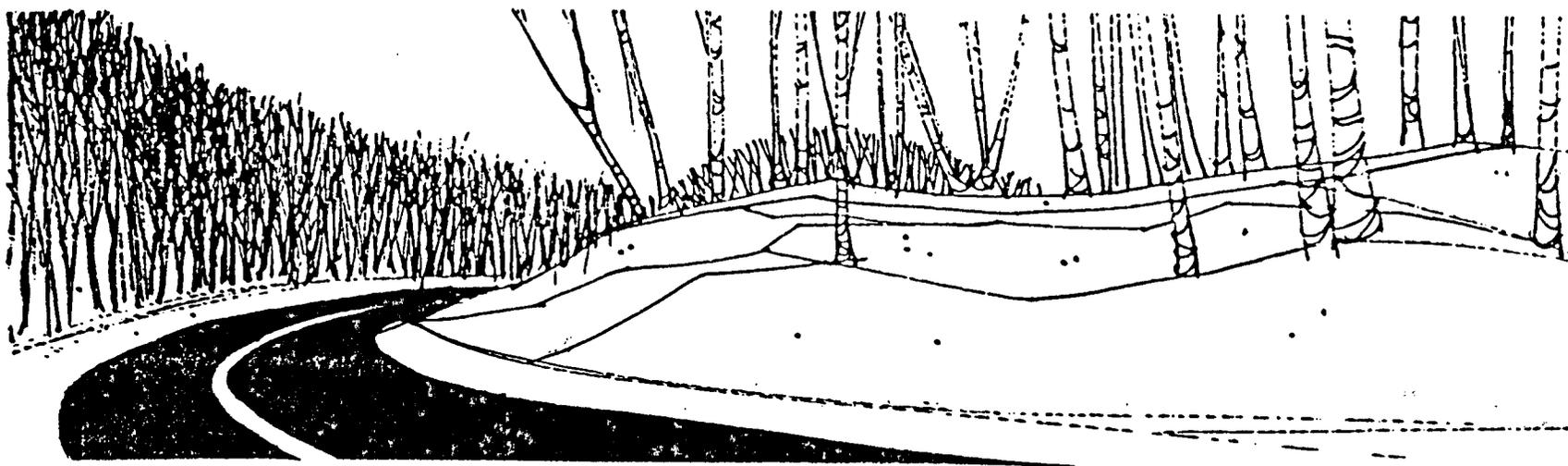


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BALTIMORE · WASHINGTON PARKWAY

Design Elements

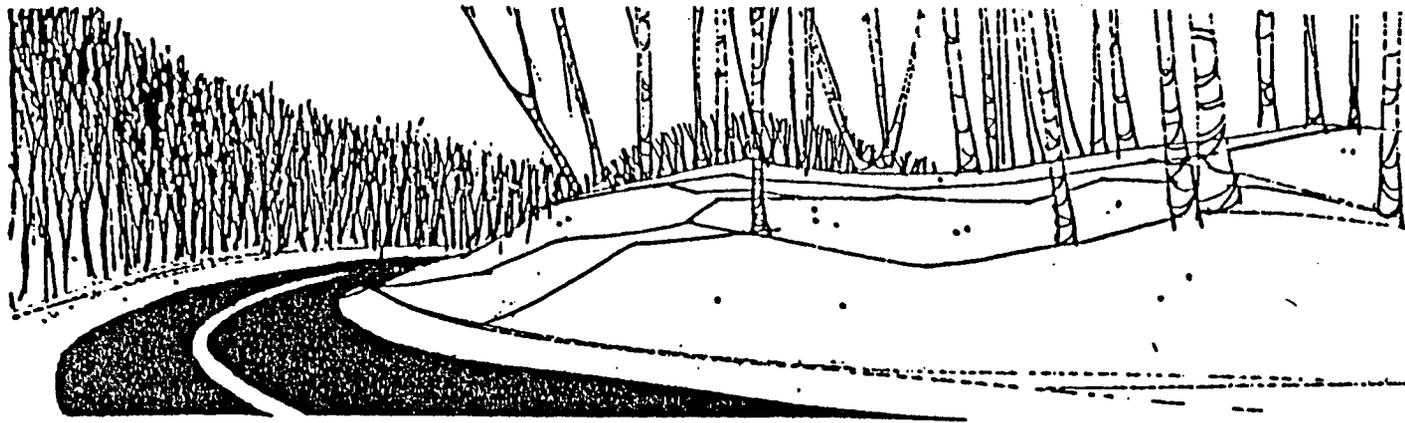
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BALTIMORE · WASHINGTON PARKWAY

Design Elements

National Capital Region
National Park Service
United States Department of the Interior

February 1984

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INTRODUCTION

Urban parkway systems were constructed as gateways to Washington, New York, and other eastern cities during the 1930's-1950's and have served their multiple purposes extremely well. They are typically four-lane divided, controlled, or limited access facilities. The parkways were carefully designed and constructed by teams of engineers and landscape architects who took care to ensure that the roadways fit into the existing topography and landscape settings in order to enhance people's enjoyment and appreciation of the parkway environment. Parkway provide a scenic corridor for personal travel for: visitors who appreciate the scenic gateway qualities; commuters who seek a more restful alternative to freeways; adjacent communities who use the parklands for various recreational purposes; and those who use the cultural and recreational facilities which these roadways link. Parkway have become such a part of the daily lives of many users that their scenic qualities are often taken for granted.

Many of the nation's parkways are in need of major rehabilitation. Additionally, a reevaluation of the original design details of parkways is required to bring them into conformance with contemporary standards of roadway improvement. Today, state-of-the-art design for Federal aid highways has been developed into a carefully refined series of design standards. When these standards are applied to the parkways, many of the resultant construction details intrude on the parkways'

scenic landscape and negate the aesthetic qualities which were integral to their original design.

Of particular importance is the rehabilitation of this 19-mile Baltimore-Washington Parkway. The legislative intent was to develop and operate this parkway as a limited access road that would provide a dignified, protected, safe, and suitable approach for passenger vehicle traffic to the Nation's Capital, as well as provide an uninterrupted access between the Federal establishments adjacent to the parkway and the seat of government in Washington, D.C.

The National Capital Planning Commission, responsible for preparing the Comprehensive Plan for the Nation's Capital, reinforced the Congressional intent by ensuring that the parkway would become a part of the Park System of the Nation's Capital as a major gateway to Washington along with the George Washington Memorial Parkway and the Suitland Parkway.

All of the major concerns and parkway design issues are inherent in this major rehabilitation project. This special study has been conducted to develop design elements for the Baltimore-Washington Parkway which could be applied to other similarly used parkways and park roads in an urban setting.

PARKWAY LANDSCAPE

The significant difference between a parkway and other major roads is the generous right-of-way that provides for the park setting through which the roadway passes. The care and attention to the design and manipulation of this landscape setting is the most important part of parkway management. Unlike the static form of the man-made elements of this parkway, the landscape and its plant material are constantly evolving. Consequently, the landscape should be developed and maintained in accord with a plan that establishes a complementary balance between the preservation and selective clearing of existing plantings and the addition of new plantings.

The Baltimore-Washington Parkway has never had the benefit of a landscape plan. All of the plantings are either forested areas, which were saved during the original road construction, or volunteer growth, which has naturally evolved over the past 30 years. The vegetation which borders the roadway is typically 30 feet from the edge of the pavement and is maintained by a continuous forest edge. The median has either mown areas, with occasional volunteer pine, or wooded areas that predate the road construction. The wooded areas are composed of second growth hardwoods, such as oak or volunteer Virginia Pine.

The parkway has a generous right-of-way which varies from 400 feet to 800 feet, and it averages 600 feet in width. The median strip between the roadway varies from 15 feet to 200 feet, and it averages 100 feet in width. The

parkway has adequate right-of-way to provide for a variety of spatial experiences, i.e., a variety of kinds and sizes of masses of plantings in the median and undulating edges of plantings along it with specimen plantings in the open "bays" so created.

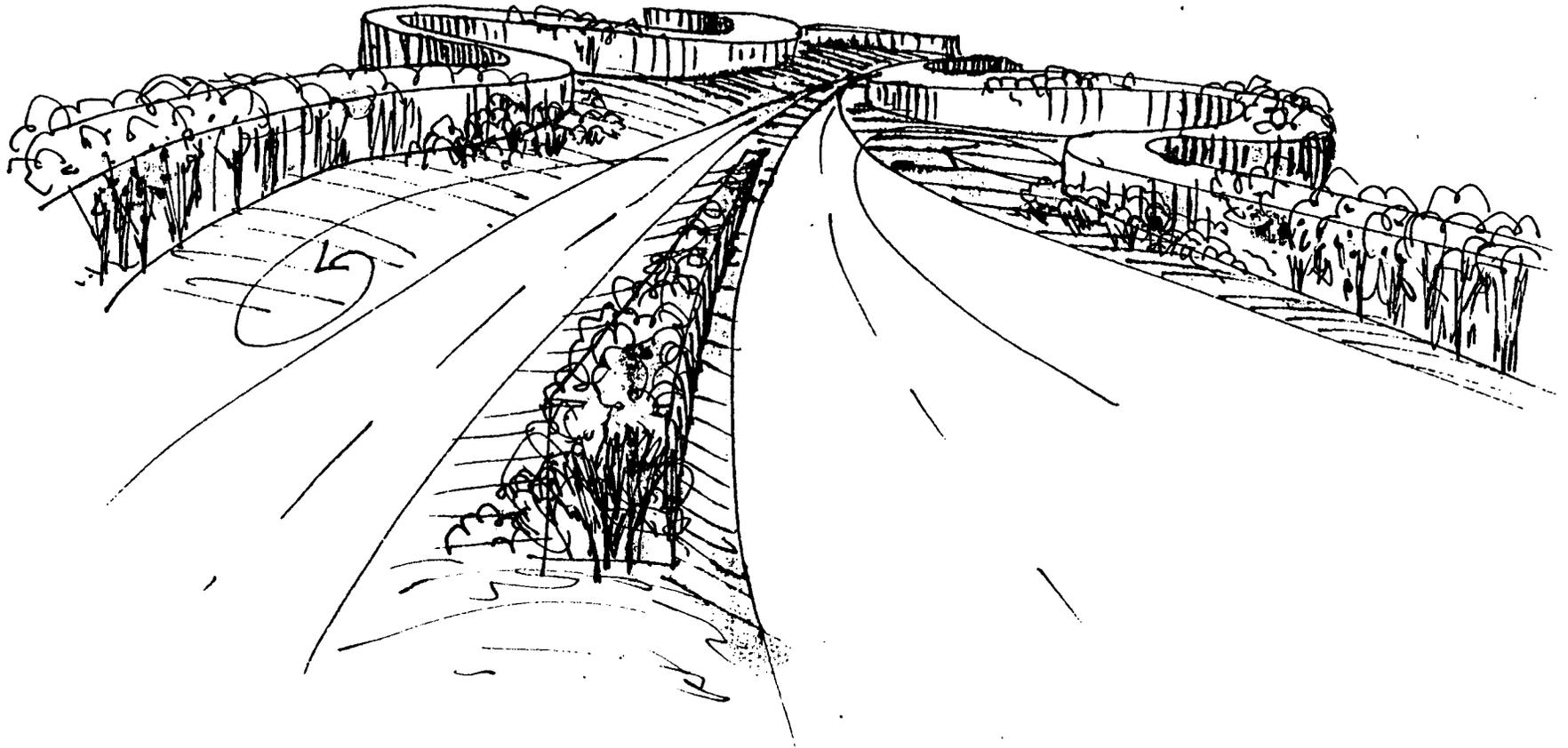
Design sequences of a variety of species are characteristic of parkway landscape treatment. This variety enhances people's experience of the parkways.

PARKWAY LANDSCAPE: RECOMMENDATIONS

Special effort should be given to the development of a landscape plan that will incorporate the above referenced features as part of the rehabilitation program for the parkway. This plan should be developed by the National Park Service during the design detailing of the project in close cooperation with the Federal Highway Administration.

This landscape plan would identify those areas which should be cleared or either mowed or maintained as meadows with wildflowers, allowed to revegetate, planted with specimen groupings, maintained to preserve or create views, mounded for visual effect, planted to reduce headlight glare, filled to avoid the need for a guard rail, or allowed to grow to produce a canopy effect over the roadway. (Figure 1.)

PARKWAY LANDSCAPE TREATMENT
CONCEPTUAL - CREATE VARIETY OF VISTAS,
VIEWS, FRAMING ELEMENTS. USE VARIETY
OF PLANT SIZES, MASSES, TOPO CHANGE, ETC.



PARKWAY CROSS SECTIONS

Parkways should have a clear delineation between the edge of the pavement and the grassed shoulders to create a distinct framing as a scenic quality. One of the prime characteristics that distinguishes a parkway, such as the George Washington Memorial Parkway, from the interstate system or other roads, is the narrow and distinct framing of the paved, travelled surface. Just as a frame can enhance the visual perception of a painting or photograph, the elements that frame a road and its adjacent space can enhance the overall appearance of a parkway. (Figure 2.)

While the aesthetic elements which distinguish a parkway from a typical highway are important, they can not be divorced from nor can they disregard the safety needs of the road user. There should be a complementary balance between safety and beauty which ensures the lowest possible accident rate.

The Baltimore-Washington Parkway was initially constructed with a frame of stabilized turf shoulders at the edge of the pavement which presented or focussed the road within a landscaped setting. The initial width of 24 feet of roadway was visually contained by grass shoulders which integrated the roadway, landscape features, and topography into a comprehensive design.

Over the past 30 years this design has been modified several times due to changing traffic patterns, increased volumes, and usage. The last 10 years have witnessed a period of

general neglect due to the impending transfer of the parkway from the National Park Service to the State of Maryland. These modifications have introduced a hard surfaced shoulder which has essentially increased the parkway to its current width.

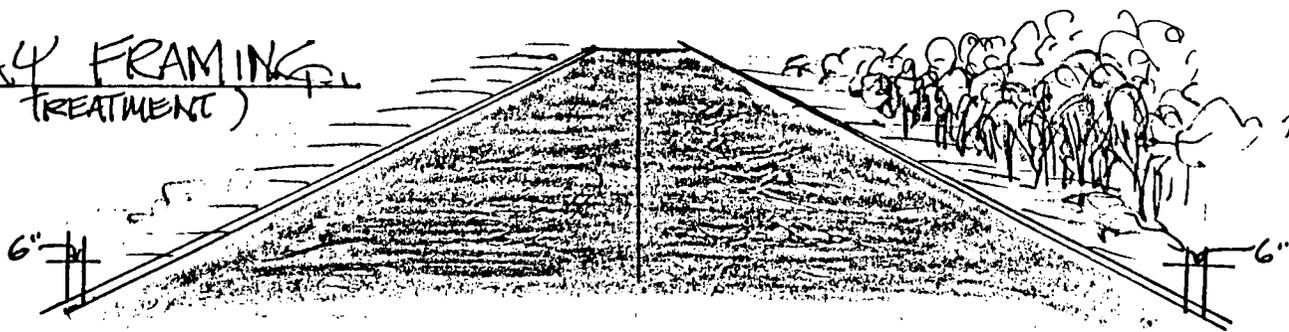
The application of current road standards to a roadway system with an average daily traffic flow of 80,000 vehicles requires that the most desirable cross section allow for a smooth transition from the main roadway through the shoulder area. The minimum desirable shoulder configuration consists of an inside shoulder, 3-feet wide, and an outside shoulder totaling 8 feet in width. The application of these standards can increase the total paved cross section by almost 50 percent. This increased width diminishes the effect of the framing and dominates the landscape.

The following discussion will address the framing elements of a parkway and focus on the area which extends beyond the 24-foot travelled roadway surface.

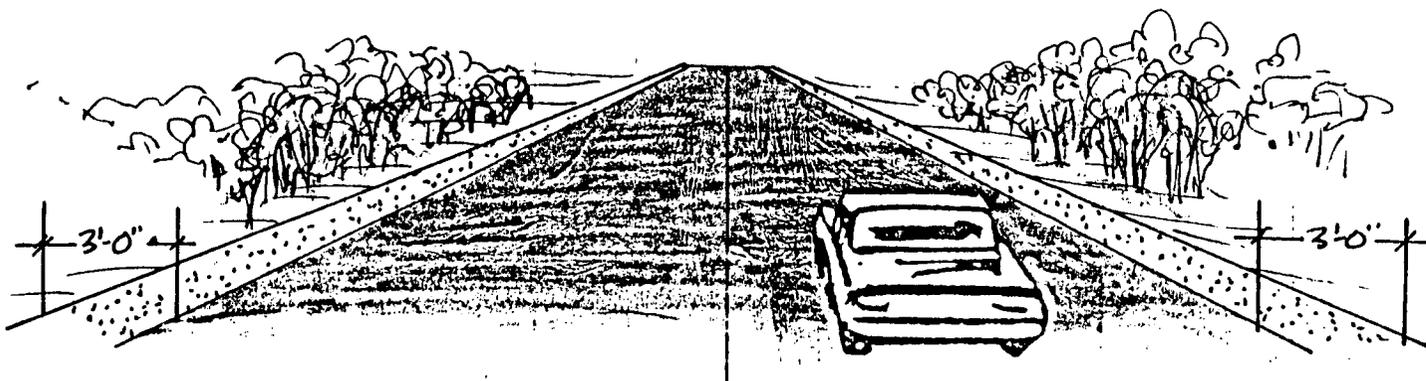
Functions which must be addressed within this area are roadway drainage, maintaining the structural edge, preserving the grass shoulders, ensuring the safety of the motorist, and achieving an aesthetic framing of the roadway.

The current roadside of the Baltimore-Washington Parkway does not meet all the above criteria in that the road edge is breaking down, the grass shoulder is dying due to lack of sufficient maintenance, and the present

PARKWAY FRAMING
(SHOULDER TREATMENT)



GUMP



3' INSIDE SHOULDER, 3' OUTSIDE

3' INSIDE SHOULDER, 8' OUTSIDE

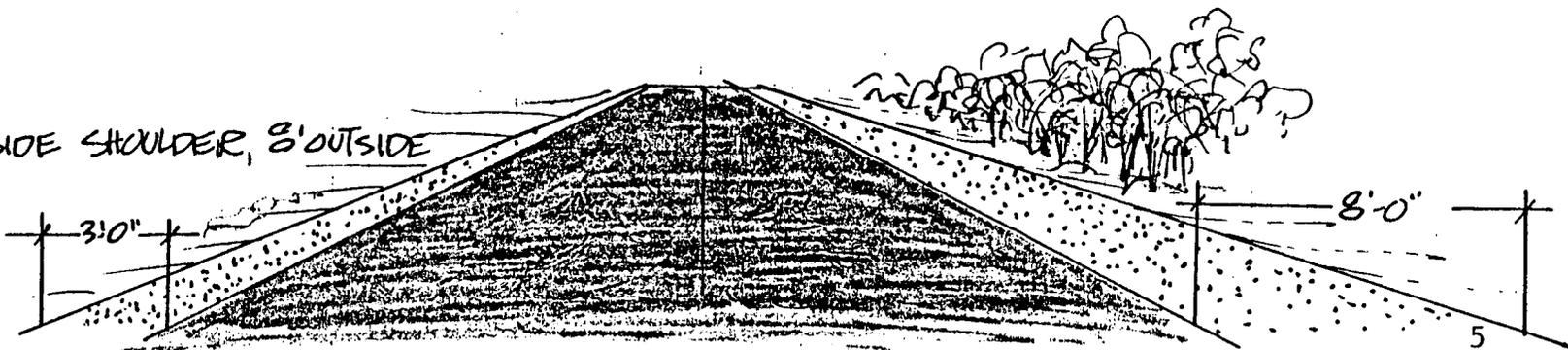


Figure 2.

width and composition of the roadside does not adequately frame the parkway.

In order to gain an understanding of the required parkway criteria, five cross sections were developed which represent the range of shoulder edge strip and shoulder characteristics under consideration. All cross sections assume a 24-foot asphaltic surface on the roadway. The diagrams that follow this section illustrate the alternative cross sections which were studied.

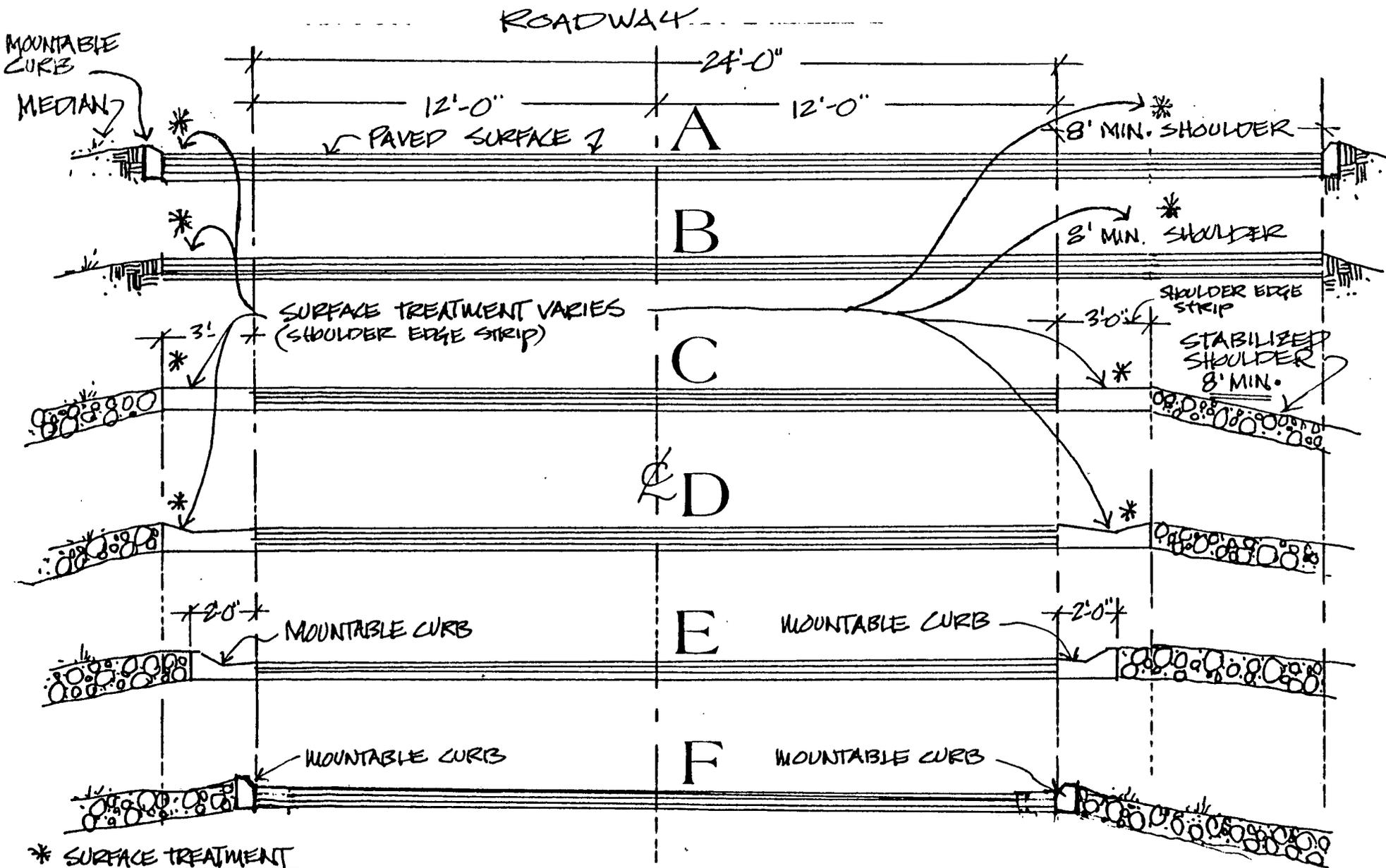
One end of the range (cross section F) is the typical road cross section represented by the George Washington Memorial Parkway-Virginia with its 24-foot travelway, 6-inch wide mountable curbs, and stabilized grass shoulders. This was designed by a joint team of National Park Service and Federal Highway Administration officials. This roadway fully meets the aesthetic criteria of a parkway. However, it is narrow by current design standards and does not provide a full shoulder width throughout its length. The mountable curbs, while designed to handle drainage, do provide an excellent framing element for the parkway. (Figure 4.)

The other end of the range (cross section A) considered consists of a 24-foot travelway with a 3-foot paved shoulder on the inside and an 8-foot wide shoulder on the outside with mountable curbs beyond the shoulder areas. A variation of this, as shown in cross section B, is to eliminate the curb. This cross section is close to the current configuration of the Baltimore-Washington Parkway, and it

meets interstate standards. Although providing for full shoulder widths as well as a flat transition from the travelway through the shoulder, these cross sections fail to meet the aesthetic criteria for a parkway in that the paved area is excessive and does not provide clearly defined delineation between the travelway and the shoulders.

The three remaining cross sections (C-D-E), fall between the above mentioned extremes. They each have in common a 24-foot travelway. They include a variable design for a 3-foot shoulder edge strip and a minimum 5-foot area which consists of a stabilized sod shoulder rather than a paved shoulder. This stabilized sod shoulder provides opportunity for the motorist to pull completely off the travelway while allowing the natural grass surface to come as close as reasonably possible to the travelway, thus emphasizing the framing of the parkway and increasing its aesthetic value.

Shoulder Edge Strip: The difference between cross sections D and E and cross section C is in the treatment of the shoulder edge strip. Cross sections D and E utilize a low mountable curb for drainage collection, whereas cross section C has a flat 3-foot wide section between the roadway and the stabilized sod shoulder. The flat section will serve the same function as the curb section in maintaining the integrity of the travelway. The flat shoulder edge strip has the advantage of (1) eliminating catchbasins, (2) improving snow removal operations, (3) providing an area for driver recovery, and (4) providing a stable



ALTERNATIVE CROSS SECTIONS

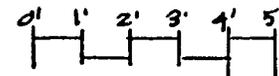
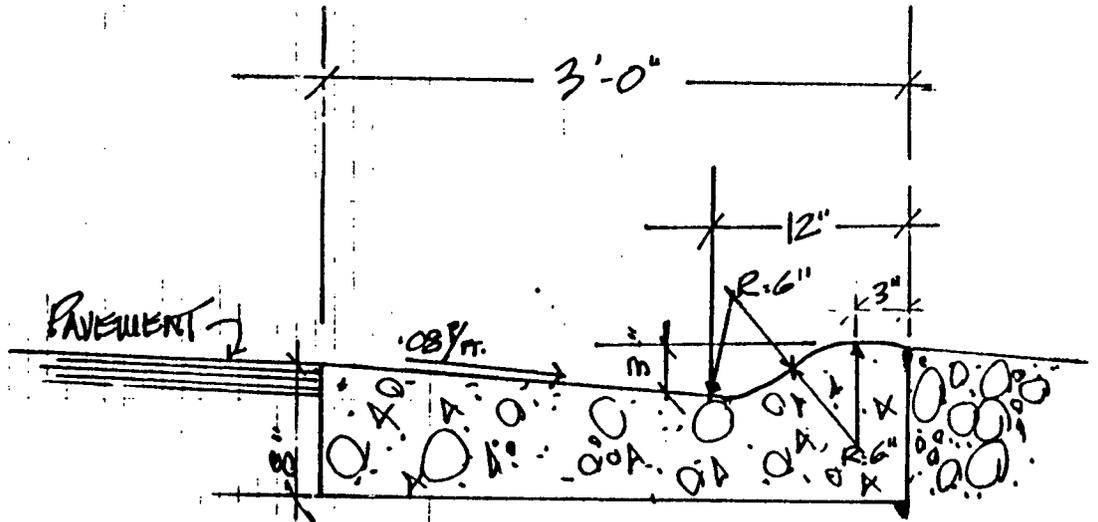
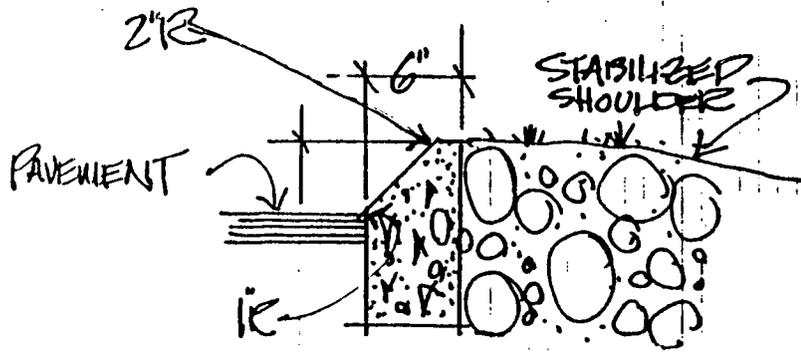
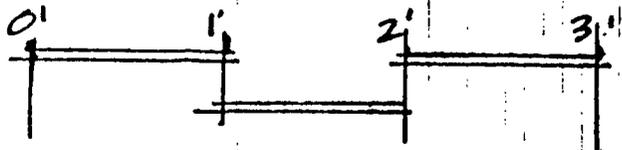


Figure 3.

MOUNTABLE CURB & GUTTER DETAILS



MOUNTABLE CURB (GUMP)



MOUNTABLE CURB & GUTTER

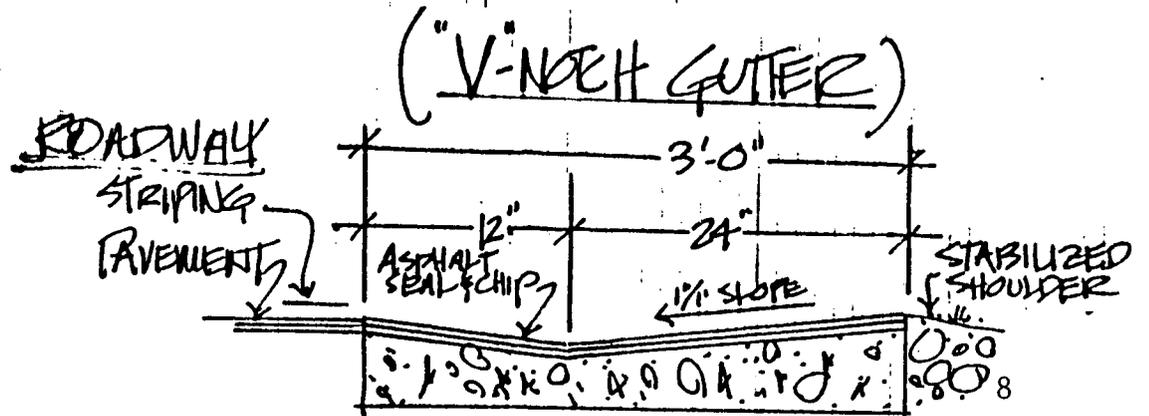


Figure 4.

surface.

The surface treatment of the 3-foot wide shoulder edge strip is important because the area will be the principle aesthetic frame for the roadway. There are a variety of treatments possible which effectively vary the visual width and texture of the shoulder edge strip. (Figure 5.)

When the shoulder edge strip is concrete, it can be varied through such techniques as exposed aggregate surfacing, architectural paving, or simply texturing the wet concrete. A textured surface could also serve as a safety warning device to drivers drifting off the travelway. In addition, the color of the concrete can be changed by adding a coloring agent to the mix.

Stabilized Turf Shoulders: Cross sections C, D, E, and F all contain stabilized turf shoulders for emergency parking. The key to the usability of these shoulders year-round and the survivability of the grass lies in the way the shoulders are developed.

The major problem with existing stabilized shoulders, as evidenced by the George Washington Memorial Parkway, is improper drainage of the road shoulder and the excessive depth of soil/aggregate mix over the road base. Under wet conditions, these shoulders are too soft to fully support parked vehicles, and they require high maintenance. This can be alleviated through proper design and maintenance.

PARKWAY CROSS SECTIONS: RECOMMENDATIONS

A 3-foot wide shoulder edge strip of a textured colored concrete (or exposed aggregate), should be placed along both sides of the asphaltic overlay of the roadway. A surface treatment should be considered which will also function as an audible warning strip to help prevent road "run-off" accidents.

The final selection of the surface treatment should be based on both long-term maintenance and visual appearance. The road should be designed with as few joints as possible because each joint allows water to seep into and under the roadway, creating potential problems under freezing and thawing conditions. In addition, an underdrain should be provided between the joints to remove excess water accumulation under the main roadway and shoulder edge strip.

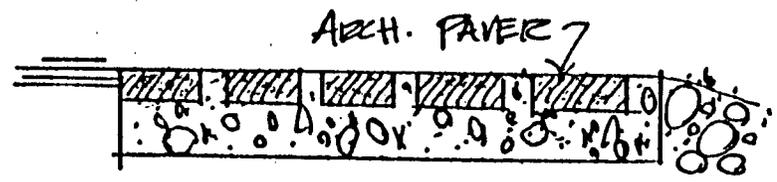
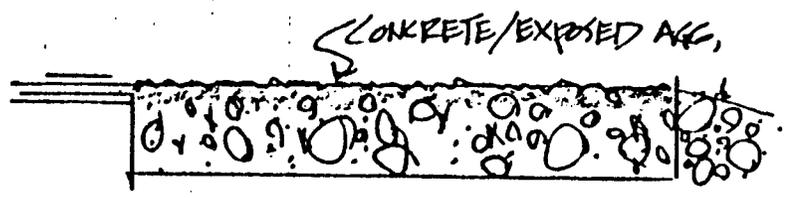
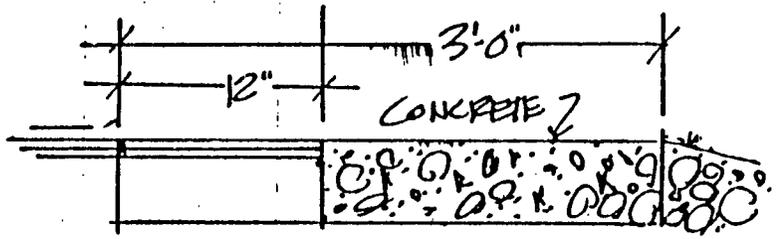
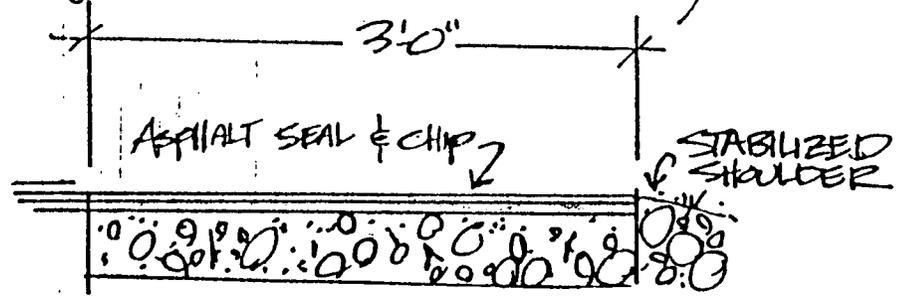
Careful consideration during the design phase should be given to carrying the shoulder edge strip texture and color through the interchanges, ramps, gores, turnarounds, and islands, to ensure design continuity. To further ensure design continuity, the full 3-foot shoulder should be carried continuously through all interchanges. (Figure 6.)

It is recommended that a series of sample panels be made of the shoulder edge strip to serve as a basis for final design selection.

The shoulder edge strip offers the greatest challenge for aesthetic design and texturing, and it is the principle framing element which defines the travel surface and establishes a

SURFACE TREATMENTS

(SHOULDER EDGE STRIP)



NOTE:

ALL SURFACE TREATMENT ALTERNATIVES SHOWN ABOVE CAN BE APPLIED TO THE 3' SHOULDER SECTION.

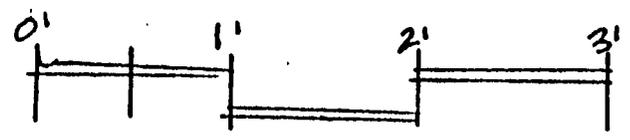
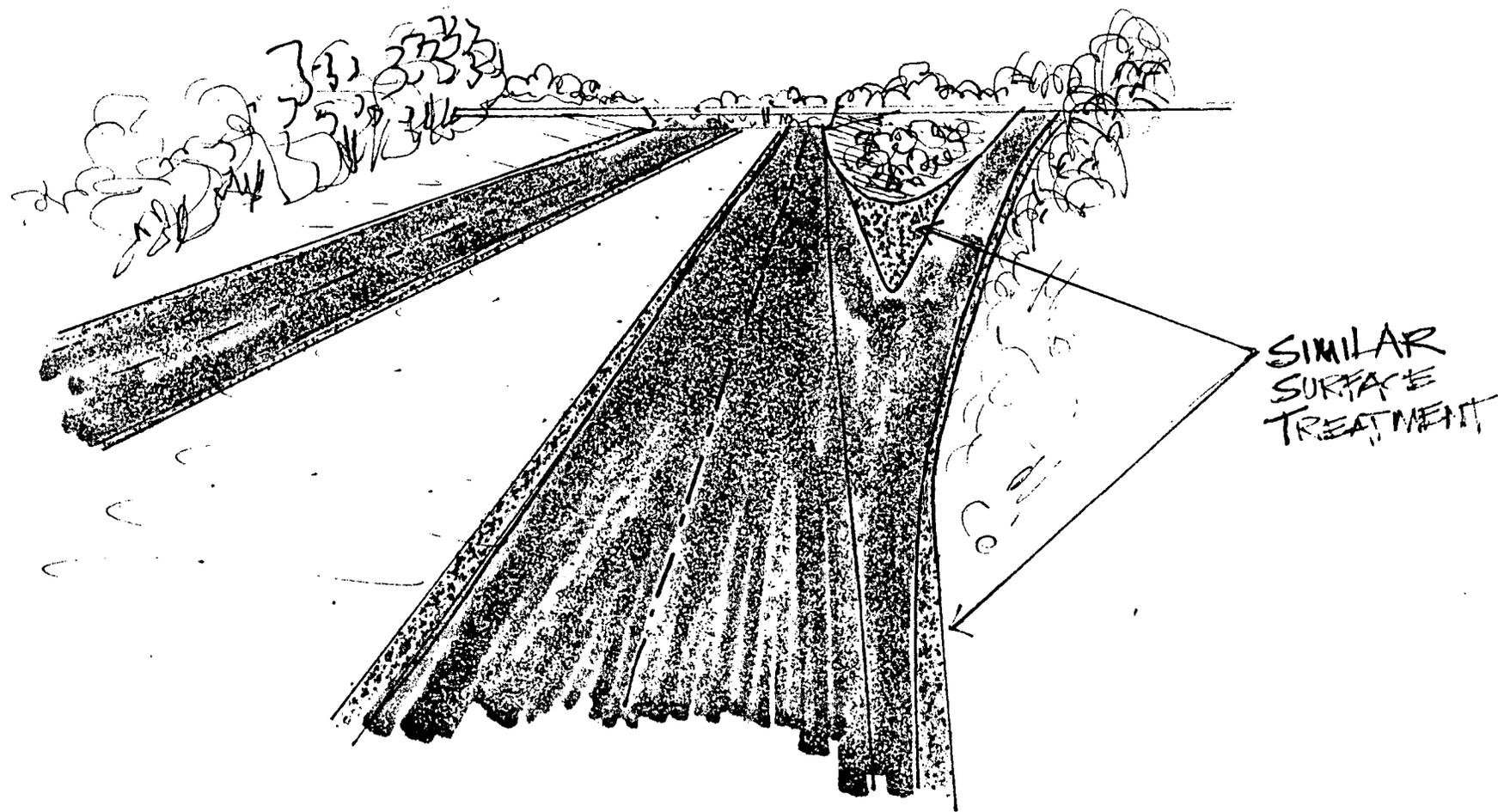


Figure 5.

INTERCHANGE - GORE & SHOULDER EDGE STRIP TREATMENT



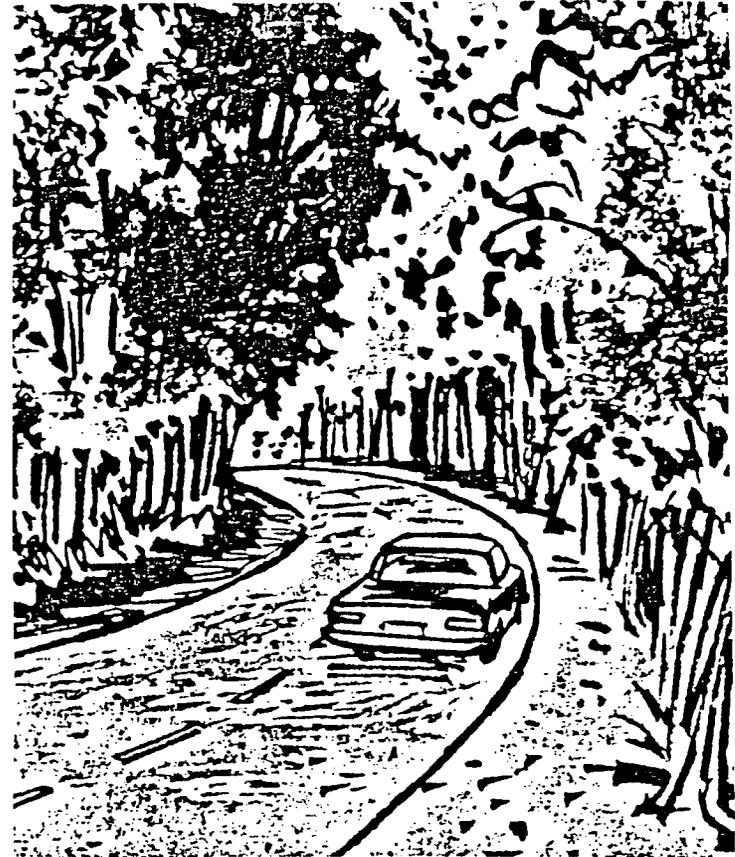
SIMILAR
SURFACE
TREATMENT

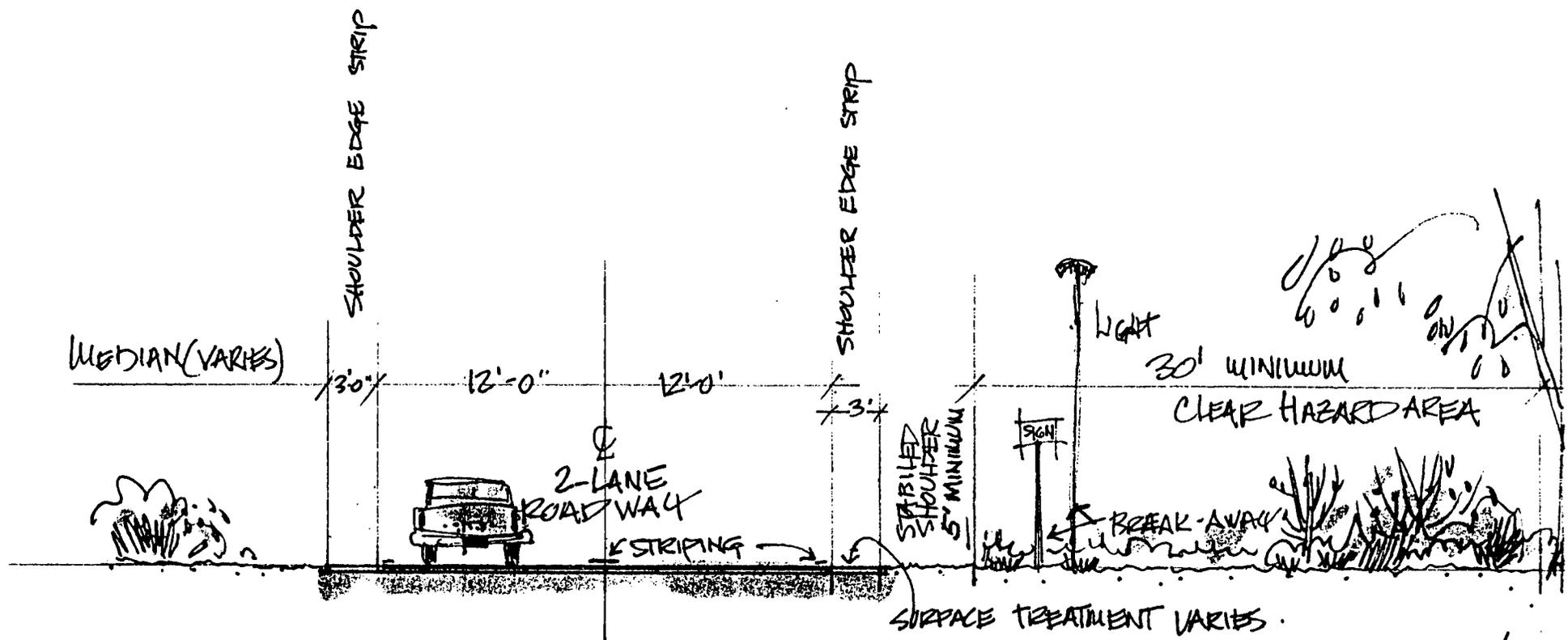
parkway's identity.

Shoulders beyond the concrete strip should be turf with a fully stabilized sub-base. The width of turfed shoulders beyond the 3-foot concrete edge strip should be a minimum of 5-feet wide, making the shoulder a minimum 8 feet. (Figure 7.)

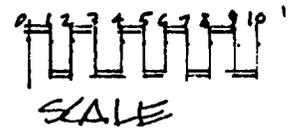
To ensure the stability of the turf shoulder section year-round, the following is recommended: extend upward, within 4 inches of the sodded area, a 15-inch depth of aggregate mix compacted to 90 percent of maximum density. Under this design, the additional incorporation of an aggregate base will alleviate the past instability problems caused by excessive water retention, and by reducing the soil/aggregate mix from an average of 19 inches to 4 inches, turf damage and maintenance costs will be reduced. (Figure 8.)

Consideration should also be given to alternate color and surface treatments of the asphaltic overlay on the road surface. A variegated surface with brown tones would be preferable to the standard "black top" appearance. An open graded plant mix seal with 3/8-inch pea gravel aggregate should be considered.





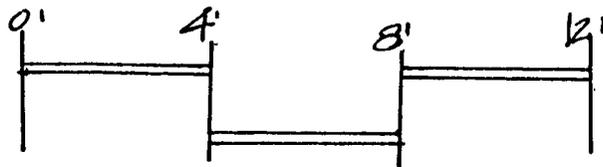
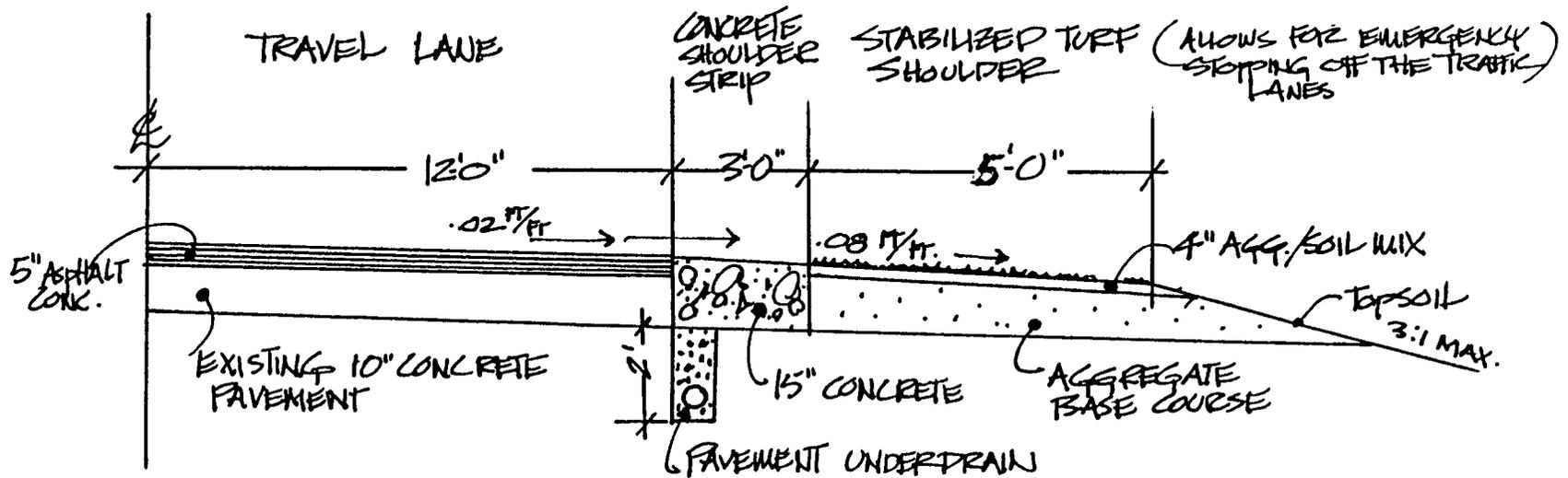
TREES
OVER 4" CALIPER



RECOMMENDED CROSS SECTION URBAN PARKWAY

Figure 7.

RECOMMENDED CROSS SECTION OF ROADWAY WITH STABILIZED SHOULDER



NOTE:

AGG./SOIL TOPSOIL MIX SHALL BE IN THE RANGE OF 70% AGGREGATE AND 30% SOIL COMPACTED TO 90% OF MAX. DENSITY.

Figure 8.

SAFETY STRUCTURES AND DEVICES

The following sections deal with those structural elements required to ensure the safety of the motorist and to provide the needed directional and regulatory information. The overall criteria for these elements should be one of unity of design and color to create a family of structures. All the structures must be compatible with each other, the roadway, and the landscaping; they should not be considered in isolation.

Barriers: The purpose of traffic barriers is essentially to protect the motorist from hazardous roadside conditions that can not be eliminated. As pointed out in the American Association of State Highway and Transportation Officials (AASHTO) Guide, the traffic barrier itself is a hazard, and every effort should be made in the design stage to eliminate the need for barriers. In addition, barriers should be installed only if they reduce the severity (rather than the probable frequency) of potential accidents.

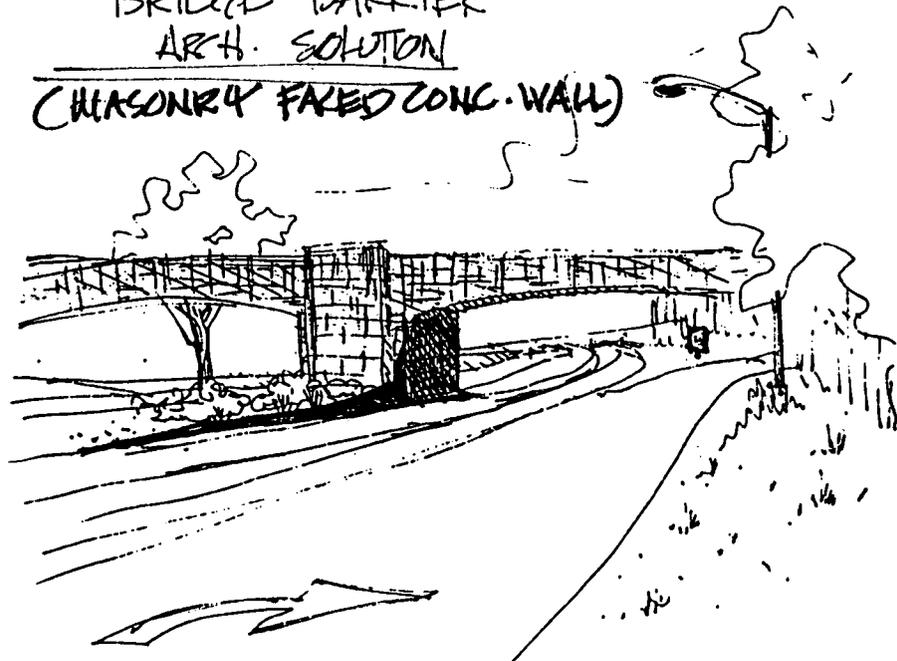
No barriers are acceptable where a reasonable alternative is available. This essentially restates the AASHTO position that it is better to avoid a barrier through design than to use a barrier to correct a design. Any modifications to the bridge abutments should provide for the use of the same stone as currently in the bridges, and they should be compatible with the bridge design and masonry faced concrete barriers. (Figure 9.)

Longitudinal Barriers: These roadside devices

are designed to redirect the path of the vehicle, keeping it away from the hazard. Barriers of some form are, in all likelihood, necessary to a parkway that is both aesthetically pleasing and safe. The application of barriers can and should be carefully considered following a design priority such as the following:

1. Non-structural - In a certain number of cases, grading, filling, mounding, and similar topographic contouring can mitigate the safety hazard that warrants a barrier.
2. Vegetative - In addition to its obvious landscaping application, vegetation has been utilized as a vehicle-cushioning device. It is limited by its slow growth recovery to engineering standards of cushioning.
3. Architectural Modification - Bridge design, bridge abutment design, and breakaway sign posts are all areas where modifications could be incorporated that would eliminate barriers.
4. Natural Material - Where it is proven safe, wood and stone are preferable materials.
5. Natural-like Material - Where a natural material is not applicable (such as wood timber guard rails because of their lack of shatter resistance and their tendency to pierce the passenger compartment), barriers should be harmonious with natural land and vegetative features. Weathering steel and various surface coatings have been applied in this effort.

BRIDGE BARRIER
ARCH. SOLUTION
(MASONRY FACED CONC. WALL)



BRIDGE
BARRIERS

BRIDGE BARRIER
BOX-BEAM

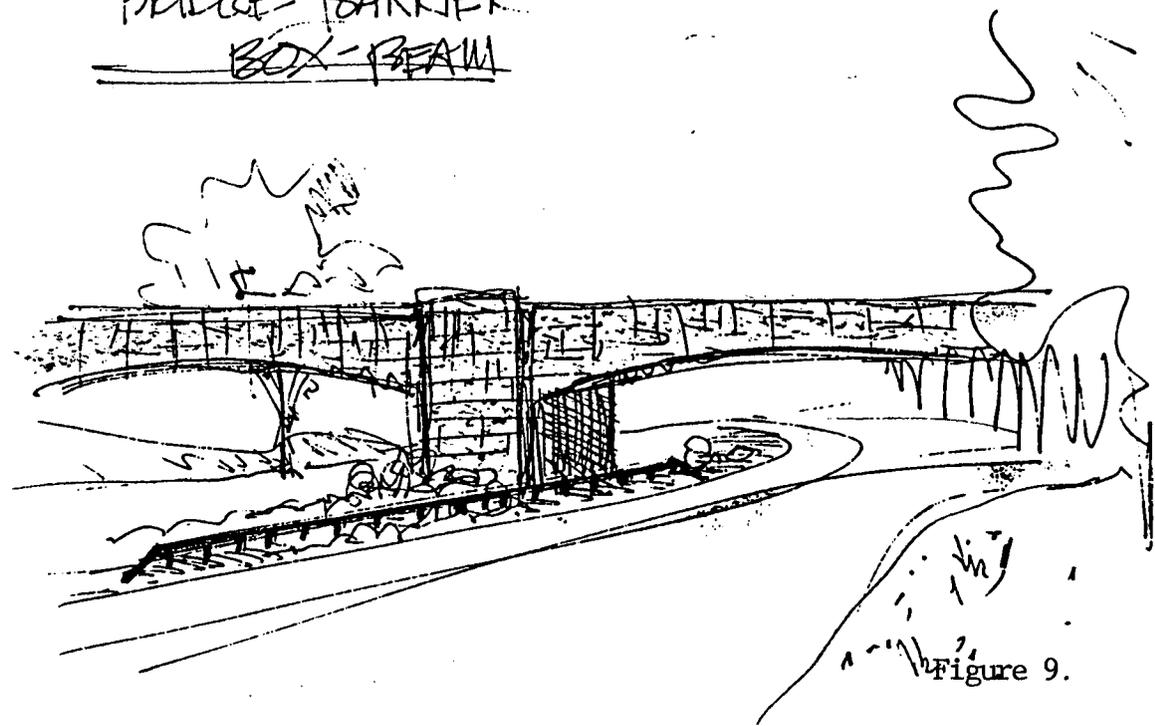


Figure 9.

Within the context of the above criteria, a number of proven safe barrier devices or systems were rejected due to their inherent inability to fit into the landscaped parkway design. In addition, galvanized surfaces and aluminum have been deleted from further consideration due to their industrial appearance. As mentioned before, the wooden timber solutions used in the past have also been rejected due to their lack of proven safe application as well as their relatively short life. The following categories have been found potentially viable:

1. Guard Rails - These have been extensively applied with the W-beam becoming almost ubiquitous to modern highway design. In the same family, the box beam has recently experienced a substantial increase in application. Both systems are available in various surface coatings and colors as well as in weathering steel.

2. Cable and Steel Post Systems - These devices serve to catch the vehicle and bring it to a safe stop. With the broadest deflection characteristics, their application is somewhat limited because the areas behind the cable must be kept clear of immovable objects or plant material that could defeat the system's effectiveness. (Figure 10.)

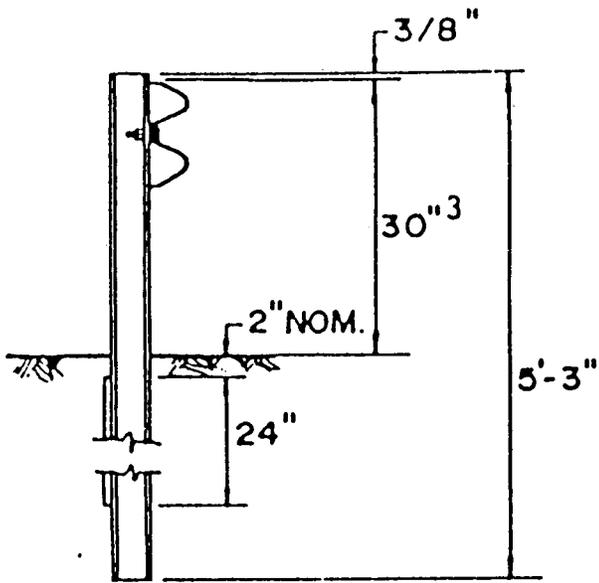
3. Concrete Barriers (New Jersey Type) - These are highly engineered concrete structures with little history of attempts to mitigate their aesthetic deficiencies. (Figure 11.)

4. Masonry-faced Concrete Wall - At vehicle speeds experienced on the Baltimore-Washington Parkway, a concrete wall with a relatively smooth stone face (Class "B" Masonry), with 1/2-inch raked joints or less, and of generally the same height as the Jersey Barrier, would answer much of the same safety needs as New Jersey-type barriers. (Figure 12.)

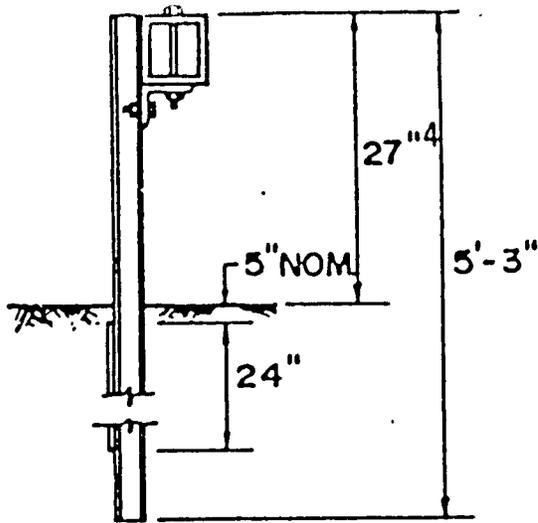
SAFETY STRUCTURES AND DEVICES: RECOMMENDATIONS

An intensive evaluation of the parkway's needs for existing barriers should be made with the intent of keeping the number of barriers to a minimum. Following such an evaluation, it is recommended that masonry faced concrete walls be adopted throughout the parkway.

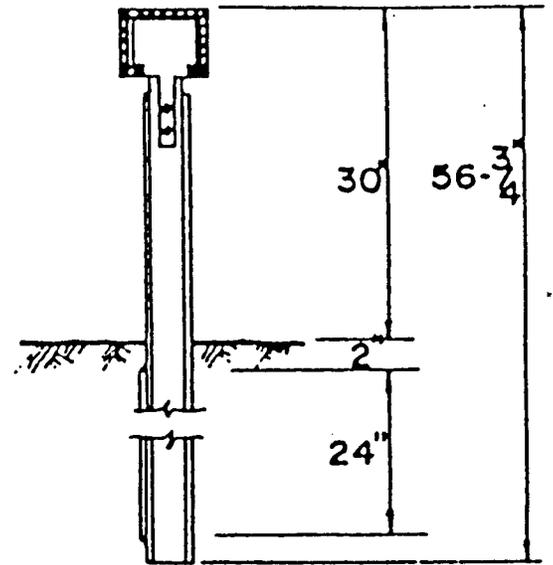
The use of masonry concrete walls would serve a two-fold purpose: (1) it would resolve the problem presented in the narrow median from Route 50 north to Route 450 in that a planting area could be accommodated, and (2) the selective application of stone walls would allow for site specific needs and for design variety. Stone walls should be similar in texture and color to the stonework in the current bridges along the Parkway. (Figure 12.)



"W" BEAM/STEEL POST

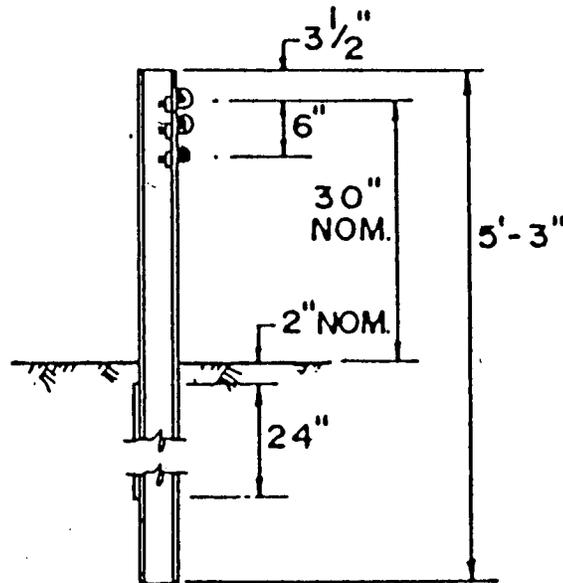


BOX BEAM/STEEL POST

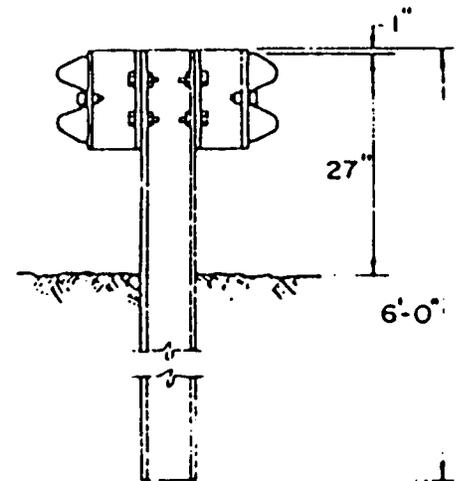


BOX-MEDIAN BARRIER
STEEL POST

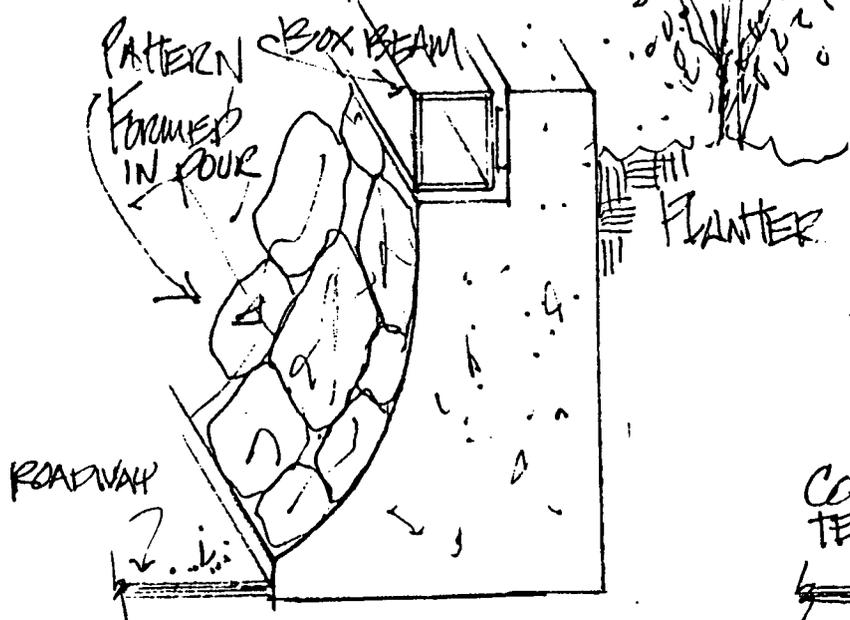
CABLE & STEEL
POST BARRIER
SYSTEMS



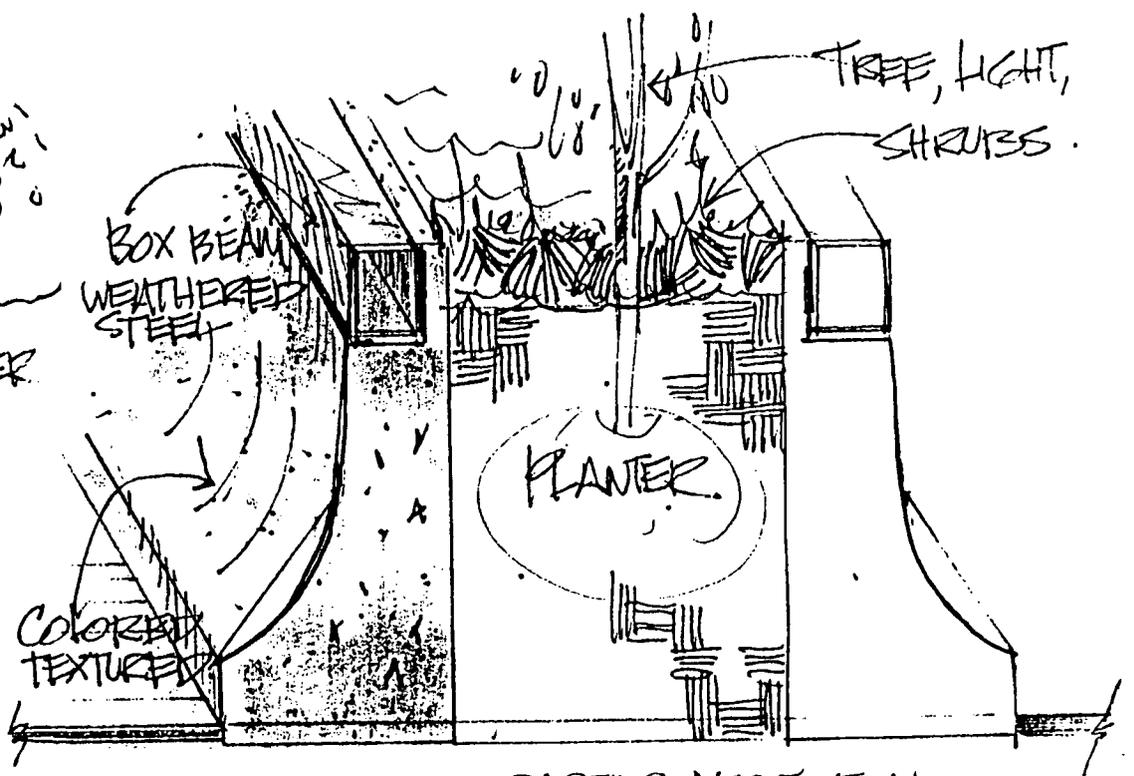
CABLE GUARDRAIL



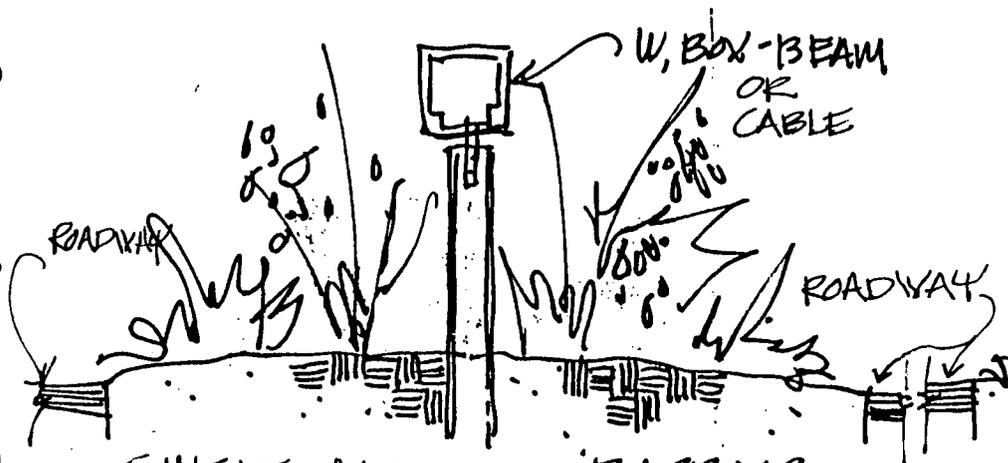
"W" BEAM-BLOCKED-OUT
Figure 10. 18



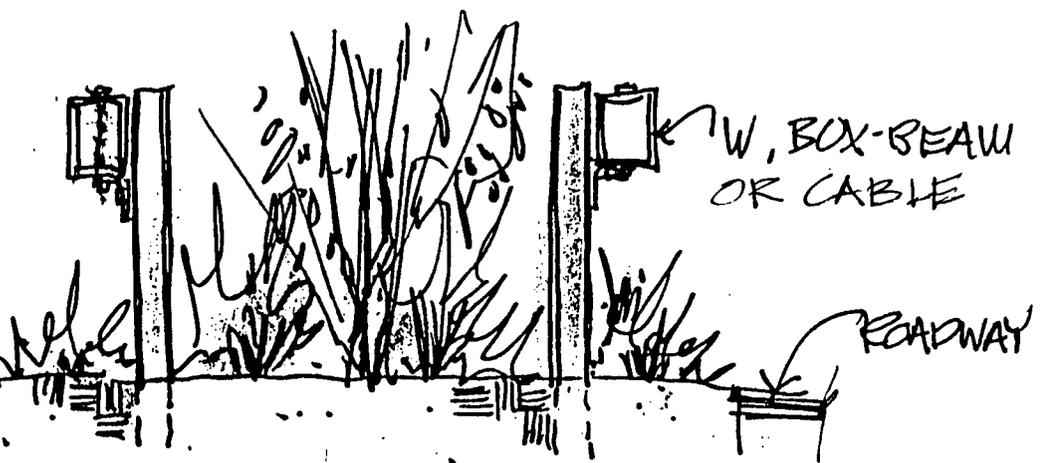
MODIFICATION OF CONCRETE BARRIER
NO SCALE



MEDIAN CONCRETE BARRIER MODIFICATION
NO SCALE



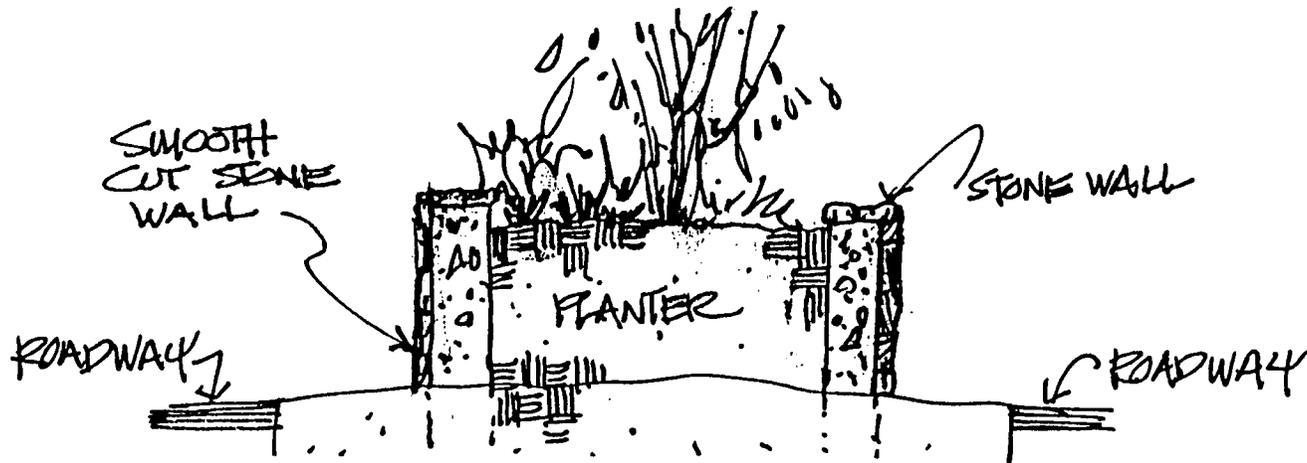
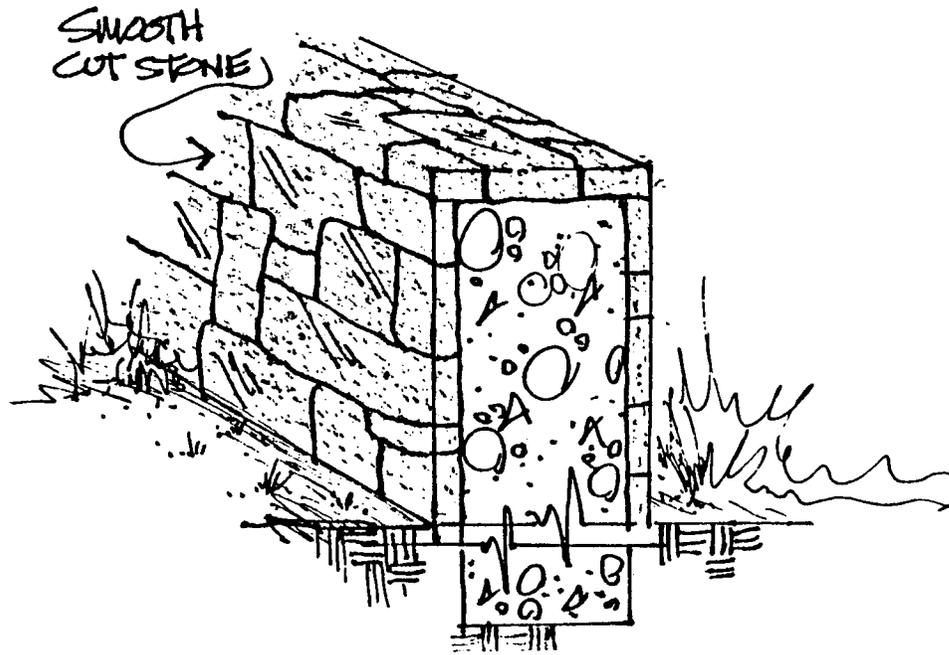
SINGLE MEDIAN BARRIER
NO SCALE



MEDIAN BARRIERS
NO SCALE

BARRIERS-STUDY ALTERNATIVES

STONE WALL
BARRIER
NO SCALE



MEDIAN
BARRIER
NO SCALE

RECOMMENDED
MASONRY-FACED
CONCRETE WALL BARRIERS

SIGNS, TRAFFIC CONTROL DEVICES, AND ROADWAY LIGHTING

By Memorandum of Understanding developed with the Federal Highway Administration (FHWA) in 1973, the National Park Service agreed to have roadway signing in compliance with the national standards contained in the Manual on Uniform Traffic Control Devices (MUTCD). Thus, the design of all guidance or informational signing is standardized. In addition, all traffic control devices (signs, signals, pavement markings, etc.) are subject to the standards approved by the FHWA in the MUTCD and in the "Standard Signs Book" as amended by "National Park Service Sign Manual." All of the above standardization is in accordance with Public Law 89-564, Highway Safety Act of 1966 and 23 USC 402.

Guide and Informational Signs (Directional Signs):

1. Letters - These signs should have white letters on a brown background, and the lettering style should be "Modified Clarendon," sized to the posted speed limit, which is minimally a 9-inch upper case and a 6-inch lower case configuration for a divided roadway having a 55 miles-per-hour speed limit (Category 1). Signs shall have a white border, and corners will be rounded.

2. Message - A good deal of flexibility exists in the message and its presentation on each sign. To ensure the least amount of signs necessary, an overall signing plan should be developed as an integral part of the

final project. Such a plan would address the scope of information necessary and develop a uniform program of vocabulary and abbreviation.

3. Roadside Location - Signs should normally be located on the right-hand side of the roadway, located to optimize night-time visibility, and be unobstructed by other roadside objects. Signs shall be placed no closer than 6 feet from the edge of the useable shoulder or 12 feet from the edge of the roadway. If located within 30 feet of the travelway, and not shielded by a barrier, signs shall be of breakaway design. It is preferable to locate large guidance signs that are not breakaway 30 feet or more from the nearest traffic lane, thus eliminating the need for barriers.

4. Sign Height - Sign height is measured from the bottom edge of the sign to the elevation of the near edge of pavement. If directional signs are placed within 30 feet of the edge of the travelled lane, the height is 7 feet; if outside of the 30 feet, the sign height may be 5 feet. Route markers, warning, and regulatory signs may be placed at 6 feet unless in a pedestrian area where they are placed at 7 feet.

Support Structures:

1. Posts - Quite a bit of latitude exists in the choice of post shapes and materials. The criteria that must be met are that posts must be durable, uniform in color (dark brown), and either breakaway or protected by a design to minimize impact forces.

2. Overhead Structures - In a number of cases on the Baltimore-Washington Parkway, the number of possible traffic movements may require a substantial amount of signage (Route 450). In these cases, an evaluation of road-side versus overhead structures should be made although the application of overhead signage is viewed as incompatible to parkway design. Minimum vertical clearance for such signs shall be not less than 17 feet. Such a limitation, combined with the design demands of a safe support structure, severely limits their applicability. Accordingly, the use of overhead signs is not recommended.

3. Affixed to Other Objects - The placement of signing on bridges and other architectural features is viewed as inappropriate and has been eliminated.

Sign Lighting: The existing overhead signs at the New York Avenue split are illuminated, as are the signs on the Route 193 bridge. The placement and makeup of all signs should be carefully engineered to avoid the necessity of lighting.

Traffic Control Devices: Devices, such as pavement markings, reflectors, and chevrons are placed to assist the night and inclement-weather driver in staying on the travelled way. Often, they have been placed in areas that have an apparent design defect as an expedient means of improving the facility's safety. When reflectors or chevrons are found to be necessary, even with a significant redesign of the roadway, they may be used. Two types are generally available:

the clip-on and the road-surface mounted. The road-surface mounted reflector is preferred. No vertical reflector posts should be used, and snow guides should be in place only during peak winter months.

Warning and Law Enforcement Aids: The above discussion addressed guidance, informational, and traffic control signing. A sub-classification of traffic control signs are those that may be required to aid enforcement of Federal or local laws and regulations. These signs should be in conformance with the MUTCD and the National Park Service Sign Manual. Consideration should be given to adopting some means of avoiding the use of such signs because experience indicates a tendency to "oversign."

Roadway Lighting: Roadway lighting detracts from the parkway environment. During the day light poles are intrusive structures whose verticality and height violate the skyline and landscape characteristics of the parkway. At night the illumination creates an artificial interstate appearance that detracts from people's perception of a roadway flowing through a natural environment. Careful consideration should be given to design solutions which would eliminate the need for lighting.

SIGNS, TRAFFIC CONTROL DEVICES, ROADWAY LIGHTING: RECOMMENDATIONS

All structural elements associated with signs and traffic control devices should be compatible in form and color to create a unity of parkway design.

A careful reevaluation of the signing requirements of the parkway should be undertaken to minimize the number and size of signs. Emphasis should be placed on the development of a signing program that would preclude, except under the most unusual circumstances, the use of overhead signs. Signing and sign messages should be oriented toward national visitors rather than local or special-interest groups. Wherever possible, information signing shall be placed on exit ways rather than on the main travelled way.

The optimum solution for lighting would be to eliminate all lighting on the Baltimore-Washington Parkway because of its intrusive nature. If lighting is required, it should be confined to the replacement of existing lights at the south entrance to the parkway utilizing a low profile, brown-color standard. Emphasis should be placed on providing suitable reflective devices in the road surface, reducing decision points, and improving signing. Color of illumination and architectural design and color of the poles should blend with the scene and be visually compatible with the rest of the family of man-made structures along the road.

CONCLUSIONS A PARKWAY FOR THE 80'S

The upcoming rehabilitation of the Baltimore-Washington Parkway offers an opportunity to upgrade the visual quality and safety of one of the major gateways to our Nation's Capital. Detailed planning for the rehabilitation should focus on a family of design elements which will create a strong unity between the natural environment and the man-made structures.

The redesign of this parkway will be the next step in a continuum in the evolution of parkway development that had its beginnings in the late 20's, and its most recent expression in the mid-60's with the completion of the Maryland section of the George Washington Memorial Parkway.

The rehabilitation process should translate the Baltimore-Washington Parkway into a modern idiom which will carry it forward into the next century, while at the same time, preserving the best qualities of historic parkway design which have proven their viability through the last 50 years.

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ACNOWLEDGMENTS

We must acknowledge the contributions of other individuals within the National Park Service and other organizations and agencies whose participation and assistance have substantially contributed to this effort.

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