

# **Barney Circle Freeway Modification Project Design Public Hearing Report**

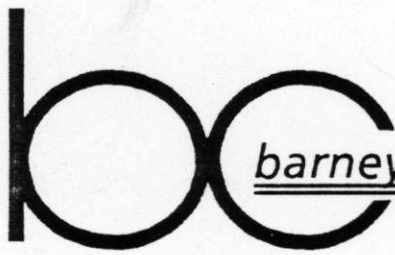
*prepared by the  
District of Columbia  
Department of Public Works  
and  
U.S. Department of Transportation  
Federal Highway Administration*

***Design Public Hearing  
May 11 & 12, 1988***

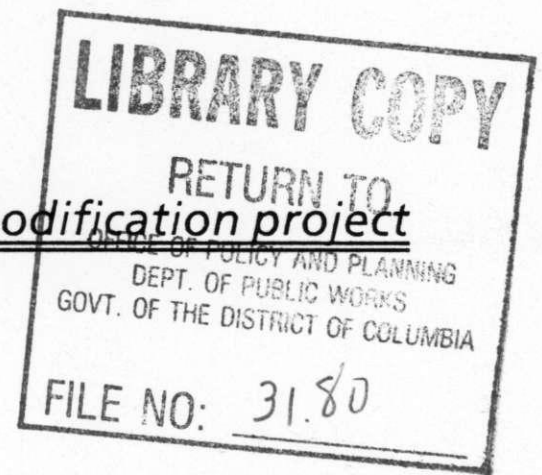
*with the assistance of:*

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barney circle freeway modification project



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GOVERNMENT OF THE  
DISTRICT OF COLUMBIA

MARION BARRY, JR., MAYOR

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BARNEY CIRCLE FREEWAY MODIFICATION PROJECT  
DESIGN PUBLIC HEARING REPORT

I. INTRODUCTION

Project Description and Need

The Barney Circle Freeway Modification Project represents a long-standing commitment of both the District of Columbia Department of Public Works (DCDPW) and the Federal Highway Administration (FHWA) to meet the transportation needs of Northeast and Southeast Washington D.C. The project (see Figure 1-1) would connect the Southeast/Southwest (SE/SW) Freeway with the Anacostia Freeway by constructing a new freeway and bridge across the Anacostia River and a parkway along its west bank in the vicinity of Barney Circle. This proposed action is directed at reducing the level of through traffic on local, residential streets by providing direct highway access between central Washington and its outlying areas to the north and east and eliminates a serious gap in the regional transportation system.

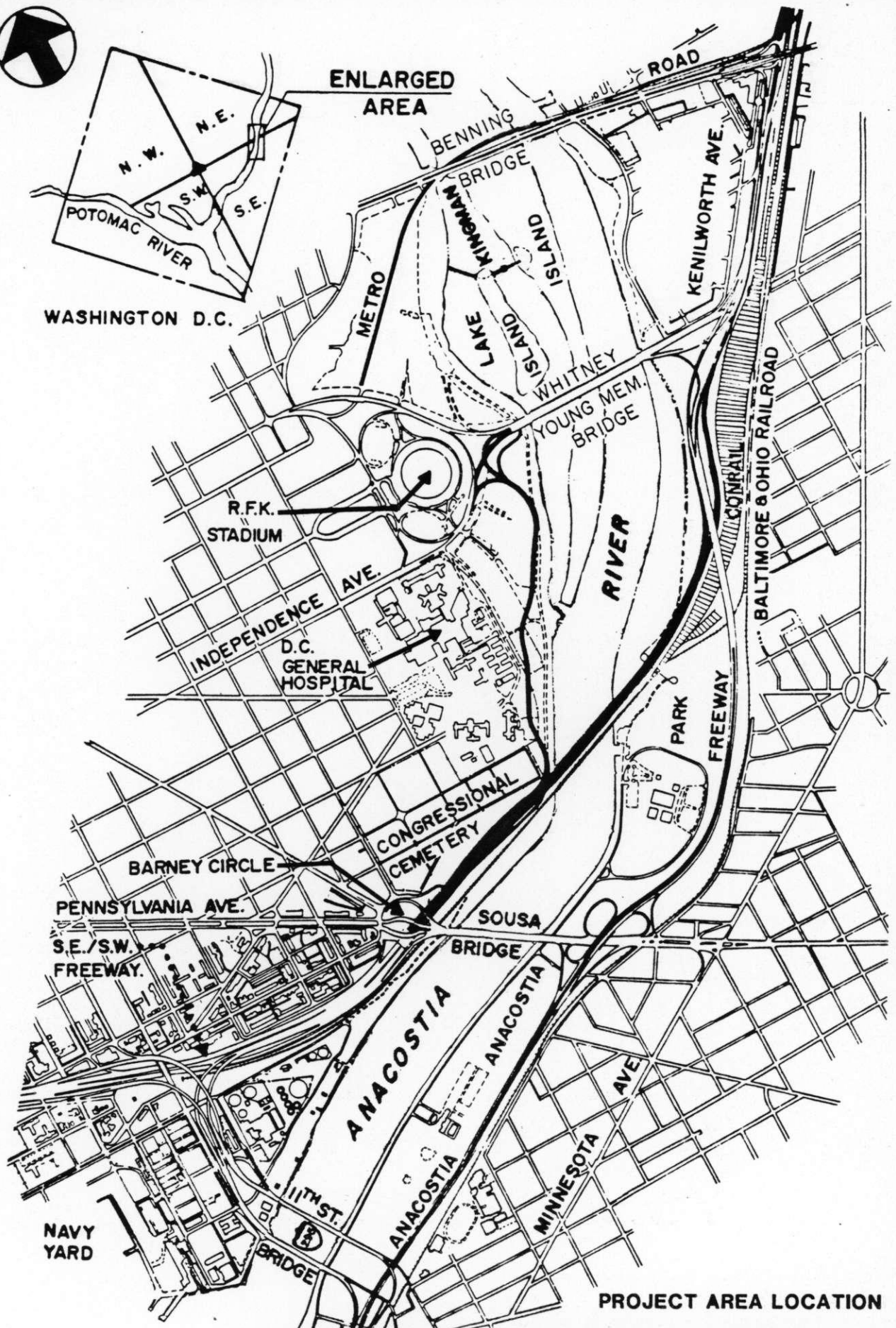
A Transportation System Management (TSM) plan is being formulated in conjunction with this project. This would additionally reduce the level of through traffic on neighborhood streets by employing measures such as changing directional traffic flows on certain streets, modifying traffic signalization, and restricting turning movements at specific locations. All TSM measures have been and will continue to be developed with the assistance of community input received at meetings of the Capitol Hill Traffic Management Task Force\* and meetings with community groups located east of the Anacostia River.

The Barney Circle Freeway Modification Project has been developed with federal and local agency input. This coordination ensures compatibility with agency goals and objectives. For example, National Park Service (NPS) long range goals for Anacostia Park have been considered in the choice of a preferred design option. Additionally, as discussed in this report, stipulations of the Memorandum of Agreement (MOA) (see Appendix A) signed by FHWA, the Advisory Council on Historic Preservation, and the District Historic Preservation Officer have been adhered to.

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\* A group composed of representatives from the District, the Advisory Neighborhood Commissions, the Congressional Cemetery Association, the Capitol Hill Restoration Society, and other community organizations and interested citizens.





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BARNEY CIRCLE  
FREEWAY  
MODIFICATION  
FIGURE 1-1



## Process and Advancement of the Project

The Barney Circle Freeway Modification Project was divided into a conceptual, alternatives development phase and a preliminary engineering and design phase. In the first phase the "no-build" and four "build" alternatives and associated impacts were developed and analyzed. The conceptual phase concluded with a Location Public Hearing in March 1983 to solicit public comments on these alternatives, and with the subsequent publication in August 1983 of the Barney Circle Final Environmental Impact Statement (FEIS).

Based on comments received at the Location Public Hearing, written comments from the community on the FEIS, and a full technical evaluation of impacts associated with each alternative, Alternative 1/2 was chosen as the Selected Alternative. Following completion of the FEIS the Federal Highway Administration granted location approval for the Selected Alternative 1/2 and the preliminary design process was then initiated.

The preliminary engineering and design phase, following the Location Public Hearing, consisted of refining and preparing preliminary design plans for each element of the Selected Alternative, as well as the other remaining proposed project components such as Anacostia Park improvements, transportation-related safety improvements for adjacent neighborhoods, and the development of TSM measures. At this stage the project and route location have been approved, design refinements have been considered, and a preferred design is proposed by the District.

The purpose of the Design Public Hearing, the culmination of the preliminary engineering and design phase, is to ensure that an opportunity is afforded for effective participation by interested persons in the process of determining major design features of a Federal-aid highway, and to provide a public forum that affords a full opportunity for presenting views on major highway design features, including the social, economic, environmental, and other effects of alternative designs. All community comments will be considered in development of the final design plans.

None of the refinements to the Selected Alternative, as discussed in this report, adversely affect the social, economic, or environmental conditions of the study area in comparison to the original FEIS alternative. No residences or businesses will be relocated due to this project. Further details of the Selected Alternative and its impacts can be found in the FEIS previously completed for this project.

As detailed in Section IV, the Barney Circle Freeway Modification Project is estimated to cost approximately \$143 million to

construct. Several steps must be executed to advance this project from the Design Public Hearing to its construction stage. These include obtaining approval of preliminary plans, preparation of final plans, specifications, and detailed project cost estimates; receiving authority to acquire right-of-way; determining construction staging areas; securing necessary permits from the Coast Guard and the National Park Service; developing an implementation plan for Phase I TSM measures; and further coordination with community civic groups and interested citizens.

#### Community and Agency Participation

After the Location Public Hearing and concurrently with developing preliminary engineering and design plans for Selected Alternative 1/2, the District initiated a forum for community participation. Two steering committees were formed: the Technical Coordinating Committee (TCC), composed of government agency representatives; and the Citizens Advisory Group (CAG), composed of representatives from civic and community groups as well as concerned residents of the project area. CAG membership included representatives from all the Advisory Neighborhood Commissions (ANC) and residents from Capitol Hill, Lincoln Park, Anacostia, and elsewhere in the project area. In addition, other groups such as the Congressional Cemetery Association, the Capitol Hill Restoration Society, and the Sierra Club were involved.

The community meetings were held to obtain the community's comments and to advance the project to its design completion through the community participation mechanism. Project design issues were examined and analyzed based on comments expressed by both committees during the community participation process. Specific input is discussed for each project element in Section II. TCC and CAG meetings held as part of this project are listed as follows:

<u>1984</u>	<u>1985</u>	<u>1988</u>
June 11 (TCC)	April 15 (TCC)	January 11 (TCC)
June 12 (CAG)	April 16 (CAG)	January 12 (CAG)
July 9 (TCC)	July 8 (TCC)	April 18 (TCC)
July 10 (CAG)	July 9 (CAG)	April 19 (CAG)
August 13 (TCC)		
August 14 (CAG)		
December 10 (TCC)		
December 11 (CAG)		

No TCC or CAG meetings were held in 1986 or 1987 while issues of funding and park coordination were discussed. DCDPW and their

consultants met with the following ANC, community, and civic associations:

Congressional Cemetery Association (CCA)	June, 1984
ANC 6C	September 27, 1984
Fort Dupont Civic Association	October 1, 1984
ANC 6A/6B	October 30, 1984
East Washington Park Citizens Association	November 7, 1984
Capitol Hill Restoration Society	November 13, 1984
Committee of 100	November 15, 1984
ANC 6C	November 29, 1984
ANC 2D	December 3, 1984
CCA	March 4, 1985
CCA	March 7, 1985
Capitol Hill Restoration Society	May 13, 1985
ANC 6B	May 14, 1985
River Terrace Citizens Association	May 15, 1985
ANC 2D	June 3, 1985
CCA	September 30, 1985

In addition, approximately 50 meetings of the Capitol Hill Traffic Management Task Force have been held since its inception in 1982 as the 6A/6B Neighborhood Traffic Management Task Force. In the past two years the Task Force has met regularly, usually on a monthly basis.

## II. DESIGN ALTERNATIVES

The Location Public Hearing and FEIS concluded with several unresolved design issues for the Selected Alternative 1/2. These issues were further discussed during the preliminary engineering and design phase of the project and preferred solutions developed. The following section discusses each design issue, presenting its FEIS design, input received from the community, alternatives suggested, and the preferred design refinement. Beneficial and adverse impacts of the preferred option are briefly discussed. To facilitate understanding of this complex project, the discussion is divided into seven major components: the parkway, freeway, freeway bridge, Anacostia Park, Kenilworth Avenue safety improvements, other transportation safety improvements, and Transportation System Management (TSM) measures. The recommended design refinements over the FEIS design are summarized for each project component.

A re-evaluation of the FEIS to determine whether environmental conditions and anticipated impacts of the Proposed Action have significantly changed was performed and is summarized in Section III.

### 1. PARKWAY

#### FEIS Selected Alternative

The parkway runs generally from Barney Circle to East Capitol Street on the west bank of the Anacostia River. The FEIS selected parkway configuration consists of a four-lane roadway with a median of varying width. At the parkway's terminus with East Capitol Street an at-grade intersection with Independence Avenue is proposed. South of East Capitol Street the parkway would be two lanes each direction to the river crossing and then narrow to one lane each way to merge with the two inbound lanes of the proposed freeway and connect to the SE/SW Freeway. The FEIS proposed design speed of the parkway is 35 mph. Ramps connecting the parkway to Barney Circle and Pennsylvania Avenue would be included in this configuration, but would be used only for events at the Robert F. Kennedy Memorial (RFK) Stadium.

#### Design Phase Refinements Considered

The design phase focused on reducing noise and visual impacts on Congressional Cemetery, RFK Stadium parking lot takings, conversion of parkland to highway uses, and addressing safety issues while meeting defined transportation needs.

Alignment. Both straight and curvilinear alignments for the parkway were considered. A straight alignment would use slightly less parkland but create a less "parklike" atmosphere. Additionally, a straight alignment encourages higher speeds. Curvilinear alignments, while more "parklike", can be hazardous for pedestrians to cross because sight distance is shorter. A curvilinear alignment can leave larger areas of land in park use by shifting the roadway towards park boundaries. For this project a curvilinear alignment is preferred for its enhancement of the park setting and encouragement of lower vehicle speeds.

Number of Lanes. Refinements of the 4-lane FEIS design included 3-lane, 2-lane, and 2-lane reversible designs. The 4-lane design (which includes a median) required a large amount of parkland, particularly when the proposed 8-foot bike lane along the river is considered. The width of roadway could visually intrude on the park setting although the grassed median and potential vertical separation of lanes would somewhat alleviate this effect. The 4-lane configuration would be able to handle all of the traffic volume forecast in the FEIS.

The 3-lane option (no median, two lanes in the peak traffic flow direction during rush hour) was also analyzed. While traffic evaluation studies determined that 3-lane configurations would also be able to handle 100 percent of the volume forecast in the FEIS, reversible operations are inefficient as they require signs, barricades, and labor to open and close the lanes. The 3-lane configuration has a more "urban" characteristic and presents a wide expanse of pavement because there is no median. The wider roadway might also encourage higher traffic speeds than a 2-lane roadway. The 3-lane configuration requires similar connections to a 4-lane cross section, thereby reducing the parkland savings, and can be confusing to pedestrians trying to cross the roadway. An advantage of the 3-lane option is that the third lane can have a variety of uses such as parking and the accommodation of counterflow traffic.

The 2-lane reversible design would be operated as two lanes in the peak direction during rush hours and one lane in each direction in the non-peak traffic periods. No median is proposed. In the peak direction, the 2-lane roadway could accommodate all the peak hour traffic forecast in the FEIS. In the non-peak direction, however, local streets would still have to accommodate relatively high volumes. As in the 3-lane configuration, the 2-lane reversible configuration is not desirable in terms of daily operations because of the need for signs, barricades, and labor required to open and close lanes.

The 2-lane reversible configuration would provide a more "parklike" appearance than 3 or 4-lane cross sections and the

narrower roadway is less difficult for pedestrians to cross should crossing be necessary. The narrower configuration also would use less parkland and take less land from RFK Stadium lots (roughly 275 parking spaces). Parking lot reconfiguration is discussed more fully in Section III of this report. A 2-lane cross section is also expected to reduce noise levels, especially near the Cemetery, by carrying slightly less traffic and by confining the traffic to a smaller area.

The 2-lane non-reversible design (one lane in each direction, no median) has similar advantages of "parklike" appearance, less use of parkland, pedestrian safety, and, additionally, ease of operation. Although this configuration cannot accommodate all the FEIS traffic forecast for the peak hour, it comes very close on a 24-hour (Average Daily Traffic) basis. A 2-lane configuration is also most compatible with National Park Service objectives for Anacostia Park. This is the preferred design refinement because it balances the goals of traffic capacity, preservation of parkland, and maintenance of the park atmosphere.

Shoulders. While options for the lane configuration were being refined, the treatment of the shoulders was discussed. Options included paved shoulders, unpaved shoulders, no shoulders, and emergency pulloffs. In the interests of maintaining the park atmosphere, as well as safety, the preferred design refinement includes an unpaved but stabilized turf shoulder with a mountable curb.

Pavement. Refinement of the pavement type from regular asphalt to open-graded asphalt is preferred in order to minimize roadway noise (see Memorandum of Agreement, Appendix A). Open-graded asphalt also is more skid resistant than standard asphalt pavement.

Freeway/Parkway Connection. The FEIS Selected Alternative 1/2 made this connection by bringing both lanes of the parkway under the freeway at-grade. Refinements to this design, necessarily made in conjunction with the refinements to the parkway profile, bridge, and other elements, were discussed in order to better maintain the park integrity, increase pedestrian access to the park, address noise and visual intrusion issues, meet required clearances, and maintain adequate drainage and hydraulic characteristics. Alternatives included the southbound lanes remaining at-grade while the northbound lanes passed over the freeway, southbound lanes at-grade with northbound lanes passing under the freeway, southbound lanes at-grade with northbound lanes in a tunnel, and both north and southbound lanes in tunnels under the freeway. Placing both lanes in tunnels is preferred as it best addresses the access, intrusion, noise, and other issues. Drainage at the Cemetery would be expected to improve due to the



required use of pumping stations with this alternative.

Profile Near Congressional Cemetery. The parkway profile and alignment near Congressional Cemetery is important in terms of visual intrusion, noise, and relationship to other elements of the project. The FEIS Selected Alternative included an at-grade parkway (resulting in a midspan clearance of 28 feet for the freeway bridge). An at-grade parkway alignment requires a higher and more intrusive bridge profile, and results in more noise reaching Congressional Cemetery (and the need for noise walls to mitigate it), and a less parklike view in the Cemetery vista.

The approval of a lower bridge height (see 3. Bridge) made feasible the lowering of the profile of the parkway near the Cemetery. The lowering of the profile accomplishes the same required clearances between freeway and parkway as raising the freeway while at the same time reducing the visual intrusiveness of the parkway, freeway, and bridge, particularly as seen from Congressional Cemetery. The preferred refinement is to put both ramps into tunnels under the freeway and bring the parkway below grade. This allows more open space near the Cemetery, a more parklike view from the Cemetery, achieves the necessary profile, and, through use of the tunnels and a retaining wall, mitigates the noise impact of the parkway on Congressional Cemetery.

Ramps at Independence Avenue. During the design phase several options were considered for the connection of the parkway with Independence Avenue and East Capitol Street which would improve traffic flow and increase capacity over the FEIS Selected Alternative 1/2. The at-grade intersection proposed in the FEIS does not provide efficient traffic capacity and flow characteristics to the traffic network. Within a grade-separated proposal, several ramp configurations for both parkway and Independence Avenue connections were evaluated. The primary variation between these proposals is whether the ramps connect to the outside or inner lanes of East Capitol Street. An inner lane connection provides more efficient flow, eliminates a weave movement on the bridge, and would have a low profile. The preferred refinement, with both connections as inner merges, provides capacity, safety, and minimizes the visual intrusion of the intersection. Independence Avenue would be connected to the bridge via an overpass.

Ramps at Pennsylvania Avenue. The FEIS proposed a connection of the parkway at Pennsylvania Avenue through a pair of ramps. Provision of these ramps was found to introduce operational problems (weaving), encourage traffic movement through local neighborhoods, and complicate engineering. Alternatives to this connection were to upgrade the existing ramps at Barney Circle or to remove them. The preferred refinement is to remove these

ramps, providing no access to or from the parkway at Pennsylvania Avenue. Most of the movements affected by the elimination of the proposed ramps will be served by the proposed opening of the 11th Street Bridge ramps (see Other Transportation Safety Improvements).

### Preferred Parkway Design

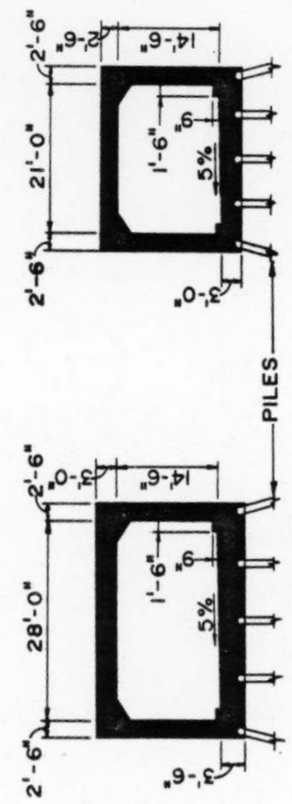
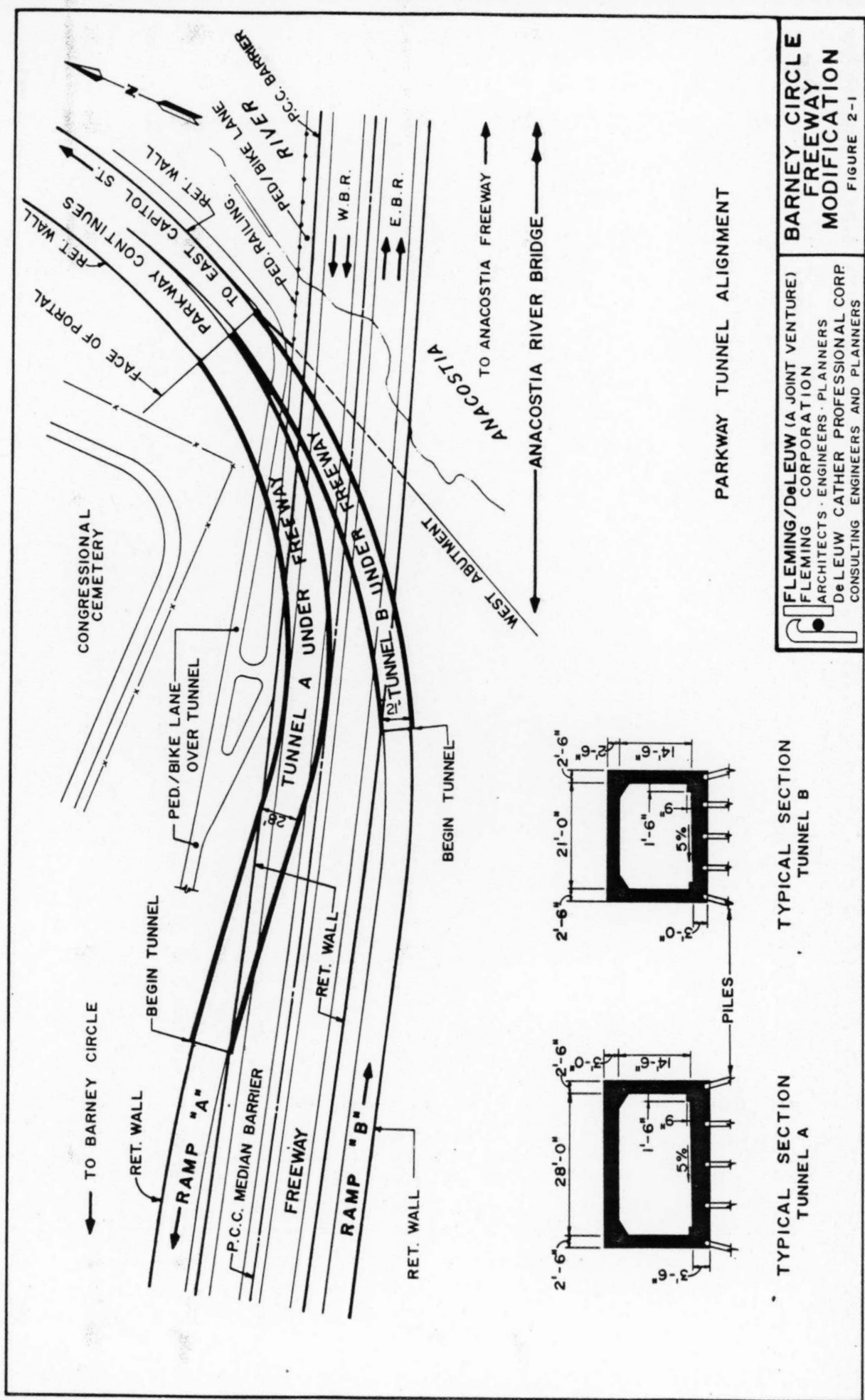
In summary, the preferred parkway design includes: a 2-lane, 1.1 mile long facility with no median; incorporation of a grade-separated connection from the parkway to the eastbound East Capitol Street Bridge (Whitney Young Memorial Bridge) and Independence Avenue; placement of the parkway below-grade (in tunnels) at the southeastern corner of Congressional Cemetery; and elimination of connecting ramps to Pennsylvania Avenue. Vehicular access into Anacostia Park for both northbound and southbound parkway traffic will be provided by a satellite parking lot located along the parkway alignment and by new entrances into the RFK Stadium parking lots. The lots will be reconfigured to maintain sufficient parking. The proposed design speed remains at 35 mph (with a curvilinear configuration), although the speed limit may be lower. The two tunnels (see Figure 2-1) will be ventilated: the longer tunnel (Tunnel 'A') by fans at its south end and the shorter tunnel by natural ventilation. The cumulative effects of the preferred parkway design reduced the total amount of park land required from that of the FEIS Selected Alternative (see also Section III).

## 2. FREEWAY

### FEIS Selected Alternative

The freeway element of the project extends from Barney Circle, where it connects to the SE/SW Freeway, across the river, and north where it merges with the Anacostia Freeway. It is generally three lanes wide in each direction, with two in each direction crossing the river; the third lanes becoming the parkway. The freeway element of this project is closely linked to the bridge although they are treated separately here.

The Selected Alternative of the FEIS for the outbound lanes of the freeway begins as three eastbound lanes at the existing terminus of the SE/SW Freeway at Barney Circle and continues parallel to the Conrail tracks. Halfway between the western shoreline and Barney Circle, two lanes become elevated and cross the Anacostia River as a freeway bridge (see next section). The third lane becomes the northbound lane of parkway, discussed above. On the eastern shore the freeway returns to grade halfway between the shoreline and the existing Anacostia Freeway Bridge,



TYPICAL SECTION TUNNEL A

TYPICAL SECTION TUNNEL B

PARKWAY TUNNEL ALIGNMENT

paralleling the Conrail tracks. The two lanes continue east under the Anacostia Freeway Bridge, then turn north for approximately 1,500 feet before merging with the two northbound lanes of the Anacostia Freeway via at-grade ramps (see Figure 1-1). At this north merge, the Anacostia Freeway widens from two to three lanes.

The FEIS inbound connection of the freeway begins on the Anacostia Freeway south of East Capitol Street with a realigned ramp from eastbound East Capitol Street to the southbound Anacostia Freeway. At the Anacostia Freeway Bridge two lanes split off from the Anacostia Freeway to become the new freeway. Continuing through Anacostia Park along the northern side of the Conrail yards, these two lanes become the inbound lanes on the new bridge and continue on to Barney Circle and the SE/SW Freeway. The southbound parkway lane joins these two lanes prior to this terminus.

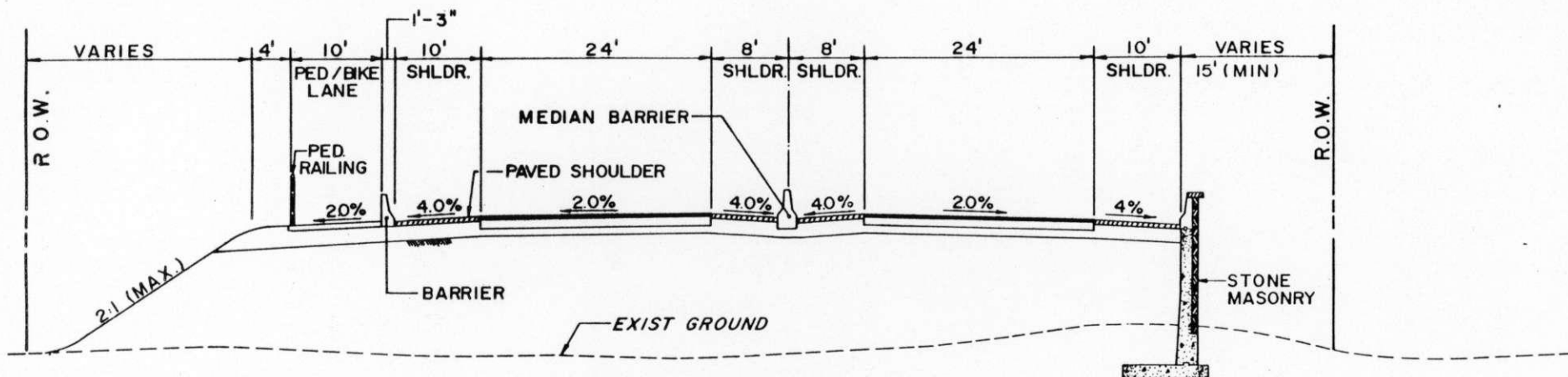
#### Design Phase Refinements Considered

Input received from the community indicated concerns regarding visual impacts, traffic alterations adversely affecting neighborhoods, and pedestrian and bicycle access. No major design refinements for most of the new freeway were investigated although Transportation System Management (TSM) options to be used in conjunction with the freeway were explored and are discussed elsewhere in this report. Design refinements to the bridge are treated in the following section.

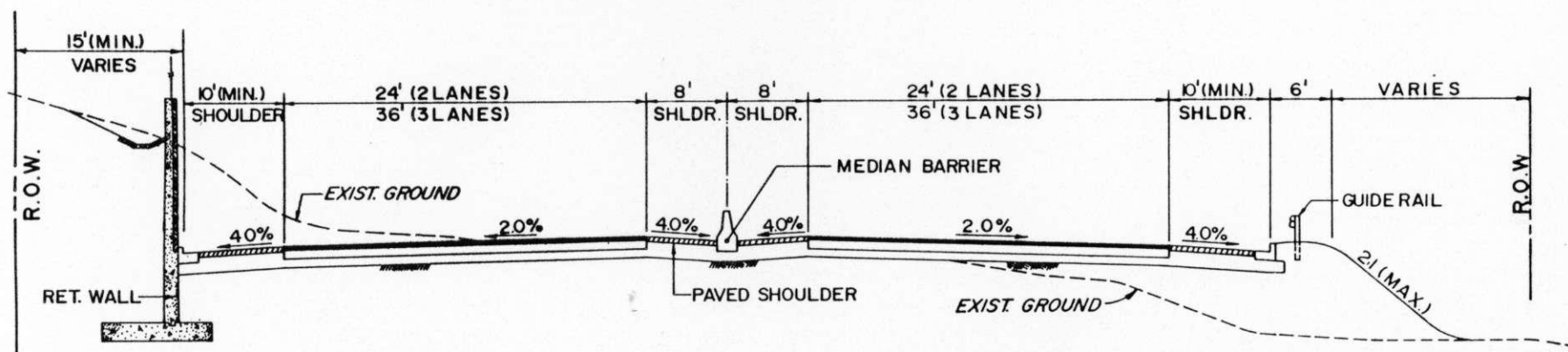
Discussions on design refinements to the freeway centered on the height of the freeway (and associated bridge) and the need for the freeway embankment. The embankment allows for a 28-foot clearance under the freeway bridge and the construction of the parkway at grade. A lower bridge clearance and depressed parkway profile enables the elimination of the embankment and resulting mitigation of visual impacts of the project.

#### Preferred Freeway Design

The preferred refinement to the FEIS design consists of changing the elevated freeway on the western shore to at-grade. As in the FEIS, the freeway will begin on the western shore of Anacostia Park at the terminus of the SE/SW Freeway at Barney Circle. Figure 2-2 shows typical sections both east and west of the river. It will have a design speed of 65 mph. The two outbound lanes will remain at-grade until they reach the western shoreline of the Anacostia River, reducing the visual intrusiveness of the project. Once over the bridge the freeway is as described in the FEIS.



TYPICAL FREEWAY SECTION EAST OF ANACOSTIA RIVER  
WITH PEDESTRIAN/BIKE LANE AND RETAINING WALLS



TYPICAL FREEWAY SECTION WEST OF ANACOSTIA RIVER  
4 & 6 LANES

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BARNEY CIRCLE  
FREEWAY  
MODIFICATION  
FIGURE 2-2

The inbound connection of the preferred design will begin along eastbound East Capitol Street at the existing southbound ramp leading to the Anacostia Freeway. This ramp will be removed and replaced with a new southbound ramp from East Capitol Street, beginning roughly 40 feet east of the existing southbound ramp. The ramp is designed to pass under the Freeway, and then turn south. The ramp gradually returns to at-grade and forms a left-side merge with the southbound Anacostia Freeway. As in the FEIS, the existing Anacostia Freeway and its new connection proceed for approximately 1000 feet before a two-lane ramp southbound splits from the Anacostia Freeway and begins the two inbound lanes of the proposed freeway. The remainder of the design is as in the FEIS except for the lower bridge height, discussed in more detail below.

### 3. BRIDGE

#### FEIS Selected Alternative

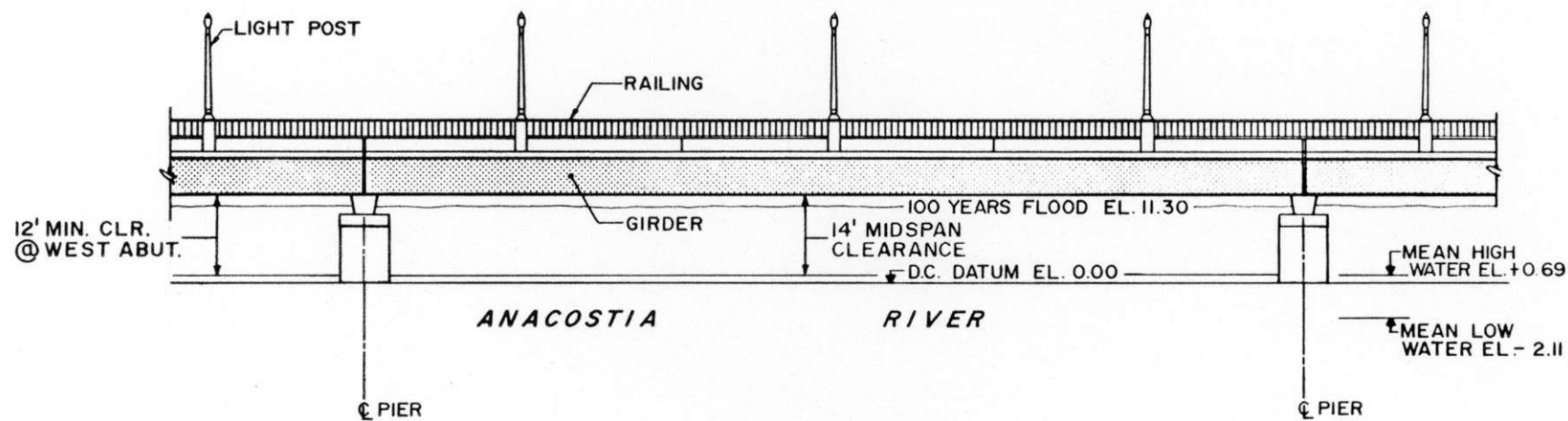
The proposed bridge across the Anacostia River is integral to the freeway element of this project. The FEIS stipulated only the number of lanes (four) and the 28-foot bridge clearance height (measured from the bottom of the mid-span of the bridge to the mean high water mark of the river) for the structure.

#### Design Phase Refinements Considered

During the FEIS process comments were received recommending that the District use the lowest possible clearance to minimize visual impacts to the Congressional Cemetery vista, as well as improve bicycle access, and protect the use of the river for navigation. An investigation of alternative heights (as committed to in the Memorandum of Agreement(MOA))(see Appendix A) reviewed the clearances of nearby bridges on the Anacostia River as part of an effort to lower the clearance to 22 feet or less.

Alternatives investigated were 22 feet, 14 feet, a drawbridge, a humped profile bridge, and intermediate heights. A 14 foot bridge would not intrude into the view from much of the Cemetery nor for much of the year due to vegetative screening. A 14 foot midspan clearance maintains 100 year flood passage (Figure 2-3) and is the same clearance as the Magruder railroad bridge upstream (the controlling vertical clearance for the Bladensburg marina). The Coast Guard was consulted throughout this design phase and have concurred with the reduced bridge height, thereby ensuring that navigational interests have been protected.





**FREEWAY BRIDGE**  
NOT TO SCALE

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**BARNEY CIRCLE  
FREEWAY  
MODIFICATION**  
FIGURE 2-3

### Preferred Bridge Design

The preferred design for the freeway (see above) is at-grade, with the parkway depressed below the existing ground level at those areas closest to Congressional Cemetery. These changes eliminated the need for an embankment and allowed further refinement to the design of the proposed bridge. A bridge with a midspan clearance height of 14 feet is preferred. This preferred design is 14 feet lower than the FEIS alternative. With this clearance pier spacing will be approximately 137 feet.

Also, based on comments received from the community, a pedestrian/bicycle lane located adjacent to the bridge's two upstream (north) lanes has been incorporated in the proposed bridge design. The lane will link the shores of Anacostia Park and will provide a new pedestrian/ bicycle connection for residents.

The architectural treatment of the bridge will be selected based on compatibility with the engineering and consistent with stipulations mandated in the MOA, by the Commission of Fine Arts, and by other review agencies.

### 4. ANACOSTIA PARK

Anacostia Park, located on both sides of the Anacostia River, is publicly owned land under the jurisdiction of the National Park Service (NPS). On the eastern shore of Anacostia Park, the portion of the park potentially impacted by construction of the Barney Circle Freeway Modification Project is bounded by the Sousa Bridge, East Capitol Street, the Anacostia Freeway, and the Anacostia River. This portion of the park, approximately 99 acres, is divided into two distinct areas by the Conrail railroad tracks. The southern half presently contains active recreational facilities, including an open air pavilion, tennis courts, a boat ramp, basketball courts, a playground, and 400 automobile parking spaces. Public access to this section of the park is along a park loop road. North of the railroad tracks the park is composed of dense vegetation and large trees. Access to this section of the park is from a service road used by NPS personnel for park maintenance purposes only, or from the existing bicycle trail.

On the western shore of the park, the area potentially impacted by the project is approximately 68.5 acres. It is bounded by Barney Circle and Sousa Bridge on the south, East Capitol Street on the north, the Anacostia River on the east, and Congressional Cemetery and RFK Stadium on the west. This portion of the park contains one marina, one boat repair facility, approximately

2,395 parking spaces for RFK Stadium, and a south to north Stadium access road. The remaining area is undeveloped with no active recreational facilities present.

#### FEIS Selected Alternative

Mitigation of impacts to the park under FEIS Selected Alternative 1/2 were outlined in the FEIS to include landscaping design and architectural treatments coordinated with NPS and the Commission of Fine Arts. Although specific details were not discussed, the FEIS states that all efforts to minimize visual impacts will be made and access to the Stadium, river, and park will be maintained. The alternative includes pedestrian and bicycle access across the river on the new bridge. The ecology of the park will be protected through erosion control, replanting, and landscaping. Other mitigation as necessary will be coordinated with NPS.

#### Design Phase Refinements Considered

In the design phase many of the above proposals were developed and enhanced. Park improvements were developed through recommendations from NPS on compatibility with their proposed plans for the park and through a compendium of community comments for desired recreational facilities and amenities. Community comments regarding the park improvements included recreational space, circulation and traffic within the park, and parking.

Access. Alternatives for bicycle and pedestrian access improvements included trails and ramps throughout the park. To cross the railroad which, on the east side of the river, separates the lower half of the park from the undeveloped upper half, the existing 'underpass' (at the Conrail bridge abutment) could either be maintained and improved or replaced with an overpass. The overpass would provide greater safety and access between these two sections. A new pedestrian/bicycle overpass is proposed which would cross the B&O Railroad line and the Anacostia Freeway from Fairlawn Avenue at Burns Street, SE. These would provide a continuous connection along the park's eastern shore and improved access throughout the park. Other options for increased access are a pedestrian/bicycle trail along the western shoreline adjacent to the proposed parkway, and constructing bicycle/pedestrian ramps to connect this portion of the park to those sections of parkland south of Sousa Bridge and north of East Capitol Street.

Parking. Options for increased parking include a new parking lot close to the existing pavilion and several small satellite parking lots adjacent to the new multipurpose playing fields.

Given the elongated nature of the park, the many lots would provide convenient parking for park users.

#### Preferred Refinement

In a plan developed in conjunction with the Barney Circle Freeway Modification Project, but not entirely funded by it or implemented with its construction, improvements to the park are proposed for both the eastern and western shores and detailed on Figure 2-4. In this conceptual plan worked out for this region of the park, existing recreational areas on the eastern shore will be expanded and upgraded to include new softball fields and more open space. The boat ramp would be relocated closer to Pennsylvania Avenue and the loop road shortened to encourage more pedestrian traffic. A new parking lot is proposed close to the existing pavilion. Finally, access across the railroad would be provided by a new overpass. The undeveloped section of parkland will remain essentially unchanged but the existing bicycle trail will be upgraded. New bicycle ramps and overpasses will be added throughout the park.

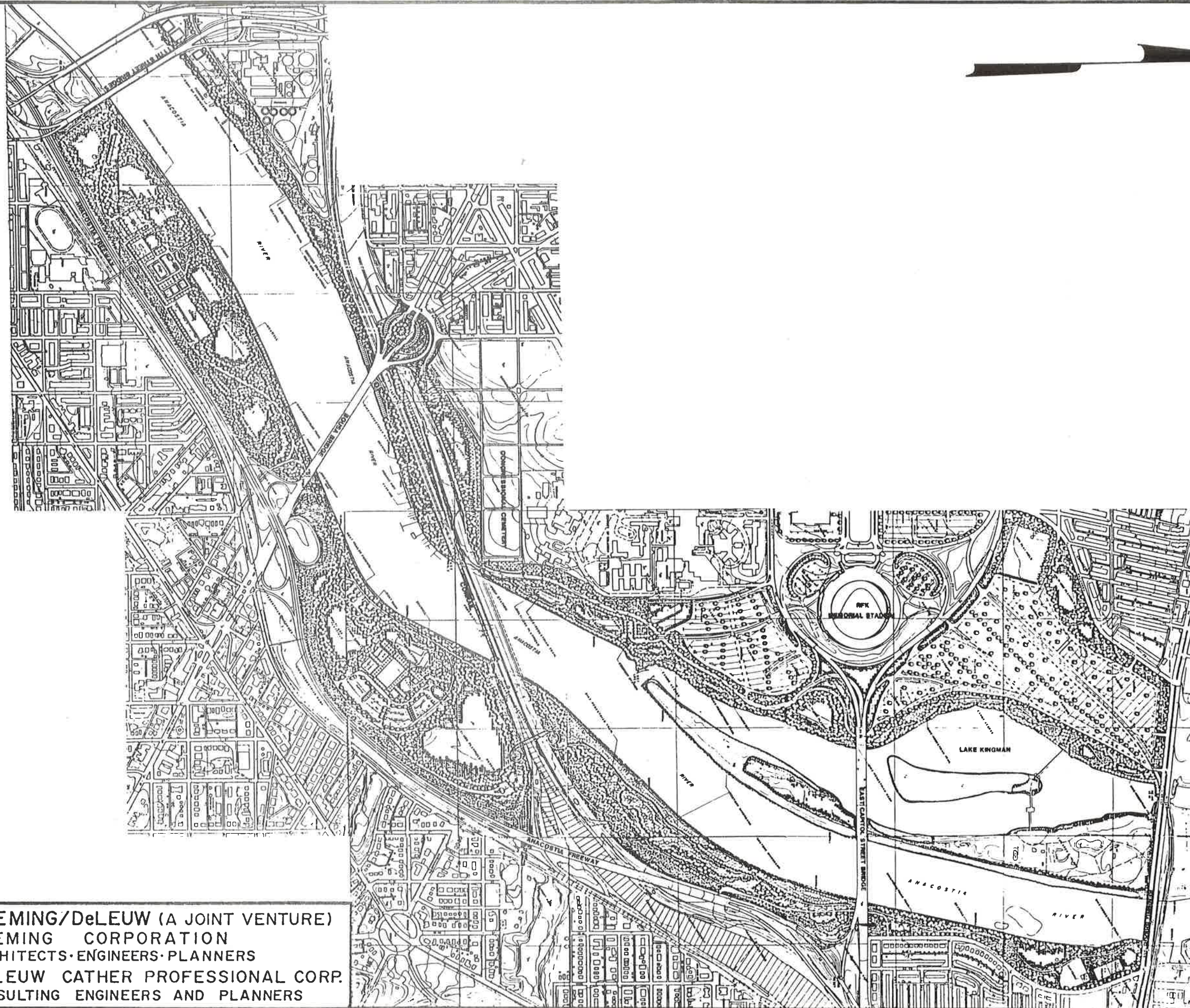
Proposed improvements to the western shoreline include adding new multipurpose playing fields, creating a pedestrian/bicycle trail along the entire western shoreline adjacent to the proposed parkway, and constructing bicycle/pedestrian ramps to connect this portion of the park to those sections of parkland south of Sousa Bridge (Pennsylvania Avenue) and north of East Capitol Street. Several small satellite parking lots are proposed adjacent to the new multipurpose playing fields. The practice field has been relocated to an area north of East Capitol Street and adjacent to Oklahoma Avenue, thereby opening more land for park use. These preferred improvements would substantially upgrade a previously underutilized and unattractive portion of Anacostia Park and increase the amount of open/recreational space available to community residents.

Because these improvements are being undertaken in Anacostia Park but not all are part of the Barney Circle Freeway Modification Project, some will be carried out by NPS under a separate contract. The two efforts have been coordinated so that the proposed park improvements are complementary. Cost estimates for the improvements funded as part of this project are discussed in Section IV of this report.


#### 5. KENILWORTH AVENUE SAFETY IMPROVEMENTS

As part of the Barney Circle Freeway Modification Project, safety improvements are proposed for Kenilworth Avenue. These improvements consist of added shoulders (within the existing





**OVERVIEW  
PARK PLAN**


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 FREEWAY  
 MODIFICATION**  
 FIGURE 2-4



right-of-way) to Kenilworth Avenue in each direction between East Capitol Street and Benning Road. In addition, one lane would be added to the ramp from northbound Kenilworth Avenue to westbound Benning Road to alleviate the existing traffic congestion there.

#### 6. OTHER TRANSPORTATION-RELATED SAFETY IMPROVEMENTS

In conjunction with the Barney Circle Freeway Modification Project, transportation-related safety improvements will be undertaken. The FEIS defines transportation-related safety improvements as either structural or operational (non-structural). Structural improvements, discussed here, could consist of lane widenings, adding or relocating expressway exit and entrance ramps, lengthening expressway exit and entrance merge sections, and replacing at-grade intersections with grade-separated intersections. Non-structural or operational improvements are discussed below in the Transportation Systems Management section of this report.

##### 3RD STREET SE RAMP

The 3rd Street SE ramp is located adjacent to Garfield Park between 2nd and 3rd Streets SE; it serves as an entrance to the westbound SE/SW Freeway. Traffic coming onto the freeway from the 3rd Street ramp has a short merge section and is forced to merge quickly with high speed westbound freeway traffic. In addition, traffic destined for the Center Leg Freeway (I-395 North) must exit less than 400 feet west of the 3rd Street merge section. This produces a dangerous weaving situation in a section with restricted lines of sight. For these and other reasons, the Capitol Hill community requested that it be improved or relocated.

##### FEIS Selected Alternative

The FEIS calls for the relocation of the 3rd Street ramp to 4th Street.

##### Design Phase Refinements Considered

Alternative treatments for the hazards at 3rd Street were investigated during the design phase to ensure the best possible siting for the relocation. Closing the 3rd Street ramp was not considered a feasible solution because it would prohibit access from adjacent residential neighborhoods onto the SE/SW Freeway. Options for improving sight distance for traffic entering the freeway were analyzed but did not sufficiently address the problems in this area. Relocation of the 3rd Street ramp to 7th Street and lengthening of the 3rd Street ramp merge section were



also investigated. These solutions relieve the capacity and safety problems by providing greater distances for lane changes but involve permanent changes in local traffic patterns. Relocation to 7th Street would utilize larger roadways as feeders than would the 4th Street relocation.

#### Preferred Refinement

The preferred treatment of the 3rd Street SE ramp is to relocate it to 7th Street. As this decision affects local traffic and neighborhoods, it will not be made until after the Design Public Hearing and will be selected with the benefit of further traffic analysis, definition of appropriate TSM measures for use in conjunction with the ramp relocation, and community coordination.

#### 11TH STREET RAMPS

Presently, of the two sets of 11th Street Bridge ramps connected to the SE/SW Freeway, only one set is operational. One ramp serves outbound traffic movements from the eastbound SE/SW Freeway across the 11th Street Bridge. The other ramp provides inbound traffic movements from the 11th Street Bridge and onto westbound SE/SW Freeway. Adjacent to the operational inbound and outbound ramps are a corresponding pair of ramps that provides the identical movement for traffic to or from the SE/SW Freeway east of the 11th Street Bridge. These ramps are opened only to handle large volumes of traffic during events at RFK Stadium.

#### FEIS Selected Alternative

The FEIS proposed removal of the extra set of ramps if widening of the existing freeway was required to accommodate the proposed Barney Circle Freeway Modification Project.

#### Design Phase Refinements Considered

Subsequent traffic analysis indicated that this widening was not required and that therefore the ramps could be retained. Alternatives considered included the upgrade and use of the extra ramps, connection to the SE/SW Freeway, and the use of the ramps as a detour route during construction projects. Opening the existing extra set of ramps will better connect the communities of far Southeast Washington to other sections of the city and will provide a direct and easy connection for commuters using the SE/SW and Anacostia Freeways. Opening the ramps would not interfere with the proposed freeway and would provide stadium access, reducing the need for ramps at Pennsylvania Avenue.

### Preferred Refinement

The preferred refinement is to upgrade and use the extra set of 11th Street ramps.

## 7. TRANSPORTATION SYSTEMS MANAGEMENT (TSM) MEASURES

According to the FEIS the primary objectives of the Barney Circle Freeway Modification Project are to connect the Anacostia and SE/SW Freeways and divert traffic from neighborhood streets to higher level roadways. These neighborhood streets currently carry large volumes of traffic which would be better served by the regional freeway network. Because this network has gaps, traffic is forced to use residential streets to complete both inbound and outbound trips. Transportation System Management (TSM) measures are non-structural transportation safety improvements designed to encourage this traffic diversion from local streets to the freeway.

### FEIS Selected Alternative

The FEIS proposed that Selected Alternative 1/2 be constructed with the supportive TSM measures of (1) converting Constitution Avenue between 3rd Street NE and North Carolina Avenue to one travel lane in each direction (with one lane of parallel parking) 24 hours a day, and (2) similarly converting Independence Avenue between 19th Street SE and 3rd Street SE. Each of these streets currently is one way during all or part of the day.

### Design Phase Refinements Considered

Ongoing discussions with the community, including the Capitol Hill Traffic Management Task Force, and groups located east of the Anacostia River, defined other areas and intersections of concern as well. Design options considered were: lane configuration changes, street closures, turn movement restrictions, removal of one-way operations, and on street parking changes.

### Preferred Refinement

Table 2-1 lists the TSM measures proposed to be implemented with the Barney Circle Freeway Modification Project and additional measures proposed for the study area (see Figure 2-5). These measures were chosen for their ability to encourage use of the proposed facilities and to reduce local congestion.

Table 2-1

PROPOSED TSMs INHERENT TO THE  
BARNEY CIRCLE FREEWAY MODIFICATION PROJECT

1. Discourage access to Kentucky Avenue from Barney Circle.
2. Eliminate the proposed ramp from the parkway to Pennsylvania Avenue at Barney Circle.

PROPOSED FINAL TSMs TO BE SUPERIMPOSED  
ON THE PROJECT WHEN IMPLEMENTED

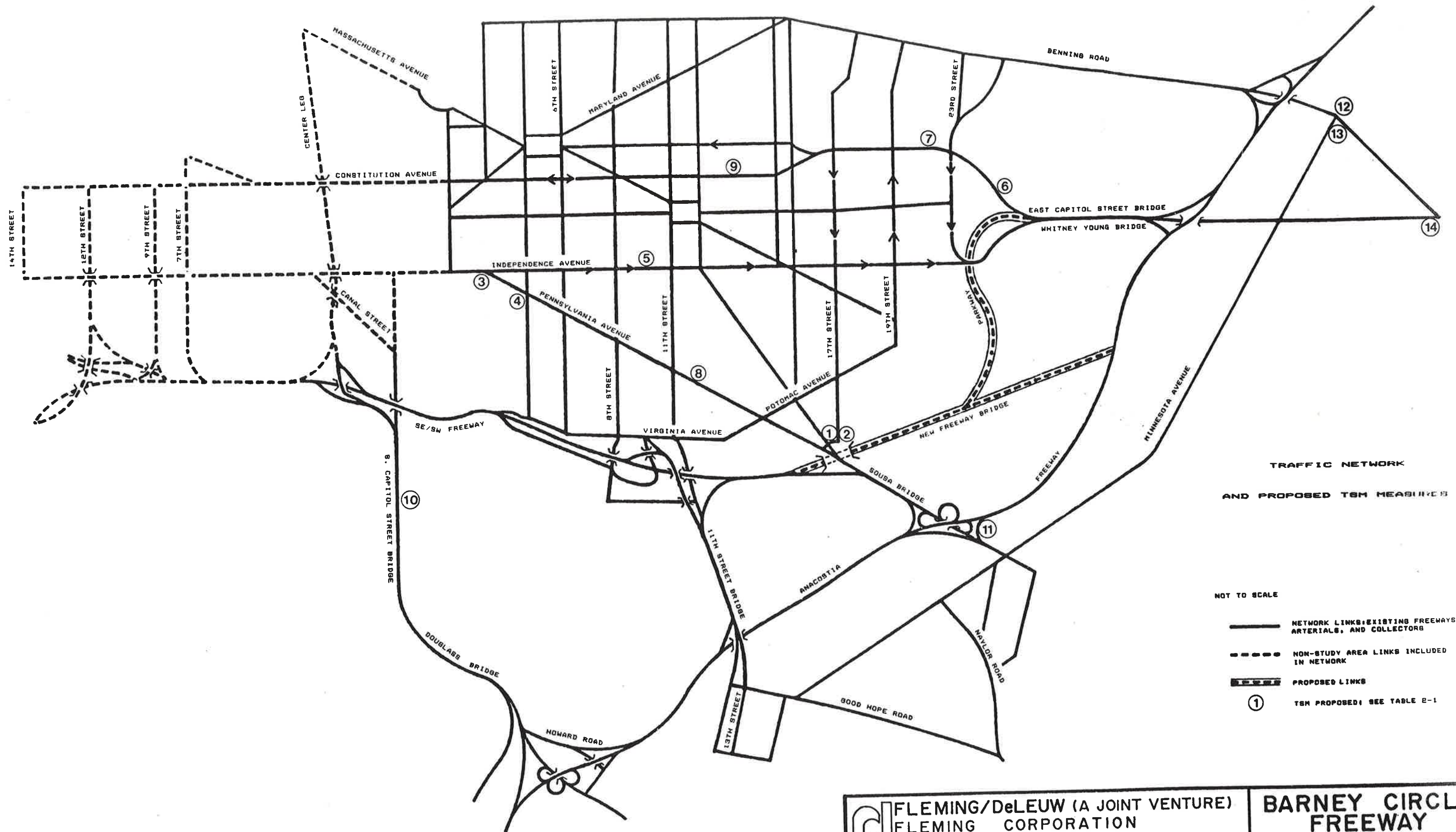
3. Eliminate the left turn bay from Pennsylvania Avenue onto Independence Avenue.
4. Prohibit left turns onto 3rd Street from Independence Avenue.
5. Independence Avenue to be two-way 24 hours a day.
6. Narrow roadway from East Capitol Street Bridge onto C Street NE.
7. Narrow C Street by one lane to add left turn bays.
8. Implement rush hour parking restrictions on Pennsylvania Avenue.
9. Make Constitution Avenue two-way 24 hours a day.

RECOMMENDED LONG TERM TRAFFIC IMPROVEMENTS TO IMPROVE THE  
EFFECTIVENESS OF TRAFFIC DIVERSION

10. Make South Capitol Street Bridge (the Frederick Douglass Memorial Bridge) three lanes outbound and two lanes inbound.\*
11. Add a left turn bay from Pennsylvania Avenue onto Fairlawn Avenue to access the Anacostia Freeway.\*\*
12. Widen Minnesota Avenue at Benning Road and north of this intersection to add a lane for opposing left turn movements.\*
13. Widen Benning Road at Minnesota Avenue to add a lane to provide for opposing left turn movements.\*
14. Construct a grade separation for East Capitol Street over Benning Road.\*

\* These TSMs are proposed for inclusion in the Six Year Capital Improvement Program.

\*\* Design ongoing, Construction expected FY89.



TRAFFIC NETWORK  
AND PROPOSED TSM MEASURES

NOT TO SCALE

- NETWORK LINKS: EXISTING FREEWAYS, ARTERIALS, AND COLLECTORS
- - - - NON-STUDY AREA LINKS INCLUDED IN NETWORK
- PROPOSED LINKS
- ① TSM PROPOSED: SEE TABLE 2-1

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**BARNEY CIRCLE  
FREEWAY  
MODIFICATION**  
FIGURE 2-5

### SUMMARY OF PREFERRED OPTIONS

In summary, the preferred options and configurations for the refined design of Selected Alternative 1/2 are as follows:

- o Two-lane parkway with a grade separated interchange at East Capitol Street.
- o Depression of the parkway below grade near Congressional Cemetery and a freeway bridge midspan clearance height of 14 feet at the navigational channel of the Anacostia River.
- o Development and improvement of Anacostia Park in accordance with the NPS park plan.
- o TSM and safety improvements on Capitol Hill, at Kenilworth Avenue, the 3rd Street SE ramp, 11th Street Bridge ramps, and elsewhere in the project area as detailed above.

Comments received on the refinements will be summarized and made available following the Design Public Hearing.

### III. SPECIAL ENVIRONMENTAL AND MITIGATION ISSUES

In addition to the design alternatives and selected refinements discussed in Section II, four topics relating to the project were considered deserving of special attention. These four, FEIS Re-evaluation and Traffic Analysis, Changes in Land Use, Archeological Resources, and RFK Stadium Parking Lot Reconfiguration are issues central to the project and noted by the public to be of concern.

#### 1. FEIS RE-EVALUATION AND TRAFFIC ANALYSIS

U.S. Department of Transportation regulation 23 CFR 771.129 stipulates that a re-evaluation of the proposed project is required (in this case prior to design approval) to determine that there have been no significant changes in the proposed action, the affected environment, the anticipated impacts, or the proposed mitigation measures. Accordingly, a re-evaluation was compiled which documented all design refinements since the FEIS and their associated effects on environmental conditions. Table 3-1 summarizes issues proposed in the FEIS, preferred design refinements to these issues, and any difference between the two.

The preliminary design of the three major elements of this project (parkway, freeway, and bridge) has undergone an analysis of refinement alternatives which led to the selection of a Preferred Design for this hearing. The design refinements to the Selected Alternative 1/2 (detailed in Section II) are minor design changes from the FEIS and will result in reducing environmental impacts of the project. In fact, these refinements are preferred primarily because they would lessen the severity of the environmental consequences of the original selected design without compromising transportation and safety benefits. Appropriate mitigation measures have been developed to further reduce the anticipated environmental consequences of the preferred design.

The Barney Circle FEIS analyzed traffic and transportation-related issues for the study area in four different contexts:

- distribution of traffic crossing the Anacostia River Bridges;
- examination of network-wide performance;
- identification of problem locations; and
- assessment of major roadway segments.

During the preliminary design and engineering phase Selected Alternative 1/2 was refined (as previously discussed) and the FEIS traffic analysis was subsequently re-evaluated. The re-evaluation concentrates on the design year for this project



Table 3-1  
FEIS REEVALUATION ISSUES

<u>ELEMENT</u>	<u>PROPOSED</u>	<u>REVISED</u>	<u>DIFFERENCE</u>
Freeway	70 mph Design Speed	65 mph	_____
	Designed for 100 Year Flood	Unchanged	_____
	4 through lanes	Unchanged	_____
	Safety Improvements to Kenilworth Avenue	Unchanged	_____
	o Ramps	Unchanged	_____
Bridge	Left merge from eastbound E. Capitol Street to southbound I-295	Unchanged	_____
	28 foot clearance (FEIS)	14 foot clearance	Minimizes visual impact
	22 foot clearance (MOA)		
	No bike lane	Bike lane added	Bicycle access across Anacostia River
	Approach Embankment	Eliminated	Minimizes visual impact
Parkway	Stone facing on bridge abutments, piers, and retaining walls	Unchanged	_____
	Twin-twenty lights	Single-twenty lights	Single-twenty lights aesthetically more pleasing
	35 mph Design Speed	Unchanged	_____
	Curvilinear Alignment	Unchanged	_____
	4 Lanes (Grass Median)	2 Lanes (No Median)	Maximizes usable parkland
	Twin-twenty lights	Minimal lighting for safety	Greater compatibility with park-like setting
	No truck ban	Truck ban under study	_____
	Graded and landscaped R.O.W.	Unchanged	_____
	Designed for 25 year Flood	15 Year flood for roadway, Tunnel pumping stations sized for 100 Year flood	D.C. Criteria, 15 Year Flood
			Pumping stations added for tunnels and grade-separated intersection

Table 3-1  
FEIS REEVALUATION ISSUES  
Continued

<u>ELEMENT</u>	<u>PROPOSED</u>	<u>REVISED</u>	<u>DIFFERENCE</u>
Parkway o Ramps	Design speed 25 mph	Unchanged	_____
	14.5 foot clearance under freeway	Unchanged	_____
	At-grade intersection at Independence Avenue	Grade-separated intersection	No traffic light, lower operating costs, less congestion
	Right merge from northbound parkway to eastbound E. Capitol Street	Left merge	Eliminated weaving problem
	Ramp one lane in each direction	Unchanged	_____
	Independence Avenue to northbound parkway	Grade-separated intersection at parkway and E.Capitol Street	Direct connection from Independence Avenue to E. Capitol Street
	Independence Avenue to eastbound E. Capitol Street	Grade-separated intersection at parkway and E.Capitol Street	Direct connection from Independence Avenue to E. Capitol Street Vertical alignment 6' higher than existing connection
	Connection to Pennsylvania Avenue for Stadium events	No connection	Movements served by 11th Street Bridge ramps
Access o Vehicular	Stadium Access	Unchanged	_____
	Park Access	Improved access on western shore	Increased vehicular accessibility
	Pedestrian/Bicycle paths to and from park	Routes on freeway bridge and from E. Capitol Street	Added access into and through park
Land Use	No land taken from Cemetery	Unchanged	_____
	562 parking spaces taken	Reconfigured/restriped parking lots provides desired number of paved parking spaces	Better utilization of area
	29.1 Acres of Parkland taken	17.2 acres of parkland required	11.9 less acres of parkland needed

Table 3-1  
FEIS REEVALUATION ISSUES  
continued

<u>ELEMENT</u>	<u>PROPOSED</u>	<u>REVISED</u>	<u>DIFFERENCE</u>
Land Use	No DC General Hospital land used	DC General transferring 3 acres to project	Increases amount of land available for recreational use
	No private property relocation/displacement	Unchanged	_____
	3.9 acres of Conrail property taken	3.6 acres required	0.3 fewer acres
	Detailed park plan with landscaping	Ongoing development	_____
Cemetery	Preserve vista	Lowered bridge; tunnels near Cemetery	Impact on vista minimized
	Maintain drainage	Drain pipe relocated, pumps in tunnels	Better cemetery drainage, no adverse impacts
	Plant vegetation to reduce roadway intrusiveness	Unchanged; Roadway less intrusive; Vegetation type under study	_____
Transportation System Management (TSM)	Develop TSM plan to enhance diversion of traffic from residential streets; improve traffic flow	Unchanged; development ongoing Phase I TSMs completed	_____
3rd Street Ramp	Relocate ramp; improve merge with freeway	Unchanged; Location to be established in coordination with Traffic Task Force	_____
11th Street Ramps	Evaluate retention of connections	Connection to SE/SW Freeway retained and opened to traffic	Improve freeway access for Southeast neighborhoods
Anacostia Freeway	Widened to 3 lanes after re-aligned ramp from east-bound E. Capitol Street Bridge	Unchanged	_____
Communication Mechanism	Arrange meetings, workshops with community	Established TCC and CAG Groups; Meetings ongoing	_____

Table 3-1  
FEIS REEVALUATION ISSUES  
continued

<u>ELEMENT</u>	<u>PROPOSED</u>	<u>REVISED</u>	<u>DIFFERENCE</u>
Noise	Noise barriers adjacent to roadways	Depressed parkway, tunnel sections, and retaining walls; 2 lane roadway	Barriers not required
	16 receptors analyzed Sites adjacent to parkway: #2 67.7 dBA Leq #12 70.9 dBA Leq #14 67.9 dBA Leq	16 receptors analyzed Sites adjacent to parkway: #2 60.1 dBA Leq #12 66.1 dBA Leq #14 60.5 dBA Leq	Quieter adjacent to parkway; No violations of Category B standards
	Low-noise asphalt	Unchanged	_____
Traffic	Diversion from non-freeway roadways	Unchanged	_____
Air Quality	16 sites analyzed for CO; No violations (low background levels assumed)	16 sites analyzed for CO; No violations (background levels revised to conform with other urban areas and USEPA recommendations)	_____

(2006) and incorporates a more realistic representation of capacity constraints on the SE/SW Freeway and several specific TSM measures not included in the FEIS. The proposed TSM measures listed in Table 2-1 are to be implemented in conjunction with the Barney Circle Freeway Modification Project and were assumed to be in place for the re-evaluation forecast.

#### Distribution of Traffic Across the Anacostia River Bridges

Table 3-2 compares the FEIS peak hour traffic forecasts for Selected Alternative 1/2 to the revised forecasts prepared during the preliminary design and engineering phase. In terms of total bi-directional movements over the two peak hours, it is estimated that by the design year (2006) traffic on the new bridge and parkway will be approximately two-thirds of that forecasted in the FEIS. The reduction in bi-directional volume for the AM peak hour (17%) is less than that for the PM peak hour (46%). These reductions are attributed to capacity constraints on the SE/SW Freeway west of 2nd Street SE. Planned safety and operational improvements for the SE/SW Freeway should result in somewhat greater improvements for the westbound (AM peak period) direction than for the eastbound direction. The freeway sections were not included in the network used for the FEIS forecasts and therefore are not included in the peak hour forecasts.

In off-peak travel periods, the revised analysis shows no significant difference from the FEIS level of traffic diversion onto the new facility. In peak periods, however, the full diversion predicted in the FEIS will not be achieved. Since roughly 50 percent of average daily traffic (ADT) occurs under uncongested conditions, total daily diversion (on a 24 hour basis) achieved by the project would be approximately 84 percent of that projected in the FEIS.

Table 3-3 shows the distribution of traffic across all Anacostia River bridges for the FEIS Selected Alternative 1/2 and the refined design. Under refined Alternative 1/2 there would be less traffic on the Benning Road Bridge and roughly the same amount of traffic on the 11th Street and South Capitol Street (Douglass) Bridges compared to the FEIS forecasted volumes. The relative decrease in traffic on the new bridge would be made up by traffic increases on westbound Pennsylvania Avenue (Sousa Bridge) and on the eastbound East Capitol Street Bridge.

The conclusions on traffic diversion for most movements perceived as problems remain unchanged from those in the FEIS. Anacostia Freeway traffic to and from the northeast would be almost entirely diverted from the 11th Street and South Capitol Street Bridges to the new bridge. Traffic diversion would also occur between the East Capitol Street Bridge and the SE/SW Freeway

Table 3-2  
Traffic Forecast Comparison  
Year 2006

	<u>Alternative 1/2</u> <u>(FEIS)</u>	<u>Alternative 1/2</u> <u>(Refined)</u>
Parkway		
AM Inbound	1436	1174
AM Outbound	815	1402
PM Inbound	1101	509
PM Outbound	2203	1215
New Bridge		
AM Inbound	3052	1818
AM Outbound	1557	1281
PM Inbound	1601	560
PM Outbound	2704	1811
AM Bi-directional Total (both roadways)	6860	5675
PM Bi-directional Total (both roadways)	7609	4095
Grand Total	14,469	9,770

Table 3-3

Traffic Crossing Anacostia River (Peak Hour, Peak Direction)

RIVER CROSSING	1979 BASE (FEIS)		2006 NO-BUILD(FEIS)		2006 ALT 1/2(FEIS)		2006 ALT 1/2(REFINED)		2006* REFINED/EIS	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Benning Road	3230	2459	4261	3317	4478	3936	3381	3344	0.76	0.85
E. Capitol St.	4010	3674	5477	5579	4919	3114	5051	5417	1.03	1.74
New Bridge	0	0	0	0	3052	2704	1818	1811	0.60	0.67
Pennaylvania Ave.	3974	3291	4670	3853	4257	4607	6184	4410	1.45	0.96
11th Street	6041	4982	7121	7077	6511	5851	6569	6145	1.01	1.05
S. Capitol St.	3349	2909	3999	3259	3916	3713	3865	3846	0.99	1.04
TOTAL	20604	17315	25528	23085	27133	23925	26868	24973	0.99	1.04

\* Ratio of refined Alternative 1/2 to FEIS Alternative 1/2.

ramps at 3rd and 6th Streets SE.

The diversions from direct routes between downtown and the East Capitol Street Bridge would be less than indicated in the FEIS, but still would be significant. Traffic circulating through the Capitol Hill neighborhoods was estimated in the FEIS to be reduced by the project by 1,900 and 2,900 vehicles for the AM and PM peak hours respectively. The re-evaluation adjusts these figures to approximately 850 and 1,850 vehicles respectively.

#### Network-Wide Performance

Overall, traffic system performance under refined Alternative 1/2 was confirmed to be significantly improved over the No-Build alternative. Table 3-4 shows the estimated network average speeds for various alternatives in different years. The networks used for the FEIS and revised analyses were slightly different (e.g., the re-evaluation network covered a larger geographic area and did not include many local streets) and therefore the numbers are not directly comparable. However, refined Alternative 1/2 shows a consistent improvement in network performance for both peak hours in 1991 and 2006. The FEIS Selected Alternative 1/2 average speed for 2006 PM peak hour was lower than the no-build alternative speed because it included a highly congested at-grade intersection at the eastbound East Capitol Street Bridge approach and congestion along Independence and Constitution Avenues. The refined design replaces this intersection with a grade separation and TSMs address the congestion problems.

Although construction of the Barney Circle Freeway Modification Project will improve overall conditions, average speeds are predicted to decrease substantially between 1991 and 2006 for refined Alternative 1/2. This decrease in average speeds indicates a significant systemwide increase in traffic congestion.

#### Identified Problem Locations

The FEIS identified the following four problem locations for particular attention:

1. The intersection of Pennsylvania and Minnesota Avenues, with 25th Street SE and L'Enfant Square. The FEIS determined that there would be no significant change to traffic Levels-of-Service (LOS) on the major approaches to this intersection between the build and no-build alternatives, due to insufficient capacity at this intersection. The re-evaluation analysis confirmed this finding, with only two minor improvements in projected LOS. Right turns from southbound Minnesota Avenue to westbound Pennsylvania Avenue would increase from LOS F to LOS B in the PM peak period,



Table 3-4  
Average Network Speeds

<u>Network</u>	<u>Analysis Year</u>	<u>Average Speeds (mph)</u>	
		<u>AM</u>	<u>PM</u>
FEIS Base (No Freeway)	1979	17.1	19.1
Re-evaluation Base (No Freeway)	1984	16.8	18.2
Re-evaluation Base (No Freeway)	1991	15.7	16.0
Re-evaluation Build (Freeway)	1991	16.0	17.7
FEIS No-Build (No Freeway)	2006	10.2	11.8
Re-evaluation Base (No Freeway)	2006	13.0	13.4
FEIS Selected Alt.1/2 (Freeway)	2006	12.2	10.4 (1)
Refined Alt. 1/2 (Freeway)	2006	14.0	14.6

-----  
(1) The FEIS shows 9.4 mph, with a note that it reflects an at-grade intersection of Independence Avenue and the parkway. Adjusting for this one location alone, the average speed should be about 10.4 mph.

while westbound Pennsylvania Avenue movements would increase from LOS F to LOS E in the AM peak period. The substantial diversion of traffic by the proposed freeway away from the eastbound Pennsylvania Avenue to the northbound Anacostia Freeway movement will occur due to the project's provision of a direct connection.

2. The intersection of Bladensburg Road, Benning Road, Maryland Avenue, Florida Avenue, H Street, and 15th Street NE. The FEIS did not project an improvement in LOS at this location due to construction of the project. The re-evaluation concurred with this finding, but determined that diversions to the proposed freeway connection from east-west movements might permit the westbound approach on Benning Road to operate at LOS E rather than LOS F in the AM peak hour.

3. The 3rd Street SE ramp onto westbound SE/SW Freeway. The FEIS determined that forced flow (LOS F) conditions would apply in the AM peak hour and LOS E in the PM peak hour. The re-evaluation indicated that even with the relocated ramp and safety and operational improvements, this location would still be at LOS F in the AM peak hour although handling more traffic. Improvement to LOS D is possible for traffic moving off the Freeway and onto northbound I-395, but the mainline freeway will probably remain at LOS E or F because of capacity constraints downstream. An advantage of the refined design in the off peak periods is the improved safety of the high speed merge.

4. The ramp from eastbound SE/SW Freeway to eastbound Pennsylvania Avenue. The FEIS projected that this location would improve from a no-build LOS C to LOS B in the PM peak hour once the facility is operational. The re-evaluation determined that not all the FEIS predicted eastbound diversion would occur and traffic remaining on this link would reduce the LOS to D in the PM peak hour.

#### Assessment of Major Roadway Segments

The re-evaluation identified some changes in the several congested segments identified in the FEIS. These changes are as shown in Table 3-5. Although the total number of congested locations decreases under refined Alternative 1/2, the level of congestion on certain links would be worse than originally forecast in the FEIS (e.g., eastbound Sousa Bridge in the PM peak hour).

Therefore, as stated in the FEIS, peak hour congestion will still occur on most bridge crossings and at many other locations throughout the study area. However, the re-evaluation indicates that refined Alternative 1/2 still represents a substantial improvement for traffic conditions over the no-build alternative.

Table 3-5  
Roadway Segments Designated as Congested

<u>Roadway Segment</u>	Congested with FEIS Alt. 1/2		Congested with Refined Alt. 1/2	
	<u>AM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>
Benning Road Bridge Eastbound		X		
Westbound	X			
-----				
E. Capitol St. Bridge Eastbound				X
-----				
Maryland Avenue NE between G St. and Benning Eastbound		X		
Westbound	X			
-----				
Anacostia Freeway from E. Capitol St. to new bridge crossing		X		
-----				
New Bridge Eastbound			X	
-----				

The overall level of daily traffic diversion attributed to the project is forecast to be nearly equal to that projected in the FEIS, with the shortfall concentrated at times and directions in which the SE/SW Freeway will be congested. Even in peak hours, substantial traffic relief is forecast for all problem movements identified in the FEIS, ranging from about half the FEIS diversion for east-west movements in Capitol Hill, to full FEIS diversion from local streets for the east side of the Anacostia River.

## 2. CHANGES IN LAND USE

As proposed, the Barney Circle Freeway Modification Project will require the taking of publicly owned parkland, specifically a total of 17.2 acres from Anacostia Park. Since this project is funded by FHWA, this land is protected under section 4(f) of the Department of Transportation Act of 1966. Section 4(f) states that FHWA will not approve any project which requires use of publicly owned parkland, recreation area, wildlife or waterfowl refuge, or historic site of national, state, or local significance unless:

- o there is no feasible and prudent alternative to the use of such land; and
- o such a program includes all possible planning to minimize harm resulting from use.

The FEIS concluded that no feasible and prudent alternative for use of this parkland existed. Technical evaluation and analysis demonstrated that Alternative 1/2, when compared to the other proposed FEIS alternatives, had the least environmental impact to Anacostia Park, the least community disruption, and was the most cost effective alternative for this project. As stated in the FEIS, planning measures were recommended under Selected Alternative 1/2 to minimize any harm to parkland that would result from this project.

In the preliminary engineering and design phase, these measures and mitigating features of design were more fully defined (see Section II). Mitigation as defined here are those measures which have been developed to protect Anacostia Park from the resultant roadway impacts and preserve or enhance its aesthetic qualities. In coordination with the National Park Service (NPS) some mitigation issues were identified in the FEIS; in the design phase a few FEIS mitigation issues were eliminated while others were created.

### Future Land Use

The proposed parkway will permanently change existing land use in Anacostia Park. Land currently undeveloped for recreational use will be used for transportation but other areas will be brought into recreational uses. The Park Plan, Figure 2-4, details the proposed future land use. The proposed freeway and parkway and their associated improvements will be constructed on land owned by NPS, DC General Hospital, and Conrail (see Figure 3-1). The project will take approximately 17.2 acres of land from NPS: 5.2 acres on the eastern shore for the proposed freeway, bridge, and ramps connecting to the existing Anacostia Freeway; and approximately 12.0 acres on the western shore dedicated to the proposed roadway. The land for both the freeway and parkway will be purchased by DCDPW from NPS.

In addition, DC General Hospital will transfer approximately 3.0 acres of hospital land located near the boundary of Anacostia Park and the hospital property. The hospital has no identified need for this land and this transfer will allow less NPS land to be needed for the proposed parkway alignment than as proposed in the FEIS. Additionally, approximately 3.6 acres of undeveloped land will be purchased from Conrail for this project. Once the proposed roadway is operational, its dedicated right-of-way will be maintained by DCDPW, while parkland will continue to be maintained by NPS.

In a separate action, the RFK Memorial Stadium practice field has been displaced as a result of the siting of the Northeast Boundary Swirl Treatment facility on this site. The 'Swirl' facility is a primary sewage treatment plant designed to improve the water quality and clarity of the Anacostia River. This facility is an integral part of the District of Columbia's commitment to improve the water quality and safety of the Anacostia River. The practice field has been relocated to a site north of the Stadium between East Capitol Street and Oklahoma Avenue, NE. The open space remaining from the original site of the practice field after parkway construction will remain National Park Service property.

### Other Issues

In addition to these direct changes, the parkway's tunnel connections to the freeway, grade-separated intersection, and its location near the Anacostia River and adjacent Capitol Hill neighborhoods, pose special environmental issues.

Parkway Pumping Stations. The preferred parkway option would be below grade at its closest point to Congressional Cemetery and would have a grade-separated intersection with its connection to



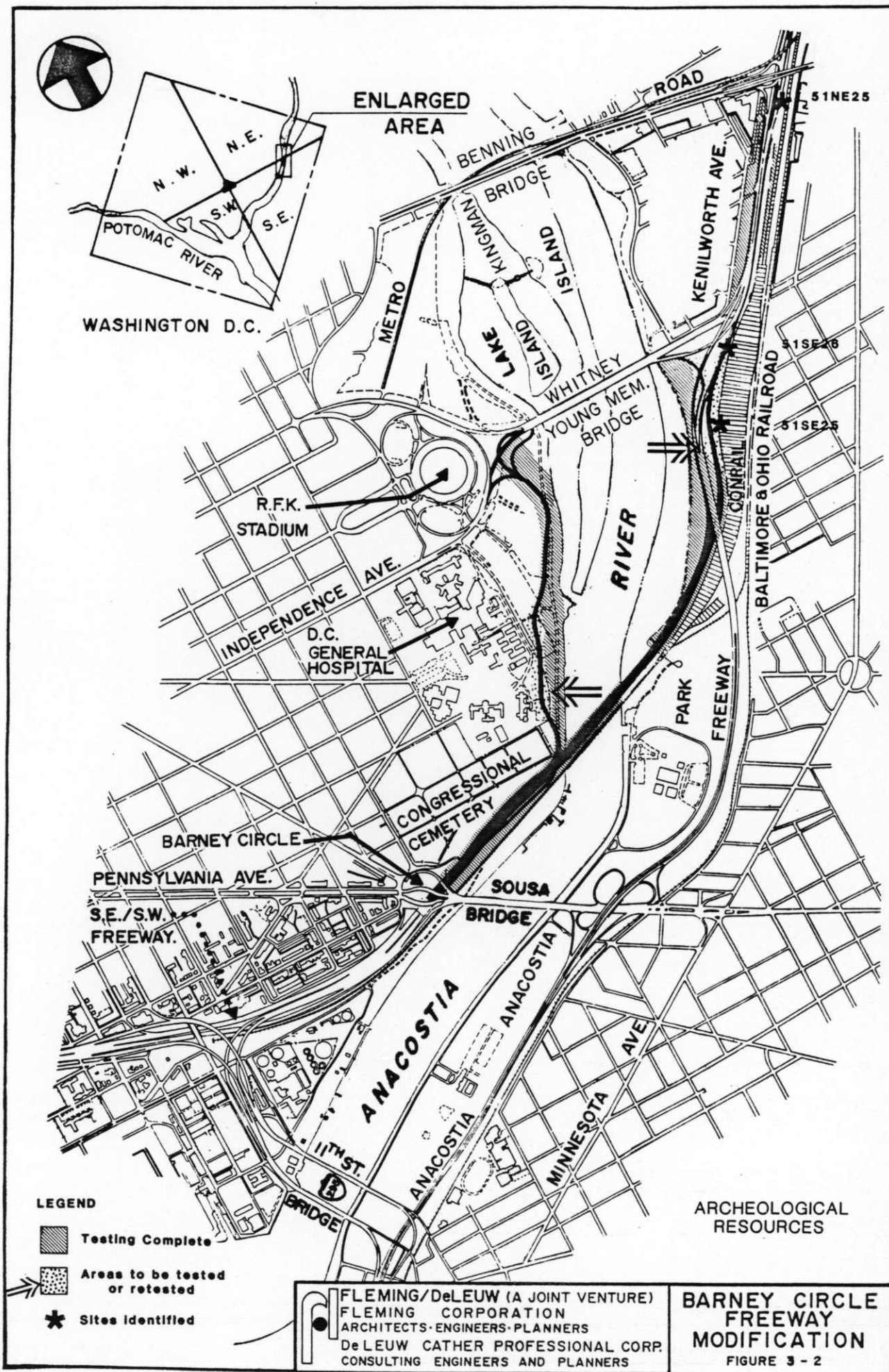
East Capitol Street, altering drainage patterns on the western shore of the park. These design refinements required that design and placement of two pumping stations be undertaken and incorporated into the overall parkway design: one for the tunnels and one for the grade-separated intersection. Each station, designed to 100 year flood requirements, will also serve to reduce flooding potential in the park by collecting and disposing of stormwater run-off. The station serving the tunnels would be located near the southeast tunnel portal. To minimize any visual intrusion, the station will be screened by vegetation, and will utilize appropriate architectural treatments to blend in with surrounding architecture. Similar treatments will be developed for the northern pumping station as necessary.

Seawall Repairs. Impacts to the existing seawall on both shorelines were identified in the FEIS as a mitigation issue under Selected Alternative 1/2. Repairs and, if necessary, reconstruction of the seawall are the proposed mitigation measures. The seawall will be repaired in those sections where the project improvements cut directly into the existing structure, including repairs on both shorelines at the point where the proposed bridge piers and seawall meet.

Additionally, under the proposed Anacostia Park plan improvements, the seawall will be repaired along both sides of the Anacostia River, primarily south of the railroad bridge. This upgrading will be performed as part of the overall improvements to the park that will be carried out by NPS under a separate contract and are not part of the Barney Circle Freeway Modification project.

### 3. ARCHEOLOGICAL RESOURCES

Preliminary archeological testing for this project took place in July and August of 1984. Testing was conducted to locate, identify, and evaluate predicted archeological resources in ten segments on both shorelines of the Anacostia River. Seven segments did not yield any resources of prehistoric or historic archeological significance. However, three segments on the eastern shore did contain prehistoric resources that are considered potentially eligible for the National Register of Historic Places (Figure 3-2). Two of these areas (sites 51SE25 and 51SE26) will need to be retested because their boundaries could not be determined during the 1984 testing. The third segment (site 51NE25) does not need to be tested again, unless grading, drainage, or work other than what was originally proposed in the FEIS is to be undertaken. Additionally, the area of the relocated ramp from eastbound East Capitol Street will need to be retested because the refined design is on a different





alignment than that proposed in the FEIS and investigated in the original testing.

On the western shore, a small portion of a segment north/northwest of the original segment tested in 1984 will need to be retested. This retesting is necessary because the proposed parkway alignment has shifted since the original testing occurred. Based on previous testing of this segment, the possibility of locating archeologically significant resources is marginal. Nonetheless, further testing of this segment is proposed in accordance with Section 106 of National Historic Preservation Act of 1966. Although additional testing is needed in a few segments, archeological mitigation measures have not been formulated for this project. However, once retesting is completed, if these segments yield substantial resources and are determined potentially eligible for the National Register, mitigation measures will be developed.

#### 4. RFK STADIUM PARKING LOT RECONFIGURATION

The proposed parkway alignment will marginally affect the existing number of parking spaces at the RFK Memorial Stadium Complex. Presently, RFK Memorial Stadium has approximately 10,000 paved parking spaces.

As part of the preliminary design and engineering phase of the project, DCDPW determined that the proposed parkway alignment and the Swirl Facility will displace 612 parking spaces and examined various reconfigurations of the existing parking lot for a more efficient use of space. A design for parking lot reconfiguration has been developed which would produce 10,688 paved spaces. A final configuration for the parking lots will be selected during the final engineering phase of this project. This final configuration will be determined in part by the selected landscaping plan for the parking lots, which will be compatible with proposed improvements to Anacostia Park.

#### IV. PROJECT COSTS, SCHEDULE, AND FUNDING

The Barney Circle Freeway Modification Project will cost approximately \$143 million to construct and will require 5 years to complete design and construction. This cost is the estimated cost of the preferred refinements to the FEIS Selected Alternative 1/2. This aggregate amount includes the project components of freeway, parkway, bridge, transportation-related safety improvements, and landscaping to areas affected by the project. Monies for the project will come from the Interstate Highway Program as a Federal-aid project. The FHWA will provide approximately 95 percent of the total project costs and DCDPW will provide the remaining 5 percent.

##### Costs of Alternatives

In the preliminary engineering and design phase following the Location Public Hearing, refinements to the FEIS Selected Alternative were developed. Qualitative cost estimates were done to facilitate the comparison of alternatives although safety, transportation, and community issues were given greater weight.

Number of Lanes. The cost of the parkway is closely related to the number of lanes since right-of-way and landscaping costs are essentially the same for all alternatives. A four lane cross section would cost approximately twice as much as the recommended two lane parkway and a three lane parkway would be one and one half times as much.

Shoulders. Paved shoulders would cost about 30 percent more than the recommended stabilized turf shoulders.

Asphalt. The recommended low noise skid resistant asphalt pavement (open-graded asphalt) would cost approximately 20 percent more than standard asphalt pavement.

Bridge Height. Construction of a bridge with a 28 foot midspan clearance would cost approximately 35 percent more than a bridge with the recommended lower 14 foot clearance due to the higher piers. The cost of constructing the approach roadway embankment to achieve the necessary clearance between the freeway and the parkway would be approximately the same as constructing the tunnels to achieve the same result.

Intersection at Independence Avenue/East Capitol Street. The recommended grade-separated intersection would cost approximately 90 percent more than an at-grade intersection.

The preferred refinements, therefore, include a less expensive parkway (2 lanes with turf shoulders), a less expensive bridge

(lower height), but a more costly intersection with Independence Avenue and East Capitol Street (grade-separated). This intersection refinement is considered to be worth the higher cost, however, because of the transportation and safety advantages it provides. Projected costs and funding sources are summarized on Table 4-1.

#### Schedule of Design Contracts

The project components have been divided into six separate final design and construction contracts.

These contracts are as follows:

- o Contract One is from Barney Circle to the west abutment of the proposed Anacostia River Bridge, including the tunnels near Congressional Cemetery.
- o Contract Two is the proposed Anacostia River Bridge.
- o Contract Three is from the proposed bridge east abutment to Anacostia Freeway and the Kenilworth Avenue safety improvements.
- o Contract Four is the parkway, interchange at East Capitol Street and Independence Avenue, and reconstruction of the RFK Stadium parking lots.
- o Contract Five consists of all TSM measures, 3rd Street ramp relocation, and upgrade of the 11th Street Bridge ramps.
- o Contract Six consists of landscaping along the freeway, parkway, ramps, and the RFK Stadium parking lots.

Table 4-2 depicts the length of each contract in terms of engineering and construction time.

#### Anacostia Park Plan Improvements

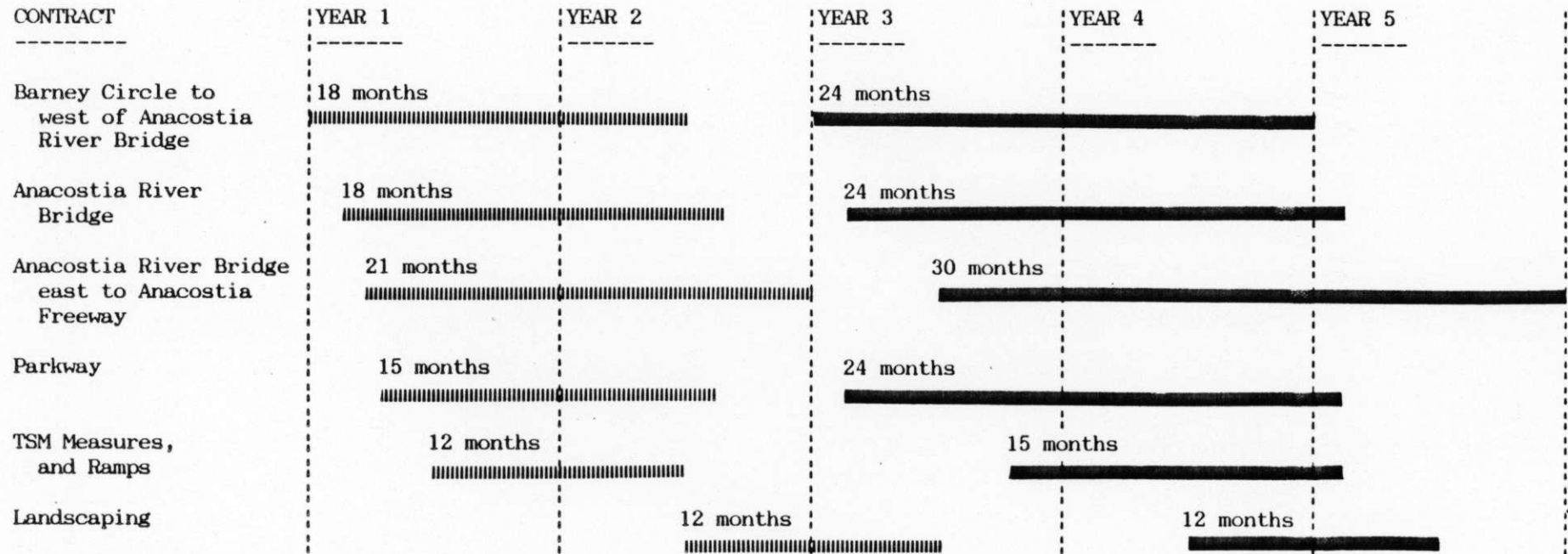
Anacostia Park Plan improvements will be funded under four categories: mitigation, replacement, sale of parkland, and other District funds. Mitigation monies are designated for improvements performed to lessen impacts to the park that will result from constructing the refined Selected Alternative 1/2. Replacement monies are earmarked for the replacement of facilities directly taken by this project. The District of Columbia and FHWA will each provide a portion of the monies for both activities. The National Park Service will determine the type and priority of park improvements to be performed with funds

Table 4-1  
Project Costs, By Contract and Source

CONTRACTS		FUNDING SOURCE IN (\$) MILLIONS				TOTAL ESTIMATED CONSTRUCTION COST
		FEDERAL SHARE			LOCAL DC SHARE	
		INTERSTATE 100%	INTERSTATE 90%—10%	URBAN PRIMARY 78.93%—21.07%		
CONTRACT 1	FROM BARNEY CIRCLE TO WEST OF ANACOSTIA RIVER BRIDGE: *Freeway at grade and retained fill *2 ramps to and from parkway including cut and cover tunnels	\$40.0	\$00.9		\$00.1	\$41.0
CONTRACT 2	ANACOSTIA RIVER BRIDGE: *4 lane freeway with ped/bike lane *Bridge aesthetics *Lighting etc.		\$38.0		\$04.0	\$40.0
CONTRACT 3	FROM EAST ABUTMENT TO ANACOSTIA FREEWAY: *4 Lane freeway aerial fill and at grade *Ped/bike overpass *Kenilworth Ave. safety improvements *Ramp from E. Capitol St. Bridge *Grade separation bridge at E. Capitol Street Bridge ramp	\$28.0		\$09.6	\$02.4	\$40.0
CONTRACT 4	PARKWAY: *2 Lane parkway from freeway to East Capitol Street Bridge *Grade separated interchange with Independence Avenue *R.F.K. Stadium access road	\$14.0				\$14.0
CONTRACT 5	T.S.M.: *Demolish existing Third Street ramp *Build new ramp to S.E./S.W. Freeway *Pave 11th Street ramps *Provide neighborhood TSM measures		\$05.0		\$00.5	\$05.5
CONTRACT 6	LANDSCAPING *Provide replacement mitigation landscaping along freeway, parkway, ramps and R.F.K. Stadium parking lot *Bike trails	\$02.5				\$02.5
TOTALS		\$84.5	\$41.8	\$09.6	\$07.0	\$143.0


SUMMARY:	
TOTAL FEDERAL SHARE	\$136.0
TOTAL LOCAL SHARE	\$07.0
TOTAL PROJECT COST	\$143.0

Table 4-2  
Proposed Design and Construction Schedule



Total Project Time including Design and Construction, approximately 5 years

Design 

Construction 

from the sale of parkland. Items to be funded as part of the Barney Circle Freeway Modification Project are detailed on Table 4-3 along with estimated purchase costs for NPS and Conrail lands.



Table 4-3  
Project Cost Estimates for Park Related Items

COST ESTIMATES FOR REPLACEMENT OF PARK FACILITIES TAKEN  
BY PROJECT AND MITIGATION OF PROJECT IMPACTS ON PARK

<u>QUANTITY</u>	<u>UNITS</u>	<u>ITEM</u>	<u>UNIT COST</u>	<u>FHWA/DC MITIGATION &amp; REPLACEMENT</u>
1	AC.	PARKING LOTS	\$95,000	\$95,000
1,500	L.F.	INTERNAL NPS ROADS	200	300,000
4	EACH	BIKE/PED RAMPS	400,000	1,600,000
1	L.S.	BIKE/PED OVERPASS OVER RR	2,000,000	2,000,000
200	L.F.	SEA WALL REHABILITATION	1,000	200,000
1	L.S.	LANDSCAPING	325,000	325,000
1	L.S.	RFK PARKING LOT	2,500,000	2,500,000
TOTALS:				\$7,020,000 =====

ESTIMATED FAIR MARKET VALUE OF LANDS TO BE ACQUIRED FOR RIGHT-OF-WAY

NPS LAND

West Bank Taking:	12.0 ACRES @	\$240,000 /ACRE =	\$2,880,000
Damages to West Bank Remainder:			\$700,000
East Bank, North Section:	5.0 ACRES @	\$120,000 /ACRE =	\$600,000
East Bank, South Section:	0.2 ACRES @	\$210,000 /ACRE =	\$42,000
17.2 ACRES			TOTAL= \$4,180,000 =====

CONRAIL LAND

West Bank Taking:	0.2 ACRES @	\$240,000 /ACRE =	\$48,000
East Bank Taking:	3.4 ACRES @	\$210,000 /ACRE =	\$714,000
3.6 ACRES			TOTAL= \$762,000 =====

Appendix A  
Memorandum of Agreement

# APPENDIX A SECTION 106 MEMORANDUM OF AGREEMENT

## Advisory Council On Historic Preservation

The Old Post Office Building  
1100 Pennsylvania Avenue NW, #800  
Washington DC 20004

### MEMORANDUM OF AGREEMENT

WHEREAS, the Federal Highway Administration (FHWA) has determined that the Barney Circle Freeway Project will have an effect upon properties included in the National Register of Historic Places and has requested the comments of the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800),

NOW, THEREFORE, the FHWA, the District of Columbia State Historic Preservation Officer (DPO), and the Council agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

### Stipulations

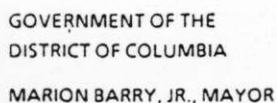
FHWA will ensure that the following stipulations are carried out.

1. Every effort will be made to minimize the height of the structure and embankment. This will include the following items:
  - a. Geometric design study will be performed to determine if a clearance height of 22 feet or less is within allowable safety, operational and engineering constraints to provide a highway connection between the Anacostia Freeway and Barney Circle termini. The results of this study will be used to request a lower navigational clearance over the Anacostia River from the U.S. Coast Guard. If the U.S. Coast Guard will not permit the proposed navigational clearance, FHWA will attempt to obtain the lowest height possible within the above constraints and will then amend this Memorandum of Agreement.
  - b. The boulevard will be designed to avoid the impact of the 25 year flood instead of the 100 year flood.
  - c. The clearance of the boulevard under the freeway will be reduced from 16.0 ft to 14.5 ft.

- d. The freeway will be designed to allow for a 65 mph design speed instead of a 70 mph design speed. This will establish the allowable grade, super elevation, lane widths and vertical and horizontal sight distances required for safety.
- e. Preliminary and final bridge designs, including the type, size and location of the structure, will be submitted to the Council, District of Columbia MPO, the owners of Congressional Cemetery or their representatives, and the Congressional Cemetery Association (CCA) for review and comment. The plans will also be submitted to the National Park Service (NPS) for review and comment, and submitted to the National Capital Planning Commission (NCPC) for action in accordance with District of Columbia procedures.
2. Lower speed limits of 35 mph will be incorporated in the design of the boulevard portion of Alternative 1/2 with the goal that the reduced operating speed of the facility will significantly reduce the noise levels in the vicinity compared to the noise levels associated with a facility designed for freeway operations.
3. The boulevard portion of the selected alternative will be designed as a parkway type facility including curving alignment and planted medians.
4. Stone facing will be provided on the bridge abutments and piers and on any retaining walls which may be required throughout the project.
5. Options shall be considered which limit the features above the parapet wall (e.g., lighting standards, directional signing), and lighting standards (e.g., "twin-twenty's") consistent with the historical character of the area will be used in compliance with AASHTO lighting standards and within safety and operational constraints.
6. "Twin-twenty" lighting standards will be used on the boulevard in keeping with the character of most of the older sections of downtown Washington.
7. A noise barrier 12-14' high will be constructed adjacent to the boulevard in the vicinity of Congressional Cemetery. The specific design for such a barrier will be developed during the final design of the project in consultation with the property owners or their representatives, CCA, the National Park Service, the Commission on Fine Arts and the District of Columbia MPO. If desired, this wall can include use of an earth berm, where practical, and/or brick facing to minimize additional visual impact.
8. "Low noise" asphalt will be used for the boulevard portion of the selected alternative to reduce noise generated by the movement of tires on pavement.
9. Vegetation will be planted to "screen" the noise barrier and roadway from the visitors at Congressional Cemetery as much as possible and reduce its intrusiveness. These plants will not be of a variety which grow to a height which would eventually block parts of the remaining vista from the Cemetery.

10. A landscaping plan will be developed by a landscape architect during the design phase for the project in consultation with NPS, the Commission on Fine Arts, and the owners of Congressional Cemetery or their representatives, and CCA. This plan will be developed in coordination with the plans for the portions of Anacostia Park adjacent to the Cemetery. The plan will be provided to the Council and the District of Columbia MPO for review and comment.
11. All practical design measures will be taken to prevent any impact on the drainage in the vicinity of Congressional Cemetery.
12. An archaeological testing program will be developed in consultation with the District of Columbia MPO based on the "Archaeology Final Technical Report No. 12" dated February, 1983, and the "Memorandum of Understanding: Archaeological Sites within the Area of Potential Impact of the Proposed Barney Circle Freeway" between FHWA, the District of Columbia Department of Transportation and the District of Columbia MPO and finalized on 9/22/83. The results of the testing program shall be provided to the District of Columbia MPO and the Council.
  - a. If the tests result in the discovery of properties that in the opinion of the District of Columbia MPO may be eligible for the National Register because they potentially could produce information important to the study of history or prehistory, FHWA shall ensure that such properties are treated in accordance with stipulation 12. b contained in this Memorandum. If the tests result in the discovery of properties which the District of Columbia MPO believes may be eligible for the National Register for other reasons, FHWA shall request further comments of the Council pursuant to 36 CFR Section 800.6(b).
  - b. FHWA shall ensure that, based on the principles in Part I of the Council's handbook Treatment of Archeological Properties, a plan is developed in consultation with the District of Columbia MPO specifying: (1) which properties or portions of properties shall be subjected to data recovery; (2) which may be destroyed without such attention; and (3) what research questions shall be addressed by the data recovery effort and in what manner. FHWA shall ensure that the plan is responsive to the guidelines in Part III of the handbook. FHWA shall submit the plan to the District of Columbia MPO and the Council for 15-day review. Unless the District of Columbia MPO or the Council objects within 15 days after receipt of the plan, FHWA shall ensure that the plan is implemented.
13. A mechanism will be established to assure that lines of communication will be maintained with the Congressional Cemetery Association throughout the design process. The Association will be provided with copies of the non-financial portions of the monthly progress reports submitted to District of Columbia DOT from the design consultant.

Appendix B  
Comment Sheet



# loc barne

barney circle freeway modification project

*design public hearing  
may 11 & 12, 1988*

**comments:**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Please leave your comment sheet in the box provided, or submit comments within 30 days to:

DC Department of Public Works  
Bureau of Transportation  
Construction Services, DECA  
Reeves Center, Fifth Floor  
2000 - 14th Street, N.W.  
Washington, D.C. 20009

**name:** \_\_\_\_\_

**address:** \_\_\_\_\_

\_\_\_\_\_ **zip:** \_\_\_\_\_

phone #: \_\_\_\_\_

**group or organization:** \_\_\_\_\_

(please print)



