



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
ITEM NO. 1 & 2
11-07-2002

November 1, 2002

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Jeffrey Zyontz, Chief *JZ*
County-wide Planning Division

Richard C. Hawthorne, Chief *RCH*
Transportation Planning

Callum Murray, Potomac Team Leader
Community-Based Planning Division

FROM: Carol Martin: 301-495-4541 (Water Quality Plan) and *CM*
Larry Cole: 301-495-4528 (Mandatory Referral) *LC*
for the Park and Planning Department

PROJECT: Travilah Road Phase I
From Darnestown Road (MD28) to Dufief Mill Road
CIP Project No. 500101

REVIEW TYPE: Preliminary/Final Water Quality Plan Approval (Piney Branch
Special Protection Area) and Mandatory Referral No. 01812-
DPW&T-1

APPLICANT: Montgomery County Department of
Public Works and Transportation

APPLYING FOR: Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: Potomac

This staff report includes recommendations for two separate actions by the
Planning Board:

A. Approval of a Preliminary/Final Water Quality Plan per Section 19-65(d)(4)

Staff recommends approval of the Special Protection Area (SPA) preliminary/final water quality plan with the following conditions:

1. Compliance with the conditions of approval for the preliminary forest conservation plan including mitigation for one specimen tree removed within the SPA. Applicant must meet all conditions prior to the Montgomery County Department of Permitting Services (MCDPS) issuance of sediment and erosion control permit(s). Conditions include, but are not limited to, the following:
 - ◆ Planting of eight (8) landscape-size (2" to 2 ½" caliper), native species trees within an area of stream valley buffer at the stream crossing on Travilah Road approximately 1900 feet east of the intersection with Dufief Mill Road.
2. Conformance to the conditions as stated in DPS's water quality plan approval letter for the preliminary/final water quality plan, dated October 22, 2002.

B. Approval of the Mandatory Referral with Comments to DPWT

The Special Protection Area (SPA) legislation requires Planning Board approval of a Water Quality Plan for Mandatory Referrals per Section 19-65(d)(4). This Water Quality Plan (see Attachment 1) is submitted for approval by the Planning Board in conjunction with the Mandatory Referral for the Travilah Road Phase I project (01812-DPW&T-1) (see Attachment 2: Vicinity Map). The Planning Board must act on the Water Quality Plan prior to approving or disapproving the Mandatory Referral.

If the Special Protection Area (SPA) water quality plan is approved, the following comments are recommended on the proposed project:

1. Extend the proposed bikeway to the Dufief Mill Road intersection.
2. Construct the Master Plan-recommended hiker biker trail along the west side of Travilah Road and Dufief Mill Road through the limits of the proposed center-turn lane work. Provide a striped crosswalk for the trail at this intersection.
3. Provide continuous separation between the trail and roadway along Travilah Road.
4. Identify and plot the critical root zone for all trees over 30" in diameter at breast height (dbh). Provide tree protection measures including root

pruning, tree protection fencing, and pre-construction watering/fertilizing schedules for all trees over 24" dbh.

PREVIOUS BOARD ACTION: None

PROJECT DESCRIPTION

This project would construct an eight-foot wide hiker-biker trail along the north side of Travilah Road between Darnestown Road (MD 28) and just east of Dufief Mill Road, a distance of 2.9 miles. The hiker-biker trail would typically be separated from the roadway by fourteen or fifteen feet, including a grass drainage swale (see Attachment 3). Some short segments of existing asphalt sidewalk will be retained for use as part of the path.

While most of the roadway is open-section, one 650-foot segment would be built with a curb where a large culvert under the roadway and a home close to the roadway exist as constraints to the typical treatment. The offset from the proposed hiker-biker trail to the curb would be three feet in this area (see Attachment 3).

Travilah Road would be resurfaced within the project limits, generally by means of a pavement overlay, but two segments of the roadway (with a total length of 1,650 feet) would be reconstructed so that improvements in the roadway's vertical profile can be made.

The Dufief Mill Road and the west leg of Travilah Road at the intersection of these two roads would be widened to provide a center-turn lane. The total length of roadway widening would be 850 feet, including the tapers.

At the Piney Meetinghouse Road intersection, an acceleration lane would be constructed on the north leg of Travilah Road for a distance of 250 feet, including the taper.

Part of this project is within the Piney Branch Special Protection Area (SPA).

STAFF ANALYSIS

This project would implement the recommendations of the Potomac Master Plan and would provide an excellent safety benefit for residents of this area by accommodating pedestrians and bicyclists on the proposed hiker-biker trail rather than at the edge of Travilah Road, which has no shoulders for the most part. Where short segments of asphalt sidewalk do exist, they would be incorporated into the proposed trail to minimize disruption of the existing landscaping.

The plans call for the proposed trail to end at the driveway to Travilah Elementary School. While the elementary school is an obvious destination point, the Dufief Mill Road intersection is only 250 feet away. Two-way bike use is proposed to continue in

the existing gravel shoulder between the school driveway and Dufief Mill Road. Some separation, such as a barrier and/or a grass strip needs to be used to separate the trail from the roadway to allow safe two-way bike use. Bicycles traveling in the shoulder in the opposite direction of vehicular traffic is counter to recommended practice. **Staff recommends that the trail be extended to the intersection to encourage trail users to cross at the safest point**, rather than at a non-intersection location where there is less driver anticipation of a crosswalk.

Within the limits of work for the center-turn lane construction, **staff recommends that the Master Plan-recommended hiker biker trail be constructed along the west side of Dufief Mill Road at Travilah Road**. Drainage swale and drainage structure work is proposed to be constructed in this area as part of this project but would likely have to be removed to accommodate future construction of the trail. In addition, since the southbound lane against the proposed curb would be only twelve feet wide, pedestrians and bicyclists would not be accommodated. A striped crosswalk should be provided between the two trail segments.

At the northern end of the project, close to Darnestown Road, the proposed trail ends at the existing shoulder of Travilah Road about 1,180 feet from the intersection. The westbound shoulder is proposed to be used for about 500 feet at which point a grass strip reappears to separate the existing sidewalk from the road. As noted above, separation is needed between a two-way bike trail and vehicular traffic.

Some large trees exist in fairly close proximity to the proposed hiker-biker trail. Existing segments of asphalt sidewalk have been retained in part to limit disturbance to these trees. **Staff recommends that the critical root zone of all trees over 30" in diameter at breast height (dbh) be identified for tree protection measures. Tree protection measures including root pruning, tree protection fencing, and pre-construction watering/fertilizing schedules should be provided for all trees over 24" dbh.**

Parks Impacts

Big Pines Local Park, an unnamed Parks parcel and a planned Parks acquisition abut Travilah Road within the limits of work. None of these properties would be adversely affected by the proposed project.

Special Protection Area

Site Description

A small portion, approximately 0.8 acre, of the 11.6- acre project area, lies within the Piney Branch SPA. Piney Branch and its tributaries are Use I streams. Most of the proposed project falls within the existing public right-of-way. This right-of-way is abutted by residential development along most of Travilah Road, with commercial development near its intersection with Darnestown Road (MD 28).

Soils on the upland areas consist of Gaila silt loam, Glenelg silt loam, Chrome and Conowingo soil, and Travilah silt loam. These soils are common in the county and are generally found in upland areas and are well drained. Small areas of Baile silt loam, a hydric soil, are associated with the floodplain and stream valleys in the county and are poorly drained.

There is no forest within the project area.

Review for Conformance to the Special Protection Area Requirements

As part of the requirements of the Special Protection Area law, a preliminary water quality plan must be reviewed in conjunction with a mandatory referral. Under the provision of the law, the Montgomery County Department of Permitting Services (DPS) and the Planning Board have different responsibilities in the review of a water quality plan. The Planning Board's responsibility is to determine if environmental buffer protection, and SPA forest conservation and planting requirements have been satisfied.

DPS has approved the elements of the preliminary/final water quality plan under its purview. Their approval letter is shown as Attachment 1.

Site Performance Goals

As part of the water quality plan, several site performance goals were established for the site: protect streams and aquatic habitat, minimize storm flow runoff increases, minimize increases to ambient stream water temperatures, minimize sediment loading, and minimize pollutant loading.

Site Imperviousness

The Piney Branch SPA has no imperviousness limit.

Environmental Buffers

There is one small area of environmental buffer located at a culverted stream crossing approximately 1900' from the intersection of Travilah and Dufief Mill Roads. This environmental buffer is not within the SPA.

Forest Conservation

No forest clearing is proposed within the limits of the project. Within the SPA one specimen tree, a 36" oak, will be removed. The forest conservation plan proposes mitigation of this specimen tree loss with reforestation planting within the stream valley buffer which proposal conforms with the requirements of the Forest Conservation Law.

Stormwater Management Concept

To help meet the project's performance goals, the stormwater management (SWM) concept includes the following features:

- ◆ Stormwater management quality controls will be provided by roadside, vegetated swales and sand filters or infiltration trenches in series that drain to a SWM quantity facility.

Sediment Control

DPS is requiring the use of redundant sediment control measures, such as sediment traps in series. Project grading will be phased to minimize the amount of disturbed area at any one time.

Monitoring of Best Management Practices

The details of the monitoring program will be determined by DPS and DEP and become a part of the final water quality plan review process.

BACKGROUND

The Planning Board Draft of the Potomac Master Plan was approved by the Council on March 5, 2002, and adopted in April 2002.

COMMUNITY OUTREACH

DPWT has provided extensive public outreach on this project. Public meetings were held by DPWT on April 8, 1998; January 28, 1999 and March 9, 2000. A public hearing is anticipated in January 2003.

This project would require easements and/or right-of-way from 128 property owners. While there was initial resistance from some property owners, DPWT staff has said that there are no significant objections to the project at this time.

LC:cmd

MR-WQ Travilah Road1.doc

**DEPARTMENT OF PERMITTING SERVICES**

Douglas M. Duncan
County Executive

Robert C. Hubbard
Director

October 22, 2002

Mr. Gerald P. Maragos, P.E.
Hurst-Rosche Engineers, Inc.
18 South George Street, Suite 605
York, Pennsylvania 17401

Re: **Preliminary/Final Water Quality Plan and
Stormwater Management Concept for Travilah
Road Improvements**
SM File #: 205541
Montg. Co. Page: 27&28
Watershed: Watts Branch/Piney Branch

SPECIAL PROTECTION AREA

Dear Mr. Maragos:

Based on a review by the Department of Permitting Services Review Staff, the Preliminary/Final Water Quality Plan and the stormwater management concept for the above mentioned site is conditionally approved. This approval is for the elements of the Preliminary/Final Water Quality Plan of which DPS has lead agency responsibility. It does not include limits on imperviousness or stream buffer encroachments.

Site Description: The proposed improvements include lane widening of paving from 23 to 29 feet; an eight foot wide bike path; and, storm drains. The area of improvement on Travilah Road will be from Dufief Mill Road to 650 feet north of Nolan Drive. It also includes 400 feet on Dufief Mill Road at its intersection with Travilah Road. These improvements are partially located within the Piney Branch Special Protection Area.

Stormwater Management: Quantity control will be provided either in existing ponds adjacent to Travilah Road; on top of the surface sand filters/infiltration structures; or, by reducing flows to less than 2 cubic feet per second at points of discharge (per the new state regulations). Quality control will be provided by proposed surface sand filters above a stone infiltration/recharge trench (if shallow bedrock is encountered the infiltration/recharge layer may be eliminated). The quality structures will be pretreated by vegetated roadside swales. The surface sand filter will be sized to treat a total of one-inch over the tributary impervious area and provide one foot of recharge storage below the underdrain pipe.

Sediment Control: Silt fence alone will not be allowed as a perimeter control. The use of super silt fence or a double row of silt fence will be acceptable for sediment control. These measures may be coupled with additional devices at the detailed plan review stage. The site grading shall be limited as much as possible with immediate stabilization emphasized.

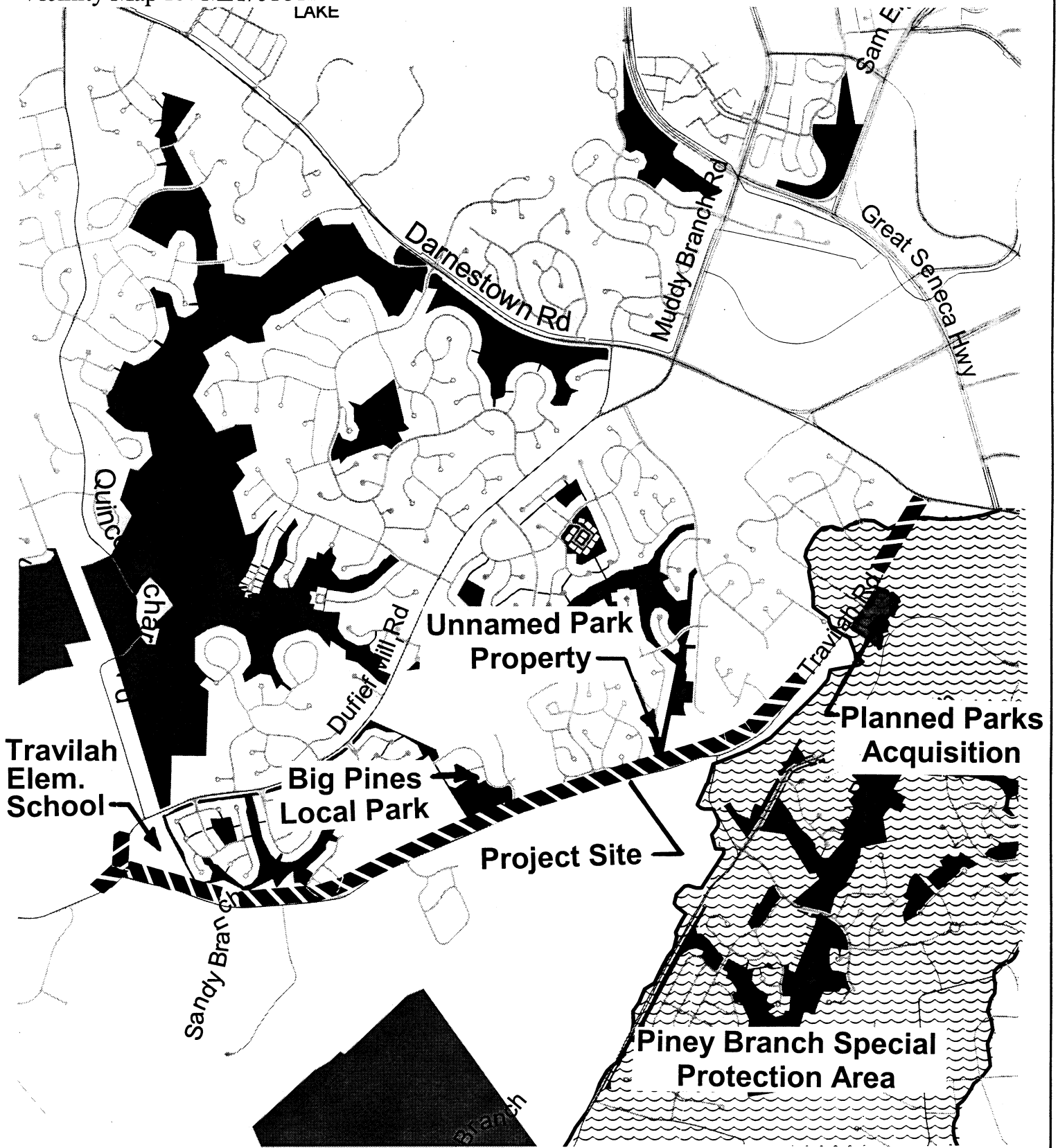
Performance Goals: The performance goals that were established at the pre-application meeting will be met as specified in the Preliminary/Final Water Quality Plan. They are as follows:

1. Minimize storm flow run off increases.

**ATTACHMENT 1**

Vicinity Map for MR#01812-DPW&T-1

LAKE



Vicinity Map

ATTACHMENT 2

Map Compiled On 10-31-2002 at 02:27 PM
 Map Scale: 1 inch = 2000 feet or 1:24000

0 2000 Feet



The Maryland-National Capital Park and Planning Commission
 Montgomery County Department of Park and Planning
 Transportation Planning Unit
 8787 Georgia Avenue | Silver Spring, Maryland 20910
 301.495.4525 voice | 301.495.1302 fax | <http://www.mc-mncppc.org>

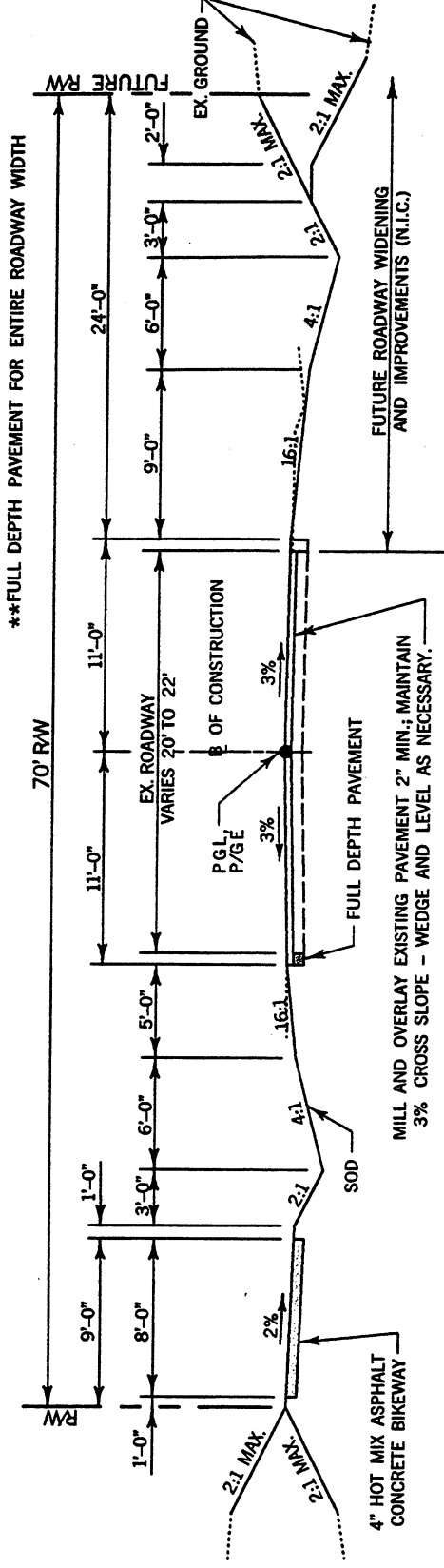
- Amendment
- Street and Stream Names
- Master Plan of Highways Centerline 1
- DPWT DIME 2000 Street Centerlines
- Street Pavement
- All Parks
- Existing
- Proposed
- Special Protection Areas
- Municipalities
- Montgomery County

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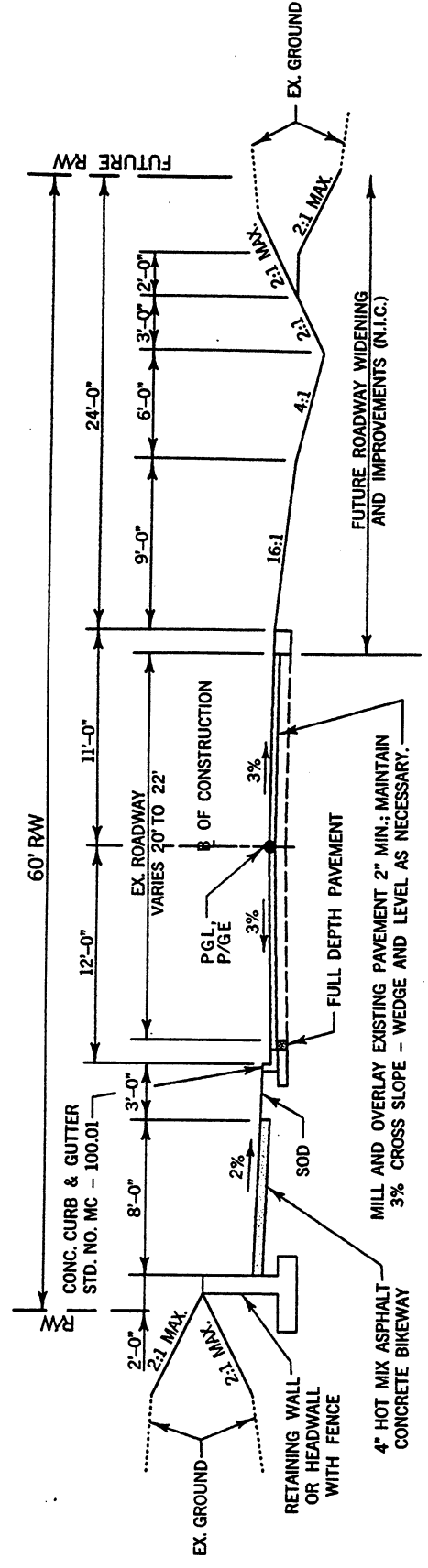
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TYPICAL ROAD SECTION



TYPICAL ROAD SECTION

AT RETAINING WALL AND BOX CULVERT