C. Drawing Nos. 314, 315 and 324. The post shall be cast iron or cast aluminum. All components, regardless of the method by which they are produced, shall be uniform quality and appearance; true to pattern; fine surface texture; free from buckle, cracks, die marks, and all other defects peculiar to the method of production used, which many adversely affect the use appearance or strength of the component.

The components shall be carefully and thoroughly cleaned of all sand, scale, fins, cable anchors, welds, machine markings, projections, imperfections, etc.

All ornamentation and markings shall be sharp and clearly defined. the desired finish for these components shall be of the finest surface with a minimum of grinding, machining, dressing, etc., in accordance with normal foundry practices. Excess dressing shall be cause for rejection. Bolt holes must be clean and true with good alignment in the companion pieces to permit the interchange-ability of castings. Shafts shall be straight and true with not more than 3/8" deflection along the length when rotated on the end centers.

The District reserves the right to require the Contractor to submit a preproduction sample will be only to the specific mechanical features demonstrated by it and shall not constitute acceptance beyond that point.

The burden of demonstrating that the product he offers or manufactures does meet the requirements of this specification will lie entirely with the contractor. No part of any component except machined areas shall be primed, filled, painted, or otherwise treated in any way that may interfere with inspection or test of the same. The contractor shall cooperate in such inspections or test by furnishing ample facilities, help, and technical assistance to the District inspector.

Each cast iron component shall be thoroughly cleaned inside and out with a rust inhibiting hot phosphate type detergent solution prior to painting. After thoroughly cleaning and drying, each component shall be given a coat of primer inside and out, then a finish of two (2) coats of an two part epoxy paint system. The manufacturer shall give the first finish coat time to cure before applying the second coat. Each component shall be wrapped and/or boxed to protect the finished product during shipping and storage. Any damage the the finish shall be repaired by the Contractor at no additional cost to the District. The color will match Federal Color Chip # 16099.

SPECIFICATION FOR 18 UPRIGHT POST

The post shall be similar in appearance to D.C. Drawing Nos. 314, 315 and 326. The post shall be cast iron or cast aluminum. All components, regardless of the method by which they are produced, shall be uniform quality and appearance; true to pattern; fine surface texture; free from buckle, cracks, die marks, and all other defects peculiar to the method of production used, which many adversely affect the use appearance or strength of the component.

The components shall be carefully and thoroughly cleaned of all sand, scale, fins, cable anchors, welds, machine markings, projections, imperfections, etc. All ornamentation and markings shall be sharp and clearly defined. the desired finish for these components shall be of the finest surface with a minimum of grinding, machining, dressing, etc., in accordance with normal foundry practices. Excess dressing shall be cause for rejection. Bolt holes must be clean and true with good alignment in the companion pieces to permit the interchange-ability of castings. Shafts shall be straight and true with not more than 3/8" deflection along the length when rotated on the end centers.

The District reserves the right to require the Contractor to submit a reproduction sample will be only to the specific mechanical features demonstrated by it and shall not constitute acceptance beyond that point. The burden of demonstrating that the product he offers or manufactures does meet the requirements of this specification will lie entirely with the contractor. No part of any component except machined areas shall be primed, filled, painted, or otherwise treated in any way that may interfere with inspection or test of the same. The contractor shall cooperate in such inspections or test by furnishing ample facilities, help, and technical assistance to the District inspector.

Each cast iron component shall be thoroughly cleaned inside and out with a rust inhibiting hot phosphate type detergent solution prior to painting. After thoroughly cleaning and drying, each component shall be given a coat of primer inside and out, then a finish of two (2) coats of an two part epoxy paint system. The manufacturer shall give the first finish coat time to cure before applying the second coat. Each component shall be wrapped and/or boxed to protect the finished product during shipping and storage. Any damage the finish shall be repaired by the Contractor at no additional cost to the District. The color will match Federal Color Chip # 16099.

Specification for Twin 20 Steel/Cast Iron Post

The Intent of this specifications is to obtain a streetlight post of the same size and appearance as shown on District of Columbia, Department of Public Works, Drawing 20A-1923. The post shall consist of 5 (five) components, a steel shaft, cast iron clam shell base, crossarm and 2(two) casings.

The Shaft shall be fabricated from 11 gauge steel meeting ASTM-A595 GR A with a yield point of no less than 55,000 pounds per square inch, and have a 16 flat flute cross section. A cast steel anchor base shall be welded to the bottom of the shaft. A 4"x 6 2" hand hole with reinforced frame and cover shall be installed 10 inches above the base. Directly opposite a 2"-13 sq. nut for the ground stud shall be welded to the pole wall. The flutes shall be of equal size, true and straight when observed from the base toward the tenon. Misaligned, uneven or waves in the flutes shall be cause for rejection of the pole. A three (3) foot sample of the shaft must be submitted for approval before the start of fabrication. The sample must show the fluting, be galvanized and final coated. The sample shall be sent to: Department of Public Works, Streetlight Section, 8th Floor, 2000 14th Street, N.W., Washington, D.C., 20009, Attention Jama Abdi.

The shaft shall be cleaned of all rolled-in mill scale, impurities and non-metallic foreign materials. The welds will be cleaned of all weld flux. The shaft is to be degreased by immersion in a heated caustic solution, then pickled in a heated sulfuric acid solution. The shaft will then be rinsed in a fresh water bath to remove any residual effects of the caustic or acid baths. The shaft will then be immersed in a concentrated zinc ammonium chloride solution and allowed to air dry before being galvanized. The hot-dip galvanizing shall meet the requirements of either ASTM A123 or ASTM A153. The galvanized coating shall be free of any debris or flux ash.

All galvanized exterior surfaces visually exposed are to be coated with a Urethane or Triglycidyl isocyanurate (TGIC) polyester powder to a minimum dry film thickness of 2.0 mils. Prior to application, the surfaces to be powder coated are to be mechanically etched by brush blasting (ref. SSPC-SP7) and the zinc coated substrate preheated to 450 F for a minimum of one (1) hour in a gas-fired convection oven. The coating shall be electrostatically applied and cured by elevating the zinc coated substrate temperature to a minimum of 350 F in a gas-fired convection oven.

The shaft shall either be wrapped in a 3/16" U.V. inhibited plastic backed packing foam or cradled in a 1" rubberized foam base.

As part of the bid the manufacturer shall submit copies of the following certifications:

1. That the welds meet the requirements of AWS D1.1.
2. Material shall be provided for all ASTM numbers referred to in this specification.
3. copy of factory certification that it meet the requirement of American Institute of Steel Construction (AISC) category 1. the three (3) certification shall be submitted as part of the bid.

All cast components shall be made of either cast iron or cast aluminum. No matter which material is used in its construction the new post must accommodate existing D.C. #16 casing.

Samples are available to bidders for inspection. All components, regardless of the method by which they are produced, shall be uniform quality and appearance; true to pattern; fine surface texture; free from buckle, cracks, die marks, and all other defects peculiar to the method of production used, which many adversely affect the use appearance or strength of the component. The components shall be carefully and thoroughly cleaned of all sand, scale, fins, cable anchors, welds, machine markings, projections, imperfections, etc.

All ornamentation and markings shall be sharp and clearly defined. the desired finish for these components shall be of the finest surface with a minimum of grinding, machining, dressing, etc., in accordance with normal foundry practices. Excess dressing shall be cause for rejection. Bolt holes must be clean and true with good alignment in the companion pieces to permit the interchange-ability of castings. The cast components shall receive a coat of primer and two finish coats of a two part epoxy paint system. The bidder shall submit a sample of the paint system that he proposes to use. All cast components shall be wrapped and/or boxed to protect the finish during shipping and storage. All damage to the finish shall be repaired by the Contractor at no additional cost to the District. The color will match Federal Color Chip # 16099.

WOOD POLE

All wood poles for use in this contract will be Class 5 Southern Yellow Pine, Douglas Fir or Western Larch cut from live trees. All poles shall conform to the requirements of ANSI Standard 05.1. All poles may be air-seasoned, shed-dried, kiln-dried or conditioned or seasoned in any manner that conforms to AWWA Standards C1, C4 and M1, that will not materially damage the wood. The poles must be seasoned until a moisture content of 25% or less is reached. All poles shall be machine peeled and conform to ANSI Standard 05.1. All poles must be branded, the brand is to be located 12 feet from the butt end. The branding shall identify the supplier, pole length, class, year of treatment and preservative used, in accordance with AWWA Standard M6. The treatment charge number shall be stamped on the butt of the pole. The preservative used will be Creosote meeting requirement of AWWA P1, Penachlorophenol-in- petroleum meeting requirement of AWWA P8 or water-borne preservative suitable for pole treatment meeting requirement of APWA P5 and C4. All poles shall be free of evidence of bleeding or blooming regardless of the type of preservative used. There shall be no sludge depositions. Penetration of any preservative shall be a minimum of three (3) inches or 90% of the sapwood depth. Poles with less than 3" of sapwood shall have 100% penetration of the sapwood. Retention of creosote will be in accordance with AWWA Standards A1 and C4. Retention of Penachlorophenol-in-petroleum will be in accordance with AWWA Standards A1 and C4. The Contractor will supply the Engineer with Copies of any test reports that he receives from the pole supplier.

SPECIFICATION FOR STEEL TRANSFORMER BASE

The transformer base shall have dimensions as detailed on Drawing No.393. The base shall be fabricated from hot rolled carbon steel meeting ASTM-A36. The top and bottom plates shall be made of 3/4" minimum thick steel plate. The body of the base shall be made of 7 gage steel. The base will be provided with 4 (four) loose steel plate anchor clips to fasten the base to the anchor bolts. Each base shall be provided with 1"x 3" bolts with nuts and washers to connect the post shaft to the base. Each base will also include 4- 1"x 40" anchor bolts, nuts, washers and shims.

The base will be cleaned of all rolled-in mill scale, impurities and non-metallic foreign materials. The welds will be cleaned of all weld flux. The base is to be degreased by immersion in a heated caustic solution, then pickled in a heated sulfuric acid solution. The base will then be rinsed in a fresh water bath to remove any residual effects of the caustic or acid baths. The base will then be immersed in a concentrated zinc ammonium chloride solution and allowed to air dry before being galvanized. The base, door and anchor clips are to be hot-dip galvanized to the requirements of either ASTM A123 or ASTM A153.

SPECIFICATION FOR ALUMINUM TRANSFORMER BASE

The aluminum transformer base shall be similar in dimension to the steel transformer base. See Drawing No. 393. The aluminum shall be 356-T6 meeting ASTM -B108-87. Each base shall be supplied with galvanized steel washers to fasten the base down to the anchor bolts. Nuts and bolts to connect the shaft to the base shall be provided. A 1/2" - 13 UNC tapped hole shall be provided for grounding lug. The base shall meet the 1975 AASHTO requirements and approved by F.H.W.A.

PRECAST CONCRETE MANHOLE

The Contractor will submit catalog cuts of all precast man and hand holes that he proposes to install as part of this contract.

All structures to be installed in roadway or areas subject to vehicle loading shall meet AASHTO's loading. The Contractor will not use brick in adjusting the neck of the manhole to grade.

MANHOLE FRAME AND COVER

The frames and cover for use in this contract shall match the ones shown on standard drawing number. All covers shall be equipped with "DCSL cast into top. Each cover shall have two (2) 7/8" pick holes to allow the cover to be removed. The frame and cover shall match Neenah Foundry Company frame R-1642, lid type B

GROUND RODS

The ground rod shall be a high strength steel rod with an electrolytically bonded copper jacket. The rod shall have a minimum diameter of 3/4" and a minimum length of 10'. In all installations the rod shall be sized so that there is a minimum of eight (8) feet in contact with earth.

U GUARD WITH FLANGE

The guard shall be schedule 40 PVC furnished in 10 foot lengths. The guard shall be sized according to the size of cables that are to be protected. In no case shall the sized be smaller than 3 inch.

ARMS FOR USE ON WOOD POLES

The arms shall be galvanized steel, for mounting on wood poles, pipe size from 1 1/4 to 2 inch. All mounting and grounding hardware shall be supplied with the arm.

2.5 ft arm G.E. Cat # RBSCWH2.5X1.25GV or approved equal
4 ft arm G.E. Cat # RBSCWH4X1.25GV or approved equal
6 ft arm G.E. Cat # RBSCWH6X1.25GV or approved equal
8 ft arm G.E. Cat # RBSCWH8X2GV or approved equal
12 ft arm G.E. Cat # RBSCWH12X2GV or approved equal
16 ft arm G.E. Cat # RBSCWH16X2GV or approved equal

ALL OTHER SUPPLIES AND MATERIAL

The Contractor will submit three (3) catalog cuts along with one (1) sample for all parts and supplies that he proposed to use as part of this contract which are not covered by the Material Specifications. The Contract Administrator will return one copy of the catalog cut approved to the Contractor before any material is ordered. The sample will remain with the Contract Administrator during the life of the contract, and will be returned the Contractor at the end of the contract. Should the Contractor wish to make changes in the type or brand of material used, he will submit the catalog cuts and sample for approval as called for in this section before starting to use the material in the performance of the contract.

v. PAINT NEW AND EXISTING METALWORK:

This S.P. modifies and supplements 707 and makes reference to Steel Structures Painting Council (SSPC) Steel Structures Painting Manual, Volume II, Systems and Specifications.

(1) GENERAL - The Contractor shall apply a three-coat paint system as specified herein. The painting of structural steel and other metalwork shall include complete preparation of the metal surfaces, application and protection of the drying paint coatings, removal and proper disposal of existing paint, rust, millscale and hazardous waste, protection of workers and the environment and furnishing all labor, materials, tools, scaffolding and other equipment, and incidentals necessary for proper execution of the work.

Elements to be coated include the new and existing structural steel members, cross frames, diaphragms, shapes, plates, their connection components and steel bearings. Also included shall be all steel components of the bridge deck drainage system and their supports. Excluded from painting shall be light standards, sign structures, electrical equipment and galvanized steel.

Offsite Painting - If painting is conducted outside the District, the Contractor shall obtain all required permits and clearances required by the state and local government. Prior to beginning work, evidence shall be provided that the Contractor has complied with all regulations and requirements of those organizations and shall include with the documentation names, addresses and telephone numbers of state officials for verification by the Engineer.

(2) CAPABILITY OF WORKERS - All shop and field painting shall be performed by a Contractor/ Subcontractor certified by the Steel Structures Painting Council (SSPC) Painting Contractors Certification Program for Class 2 work and meet the requirements of SSPC-QP 1 for Contractor qualification and SSPC-QP 2 for hazardous paint removal prior to beginning work. The SSPC certification shall be provided to the District as part of the required submittals for this work. Failure to provide the required SSPC certification shall be grounds for disqualification of the painting Contractor.

(3) ENVIRONMENTAL REGULATIONS - The Contractor shall be subject to the requirements of D.C. Municipal Regulation (DCMR) Title 20, Section 605, for control of fugitive dust and the EPA Final Rule, dated September 11, 1998, for "National Volatile Organic Compound Emission Standards for Architectural Coatings. The Contractor, with the assistance of the Department of Public Works, shall obtain a permit from DCRA prior to engaging in blast cleaning and painting operations. A copy of the permit form is included in the Appendix to this document. Applicable portions of Section 605 is as follows:

(4) COATING SYSTEMS

(A) New structural steel shall receive the following coatings selected from the list of paint systems found below:

- Stripe Coat - All edges, including flanges, shop-installed nuts and bolts, and welds, shall receive a stripe coat of primer just prior to application of the primer coat. The stripe coat shall be brush applied. The paint shall either be constantly agitated, or stirred just prior to application.
- Primer - One shop coat of inorganic zinc-rich (IOZR) primer conforming to the requirements as specified herein to a dry film thickness (DFT) in accordance with manufacturer's recommendations. This coat shall be applied the same day of blast cleaning.
- Intermediate - One coat of epoxy paint conforming to the requirements specified herein, with a minimum DFT in accordance with manufacturer's recommendations.
- Finish - One coat of urethane topcoat, tinted as specified by DCDPW, conforming to the requirements specified herein with a minimum DFT in accordance with manufacturer's recommendations.

Following installation in the field, new steel shall receive touch-up coats on damaged areas as specified in (I), REPAIRS, of this S.P.

(B) All existing metal surfaces, except those specifically excluded, shall receive the following coatings selected from the list of paint systems found below.

- Primer - One coat of inorganic zinc-rich primer conforming to the requirements specified herein with a minimum dry film thickness (DFT) in accordance with manufacturer's recommendations.
- Intermediate - One coat of epoxy paint conforming to the requirements specified herein with a minimum DFT in accordance with manufacturer's recommendations.
- Finish - One coat of urethane topcoat, tinted as specified by DCDPW, conforming to the requirements specified herein with a minimum DFT in accordance with manufacturer's recommendations.

Epoxy-urethane paint systems, selected from the current approved lists of the Maryland State Highway Administration and the Virginia Department of Transportation, may be submitted for approval. Said systems shall be accompanied by full documentation, including the state's list of approved systems. All products, including thinners, for the complete system shall be from the same manufacturer.

(5) BOLTS AND BOLTED CONNECTIONS

- (A) All high strength bolts (AASHTO M164/ASTM A325) shall meet the requirements of 706.17, HIGH STRENGTH STEEL BOLTED CONNECTIONS.
- (B) Faying surfaces of new steel shall be shop coated with the IOZR primer as previously specified. IOZR primer shall cure in accordance with (I)(5) before bolting connections. In no case shall field primer be applied to any faying surfaces prior to field erection and installation of the fasteners.
- (C) If the Contractor exercises the option of applying the intermediate and finish coats in the shop, the faying surfaces shall be masked. Intermediate and finish coats shall be applied to exposed surfaces at bolted connections only after installation of the fasteners is complete.
- (D) Painting at connections of new steel to new steel shall be performed as follows:

After field installation and torquing of the fasteners has been completed, the fasteners shall be degreased and cleaned by blast cleaning or power tool cleaning in such a way that the shop coatings on the adjacent new steel are not damaged. This may be accomplished by masking the steel prior to blast cleaning or power tool cleaning, or they may be cleaned by vacuum blasting. The fastener components shall then be brush coated with an approved organic zinc-rich primer prior to the application of further coatings.

The exposed surfaces of new steel shall then be prepared in accordance with SSPC-SP1, Solvent Cleaning. The solvent cleaning shall be performed using either an approved emulsion or alkaline cleaner or by steam cleaning using an approved detergent or cleaner and followed by a steam or fresh water wash to remove detrimental residues, including oily contamination resulting from the bolting operation. The surfaces shall then be dried

or allowed to dry. Any damaged areas exhibiting rusting shall be repaired, as specified elsewhere, using the field primer. After cleaning and repair of damage, the field bolted connection areas shall then receive the intermediate and finish coats, as specified elsewhere.

(E) Painting at connections of new steel to existing steel shall be performed as follows:

After field installation and torquing of the fasteners is completed, the fasteners shall be degreased and cleaned by blast cleaning or power tool cleaning in such a way that the shop coatings on the adjacent new steel are not damaged. This may be accomplished by masking the steel prior to blast cleaning or power tool cleaning, or they may be cleaned by vacuum blasting. The fastener components shall then be brush coated with an approved organic zinc-rich primer prior to the application of further coatings.

The exposed surfaces of new steel shall be prepared in accordance with SSPC-SP 1, Solvent Cleaning. The solvent cleaning shall be performed using either an approved emulsion or alkaline cleaner, or by steam cleaning using an approved detergent or cleaner, and followed by a steam or fresh water wash to remove detrimental residues, including oily contamination resulting from the bolting operation. The surfaces shall then be dried or allowed to dry. Any damaged areas of new steel exhibiting rusting shall be repaired, as specified elsewhere, using the field primer. After cleaning and repair of damage, the field bolted connection areas shall then receive the intermediate and finish coats, as specified elsewhere.

Following solvent cleaning, all exposed surfaces of existing steel at the connection areas shall be blast cleaned in accordance with SSPC-SP 6 Commercial Blast Cleaning. All such surfaces shall then be primed, on the same day the blast cleaning is performed, using the field primer. After the connection areas have been primed, they shall then receive the intermediate and finish coat as specified elsewhere.

z. CONCRETE BONDING AGENTS:

This S.P. supplements 824.

(1) **GENERAL** - Alternative bonding agents for concrete surface repairs and bonding new concrete to existing, to be used in lieu of epoxy, may be considered as follows:

Bonding agent compound for bonding uncured concrete to existing concrete shall be Thorobond, Weld-Crete, Link, or approved equal with a polyvinyl acetate homopolymer base for surface bonding application.

The Contractor shall submit product specification sheets to the Engineer for approval.

Application procedure and temperature shall be in accordance with manufacturer's recommendation.

aa. SUBCONTRACTING:

The subcontractor approval request form included herein must be used to request approval of subcontractors on this project. The form must be completed for each subcontractor requested for approval and submitted to:

Attention:
Contracting Officer
Department of Public Works
Contract Compliance Division
2000 14th Street, N.W., 5th Floor
Washington, D.C. 20009

Copies of these forms are available upon request.

Copies of subcontracts shall be made available for review at any time by representatives of the Department of Public Works and Federal Highway Administration. July 10, 2007

J. ATTACHMENTS AND ENCLOSURES

- Appendix A DC NHS Asset Preservation Highway Segments*
- Appendix B Asset Performance Measures*
- Appendix C Pavement Asset Data*
- Appendix D DC Parking Restrictions Along Study Segments*
- Appendix E Catch Basins*
- Appendix F Inventory and Condition of Specific Assets*
- Appendix G Bridge Inspection Information*
- Appendix H Tunnel Information*
- Appendix I Snow Accumulation Information (Reagan National Airport)*
- Appendix J Highway Lighting Information*
- Appendix K Sample Exercise and Past Performance Table*
- Appendix L Relevant Contracts*
- Appendix M Overheight Vehicle Detectors*
- Appendix N Pepco Requirements*
- Appendix O Wheelchair and Bicycle Ramp Specifications*
- Appendix P Erosion and Sediment Control Specifications*

CD

- Asset Management Plan
- DC DPW Standard Drawings
- Pavement Asset Databases
- Snow Accumulation Database

K. REPRESENTATIONS AND CERTIFICATIONS

K.1. Certification Regarding A Drug-Free Workplace (July 1990)

(a) Definitions

As used in this provision,

1. “Controlled substance” means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 – 1308.15
2. “Conviction” means a finding of guilt (including a plea of *nolo contendere*) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.
3. “Criminal drug statute” means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession or use of any controlled substance.
4. “Drug-free workplace” means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance, whether or not such sites are collocated with the employer’s premises, or are at an off-site location.
5. “Employee” means an employee of a Contractor directly engaged in the performance of work under a Government contract. “Directly engaged” is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.
6. “Individual” means an Offeror/contractor that has no more than one employee including the Offeror/contractor.

(b) By submission of its offer, the Offeror, if other than an individual, who is making an offer that equals or exceeds \$25,000, certifies and agrees, that with respect to all employees of the Offeror to be employed under a contract resulting from this solicitation, it will, not later than thirty (30) calendar days after contract award (unless a longer period is agreed to in writing), for contracts of 30 calendar days or more performance duration; or as soon as possible for contracts of less than 30 calendar days’ performance duration; but in any case, by a date prior to the date on which performance is expected to be completed:

1. Publish a statement notifying such employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition;
2. Establish an ongoing drug-free awareness program to inform such employees about:

- (i) The dangers of drug abuse in (or at) the workplace (if the worksite is not located physically within the employer's premises);
 - (ii) The Contractor's policy of maintaining a drug-free workplace and workforce;
 - (iii) Any available counseling, rehabilitation, and employee assistance programs; and
 - (iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
 3. Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph B.1. of this provision;
 4. Notify such employees in writing in the statement required by subparagraph B.1 of this provision that, as a condition of continued employment on the contract resulting from this solicitation, the employee will:
 - (i) Abide by the terms of the statement; and
 - (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 calendar days after such conviction.
 5. Notify the Contracting Officer in writing within 10 calendar days after receiving notice under section subdivision B.4. (ii) of this provision, from an employee, or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee, and if he or she is one of the named key personnel, the name of the individual as well;
 6. Within thirty (30) calendar days of receipt of notice under subdivision (ii) of this provision of a conviction, the Contractor shall take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in or at the workplace:
 - (i) Take appropriate personnel action against such employee, up to and including termination; or
 - (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
 7. Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs B.1 through B.6 of this provision.
- (c) By submission of its offer, the Offeror, if an individual who is making an offer of any dollar value, certifies and agrees that the Offeror will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in the performance of the contract resulting from this solicitation.

(d) Failure of the Offeror to provide the certification required by paragraphs (b) or (c) of this provision, renders the Offeror unqualified and ineligible for award. (See FAR 9.104-1(g) and 19.602(a) (2) (i.)

(e) In addition to other remedies available to the District the certification in sections (b) or (c) of this provision concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18. United States Code, Section 1001.

K.2. Certification of Toxic Chemical Release Reporting.

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that --

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in §313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42U.S.C.11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42U.S.C.13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in §313(a) and (g) of EPCRA and §6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [Check each block that is applicable.]

* (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under §313(c) of EPCRA, 42 U.S.C.11023(c);

* (ii) The facility does not have 10 or more full-time employees as specified in §313(b)(1)(A) of EPCRA, 42 U.S.C.11023(b)(1)(A);

* (iii) The facility does not meet the reporting thresholds of toxic chemicals established under §313(f) of EPCRA, 42 U.S.C.11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

* (iv) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in §19.102 of the Federal Acquisition Regulation; or

* (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

L. INSTRUCTIONS TO OFFERORS

L.1. General

All proposals must be submitted in the manner specified by this section. Offerors that do not comply with these instructions, as well as the instructions in other sections of this RFP, risk losing consideration of their proposals.

QUESTIONS: Questions on the content of this RFP, process, and procedures must be submitted to the persons specified in Section G. Where written questions are submitted, it is recommended that prospective Offers call on the following business day to confirm receipt of their questions.

A Pre-Bid Conference will be held for the purpose of answering any questions relative to the RFP and the scope of services on November 19 at 10:00 a.m. This conference will be held in the 2nd Floor Conference Room at the address specified in L.2.

AVAILABILITY OF DOCUMENTS: Documents referenced in this RFP will be available for viewing at 2000 14th Street, 2d floor.

The *District of Columbia Department of Public Works Standard Specifications for Highways and Structures- 1996* may be purchased for \$20.

L.2. Place, Date, and Time of Delivery

All proposals must be delivered **no later than 2:00 p.m. on December 7, 1999**. Proposals delivered after this time may not be considered for award. Proposals submitted by facsimile or electronic mail will not be considered. Proposals must be submitted to:

Department of Public Works
Office of Management Services
Construction Procurement Support Branch
2000 14th Street, 2nd Floor
Washington, D.C. 20009

L.3. Proposal Format and Organization

The offeror's proposal in response to this solicitation shall be a complete and accurate representation of his or her ability to perform the work described and comply with the specifications and terms and conditions set forth in Sections A through K. To be considered fully compliant, the proposal must set forth complete and accurate information as required by this section and other sections of this solicitation. Telephonic, telegraphic, or facsimile proposals will not be accepted. Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation; on the contrary, they

may be construed as evidence of the Offeror's inattention to cost consciousness. Intricate artwork, expensive paper and bindings, and expensive visual or presentational aids are neither necessary nor desired.

- All proposals must be submitted in English on 8.5" by 11" bond paper, using 1-1/2 inch margins all around.
- Proposals must be typewritten in Times New Roman or an equivalent font of not less than twelve (12) points in size (excluding endnotes, footnotes, headers, or footers, and subscripts or superscripts, which may be no less than (10) points in size, and must be in the same typeface as the main text).
- Price proposals must be expressed exclusively in terms of U.S. currency, and be segregated physically from the technical and program management sections of the proposal. All price information should be contained on the forms contained in Section B.

Proposals must be organized in three volumes: Technical, Staffing/Management, and Cost. Each volume must be provided in a separate, loose-leaf, three-ring binder on 8.5" x 11" paper. Each volume must contain a cover that clearly identifies the name of the offeror, the title of this RFP, and the title of the volume.

Each volume must contain a table of contents clearly showing all parts, sections, and subsections contained within the binder. In addition, each of these parts, sections, and subsections must be separated by tab dividers that are labeled with the name of the part, section, or subsection.

Offerors must submit 10 copies of each volume of their proposal. Offerors also must submit an electronic version of their proposal in Microsoft Office 97 format on clearly marked 3.5" diskettes.

Offerors must include a cover letter, **not to exceed 2 pages**, that highlights the offeror's capabilities to perform the tasks set forth in this RFP. This cover letter will provide the evaluation team with a general understanding of the offeror's proposal and will not be evaluated.

Offerors may deviate from the instructions set forth in this section. All deviations, however, must be clearly explained, and failure to adequately explain the need for any deviation could result in an unfavorable evaluation of an offeror's proposal.

L.3.1. Technical Proposal (not to exceed 85 pages)

Technical proposals must provide a detailed description of how the offeror intends to accomplish the tasks and meet the performance standards set forth in this RFP. The technical proposal must clearly indicate how the offeror would proceed if awarded the contract.

The technical proposal must be organized as follows:

Executive Summary (not to exceed 5 pages): Provide an overview of the technical approach. Clearly include any assumptions made in responding to the RFP any exceptions made in the offer. The executive summary also must identify any uncertainties and briefly explain how the offeror intends to address those uncertainties.

Summary of Work Plan: Although a complete work plan will be required 30 days after award of the contract, offerors must explain how they intend to conduct each of the tasks set forth in Section C and meet each of the performance standards set forth in Appendix B. The summary must clearly identify:

- The resources, including equipment, materials, and staff, necessary and available to conduct the work;
- The offeror's ability to respond quickly to emergency maintenance requirements.
- The techniques and practices that will be used to conduct the work, including any innovative techniques and practices, that may be used over the life of the contract;
- Any assumptions, deviations, or exceptions to the RFP;
- Any technical uncertainties and specific proposals for resolving those uncertainties;
- Any other issues the offeror believes are important to meeting the performance standards set forth in this RFP.

The summary must be formatted with individual sections that correspond to the bid tables set forth in Section B (e.g., "Pavement Surface," "Manholes," "Roadway Cleaning," etc.). These sections must be limited to 1-2 pages each, except for the tunnel rehabilitation work, which must be limited to 30 pages.

Tunnel rehabilitation is an extremely important part of this project. Offeror's must explain how they intend to meet the performance measures for tunnels, preferably within the first year of the contract. Offerors are encouraged to propose their own solutions to tunnel rehabilitation and maintenance, using the tunnel report contained in this RFP as a guide. Offerors are not required to strictly follow the recommended actions contained in the tunnel report.

Summary of Quality Assurance/Quality Control Plan: Although a complete quality assurance/quality control plan will be required after award of the contract, offerors must include information regarding the key elements of that plan. This must include information regarding:

- The offeror's plan to ensure that quality work is performed.
- The offeror's plan to monitor quality after work has been completed.
- The offeror's facilities, equipment, and materials available to perform all tasks set forth in this RFP.
- The offeror's plan to ensure that all equipment remains in good working order and is available to perform routine and emergency maintenance.
- The offeror's plan to ensure that all materials meet appropriate specifications for strength, density, temperature, and other factors before those materials are used in a maintenance activity.

Summary of Traffic Control Plan. Although a complete traffic control plan will be required 30 days after award, offerors must include a summary of their plans to control traffic in and around work areas. This must include information regarding the following:

- The offeror’s plan to ensure safety of the public and of employees; and
- The resources needed for adequate traffic control.

L.3.2. Staffing/Management Proposal (not to exceed 80 pages)

Staffing/Management proposals must clearly describe how the offeror intends to staff all of the tasks set forth in the RFP and how the offeror intends to manage staff to ensure that work is completed to the performance standards set forth in this RFP. If subcontractors are used, the staffing/management proposal must describe how the offeror intends to manage and provide oversight of all subcontractor activities.

The staffing/management proposal must be organized as follows:

Executive Summary (not to exceed 5 pages): Provide an overview of how the offeror intends to staff and manage all of the tasks in this RFP.

Summary of Staffing/Management Plan): Although a complete staffing/management plan will be required 30 days after award, offerors must explain how they intend to provide staff and management support to ensure that all tasks are completed to the performance standards set forth in this RFP. At a minimum, offerors must describe:

- The overall program or project manager, including a resume;
- The single key personnel responsible for each asset management area set forth in Section C of this RFP, including names, proposed title, and brief summaries of relevant experience;
- How the offeror intends to ensure that staff other than key personnel, including staff employed by subcontractors, will be available throughout the life of the contract;
- The offeror’s plan to ensure that all employees, including subcontractors, have adequate training and understand the requirements of their functions;
- The offeror’s task order management process;
- The offeror’s ability to attend regular meetings with DC DPW and FHWA officials on short notice; and
- The procedures and plans for managing subcontractor performance.

For purposes of this section, key personnel include the overall program manager and project managers for each task area set forth in Section C of this RFP.

Experience and Past Performance: Offerors must describe their experience, as well as the experience of any proposed subcontractors, in conducting all tasks set forth in this RFP and in project management for projects of comparable scope and complexity. This section must be formatted to follow the tasks set forth in Section C of this RFP. For each task, offerors must include:

- A brief description of the relevant technical or task-specific experience, including the budget for the project and the period of performance;
- A brief description of the relevant program management experience;
- A point of contact that may be used as a reference; and
- A listing of key personnel involved in the project that also are proposed in response to this RFP.

In addition to a narrative presentation of this information, offerors must provide an experience and past performance matrix. The form for this matrix is included as Appendix K to this RFP.

L.3.3. Cost Proposal.

The District may award this contract based upon the initial offers received, without discussions with the offerors. As a result, offers must contain the offerors' best terms, conditions, and price.

The cost proposal must consist solely of the documents contained in Section B, including cost and pricing data. Offerors may, however, include a narrative describing or explaining their cost proposal, and this narrative must not exceed ten pages.

L.4. Conflicts of Interest

It is the District of Columbia's policy to award contracts to only those offerors whose objectivity is not impaired because of any related past, present, or planned interest, financial or otherwise, in organizations regulated by the District or in organizations whose interests may be substantially affected by District activities. Based on this policy:

(a) Offerors shall describe, in a concise manner, all past, present or planned organizational, financial, contractual or other interests with organizations regulated by the District or with organizations whose interests may be substantially affected by District activities, and which is related to the work under this solicitation. The interests described shall include those of the proposer, its affiliates, proposed consultants, proposed subcontractors and key personnel of any of the above. Past interest shall be limited to within one year of the date of the offeror's technical proposal. Key personnel shall include any person owning more than a 20% interest in the offeror, and the offeror's corporate officers, its senior managers and any employee who is responsible for making a decision or taking an action on this contract where the decision or action can have an economic or other impact on the interests of a regulated or affected organization.

(b) Offeror shall describe why, in light of any interests identified in (a) above, performance of the proposed contract can be accomplished in an impartial and objective manner.

(c) In the absence of any relevant interest identified in (a) above, the offeror shall submit in its proposal a statement that to its best knowledge and belief, no affiliation exists relevant to possible conflicts of interest. The offeror must obtain the same information from potential subcontractors prior to award of a subcontract.

(d) The Contracting Officer will review all statements submitted and may require additional relevant information from the offeror. All such information, and any other relevant information known to the District, will be used to determine whether an award to the offeror may create a conflict of interest. If such conflict of interest is found to exist, the Contracting Officer may (1) disqualify the offeror, or (2) determine that it is otherwise in the best interest of the District to contract with the offeror and include appropriate provisions to mitigate or avoid such conflict in the contract awarded.

(e) The refusal to provide the disclosure or representation, or any additional information required, may result in disqualification of the offeror for award. If nondisclosure or misrepresentation is discovered after award, the resulting contract may be terminated. If after award, the Contractor discovers a conflict of interest with respect to the contract awarded as a result of this solicitation, which could not reasonably have been known prior to award, an immediate and full disclosure shall be made in writing to the Contracting Officer. The disclosure shall include a full description of the conflict, a description of the action the Contractor has taken or proposes to take, to avoid or mitigate such conflict. The Contracting Officer may, however, terminate the contract for convenience if he or she deems that termination is in the best interest of the District.

L.5. Examination Of Solicitation

Offerors are expected to thoroughly and completely examine this solicitation and all of its attachments, enclosures, and source documents. Failure to do so will be at the Offeror's risk.

Offeror's also must conduct their own evaluation of the assets covered by this RFP. Although this RFP contains information regarding the quality and quantity of assets to be managed, this information is provided only as guidance. The District makes no claim that the information is either accurate or complete.

L.6. Restriction on Disclosure and Use of Data

Offerors who include in their proposals data that they do not want disclosed to the public or used by the District except for the purposes of this procurement process shall:

a. Mark the title page with the following legend:

"This proposal includes data that shall not be disclosed outside of the District and shall not be duplicated, used, or disclosed in whole or in part for any purpose except for the purposes of this procurement process. If a contract is awarded to this Offeror as a result of or in connection with the submission of these data, however, the District shall have the right to duplicate, use, or disclose said data to an extent consistent with the District's need during the procurement process. This restriction does not limit the District's right to use, without restriction, information contained in these proposals if it is obtained from another source. The data subject to this restriction are contained in sheets/pages (Offerors are to insert numbers or other identification of sheet/pages)."

- b. Offerors are to mark each subsequent sheet/page of data they wish to restrict with the following legend:

"Use or disclosure of data contained on this sheet/page is subject to the restriction on the title page of this proposal."

L.7 Explanations To Prospective Offerors

Any prospective Offeror desiring an explanation or interpretation of this solicitation must request it in writing. Requests must be directed to the individual identified in Section G(2). Any information given to a prospective Offeror concerning a solicitation will be furnished promptly to all other prospective Offerors as an amendment to the solicitation, if that information is necessary in submitting offers or if the lack of it would be prejudicial to any other prospective Offerors. Oral explanations or instructions given before the award of the agreement will not be binding.

L.8 Protests

In accordance with the provisions of Section 908 of the District Procurement Practices Act of 1985 (the "Act"), as amended, D.C. Code section 1-1189.8 (Supp. 1997), all protests concerning this procurement shall be filed with the District Contract Appeals Board (which has original jurisdiction to decide all protests of solicitations or awards), in accordance with 45 DCR 1358 through 1401 and 1414 through 1436 (March 13, 1998). The address of the Contract Appeals Board is 717 14th Street, N.W., Room 430, Washington, D.C. 20005.

L.9 Term of Proposal Validity

Offerors must include a statement that proposals will (at minimum) remain valid for a period of ninety (90) calendar days.

M. EVALUATION CRITERIA

M.1. Technical Solutions and Project Approach

Technical proposals will be rated based upon the extent to which offerors demonstrate, in clear and concise language, their experience, knowledge and understanding of issues relating to preservation and maintenance of the assets covered by this RFP. Offerors should refer to section L.3.1. of this RFP for instructions regarding the format of technical proposals.

In evaluating proposals, the following criteria will be used:

- M.1.a. The extent to which the Prime Contractor demonstrates experience, knowledge, and understanding of construction, preservation, and maintenance for all of the assets referenced in this RFP. Experience, knowledge, and understanding should be demonstrated in each of the specific task areas identified in Section C of this RFP.
- M.1.b. The extent to which offerors provide a clear and concise plan for meeting all of the performance standards set forth in Appendix B. This includes staffing, materials, and equipment, as well as design and construction methods, environmental protection, functional efficiency and flexibility, traffic management and protection, coordination with utilities, government agencies, and other organizations, and quick response and/or emergency asset management and maintenance activities.
- M.1.c. The extent to which proposed subcontractors, for the specific activities that they will conduct, demonstrate experience, knowledge and understanding of highway operations and maintenance for the assets referenced in this RFP.
- M.1.d. The extent to which the Prime Contractor and subcontractors demonstrate experience, knowledge and understanding of key safety issues, including work zone safety, worker protection, safety for pedestrians, bicyclists, and other non-vehicle uses, and the safety implications of poorly maintained or repaired assets.
- M.1.e. Experience, knowledge and understanding in using innovative techniques, processes, or materials related to highway operations and maintenance of the assets referenced in this RFP, including whether the offeror's potential use of innovation is likely to enhance the ability to meet the performance standards set forth in this RFP.
- M.1.f. The extent to which offerors demonstrate knowledge and understanding of the type and level of effort necessary to ensure that all assets covered by this RFP meet the performance measures as quickly as possible, preferably within the first year of performance.

M.2. Staffing, Quality Control/Quality Assurance, and Management

M.2.a. Management Plan

- M.2.a.1. The extent to which the Prime Contractor's management plan demonstrates the ability to maintain and preserve assets in compliance with the performance standards set forth in this RFP.
- M.2.a.2. The extent to which the Prime Contractor's management plan demonstrates the ability to effectively manage the proposed subcontractors.
- M.2.a.3. The extent to which the management plan demonstrates the ability to control costs and reduce financial risks to the government.
- M.2.a.4. The extent to which the management plan demonstrates the availability of staff and resources, over the term of the contract, for routine and emergency/fast response activities.

M.2.b. Quality Assurance/Quality Control Plan

The extent to which the Prime Contractor's quality assurance/quality control plan is likely to ensure that all tasks meet the performance standards set forth in this RFP, including tasks performed by the subcontractors.

M.2.c. Staffing Plan

- M.2.c.1. The qualifications and experience of key personnel, for the Prime Contractor and the subcontractors, related to asset preservation and maintenance of the NHS assets referenced in this RFP.
- M.2.c.2. The extent to which key personnel are available for the term of the proposed contract.
- M.2.c.3. The extent to which certified local business enterprises, certified disadvantaged business enterprises, and businesses located in enterprise zones are represented.

M.3. Past Performance

The extent to which the Prime Contractor's and subcontractor's experience and past performance on asset preservation, maintenance, and management contracts demonstrates a likelihood of successfully performing all of the tasks set forth in this RFP.

M.4. Cost

The extent to which proposed costs are realistic and reflect the likely overall cost to the government over the term of the contract. Costs considered in the evaluation process will

include all fixed price costs set forth in Section B, including the option years, and any of the costs associated with the additive alternates that are accepted by the District.

M.5. Basis for Award

M.5.a. Most Advantageous

The Government will accept the offer that is considered most advantageous to the government, based upon an evaluation of all of the factors set forth in this section.

M.5.b. Relative Importance

In evaluating proposals, the criteria set forth in this section will be provided the following weights:

Technical	Experience, knowledge and understanding of issues relating to preservation and maintenance of the assets covered by this RFP. Soundness of technical approach for meeting the performance measures for all of the assets referenced in Section C.	20%
Staffing, Quality Control/Quality Assurance, Management	Staffing Plan	5%
	Management Plan	5%
	Quality Control/Quality Assurance Plan	5%
Past Performance	The extent to which the Prime Contractor's and subcontractors' past performance on similar asset preservation, maintenance, and management contracts demonstrates a likelihood of successfully performing all of the tasks set forth in this RFP.	15%
Cost	The extent to which proposed costs are realistic and reflect the likely overall cost to the government over the term of the contract	50%