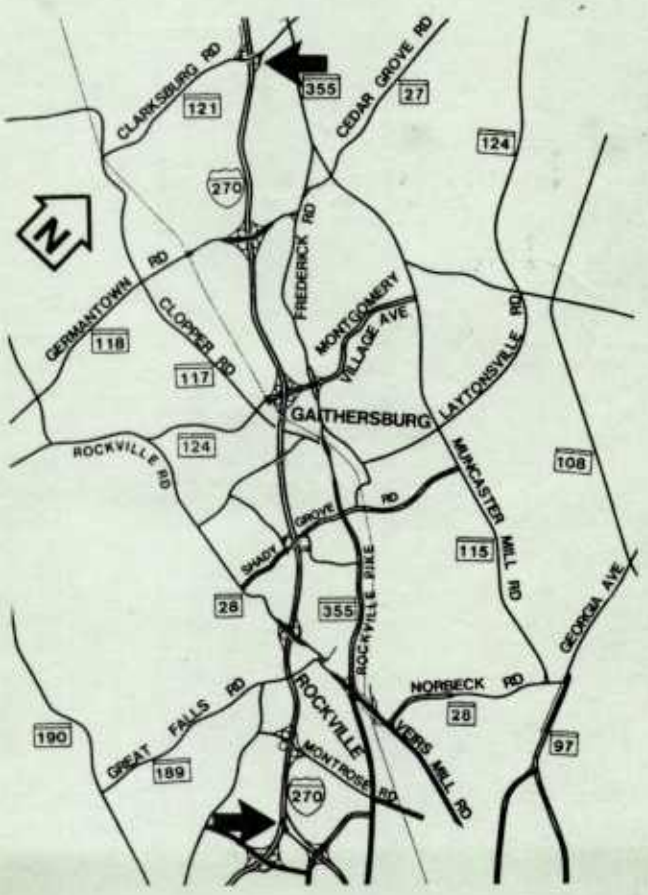
# FINDING OF NO SIGNIFICANT IMPACT 4 (f)

State Contract No. M 401-152-372
F.A.P. No. I-270-7(86)-71

Interstate Route 270
From Y-Split to Maryland Route 121




prepared by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

# TABLE OF CONTENTS

## LIST OF PLATES

# FEDERAL HIGHWAY ADMINISTRATION
# FINDING OF NO SIGNIFICANT IMPACT
# FOR
# INTERSTATE 270 WIDENING PROJECT
# FROM Y-SPLIT TO MARYLAND ROUTE 121
# MONTGOMERY COUNTY, MARYLAND

The FHWA has determined that this project will not have any significant impact on the environment. This Finding of No Significant Impact (FONSI) is based on the Environmental Assessment (EA) and the attached information, which summarizes the assessment and documents the selection of the Continuous Collector-Distributor Road Alternative. The impacts, which will occur, are summarized in the attached Comparison of Alternates Table and further discussed in this document and the EA. The FHWA has full responsibility under NEPA for the scope and content of the EA, which has been independently evaluated by FHWA and determined to adequately discuss the issues and impacts of the proposed project. The EA and FONSI contain sufficient evidence for determining that an EIS is not required.

Public hearing comments and public correspondence support the widening of I-270, even though there is a disagreement on the form the widening should take.

Issues raised by the public were analyzed by FHWA and SHA and used to evaluate the project prior to making a final decision. These items are addressed in the Comments Section attached to the FONSI.

9/28/84
Date

Emil Elinsky
Division Administrator

MEMORANDUM OF ACTION OF STATE HIGHWAY ADMINISTRATION M. S. CALTRIDER
FRIDAY, APRIL 27, 1984

CONCURRENCE WITH PRIOR ACTION

In accordance with Chapter V of the Maryland Action Plan, a Final Environmental Document (Finding of No Significant Impact) is being prepared for the project described below. Both Location and Design approval will be requested from the Federal Highway Administration.

State Contract No. M-401-152-372
I - 270 Studies

Location Recommendation:

1. Add one mainline lane in each direction from the Y split to Maryland Route 121.

2. Provide a two-lane continuous collector-distributor road in each direction from south of Montrose Road to the Maryland Route 124 interchange.

3. Shift the centerline alignment of I-270 away from existing residential areas in three locations:

   a. South of Montrose Road, the roadway will be shifted 24 feet to the west.

   b. South of Maryland Route 28, the roadway will be shifted to the east. The maximum shift possible appears to be approximately 30 feet, with a lesser shift closer to the tie-in points.

   c. North of Maryland Route 28 between Maryland Route 28 and the proposed Gude Drive Bridge, the roadway will be shifted to the west. The maximum shift possible appears to be approximately 45 feet, with a lesser shift closer to the tie-in points.

4. Retaining walls will be used to eliminate right-of way acquisition from residential properties along the mainline of I-270. Eleven families will have to be relocated due to interchange improvements.

5. Noise barriers will be provided adjacent to all subdivisions along I-270.

6. Discussions are being held with the agencies with jurisdiction over the several parks affected by the project. It appears that these agencies will prefer the use of slopes within the park area over the use of retaining walls to avoid parkland. These slopes would be provided through the provision of temporary slope easements.

7. Visual screens will be provided in a number of areas where noise barriers are not required.

**Maryland Department of Transportation**
State Highway Administration

Lowell K. Bridwell
Secretary
M. S. Caltrider
Administrator

7

April 27, 1984

MEMORANDUM

To: Mr. William I. Slacum, Secretary
State Roads Commission

From: Hal Kassoff, Director
Office of Planning and
Preliminary Engineering

Subject: Contract No. M 401-152-372
Improvement to I-270 Studies

The Bureau of Project Planning is preparing a Finding of No Significant Impact Document for this project. We will be ready to submit the document to the Federal Highway Administration in June, 1984. A decision to proceed with the recommendation, as documented in the attached Record of Decision, was made by Administrator Caltrider following Team Recommendation meetings on March 23, 1984 and April 18, 1984 and a meeting with Montgomery County Council and Rockville City Council on April 23, 1984. The FONSI is being prepared to request Location/Design Approval for the alternate described below:

1. Add one mainline lane in each direction from the Y split to Maryland Route 121.

2. Provide a two-lane continuous collector-distributor road in each direction from south of Montrose Road to the Maryland Route 124 interchange.

3. Shift the centerline alignment of I-270 away from existing residential areas in three locations:

   a. South of Montrose Road, the roadway will be shifted 24 feet to the west.

   b. South of Maryland Route 28, the roadway will be shifted to the east. The maximum shift possible appears to be approximately 30 feet, with a lesser shift closer to the tie-in points.

My telephone number is 659-1110
Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

c. North of Maryland Route 28 between Maryland Route 28 and the proposed Gude Drive Bridge, the roadway will be shifted to the west. The maximum shift possible appears to be approximately 45 feet, with a lesser shift closer to the tie-in points.

4. Retaining walls will be used to eliminate right-of-way acquisition from residential properties along the mainline of I-270. Eleven families will have to be relocated due to interchange improvements.

5. Noise barriers will be provided adjacent to all subdivisions along I-270.

6. Discussions are being held with the agencies with jurisdiction over the several parks affected by the project. It appears that these agencies will prefer the use of slopes within the park area over the use of retaining walls to avoid parkland. These slopes would be provided through the provision of temporary slope easements.

7. Visual screens will be provided in a number of areas where noise barriers are not required.

The Project Planning Summary of Actions and Recommendations is attached. Included in the Recommendations section are a number of commitments which are being made to deal with environmental impact concerns related to the project.

This information is being sent to you as part of the procedure by which you submit the action to Mr. Caltrider, receive his approval, and formally record and file this action.

CONCURRENCE:

I concur with the above information.

4/27/84
Date

M. S. Caltrider
State Highway Administrator

HK:sdc
Attachments

cc: Mr. J. A. Agro, Jr.
Mr. E. H. Meehan
Mr. W. Mangles
Mr. N. J. Pedersen
Mr. Wm. F. Schneider, Jr.
Mr. C. R. Anderson
Mr. T. Hicks
Mr. S. L. Helwig
Mr. L. H. Ege, Jr.
Mr. G. Hitchcock
Mr. G. E. Dailey
Mr. E. Terry
Mr. E. M. Loskot
Mr. P. H. Dionne
Mr. A. M. Capizzi
Mr. J. L. White
Mr. J. A. Hester
Mr. F. T. Hoffman
Mr. J. Helm

10

The decision to proceed in this manner was made by the Administrator following staff meetings held on March 23, 1984 and April 18, 1984, and a meeting with both the Montgomery County Council and the Rockville City Council held on April 23, 1984.

Copy: Mr. J. A. Agro, Jr.
Mr. G. E. Dailey
Mr. H. Kassoff
Mr. W. F. Schneider, Jr.
Mr. A. M. Capizzi
Mr. E. M. Loskot
Mr. E. H. Meehan
Mr. J. K. Gatley
SHA-Contract M-401-152-372

TABLE 1

COMPARISON OF ALTERNATES

| EFFECT | NO BUILD | SELECTED ALTERNATE |
|---|---|---|
| I. Socio-Economic | | |
| A. Residences displaced | | |
| 1. Tenant occupied | -- | 3 |
| 2. Owner occupied | -- | 8 |
| B. Total people relocated | -- | 24 |
| C. Minority families relocated | -- | 3 |
| D. Businesses displaced | -- | -- |
| E. Farms displaced | -- | -- |
| F. Access to community facilities | No change | Improved |
| G. Effect on neighborhoods and communities | No change | No change |
| H. Effects on minority groups | No communities identified in the project area | |
| I. Consistency with Master plans | No | Yes |
| II. Parks | No effect | Minor |
| III. Historic and Archeological sites | | |
| A. Historic sites | None | None |
| B. Archeological sites | None | Possibly 3 |
| IV. Transportation | | |
| A. I-270 | Capacity has been reached | Capacity will be reached after 2010 |
| B. MD 355 and other routes | Congestion will increase | Congestion will decrease |
| V. Prime and Unique Farmland | None | None |
| VI. Air Quality | | |
| Sites exceeding standards | -- | -- |
| VII. Noise Levels | | |
| A. Number of sites exceeding noise abatement criteria | 21 | 24 |
| B. Ranges predicted (dBA) | 61-78 | 61-81<br>61-67 w/barriers |

## COMPARISON OF ALTERNATES (cont.)

| EFFECT | NO BUILD | BUILD |
|---|---|---|
| VIII. Water Quality | | |
| A. Water Quality | No change | Negligible effec |
| B. Aquatic Life | No change | Slight decrea ed diversity |
| IX. Ecology | | |
| A. Rare or endangered species affected | None | None |
| B. Loss of habitat (acres) | None | 74 |
| C. Effect on wildlife populations | None | Negligible |
| D. Wetlands affected (acres) | None | 4.5 a re |
| E. Floodplains affected (acres) | None | 6 acre |
| F. Stream crossings | None | 7 |
| X. Costs | | |
| Roadway Construction | -- | $ 77,500,000 |
| Structures (including bridges, retaining walls, noise barriers, box culverts) | -- | $ 14,900,000 |
| Right of way | -- | $ 17,000,000 |
| Relocation Assistance | -- | $ 150,000 |
| Utility relocation | -- | $ 4,000,000 |

# SUMMARY OF ACTIONS AND RECOMMENDATIONS

## I BACKGROUND

### A. PROJECT LOCATION

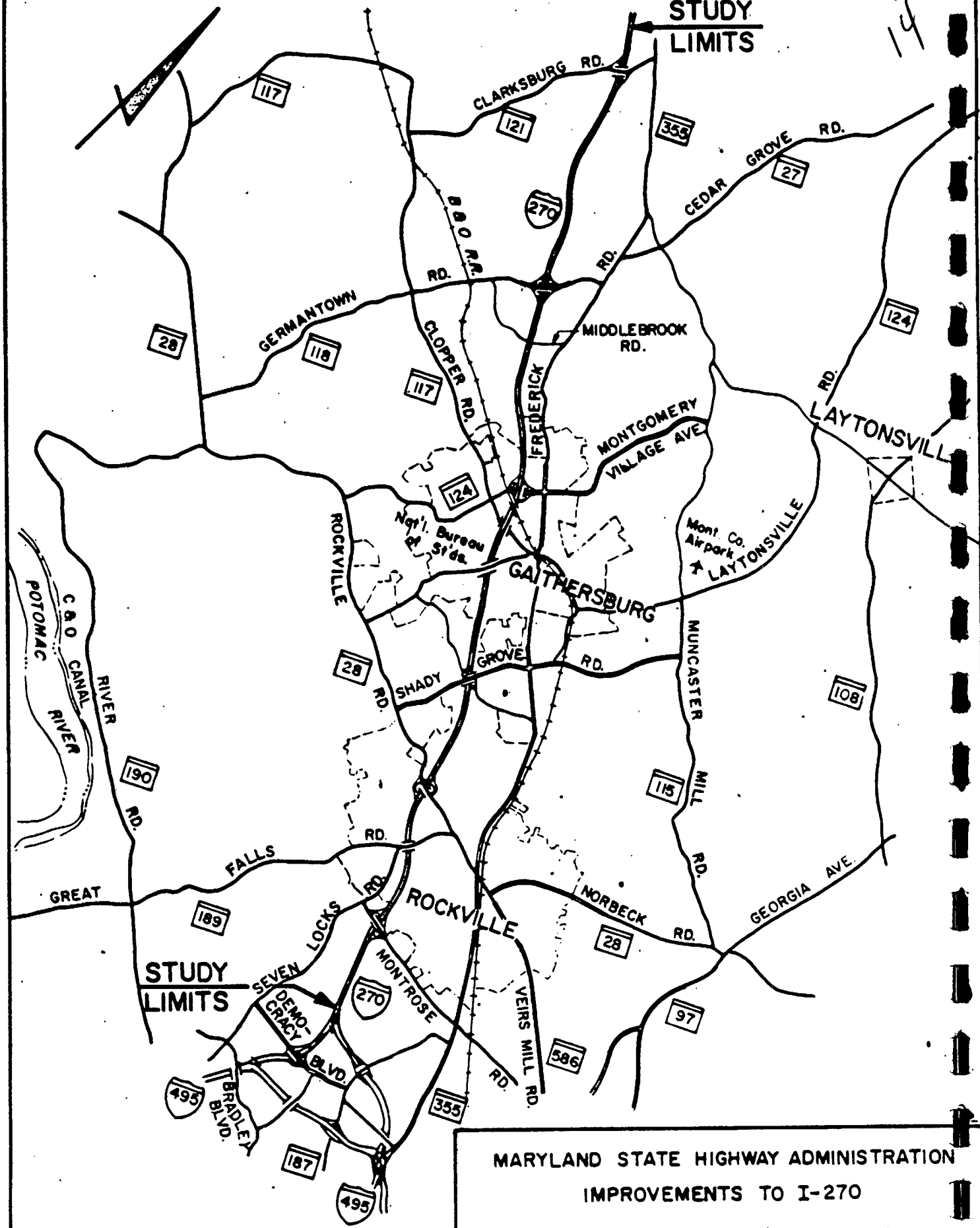
Interstate 270 is an expressway between Frederick and Washington, D.C. and consequently serves as a major radial highway carrying regional, state, and local traffic into and through the Washington, D.C. region.

The proposed improvements to I-270 extend from the I-270 Y (SPUR) to just north of the interchange of MD 121 and I-270, a distance of approximately sixteen miles in Montgomery County. (See Plate 1).

The project area is part of the Washington, D.C. Standard Metropolitan Statistical Area (SMSA) and is one of the fastest growing corridors in Maryland with respect to residential, commercial, and industrial development and has been designated a growth area in regional master plans. The corridor has been nicknamed "Satellite Alley" due to its concentrations of telecommunications, electronics, genetics, biomedical, and environmental expertise.

### B. PURPOSE OF THE PROJECT

The purpose of this study is to develop alternates for improvements to the I-270 roadway including interchanges, in order to increase the capacity of the roadway between the Y spur and MD 121. In this way, capacity and safety problems that presently exist on I-270 could be reduced now and through the design year 2010. Also, the increase in capacity on I-270 would result in lower levels of congestion experienced on both I-270 and the overall highway system in the area. Improvements




MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

FROM I-270 Y (SPUR) TO MD. RTE. 121

# LOCATION PLAN

SCALE: 1" = APPROX. 2.1 MI.

CONTRACT NO. M40H52-372

PLATE 1

to increase the capacity of I-270 south of the Y split and the Capital Beltway will be studied under a separate project to begin in the near future.

C. PROJECT HISTORY

Montgomery County and the Maryland-National Capital Park and Planning Commission have identified the I-270 corridor as one of the major growth areas in the county. Also, all the master plans of the planning districts in the corridor have recognized the need for increasing the capacity of I-270. Project Planning studies were initiated in July, 1980 to address this need.

Before the initiation of Project Planning activities began, the project was discussed during meetings on the Consolidated Transportation Program, Twenty Year Highway Needs Study and the Maryland Transportation Plan and was looked upon favorably by municipal and county planning and engineering staff and local elected officials. Public meetings were held by the Montgomery County Planning Board staff and Municipal staffs to discuss the area Master Plans, of which this project is a significant part of the transportation section.

On November 3, 1977, the Montgomery County Chamber of Commerce sponsored a seminar and discussion on the economic development of the I-270 corridor. A Resolution was submitted to local elected officials for their consideration in support of transportation improvements. One of these improvements was the widening of I-270.

Public notice of the start of Project Planning activities was made in the media on September 3, 1980.

During the preliminary studies, a wide variety of alternates for increasing the capacity of the I-270 roadway and the interchanges at Montrose Rd., MD 28, MD 118 and MD 121 was

prepared. On June 11, 1983, an all-day public workshop was held at Julius West Middle School to review the alternatives. This workshop was purposely held on a Saturday from 10:00 in the morning until 4:00 in the afternoon to afford a maximum opportunity for people in the area to have access to information about the project. Notice for this open house workshop was sent to our mailing list of approximately 1,300. (By now this list has grown to nearly 2,500.)

Last year a list of 23 civic associations was established based upon our understanding of those groups which would be most directly affected by the project. These civic associations were all contacted to determine if they were interested in meeting with us to discuss the nature of the project and its potential effects on their area. As a result of this effort, ten meetings were held with various civic groups. In addition, several meetings were held with business groups in the area who were also affected by conditions in the I-270 corridor.

In a further effort to ensure maximum public awareness of the project, the State Highway Administration, for the first time in Maryland, and possibly for the first time anywhere, utilized a Highway Advisory Radio System for the purpose of informing the public about a proposed major improvement and letting people know how they might offer comments. This radio system was installed in December, 1983 at the Shady Grove Road Interchange along I-270, and broadcasts with an effective radius of about five miles in each direction on the frequency 530 for AM radio.

An Environmental Assessment was prepared for this project and circulated in January of 1984. A combined Location/Design Public Hearing was held at the Richard Montgomery High School in Rockville on February 15, 1984. This hearing was announced in newspapers, in notices to our mailing list and in the message broadcast on Highway Advisory Radio. Approximately 285 persons attended this hearing and 28 persons made recorded comments.

Subsequent to the Public Hearing and the receipt and evaluation of all public agency comments, the Project Planning team convened on several occasions to analyze the alternates and prepare the recommendation.

The general comments from the public were that they were generally in favor of increasing the capacity on I-270 by some type of widening. However, there were many comments showing concern with the possible impacts of the project. The general subjects of concern are listed below:

1. Many citizens were concerned with the predicted noise levels at the residences along the right of way and what type of mitigation would be used.
2. Several comments were made with respect to the impacts of the project on the Y-split and the Beltway with respect to increased congestion and needs for widening these roadways as a result of the improvement to I-270.
3. There were several comments showing concern with the congestion that could occur on the roads serving I-270 as a result of the widening of I-270.
4. Several citizens felt that a full EIS should have been prepared.
5. Several comments were made concerning the negative visual impacts of the project, the effects the construction phase would have on adjacent residences, and the safety characteristics of the project for users as well as adjacent residents.
6. Some comments suggested that the improvements proposed are not compatible with the provision of Metro.
7. Several citizens were concerned with the environmental impacts of the project such as noise, air quality, natural environment and parklands.

18

8. Vibration was cited as a possible problem by several people.
9. Several citizens were concerned with the possible reduction in property values as a result of the proposed improvements.
10. Inconsistency of the project with the Master Plans in effect in the corridor was cited as a problem.

# II ALTERNATES

## A. GENERAL

Alternates were studied for both the main roadway and at each interchange. In some cases, the mainline alternate would dictate the possible interchange alternates. However, mainline alternates will be discussed separately from the interchange alternates in this section for simplification. These alternates were presented in the Environmental Assessment and at the Alternates Meeting and the Location/Design Hearing.

## B. MAINLINE ALTERNATES

### 1. No-Build Alternate

Under this alternate, no widening of the I-270 roadway is provided. Only normal maintenance such as resurfacing and safety improvements are continued. Also, no improvements would be provided at the interchanges at Montrose Road, MD 28, Middlebrook Road, and MD 118.

As the traffic volumes increase, congestion would intensify and the duration of congestion would increase. Also, as stated above, as congestion increases, the accident rate would increase. As the traffic demand continues to increase beyond the capacity of the I-270 roadway, more traffic would be diverted to other routes in the area, thereby increasing congestion on these other roadways. The No-Build Alternate is not recommended due to unacceptable congestion impacts.

2. Widening to 8-Lanes

The provision of an additional lane in each direction from the Y split to MD 121 was investigated. This would create an 8-lane roadway from the Y split to MD 118 and a 6-lane roadway from MD 118 to MD 121.

The existing ramps were designed for 25 m.p.h. in the 1950s with short acceleration lanes and weaving sections. It was found that, in order to provide an acceptable connection to the main roadway with today's design criteria, the ramps would have to be expanded to 30 m.p.h. design and the weaving sections would have to be lengthened. These improvements would create the need for extensive right-of-way acquisition and relocations resulting in greater overall adverse impacts and substantially greater costs.

The bridges carrying the crossroads over I-270 were all designed to accommodate four lanes in each direction. Therefore, the widening to 8 lanes would require reconstruction of all bridges since the interchanges would require 4 lanes in each direction plus a weaving lane. This in turn would likewise increase costs and complicate maintenance.

It was found that the most acceptable solution for the interchanges under the 8-lane widening alternate was to provide collector-distributor (c-d) roads through the interchanges. In this way, the existing 25 m.p.h. design ramps could be utilized because they connect to a lower design speed road (c-d). Also, by constructing the c-d roads behind the existing piers, the main spans of the bridges could be salvaged. By utilizing existing ramps and bridges and constructing collector-distributor roads, traffic can be more readily maintained without severely impacting the local street system.

Due to the proximity of the interchanges at Montrose Road, Falls Road, and MD 28, auxiliary lanes would be needed between the interchanges in both directions for weaving, acceleration and deceleration, creating a 10-lane roadway section between these interchanges. In a number of instances, the space

between the end on the c-d road in one interchange and the beginning of the c-d road in the next interchange was shorter than should be designed for along the mainline at an Interstate highway. This proximity of the interchanges and the need for auxiliary lanes between the interchanges led to the development of the Preferred Alternate, the Continuous Collector-Distributor Road Alternate (See Section C.) The eight-lane alternate would not provide an acceptable level of service based on the expected development in the corridor by the design year. A Level of Service E/F would be experienced even with added weave lanes.

The 8-lane alternate with the partial c-d road would create 10 weaving sections on the main roadway, whereas the Continuous C-D Road Alternate would create 6 weaving segments. More diverges and merges would also be created on the main roadway under the 8-lane alternate. Therefore, the extension of the c-d roads between the interchanges as provided in the Selected Alternate provides significantly better level of traffic service. The eight-lane alternate was therefore eliminated from further consideration.

3. Express Lanes

The provision of additional lanes to operate as express lanes or travel lanes for the exclusive use of high-occupancy vehicles (HOV) including buses during peak hours was investigated.

A lane configuation of 3-2-2-3 was selected as the HOB alternate to be studied in more detail. Preliminary construction costs were developed for this alternate.

The amount of traffic that would be diverted to the HOV lanes is related to the time savings realized by the use of the HOV lanes and the distribution of the employment and residence locations. In the I-270 corridor, employment centers are scattered throughout the corridor as are residential areas. As shown by the origin-destination matrix developed, a relatively small percentage of traffic in the corridor is destined for the Washington central business

district. Commonality of origins and destinations is an important factor in the number of car pools formed and in the number of patrons utilizing mass transportation and origins and destinations of I-270 users tend to be quite dispersed. When Metro Line is opened to Shady Grove, a large number of CBD-oriented trips will be diverted to the rail line, further reducing the nubmer of commuters that would be diverted to HOV lanes and the potential for bus usage of the express lanes. Also, as development continues in the corridor and Metro is opened, the directional distribution of traffic will tend to become more evenly divided, thus lessening the effectiveness of reversible express lanes. This alternate was eliminated from further study because the traffic service and capacity was not increased significantly due to the lack of demand for the express lanes.

Also, none of the existing bridges over I-270 could be utilized with this alternate due to the span locations and lengths required for this alternate. This alternate is not easily adaptable to staged construction due to the locations of the proposed roadways with respect to the locations of the existing roadways. Only four lanes of the existing roadways could be utilized. The use of the express lanes would create weaving and merging maneuvers necessary to gain access to these lanes.

4. Ramp Metering

The feasibility of ramp metering was determined by studying the net results of the Metering Alternate in terms of vehicle hours of travel as compared to the unmetered alternates (8-lane alternate, No-Build or any other alternate). The total travel time in vehicle-hours produced by the metered and the unmetered alternates includes expressway travel, queuing delays and travel diversions.

A computer model was used to analyze these various alternates involving ramp metering. The model has the capabilities of determining the maximum queue that will develop at each ramp, the traffic diverted, the metered rates at the

ramps, the travel speeds on the expressway and the overall travel times for any metering and expressway scenario. It was found that there would be no net savings in vehicle hours of travel in the corridor with metering the 8-lane alternate under the design year traffic.

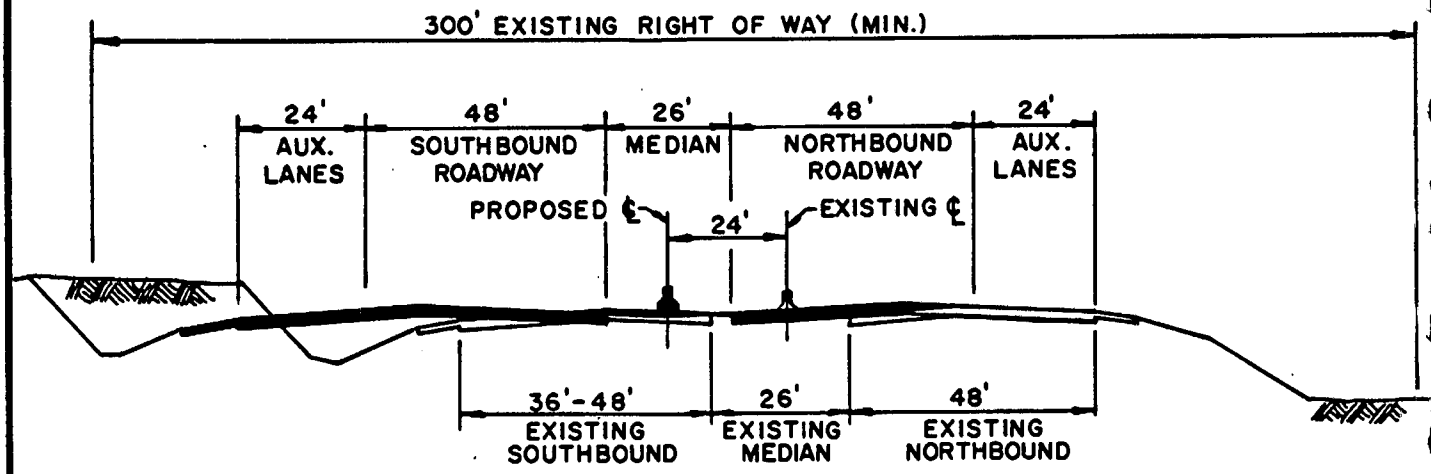
C. SELECTED ALTERNATE - CONTINUOUS COLLECTOR DISTRIBUTOR ROADS

Collector-distributor (c-d) roads were studied at Montrose Road, MD 28, and MD 118 as a means of increasing the capacity of the interchanges and reducing the accident potential by removing the weaves, merges, and diverges from the main roadway. The lower design speed of the collector-distributor road (50 mph) allows the use of 25 mph design ramps according to AASHTO criteria thus lessening the impacts which would be associated with the higher design ramps which would be required if tie-ins were made directly to the mainline.

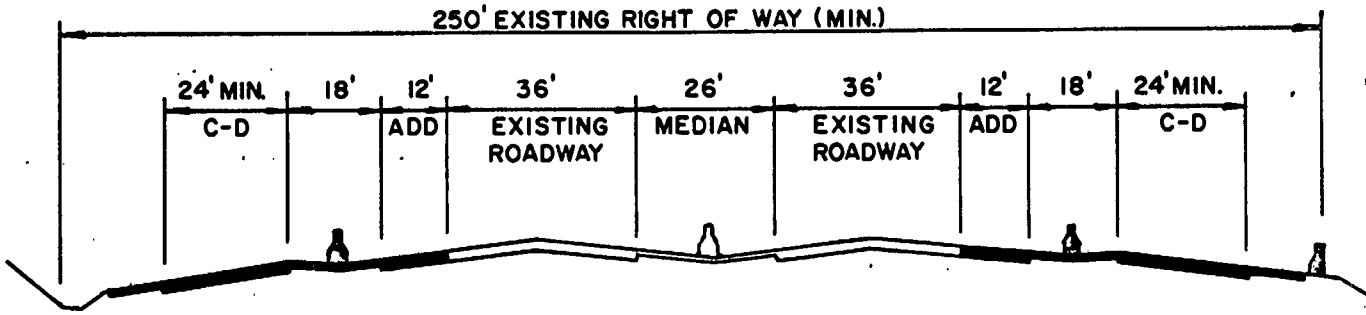
The Continuous Collector-Distributor Road Alternate was developed as a means of providing a relief roadway and connecting the various separate c-d roads at the individual interchanges. Access to and from the collector-distributor roads and the I-270 roadways would be provided through the use of slip ramps at several locations along the route. The locations of these proposed slip ramps are shown on the Plan sheets, Plates 9 through 25. The main roadway will be widened by one lane in each direction the full length of the project.

The typical cross section of this alternate consists of an eight-lane main line flanked by parallel c-d roads with a minimum of two lanes in each direction. See Plates 2-4.

Traffic projections for the Continuous C-D Alternate were developed by MD SHA. It was found that this Build Alternate would satisfy the demand anticipated from the master plans in the design year taking into consideration all proposed improvements to roads serving I-270.




## Y (SPUR) TO MONTROSE ROAD




## CONTINUOUS COLLECTOR-DISTRIBUTOR (C-D) ROADS
## MONTROSE ROAD TO MD. 124

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACT, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

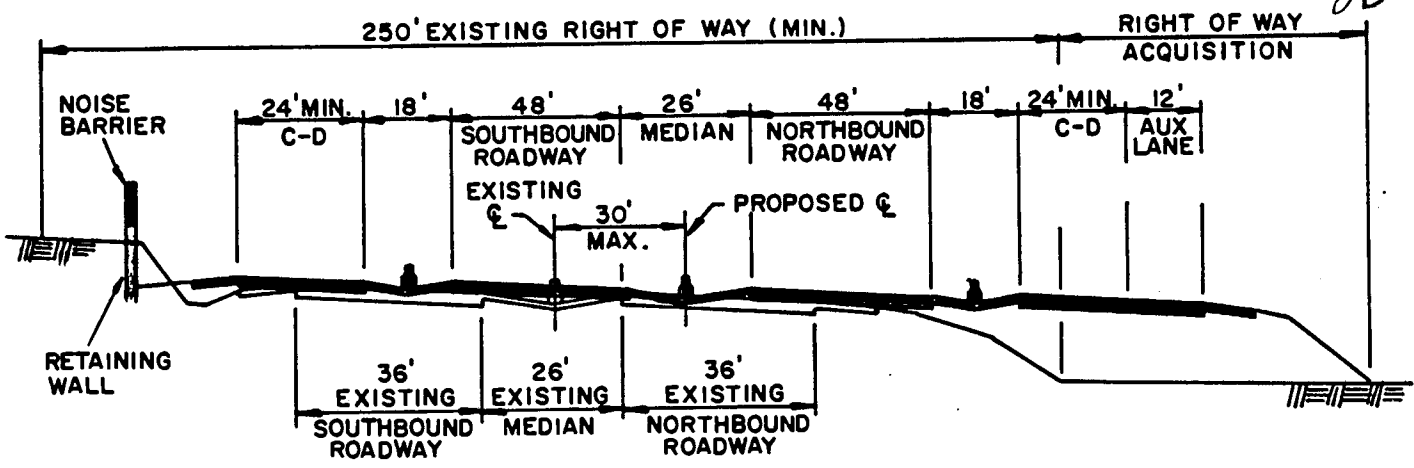
MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

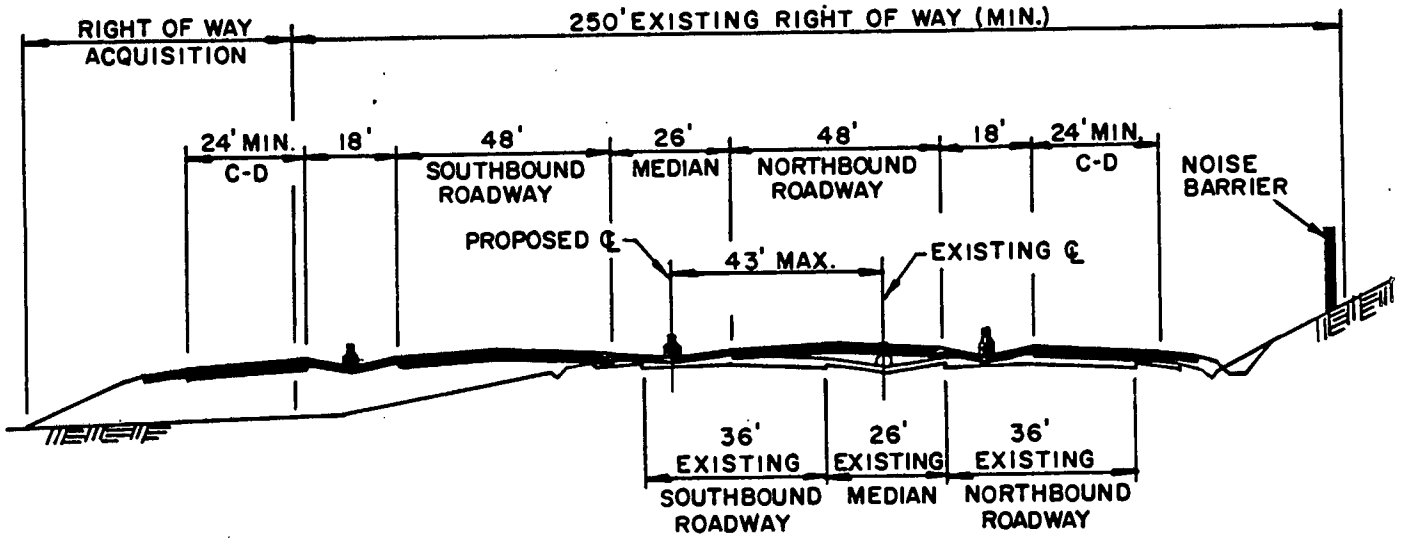
FROM I-270 Y SPUR TO MD. RTE 121

# TYPICAL SECTIONS

CONTRACT NO. M401-152-372 PLATE 2




## ALIGNMENT SHIFT SOUTH OF MD. 28




## ALIGNMENT SHIFT NORTH OF MD. 28

THE ALIGNMENT SHIFT SHOWN IS APPROXIMATE. THE FINAL LOCATION OF THE SHIFT WILL BE DETERMINED DURING FINAL DESIGN.

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACT, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

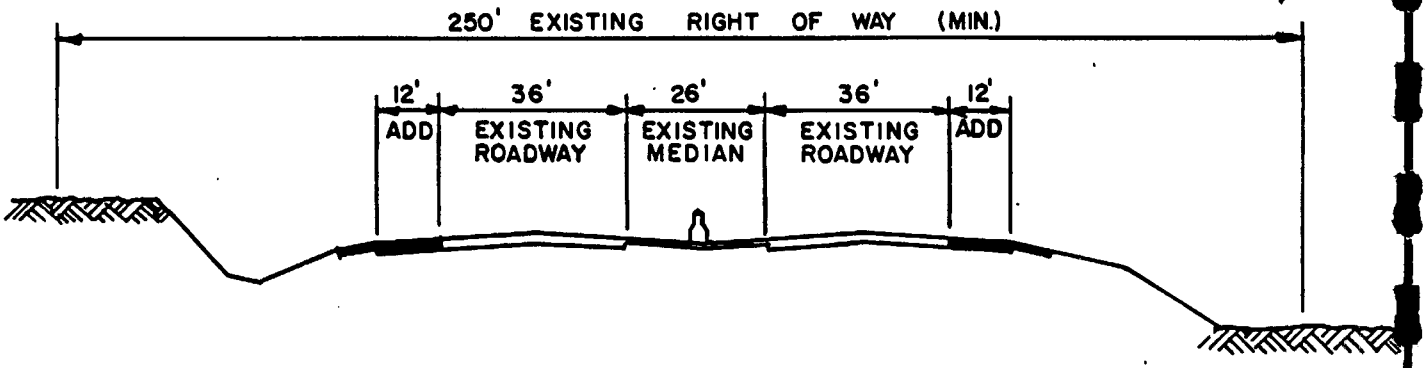
MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

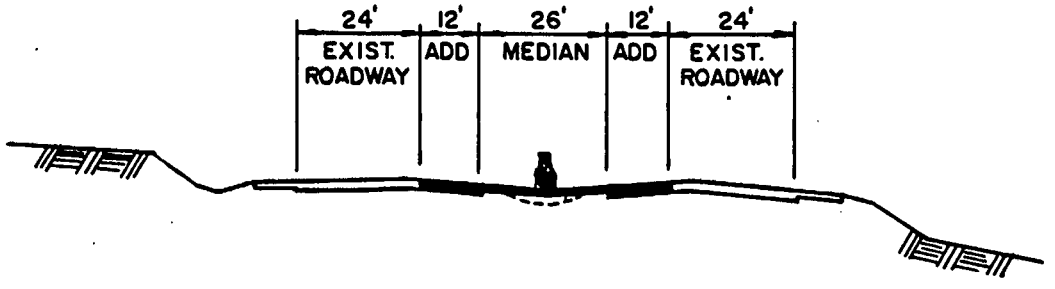
FROM I-270Y SPUR TO MD. RTE 121

# TYPICAL SECTIONS

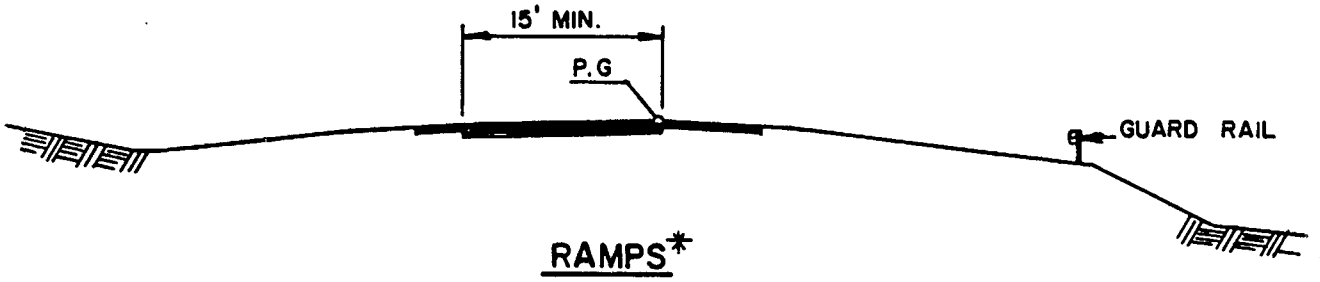
CONTRACT NO. M401-152-372 PLATE 4




## 8 LANE WIDENING
## MD. 124 TO MIDDLEBROOK ROAD




## 6 LANE WIDENING
## MD. 118 TO MD. 121




## RAMPS*

NOT TO SCALE

* WHERE RIGHT OF WAY IS RESTRICTED THE GRADING ON THE RAMPS IS REDUCED TO BE CONSISTENT WITH THE C-D GRADING

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACT, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

MARYLAND STATE HIGHWAY ADMINISTRATION

- IMPROVEMENTS TO I-270

FROM I-270 Y SPUR TO MD. RTE. 121

# TYPICAL SECTIONS

CONTRACT NO. M401-152-372

PLATE 3

A matrix of origins and destinations for the interchanges along I-270 was developed by the MD SHA for use in analyzing the operation of the collector-distributor roads. The locations of the slip ramps were determined through a traffic assignment and analysis of the weaves, merges, and diverges created both on the main roadways and the c-d roads. As much redundancy as possible was built into the system to allow for driver error and to allow the traffic volumes to balance between the mainline and the c-d's.

It was determined from studying the traffic that the c-d roads would not be justified north of the MD 124/117 interchange; therefore, north of MD 124 this alternate would be identical to the 8-lane alternate.

Retaining walls were studied wherever the grading limits extend beyond the existing right of way. Wherever parkland would be encroached on or existing structures would be affected by the grading, retaining walls could be provided to eliminate or reduce the encroachment. See Section 4(f) Evaluation.

The reasons for selection of the Continuous Collector-Distributor Road are as follows:

1. This alternate separates the through travel from the exiting and entering traffic at the interchanges. Most weaving, merge, and diverge maneuvers are removed from the through traffic, thereby increasing the efficiency of the through travel lanes and reducing the accident potential on the main roadway. By putting these movements on a lower speed roadway, the accident potential for these movements is also reduced.
2. The capacity of I-270 is increased to serve the traffic demand for the design year by adding one lane in each direction to the mainline and increasing the efficiency of these lanes by removing much of the weaves, merges, and diverges from the mainline. This alternate provides more capacity than any other build alternate.

3. This alternate can easily be adapted to staged construction and therefore reduces the problem of maintaining traffic on I-270 and roads crossing I-270 during construction relative to the other alternates considered.
4. All of the existing roadways and some of the existing ramps can be utilized due to the lower design speed on the c-d roads.

As a result of comments received at the Public Hearing, alignment shifts to increase the distance from existing residences were studied at three locations. These alignment shifts were found to be feasible and have been incorporated in the Selected Alternate. Descriptions of these shifts follow:

1. South of Montrose Road (See Plates 2 and 10)

The shift of the alignment of I-270 south of Montrose Road consists of maintaining the existing edge of the northbound roadway and shifting the roadways 24 feet to the west toward Cabin John Regional Park. Below is a list of the major considerations concerning this shift versus holding the existing centerline of I-270:

a. The retaining wall originally required from Station 226+50 to 234+75 to protect the residences is no longer required.
b. The existing offset from the edge of pavement to the residences is maintained.
c. The median must be reconstructed in a new location including any longitudinal drainage system.
d. Retaining walls are provided in two locations along Cabin John Regional Park to reduce the extent of the temporary easement required. See Plate 10.

e. There is an additional cost of right of way and construction for the shifted alignment of $500,000.

f. The noise levels at the residences will be reduced from 0 to 1 dBA due to the horizontal shift.

2. South of MD 28 (See Plates 4 and 13.)

The shift south of MD 28 consists of flattening the curve in the I-270 alignment by utilizing a compound curve of 1°, 30' and 1° to shift away from the residences along Watts Branch Parkway west of I-270. The maximum distance the roadway is shifted from the existing alignment is 30 feet. This shift eliminates any encroachment onto the property of Julius West Middle School and minimizes the shift towards the nursing home. Below is a list of the major considerations regarding this shift:

a. The retaining walls along the west side of the roadway can be reduced in height.

b. The roadway shifts 15 feet closer to the nursing home and churches on the east side of I-270.

c. A short retaining wall is required at the nursing home to maintain their access roadway.

d. The minimum distance from the edge of pavement to the residences under the Preferred Alternate is increased from 70 to 100 feet. The distance to the edge of existing pavement is 130 feet.

e. The median must be reconstructed in a new location.

f. There is an additional 2 acres of right of way acquisition required along the east side of I-270.

g. The noise levels at the residences decrease from 0 to 1 dBA. The levels at the nursing home increase by 1 dBA.

h. The shift in alignment creates an increase in right of way and construction cost of approximately $500,000.

i. The construction of the Selected Alternate with the shift creates a need for more complicated maintenance of traffic, detour roads and temporary pavement.

3. North of MD 28 (See Plates 4 and 14.)

The shift north of MD 28 maintains the positions of the MD 28 and the proposed Gude Drive bridge and shifts the roadway a maximum of 43 feet to the west, adjacent to the Regents Square condominiums and Woodley Gardens. The existing industrial development and their circulation roads were controls on the west side as to how much of a shift was possible. Below is a list of considerations regarding this shift:

a. The retaining walls along the east side of I-270 proposed under the original Selected Alternate are no longer needed. All grading can be done within the existing right of way.
b. Retaining walls are required on the west side of I-270 in the area of the industrial development to avoid encroachment on the circulation roads and parking areas.
c. The minimum distance from the edge of pavement under the Selected Alternate to the residences is increased from 50 feet to 93 feet at the maximum shift and from 65 to 78 feet at the minimum shift.
d. The median must be reconstructed in a new location.
e. There is an additional 2 acres of right of way required along the west side of I-270 with the shifted alignment.
f. The noise levels at the residences decrease from 0 to 1 dBA with the shifted alignment.
g. The shift in alignment creates an additional cost of right of way and construction of approximately $1,000,000.

h. The construction of the shift creates a need for more complicated maintenance of traffic, detour roads and temporary pavement.

## D. INTERCHANGE ALTERNATES

### 1. General

Within the limits of the study there are eight interchanges, all of which would be affected by improvements to I-270. These effects were analyzed for each mainline alternate studied. In addition, several interchanges are analyzed with respect to projected traffic to determine possible means of improving the operation and increasing the capacity of the interchanges.

The interchanges at MD Rte. 189, I-370, Shady Grove Road and MD 124/117 are being designed under separate projects. The interchanges at Montrose Road, MD Rte. 28, MD Rte. 118, and MD Rte. 121 were analyzed with respect to possible improvements. In addition, studies were made to determine the feasibility of providing an interchange at Middlebrook Road and its effect on the MD Rte. 118 interchange.

Various alternates were studied at the interchanges listed above in order to improve traffic service, capacity, and safety. In all cases, completion of the interchanges was considered to relieve weaving, ramp congestion and at-grade intersections.

Once the Continuous Collector-Distributor Road Alternate was chosen as the Selected Alternate, all interchange alternates at Montrose Road and MD Rte. 28 not compatible with this mainline alternate were eliminated from further consideration. Therefore, the following descriptions for these interchanges represent the selected alternate for each interchange.

2. Montrose Road Interchange (See Plate 5.)

The existing interchange of Montrose Road with I-270 is a cloverleaf interchange with two movements missing; northbound I-270 to westbound Montrose Road (Ramp C) and the return eastbound Montrose Road to southbound I-270 (Ramp G). These movements were anticipated in the original design plans and right of way was purchased but the ramps were not built initially. These missing movements are now accommodated by the use of left turns on Montrose Road.

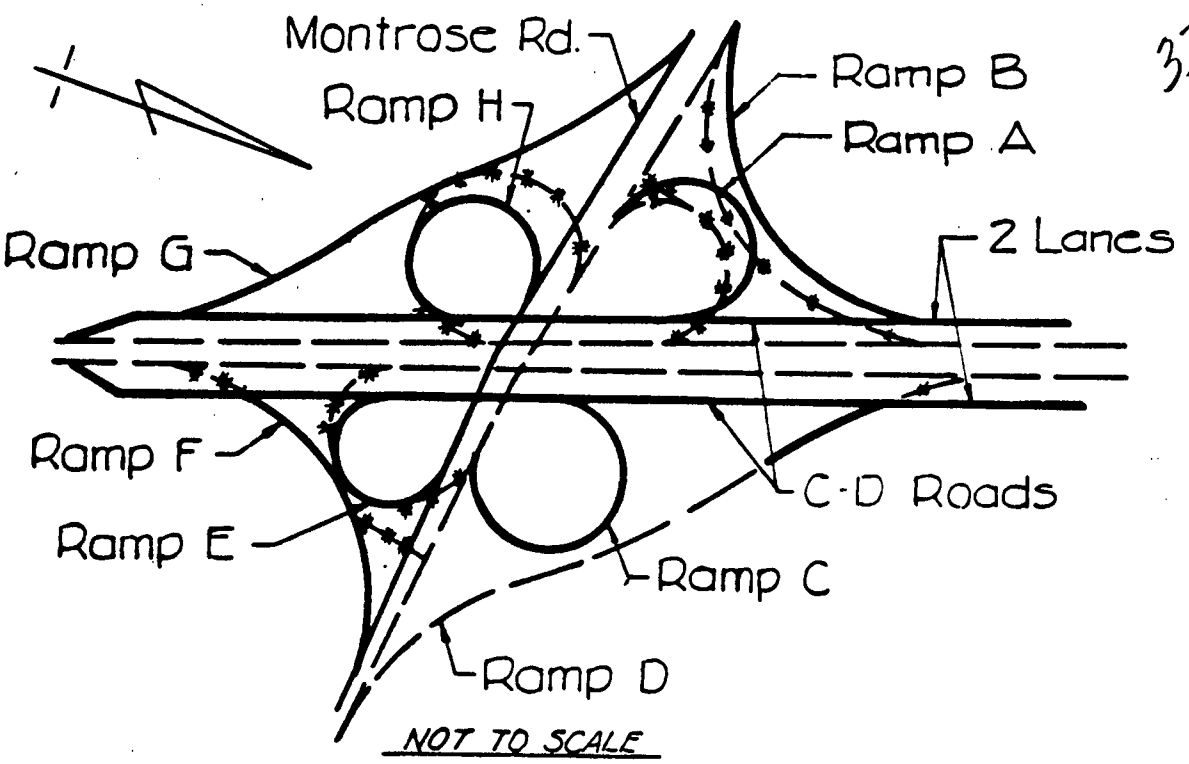
a. Northbound Roadway

The two-lane collector-distributor will begin south of Montrose Road and continue through the interchange behind the piers of the bridge over the mainline of I-270. The cloverleaf interchange will be completed by adding Ramp C to the northeast quadrant.

This alternate will relieve Ramp F by providing Ramp C and will eliminate the need for the left turn on Montrose Road. The Levels of Service of the ramps and the intersection will be improved by this alternate.

b. Southbound Roadway

The two-lane collector-distributor road will be carried through the interchange behind the piers of the bridge over the mainline of I-270 and be




NOT TO SCALE

| | NO BUILD | BUILD |
|---|---|---|
| 1. DESIGN SPEEDS | 25/40 | 25/40 |
| 2. LEVEL OF SERVICE A) MERGE / DIVERGE | E/F | D/C |
| B) WEAVE | F | A/C |
| C) INTERSECTIONS | C | A |
| 3. R/W REQUIRED (ACRE) W/RET WALLS | – | 6.3 |
| 4. R/W REQUIRED (ACRE) W/O RET WALLS | – | 16.6 |
| 5. RETAINING WALLS (LF) | – | 14,900 |
| 6. TOTAL CONSTR COST W/ RET. WALLS ($1,000) | – | 24,500 |
| 7. TOTAL CONSTR COST W/O RET WALLS ($1,000) | – | 17,000 |

## LEGEND

——— EXISTING ROADWAYS

RAMP C IMPROVEMENTS TO INTERCHANGE

* * * EXISTING ROADWAYS TO BE REMOVED

MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

# INTERCHANGE ALTERNATE MONTROSE ROAD

CONTRACT NO. M 401-152-372 PLATE 5

terminated south of Montrose Road. The cloverleaf interchange will be completed by adding Ramp G to the southwest quadrant. The existing ramps will be rebuilt to provide a larger radius and, therefore, higher design speeds.

This alternate will relieve Ramp A and the weaving maneuver between Ramps A and H and eliminate the left turn on Montrose Road. The enlarging of Ramps A and B will further improve the weaving conditions between the ramps and increase the design speed on the ramps. The Levels of Service on the ramps and at the intersections will be improved with this alternate.

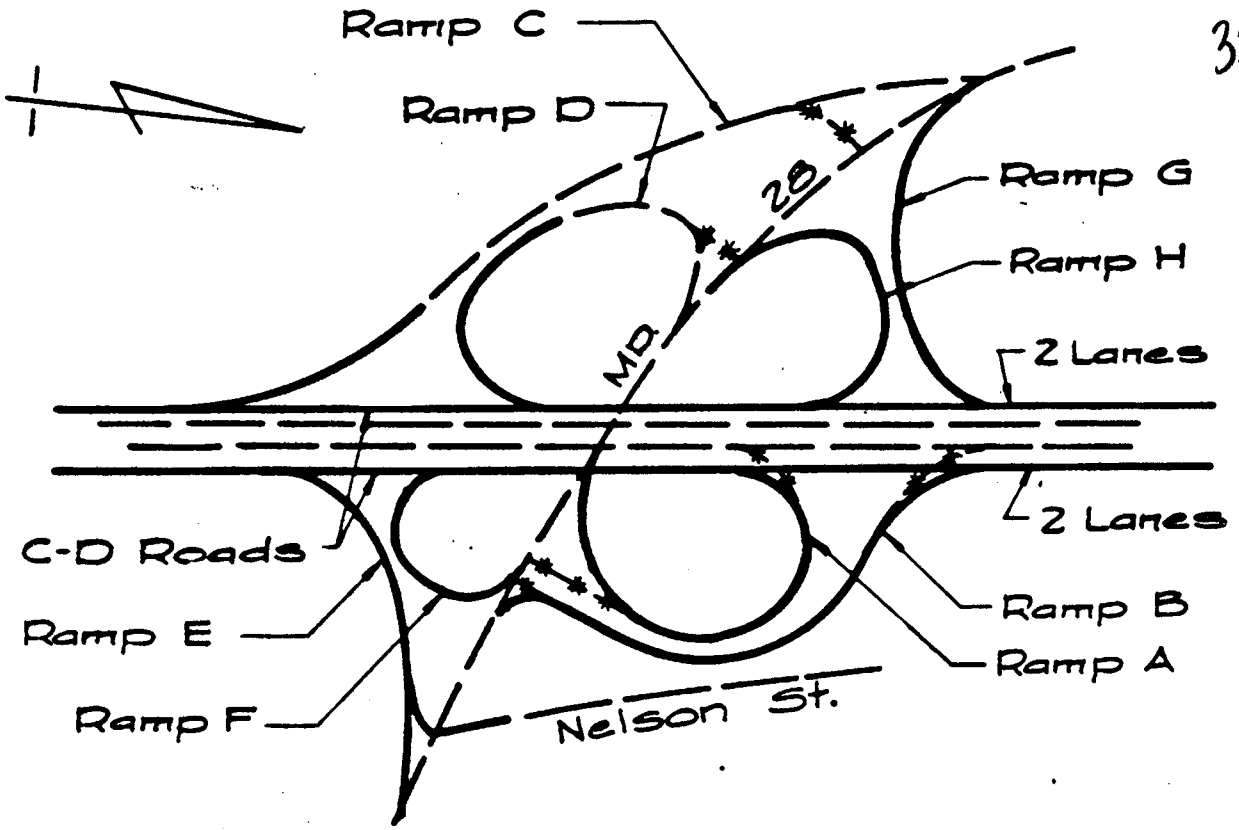
3. MD Rte. 28 Interchange (See Plate 6.)

The existing interchange of MD Rte. 28 with I-270 is a partial cloverleaf with no movements provided in the northwest or southeast quadrants. Right of way for the future provision of the movements needed to complete the cloverleaf interchange was provided.

a. Northbound Roadway

The continuous two-lane collector-distributor road will be carried through the interchange behind the piers of the existing bridge and serve the ramps to and from MD Rte. 28. Ramps E and F will be constructed in the southeast quadrant to provide a full cloverleaf interchange.

The addition of these ramps will relieve Ramps A and B and will eliminate the need for left turns at MD 28. The Levels of Service on the ramps and the intersections will be improved. Ramp E will be aligned to provide an intersection with Nelson Street and allow direct access to this area. The existing bridge over I-270 will be utilized.




| | NO BUILD | BUILD |
|---|---|---|
| 1. DESIGN SPEEDS | 25/40 | 25/40 |
| 2. LEVEL OF SERVICE A) MERGE / DIVERGE | F/E | C/D |
| B) WEAVE | – | B/C |
| C) INTERSECTIONS | D | A/D |
| 3. R/W REQUIRED (ACRE) W/RET. WALLS | – | 8.1 |
| 4. R/W REQUIRED (ACRE) W/O RET. WALLS | – | 18.7 |
| 5. RETAINING WALLS (L.F.) | – | 16,600 |
| 6. TOTAL CONSTR COST W/ RET. WALLS ($1,000) | – | 26,000 |
| 7. TOTAL CONSTR COST W/O RET. WALLS ($1,000) | – | 23,500 |

## LEGEND

——— EXISTING ROADWAYS

RAMP C IMPROVEMENTS TO INTERCHANGE

* * * EXISTING ROADWAYS TO BE REMOVED

MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

# INTERCHANGE ALTERNATE MD. 28

CONTRACT NO. M 401-152-372 PLATE 6

Seven residences from the existing loop ramp and along MD Rte. 28 will be acquired under this alternate in order to eliminate access points along Ramps A and B. Even under the No-Build Alternative, these acquisitions would be desirable to improve safety and traffic operations.

b. Southbound Roadway

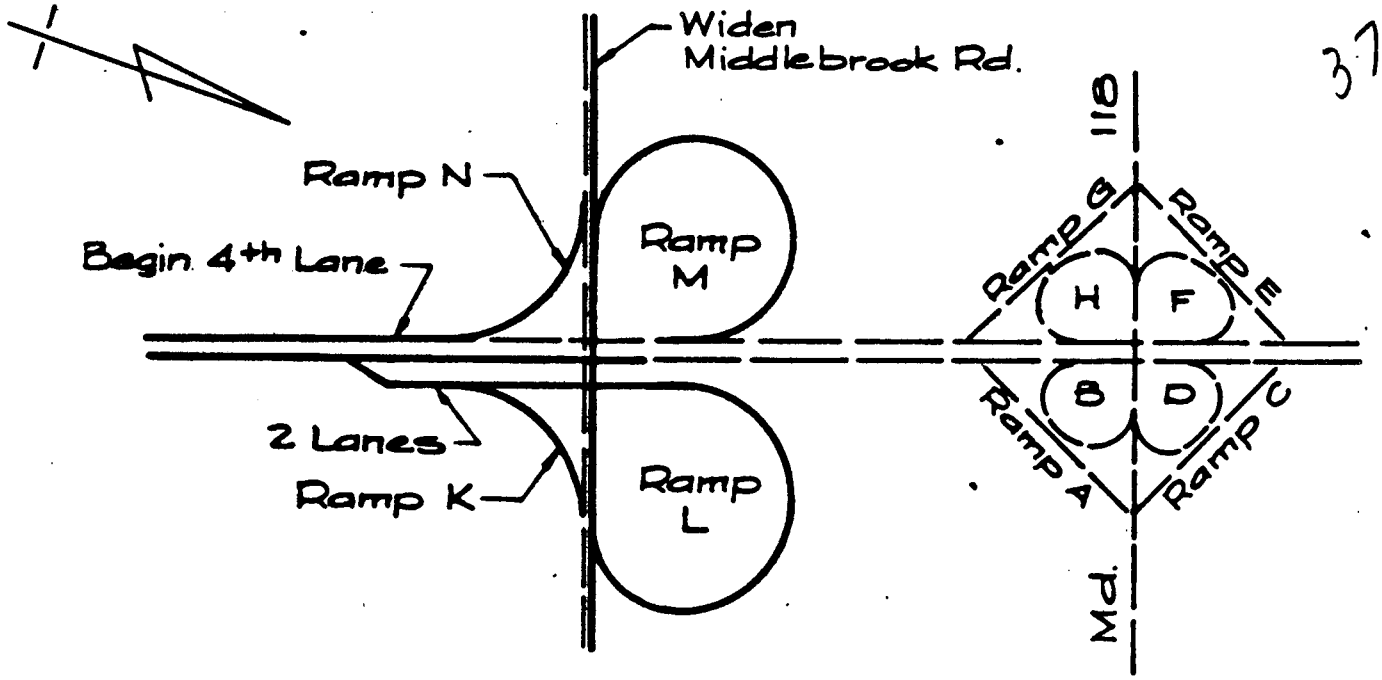
The continuous two-lane collector-distributor road will be carried through the interchange behind the piers of the existing bridge and serve the ramps to and from MD Rte. 28. Ramps G and H will be provided in the northwest quadrant to complete the cloverleaf interchange.

The addition of these ramps will relieve Ramps C and D and will eliminate the need for left turns at MD Rte. 28. The Levels of Service on the ramps and at the intersections will be improved. The existing bridge over I-270 will be utilized.

4. Middlebrook Road/MD Rte. 118 Interchange (See Plate 7.)

A possible interchange at Middlebrook Road was studied as a means of relieving the MD Rte.118 interchange and improving traffic circulation within Germantown. By providing an additional access to I-270 at Middlebrook Road, traffic on MD Rte. 118 in the area of the interchange would decrease. It was found that with the Middlebrook Road interchange, significantly more traffic could be accommodated in Germantown than with only the MD Rte. 118 interchange.

The spacing between Middlebrook Road and MD Rte. 118 is 4,000 feet, below the desirable spacing of interchanges on an Interstate highway. Therefore, the alternates studied are partial interchanges at Middlebrook Road oriented to the south. In this way there would be no weaving movements created between the Middlebrook Road and MD Rte. 118 interchanges along I-270.




NOT TO SCALE

| | NO BUILD | BUILD |
|---|---|---|
| 1. DESIGN SPEEDS | - | 30/50 |
| 2. LEVEL OF SERVICE A) MERGE/DIVERGE | - | C/C |
| B) WEAVE | - | D/E |
| C) INTERSECTIONS = AT MIDDLEBROOK RD. | - | C |
| AT MD. 118 | - | C |
| 3. R/W REQUIRED (ACRE) W/RET. WALLS | - | 23.0 |
| 4. R/W REQUIRED (ACRE) W/O RET. WALLS | - | 34.6 |
| 5. RETAINING WALLS (LF) | - | 15,500 |
| 6. TOTAL CONSTR. COST W/ RET. WALLS ($1,000) | - | 26,500 |
| 7. TOTAL CONSTR. COST W/O RET. WALLS ($1,000) | - | 21,500 |

## LEGEND

EXISTING ROADWAYS

RAMP K — IMPROVEMENTS TO INTERCHANGE

MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE 121

# INTERCHANGE ALTERNATE MIDDLEBROOK RD./ MD. 118

CONTRACT NO. M 401-152-372 PLATE 7

The traffic operation of MD Rte. 118 interchange was reviewed with the provision of the interchange at Middlebrook Road. It was found that the fourth lane on I-270 is not needed north of Middlebrook Road and the existing interchange at MD Rte. 118 would operate at an acceptable Level of Service in the design year if an interchange is introduced at Middlebrook Road. Montgomery County has programmed Middlebrook Road to be widened to a four-lane facility between MD 118 and MD 355. The widening would be required with or without the interchange. With the interchange, Middlebrook Road would continue to operate at an acceptable Level of Service.

a. Northbound Roadway

Access will be provided from the northbound roadway to Middlebrook Road east and westbound. The traffic for both Ramps K and L at Middlebrook Road are taken off the northbound roadway together on a 2-lane roadway separate from the mainline.

The fourth lane is carried 2,000 feet downstream from the takeoff at the ramps and then dropped.

The provision of these ramps at Middlebrook Road will relieve Ramps A and D at the MD Rte. 118 interchange and will improve the existing weave at MD Rte. 118. Traffic circulation in Germantown will be improved by providing another access to I-270 and traffic on MD Rte. 118 will be reduced.

b. Southbound Roadway

Access will be provided from east and westbound Middlebrook Road to southbound I-270 by means of loop Ramp M and Ramp N. The fourth lane on the southbound roadway will begin as the acceleration lane for Ramp N. Waring Station Road will need to be relocated.

The addition of these ramps will relieve Ramps G and F at MD Rte. 118 and improve the operation of the weave at MD Rte. 118. MD 118 is relieved by providing another access to I-270 in the Germantown area. The provision of these turning movements at Middlebrook Road will eliminate the need for any improvements at MD Rte. 118 or widening of the main roadway north of Middlebrook Road.

# III SERVICE CHARACTERISTICS

## A. TRAFFIC SERVICE

A comparison between the present levels of development in the I-270 corridor and that proposed in the various master plans indicates a substantial increase in traffic demand for I-270 as a major access to Washington, D.C. and other employment centers in the area during the next twenty years.

The present traffic conditions on I-270 in the peak hours indicate volumes beyond the capacity of the existing roadway in some areas. The major congestion is occurring in the southern sections of I-270 and at various interchanges such as Montrose Road, Shady Grove Road, MD 28, and MD 124. Congestion is especially heavy in the area of merges, diverges, and weaves at the interchanges along the route from MD 124 to the south. Throughout the corridor there is considerable queuing at the ramps during the peak periods, which indicates a need for interchange improvements to increase the capacity of the ramps. The congestion on the ramps also affects the roads serving I-270 and creates blockage and congestion at the intersections adjacent to I-270. Level of Service E operation exists in all segments south of MD 124 with the ramps operating at Level of Service E or F during peak hours.

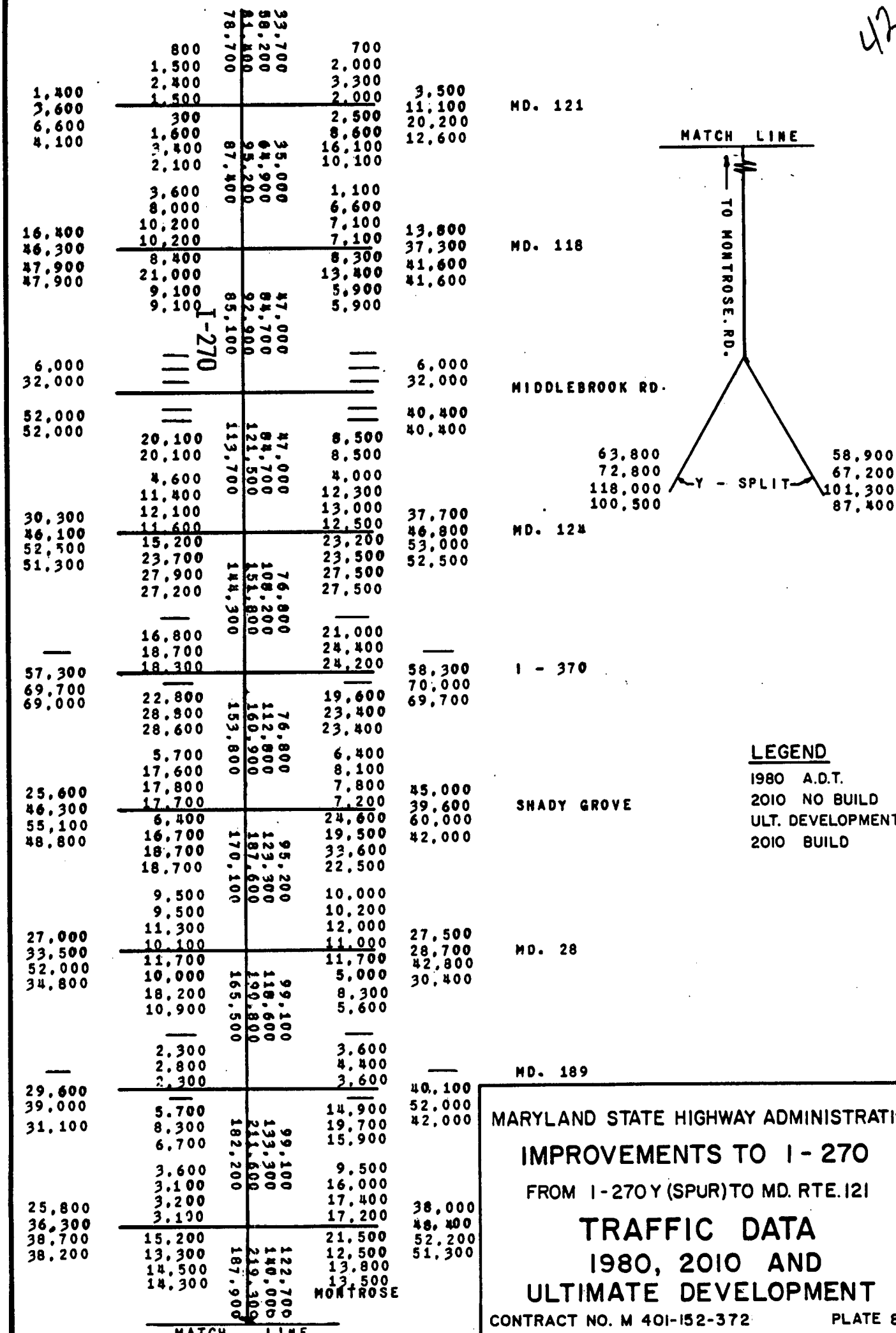
The directional distribution becomes more pronounced proceeding north from the spur. For example, between Montrose and MD 28 the split is 55% in the peak direction and 45% in the off-peak direction, while between MD 124 and MD 118 the split is 76% in the peak direction and 24% in the off-peak direction.

As development continues in the corridor, the traffic demand will continue to increase. Also the directional distribution will become more even throughout the corridor because Metrorail will accommodate more commuters to Washington and more development in Gaithersburg and Germantown will distribute the employment opportunities throughout the corridor.

Plate 8 shows the Average Daily Traffic (ADT) for the I-270 corridor for the years 1980 and the design year 2010. The traffic projections for 2010 were prepared by the Maryland State Highway Administration using traffic forecasts developed by the Washington Council of Governments reflecting Round 2 of the Cooperative Land Use Forecasts.

A second set of traffic projections was developed by the Maryland State Highway Administration for use in analyzing the collector-distributor (c-d) road alternate. See Plate 8 . These projections were based on ultimate development in the corridor and capacity constraints on the roadways serving I-270. They are considered by the State Highway Administration to be the maximum long-range projections for this roadway and were used in analyzing the traffic operations on the c-d road, determining the location of the slip ramps, and performing air and noise analyses.

The 1980 ADT reflects a volume that is slightly over the capacity of a 6-lane roadway. There are considerable backups experienced today during the morning and afternoon peak periods throughout the southern half of the roadway.




MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I - 270

FROM I-270 Y (SPUR) TO MD. RTE. 121

# TRAFFIC DATA 1980, 2010 AND ULTIMATE DEVELOPMENT

CONTRACT NO. M 401-152-372 PLATE 8

Interchange improvements are presently being designed for Falls Road, I-370, Shady Grove Road, and MD 124/117 interchanges and are being coordinated with the I-270 studies to insure compatibility.

## B. ACCIDENT RECORDS

The accident data was analyzed by type of accident and frequency and it was found that the rates of congestion-related accidents, (sideswipes and rear-end collisions) were significantly higher during the peak hours and were at least as high as the statewide averages. This tendency would indicate that these types of accidents would increase as traffic volumes and congestion increase. As congestion is reduced by capacity improvement, these rates of accidents should be reduced.

The proposed alternate will reduce the accident rate especially with respect to congestion-related accidents by reducing congestion throughout most of the corridor. The collector-distributor (c-d) road will also reduce the frequency of accidents related to the interchanges by providing the merges, diverges and weaves on the collector-distributor road rather than the main roadway. The reduced operating speeds on the c-d roads create a lower speed differential between the ramps and the connecting roadway and therefore reduce the accident potential from that existing on the roadway.

# IV ENVIRONMENTAL OVERVIEW

An Environmental Assessment, summarizing the impacts of the selected alternate was circulated to the appropriate agencies and individuals in January of 1984. The document was also made available for public review, prior to the Location/Design Hearing. The following section summarizes the potential impacts of the Selected Alternate.

## A. RELOCATIONS

The selected alternate would require the displacement of seven residences, five owner occupied and two tenant occupied, in the MD 28 interchange area, two of which are presently owned by the Maryland State Highway Administration. A total of 14 individuals would have to be relocated. The need to relocate these residences is caused by the improvements proposed to the interchange rather than widening of I-270. The relocations would be desirable for safety and operations even under no-build. All Build Alternates studied at MD 28 required the same relocations. None of the relocations at MD 28 involves minorities.

The proposed alternate for Middlebrook Road interchange would require the relocation of three residences, two owner occupied and one tenant occupied, along Middlebrook Road. These relocations would result from the relocation of Waring Station Road outside the proposed ramp. All three of the

relocations required at Middlebrook Road are minority households. A total of ten individuals would be displaced.

The proposed alternate for Montrose Road interchange would require the relocation of one residence at the west end of ramp G on the south side of Montrose Road.

The relocation of any individuals, families or businesses displaced by this project would be accomplished in accordance with the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (Public Law 91-446), and would be affected in a timely and humane fashion.

The Relocation Assistance Report indicates that there is sufficient housing available on the market for the owner-occupants to be relocated from the MD 28 and Montrose Road interchange areas. It is estimated that a lead time of 18 to 24 months will be needed to accomplish the relocations from MD 28. A study indicates that there is not adequate decent, safe, and sanitary housing available within the financial means of the residents displaced from Middlebrook Road. Therefore, housing as a last resort is indicated. A lead time of 18 months is needed for these displacements.

Retaining walls were proposed in several areas where the proposed grading limits without walls would encroach on existing dwellings or require acquisition of residential properties. The relocations of approximately 120 apartments and 15 single family homes can be avoided by the use of retaining walls.

## B. HISTORIC AND ARCHEOLOGICAL SITES

### 1. Historic Sites

A field survey was made of the project corridor and thirty-eight historic sites were identified. Of those thirty-eight sites six were identified as either possibly eligible for, or on the National Register. None of the sites

identified would be affected by the proposed improvements to I-270 or the interchanges. The closest site is approximately 300 feet from the right of way and access to the sites would not be adversely affected.

2. Archeological Sites

Field reconnaissance and research indicated the presence of eight historic archeological and five prehistoric archeological sites, six prehistoric activity areas and one historic cemetery within the project corridor.

Five of the historic sites and the five archeological sites have been identified in the corridor as possibly eligible for the National Register.

The I-270 improvements would affect none of the historic sites identified. Three of the prehistoric sites could be affected and, therefore, coordination with the Maryland Geological Survey will be maintained and additional investigations will be performed in the design phase of the project. It has been stated that the prehistoric sites could contain significant artifacts but that the sites are not significant. Therefore, the resources could be retrievable.

C. WATER QUALITY

The improvements to I-270 proposed in the Build Alternate will have a negligible effect on the water quality in the streams crossing I-270. Sedimentation during construction could adversely affect the populations and diversities of some aquatic species sensitive to sedimentation. Erosion and sediment control methods developed by the MD S.H.A. will be used to minimize the effects of the construction on the water quality of the streams.

Stormwater management facilities will be provided to maintain the discharge from the I-270 right of way at preconstruction levels in accordance with the latest approved procedures. These facilities will also help to settle out some of the pollutants from the roadway such as heavy metals and trash. The stormwater runoff will be managed under the Maryland Department of Natural Resources new storm water management practices in the following order of preference

- on-site infiltration
- flow attentuation by open vegetated swales and natural depressions
- Storm water retention structures
- Storm water detention structures

D. WETLANDS

1. Type 1 - Seasonally Flooded Basins or Flats

These types of wetlands occur along the major stream valleys in the project area, the largest of which occurs along Great Seneca Creek. The disturbance of the wetlands would be caused by the widening of the roadway and grading into the floodplain. There are no longitudinal encroachments along floodplains. The greatest amounts lost would be along Watts Branch due to improvements to the MD 28 interchange and along Gunner Branch due to the proposed Middlebrook Road interchange.

The total amount of this habitat that would be lost due to the Build Alternate would be approximately six acres which represents a negligible reduction in Wetland Type 1 available in the project area.

The alternative to the loss of this wetland is not providing the proposed interchange ramps in the northwest quadrants of the MD 28 and Middlebrook Road interchanges.

At the MD 28 interchange, Ramp H is designed with a minimum acceptable radius and therefore could not be tightened to avoid Watts Branch. Possibly a section of 200 feet of stream could be relocated rather than piped. However, relocation could cause more adverse impact than piping due to sedimentation and erosion. Means of reducing velocity of the water in the stream and culvert such as riprap baffles, gabions and energy dissipators will be used to avoid increased velocities through piping and consequent erosion and bank destabilization.

At the Middlebrook Road interchange, the provision of Ramp M in the northwest quadrant would require the piping of approximately 500 linear feet of Gunner Branch. The location of the ramp precludes the possibility of relocation of the

stream. However, grading could be designed to leave approximately 200 feet of the stream in its existing state within the loop if it is felt to be significant. As at MD 28, energy dissipation and sediment control measures will be employed at this location to reduce the effects on the aquatic life in the stream.

2. Type II - Inland Fresh Meadow

Tyis type of wetland exists at several locations in the project area. Approximately 0.5 acres would be lost due to the proposed improvements. This acreage represents about 10% of the meadows at the sites of encroachment. This reduction produces a negligible reduction in the populations of the species inhabiting these areas.

The locations of these wetlands adjacent to, and within, the right of way fence reduces the use of these areas for habitat, therefore their loss is not as significant as it could be located at a distance from the highway. Since some of the wetland in both locations is within the right of way, the only means of avoiding the wetland completely would be the No Build Alternate. These wetland areas will be replaced. Determination of the location of these replacements will be made during final design in coordination with the Department of Natural Resources.

3. Type V - Inland Open Fresh Water

This type of wetland, which is either ponds or streams, occurs along the major stream crossings. The major effects on these areas would occur through sedimentation during the construction phase as mentioned in the Water Quality section. Approximately 4 acres would be lost as a result of construction, mostly at Watts Branch at the MD 28 interchange and Gunner Branch at the proposed Middlebrook Road interchange. This loss of habitat would create a negligible impact on the populations and diversities of wildlife

4. Wetland Findings

Based upon the above considerations, it is determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

Floodplains

None of the floodplain encroachments will result in risks or impacts to the beneficial floodplain values or provide direct or indirect support to development within the floodplains. Therefore all floodplain encroachments were determined to be non-significant. In accordance with the Federal-Aid Highway Program Manual 6-7-3-2, a floodplain finding is not required.

## E. RARE OR ENDANGERED SPECIES

As stated in the Existing Environment section, no endangered species are known to inhabit the project area. No rare species were found within the project limits.

## F. WILDLIFE HABITAT

Various terrestrial habitats would be reduced due to the proposed improvements as described in the Environmental Assessment. This loss of natural habitat would result in a consequent reduction in populations of the species inhabiting these areas. The acreages of habitat lost represent a negligible proportion of that habitat available contiguous to those areas affected, thereby creating a negligible effect on wildlife. Also, due to the proximity to the existing highway of the disturbed habitat, the reduction in populations would be less than the proportion of habitat affected would indicate since these areas would be less densely populated than other areas at a distance from the highway.

inhabiting this type of area since the proportion of the amount lost to the total acreage available along the streams in the project area is negligible.

The pond located just north of Great Seneca Creek on the east side of I-270 is located immediately adjacent to the right of way. The grading for the improvements would encroach on the pond. Therefore, a retaining wall is proposed along the pond to eliminate encroachment. The other major stream crossings will be maintained as they exist. Where bridges carry the highway across the streams, there will be no effect on the streams due to the widening of the bridges. Where the streams are in box culverts, the structures will be lengthened to accommodate the proposed widening. There will be no effect on the carrying capacity of the stream or culvert or on the aquatic life except temporarily during the construction period as described under water quality.

The mitigation methods to be employed and the selection of any replacement wetland will be developed in cooperation with concerned federal and state agencies during the design phase of the project.

The effects on the species inhabiting the wetlands in the project area will be miniscule when considered in the context of the amount of habitat lost to that available in the corridor. For example, wetland type 1 (floodplain) exists along all the streams in the area throughout their length. Therefore, a reduction of 6 acres will have no appreciable effect on the wildlife. This same comparison can be made with the other types of wetland affected.

G. NOISE

Thirty-three noise sensitive areas (NSA) along the project were identified. Existing noise levels were monitored at these sites and predicted levels were calculated using the STAMINA 2.0/OPTIMA computer model.

Fourteen of the thirty-three noise sensitive areas (NSA) studied have ambient noise levels higher than the FHWA Noise Abatement Criteria (70 dBA). The predicted noise levels for the No Build Alternate exceed this level at twenty-one NSA's. The Build Alternate (Selected Alternate) would produce noise levels greater than 70 dBA at twenty-four NSA's.

Noise barriers were studied at eighteen sites where the Build Alternate would produce noise levels greater than the FHWA standards. It was determined that noise barriers would be recommended at 6 locations represented by 13 of the NSA's. The total cost of the barriers proposed is $4,000,000.

H. AIR QUALITY

The thirty-three receptors used in the noise analysis were also studied to determine the effects due to the selected alternate on the air quality in the project area. It was found that the Build Alternate would produce concentrations of carbon monoxide (CO) slightly higher than the No Build Alternate (1-2 parts per million (PPM)). There would be no violations of the National Ambient Air Quality Standards under either alternate for either analysis year 1990 or 2010.

I. PARKLAND AND OPEN SPACE

Montgomery County has an extensive system of local, city, regional, and State parks, several of which abut the I-270 right of way. These parks are shown on Plates 9 through 25 and include Tilden, Cabin John Regional, Rockmead, Wootten Mill, Muddy Branch, Summit Hall, Metropolitan Grove, Seneca

Creek State, and Little Seneca Regional Parks and Middlebrook Hill Neighborhood Conservation Area.

In addition, several open space areas also abut the I-270 right of way including Julius West Middle School playing fields, Woodley Garden Senior Citizens Center and Montgomery College.

The effects on Tilden, Cabin John Regional, Rockmead, Wootten Mill, Metropolitan Grove, Seneca Creek State Park and Middlebrook Hill Neighborhood Conservation Area are described in the 4(f) Statement attached to this document. The remaining areas and the effects are described below:

1. Muddy Branch and Summit Hall Park

   The effects on Muddy Branch Park and Summit Hall Park are created by the improvements proposed under the I-370 project. It was thought during the preparation of the FEIS on I-370 that impacts to the parkland could be avoided. The potential encroachment was identified during final design with the development of field surveys and larger scale mapping. A supplemental 4(f) evaluation will be issued to address the impacts to these parks. The document will be circulated to the appropriate agencies. Coordination has begun with the City of Gaithersburg which has jurisdiction over both parks. The I-270 project would not encroach on the parks or adversely impact them.

2. Woodley Gardens Senior Citizens Center

   The retaining wall at the north end of Woodley Gardens will be extended north to Gude Drive to avoid any acquisition from the Senior Citizens Center. The noise barrier will also be extended across this property to Gude Drive to reduce the noise levels

experienced during the design year at the center to below those presently experienced.

3. Julius West Middle School & Montgomery College

The alignment has been shifted in the vicinity of Julius West Middle School. There will be no recreational property required from the school.

Under the proposed alternate with the Middlebrook Road interchange, no acquisition would be required from Montgomery College. There should be no significant increase in noise levels at either site.

4. Little Seneca Creek Park

This park is located north of MD 118 where the proposed improvements consist only of widening in the median. Therefore, there would be no easements required in the park. There would be an increase in the noise levels at the right of way of I-270 in the design year of 8 dBA over the existing ambient levels for the No-Build Alternate and 9 dBA for the Build Alternate. Since the nearest activity area is located at some distance from the right of way of I-270, noise barriers were not considered.

# V RECOMMENDATIONS

Following the combined Location/Design Public Hearing held on February 15, 1984, the Project Team met on several occasions to review the comments received as a result of the hearing and the circulation of the Environmental Assessment. It was decided that the team would recommend that the Administrator approve the following:

1. Adopt the Continuous Collector-Distributor Road Alternate including the main line alignment shifts described in detail on pages II-5 - II-7 and summarized below:

   a. South of Montrose Road the roadway will be shifted 24 feet to the west.

   b. South of MD 28 the roadway will be shifted to the east. The maximum shift possible appears to be approximately 30 feet, with the shift being less, closer to the tie-in points.

   c. North of MD 28 between MD 28 and the proposed Gude Drive Bridge the roadway will be shifted to the west. The maximum shift possible appears to be approximately 45 feet, with the shift being less, closer to the tie-in points.

2. Provide retaining walls where right of way would otherwise be required from residences without the walls. A list of the locations and estimated costs of these recommended retaining walls is shown below:

| Location | Approximate Length | Cost ($1000) |
|---|---|---|
| SB 194+00 - 201+30 | 730 | 835 |
| MD 28 Ramp B 12+50 - 14+00 | 150 | 39 |
| NB 379+00 - Ramp E 12+50 | 1000 | 550 |
| MD 28 9+70 - Ramp E Sta. 14+70 | 600 | 155 |
| NB 414+00 - 420+00 | 600 | 208 |
| NB 444+50 - 452+25 | 775 | 199 |
| NB 455+00 - 477+50 | 2250 | 524 |

| Location | Approximate Length | Cost ($1000) |
|---|---|---|
| SB 208+00 - 215+50 | 750 | 237 |
| SB 227+25 - 237+00 | 975 | 338 |
| Montrose Rd. Sta. 52+00-57+75 | 575 | 455 |
| NB 578+50 - 584+00 | 550 | 131 |
| NB 602+00 - 606+50 | 450 | 116 |
| NB 607+00 - 608+50 | 150 | 25 |
| NB 608+50 - 619+50 | 1150 | 381 |
| NB 726+25 - 731+50 | 525 | 238 |
| NB 752+00 - 757+00 | 500 | 173 |
| NB 758+00 - 768+50 | 1050 | 785 |
| NB 770+00 - 774+00 | 400 | 405 |
| SB 356+00 - Ramp C 13+10 | 4240 | 2008 |
| SB 419+25 - 12+30 Ramp G | 1350 | 316 |
| SB 422+00 - 426+50 | 450 | 83 |
| SB 439+00 - 469+00 | 3000 | 946 |
| SB 773+00 - 777+50 | 450 | 347 |
| TOTALS | 22670 | $9,494,000 |

3. Provide noise barriers at the following locations:

| Location | Length | Estimated Cost ($1000) |
|---|---|---|
| NB Sta 204+00 - 252+00 | 4800 | 1304 |
| SB Sta 351+00 - Ramp C Sta 15+00 | 4450 | 755 |
| NB Sta 420+00 - 452+25 | 3225 | 761 |
| NB Sta 568+00 - 584+50 | 1650 | 335 |
| NB Sta 746+00 - 782+00 | 3600 | 641 |
| TOTAL | 17725 | $3,796,000 |

The lengths and heights of the committed noise barriers are approximate and will be refined during final design.

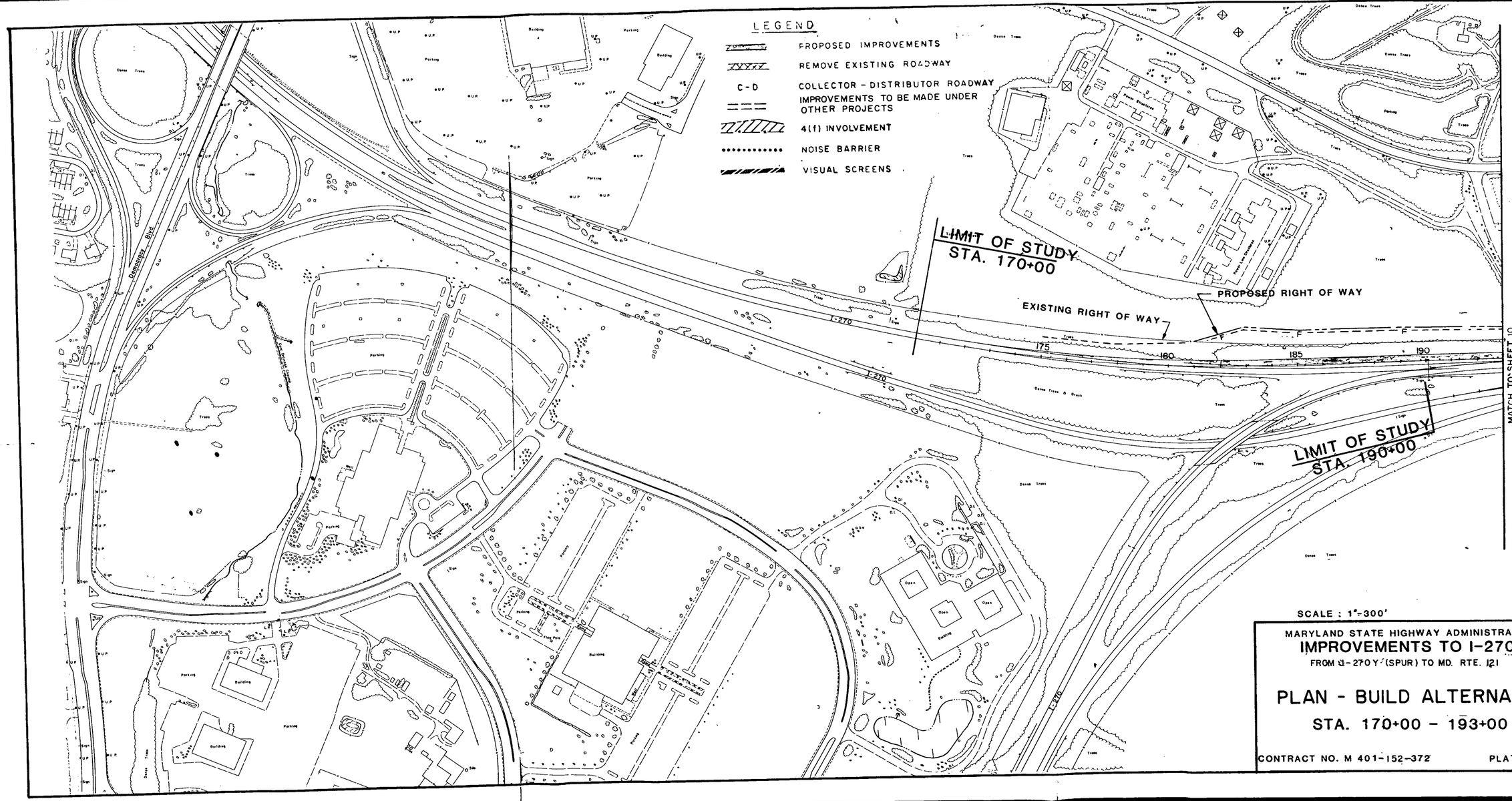
4. Study a noise barrier at the nursing home and churches south of MD 28 on the east side of I-270.
5. Coordinate with communities on noise and visual barrier design. Meetings will begin as soon as practicable after the start of final design of the highway project and will be coordinated with the Maryland National Capital Park and Planning Commission and the Cities of Rockville and Gaithersburg.
6. Plant-mix seal will be used as surface course for the roadway, so as to reduce noise levels.
7. Twenty-four hour noise monitoring will be undertaken at approximately 12 sites during the summer of 1984.
8. Second story noise mitigation will be investigated during final design.
9. Visual barriers will be provided where requested and appropriate. Visual barriers include privacy fencing and/or landscaping. Privacy fencing, placed generally along the right-of-way line, will be installed as a first order of business during the construction phase in order to reduce the impacts of construction.
10. Where permanent noise and visual barriers cannot be installed during the early stages of construction due to cost or feasibility, temporary barriers will be considered.

11. No right-of-way will be required from existing residential properties along the main line of Interstate 270. The use of residential property will only be considered if absolutely necessary for temporary construction easements in conjunction with the construction of retaining walls and noise or visual barriers. Some residential properties will be required in interchange areas.
12. Investigate and apply measures necessary to provide safety protection for development immediately adjacent to the right-of-way. Such measures may include outside Jersey barriers and other possible techniques.
13. Make seismographic studies before and after construction in residential areas.
14. Allow the grading limits to extend beyond the existing right-of-way only where there are no residences that would be affected by the right-of-way acquisition required for this design except in interchange areas where there is no alternative.
15. Replace all Type II wetlands lost to the project on an acre-for-acre basis.
16. Incorporate the latest methods of erosion and sediment control to reduce the effects on the streams and the acquatic life.
17. Provide the 25 mph design speed on Ramp D at MD 28 even though some minor acquisition would be needed from Wootten Mill Park.
18. Enclose Watts Branch in a box culvert from I-270 to MD 28

rather than relocate a small portion of the stream.

19. Investigate the grading requirements at Middlebrook Road Interchange Ramp M to determine whether the stream should be closed completely or allowed to remain open for a section within the loop.

20. Perform additional studies to determine the significance of the prehistoric archeological sites.




SCALE : 1"=300'

MARYLAND STATE HIGHWAY ADMINISTRATION

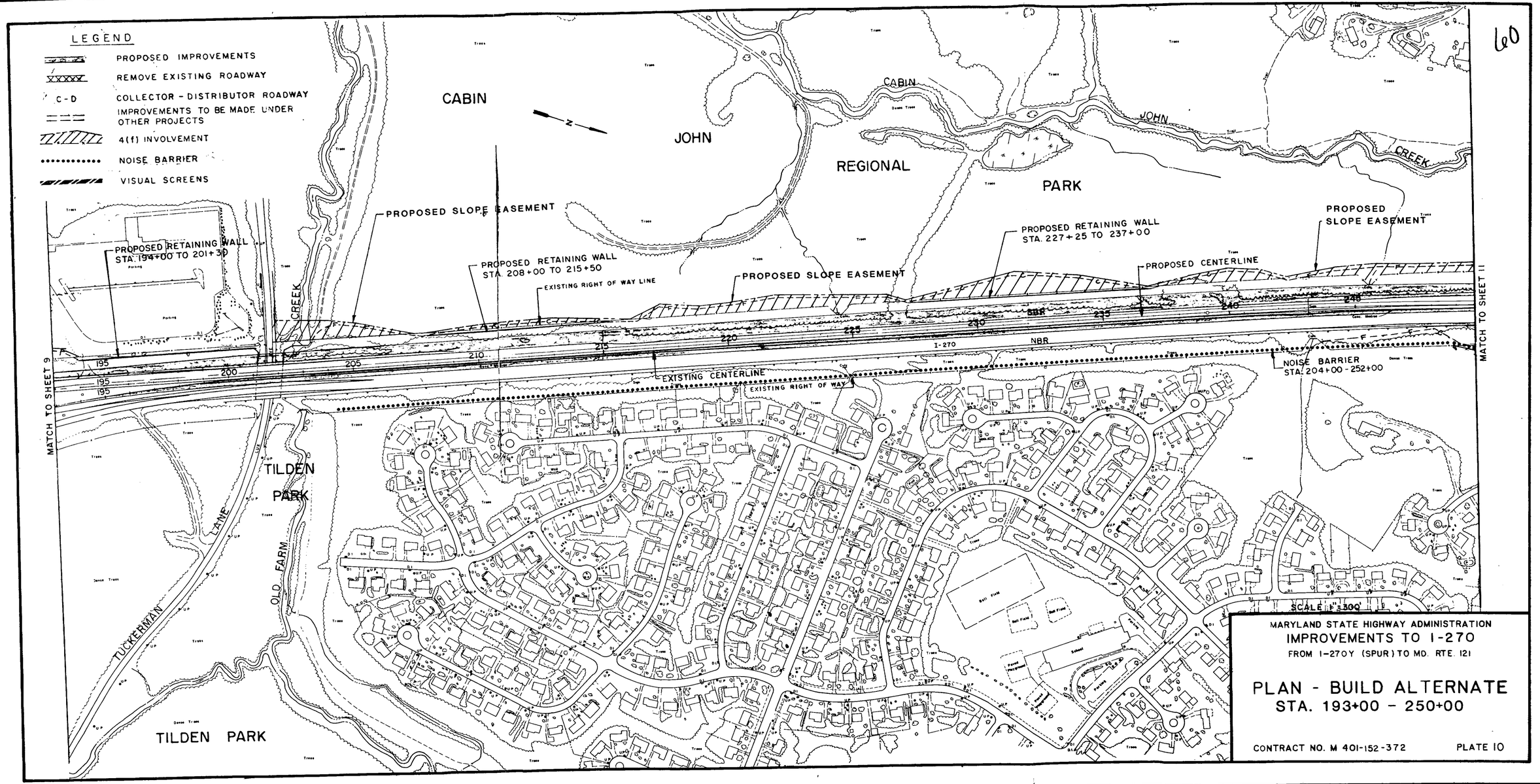
# IMPROVEMENTS TO I-270

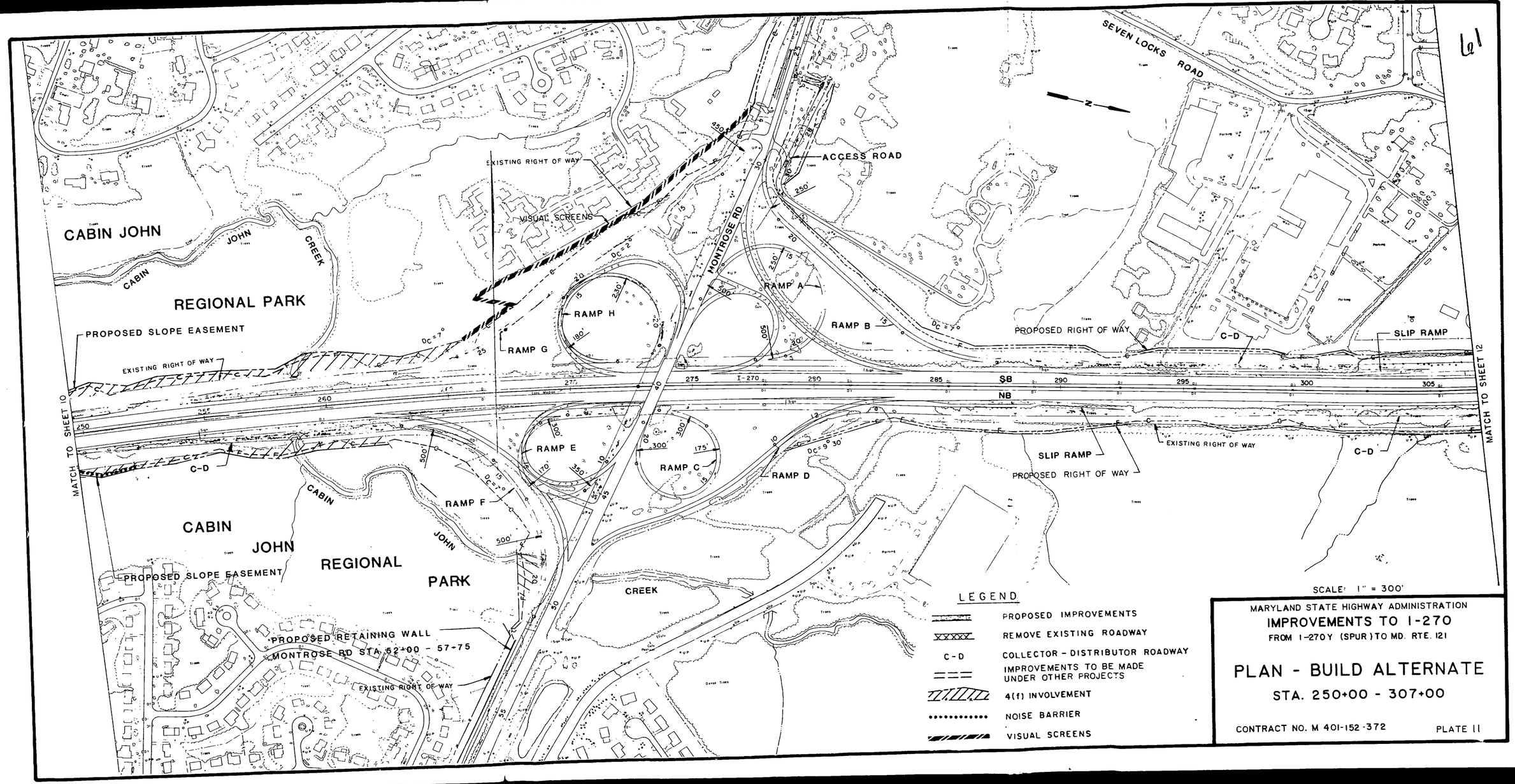
FROM I-270 Y (SPUR) TO MD. RTE. 121

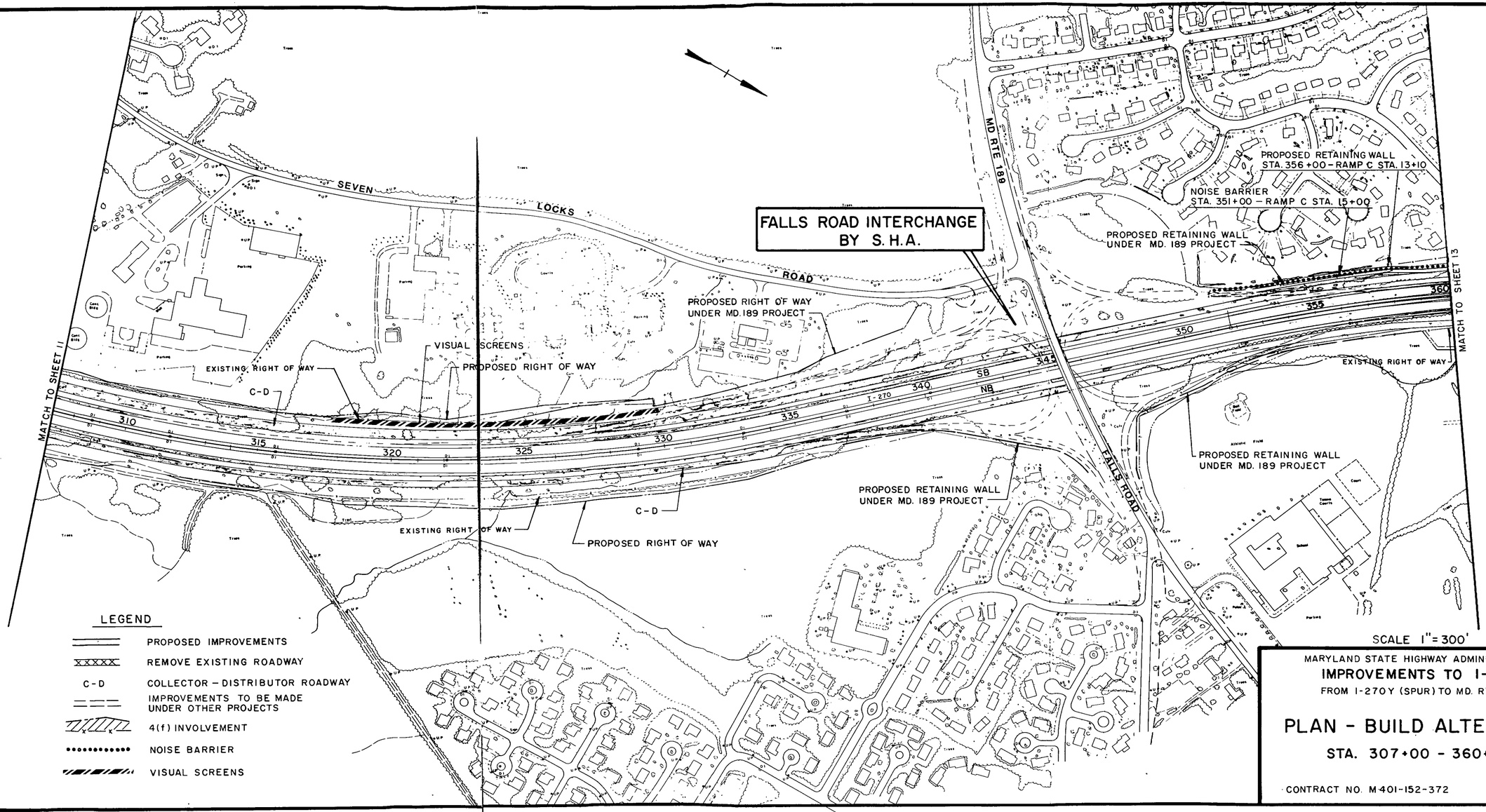
## PLAN - BUILD ALTERNATE

## STA. 170+00 - 193+00

CONTRACT NO. M 401-152-372 PLATE 9


LEGEND
PROPOSED IMPROVEMENTS
REMOVE EXISTING ROADWAY
C-D COLLECTOR - DISTRIBUTOR ROADWAY
IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
4(f) INVOLVEMENT
NOISE BARRIER
VISUAL SCREENS
CABIN JOHN REGIONAL PARK
CABIN JOHN CREEK
PROPOSED SLOPE EASEMENT
PROPOSED RETAINING WALL STA. 194+00 TO 201+30
PROPOSED RETAINING WALL STA. 208+00 TO 215+50
EXISTING RIGHT OF WAY LINE
PROPOSED RETAINING WALL STA. 227+25 TO 237+00
PROPOSED CENTERLINE
PROPOSED SLOPE EASEMENT
I-270
NBR
SBR
NOISE BARRIER STA. 204+00 - 252+00
EXISTING CENTERLINE
EXISTING RIGHT OF WAY
MATCH TO SHEET 9
MATCH TO SHEET 11
TILDEN PARK
TUCKERMAN LANE
OLD FARM
TILDEN PARK
SCALE 1"=300'
MARYLAND STATE HIGHWAY ADMINISTRATION
IMPROVEMENTS TO I-270
FROM I-270Y (SPUR) TO MD. RTE. 121
PLAN - BUILD ALTERNATE
STA. 193+00 - 250+00
CONTRACT NO. M 401-152-372
PLATE 10


CABIN JOHN REGIONAL PARK
JOHN CABIN CREEK
PROPOSED SLOPE EASEMENT
EXISTING RIGHT OF WAY
VISUAL SCREENS
MONTROSE RD.
ACCESS ROAD
SEVEN LOCKS ROAD
RAMP A
RAMP B
RAMP C
RAMP D
RAMP E
RAMP F
RAMP G
RAMP H
C-D
SLIP RAMP
PROPOSED RIGHT OF WAY
I-270
SB
NB
MATCH TO SHEET 10
MATCH TO SHEET 12
CABIN JOHN REGIONAL PARK
CREEK
PROPOSED RETAINING WALL
MONTROSE RD STA 52+00 - 57+75
SCALE: 1" = 300'
LEGEND
PROPOSED IMPROVEMENTS
REMOVE EXISTING ROADWAY
C-D COLLECTOR - DISTRIBUTOR ROADWAY
IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
4(f) INVOLVEMENT
NOISE BARRIER
VISUAL SCREENS
MARYLAND STATE HIGHWAY ADMINISTRATION
IMPROVEMENTS TO I-270
FROM I-270Y (SPUR) TO MD. RTE. 121
PLAN - BUILD ALTERNATE
STA. 250+00 - 307+00
CONTRACT NO. M 401-152-372
PLATE 11


FALLS ROAD INTERCHANGE
BY S.H.A.
SEVEN LOCKS ROAD
MD RTE 189
FALLS ROAD
I-270
SB
NB
MATCH TO SHEET 11
MATCH TO SHEET 13
EXISTING RIGHT OF WAY
PROPOSED RIGHT OF WAY
C-D
VISUAL SCREENS
PROPOSED RIGHT OF WAY UNDER MD.189 PROJECT
PROPOSED RETAINING WALL STA. 356+00 - RAMP C STA. 13+10
NOISE BARRIER STA. 351+00 - RAMP C STA. 15+00
PROPOSED RETAINING WALL UNDER MD. 189 PROJECT
PROPOSED RETAINING WALL UNDER MD. 189 PROJECT
PROPOSED RETAINING WALL UNDER MD. 189 PROJECT
310
315
320
325
330
335
340
345
350
355
360
LEGEND
PROPOSED IMPROVEMENTS
REMOVE EXISTING ROADWAY
C-D COLLECTOR - DISTRIBUTOR ROADWAY
IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
4(f) INVOLVEMENT
NOISE BARRIER
VISUAL SCREENS
SCALE 1"=300'
MARYLAND STATE HIGHWAY ADMINISTRATION
IMPROVEMENTS TO I-270
FROM I-270Y (SPUR) TO MD. RTE. 121
PLAN - BUILD ALTERNATE
STA. 307+00 - 360+00
CONTRACT NO. M-401-152-372
PLATE 12

WOOTTEN MILL PARK

PROPOSED RIGHT OF WAY

PARKWAY

EXISTING RIGHT OF WAY

$D_C = 10° 30'$

$D_C = 5° 30'$

RAMP C

BRANCH

LOCHNESS CT.

WATTS

PROPOSED RETAINING WALL
STA 356+00 - RAMP STA 13+10

PROPOSED RIGHT OF WAY

RAMP D

RAMP G

PROPOSED RETAINING WALL
RAMP STA 12+15 - STA 419+25

RAMP H

SLIP RAMP

SB

NB

375 380 385 390 395 400 405 410

SLIP RAMP

PROPOSED RETAINING WALL
STA 379+00 - RAMP STA 12+50

PROPOSED ℄

RAMP E

RAMP F

RAMP A

RAMP B

$D_C$ 8° 15'

PROPOSED RIGHT OF WAY

PROPOSED RETAINING WALL
MD 28 STA 9+70 - RAMP E STA 15+50

PROPOSED RIGHT OF WAY

NELSON ST.

VISUAL SCREENS

PROPOSED RETAINING WALL
STA 12+50 - 14+00

MD RTE 28

MATCH TO SHEET 14

SCALE 1" = 300'

NTS

ADWAY

TOR ROADWAY

MADE UNDER

MARYLAND STATE HIGHWAY ADMINISTRATION

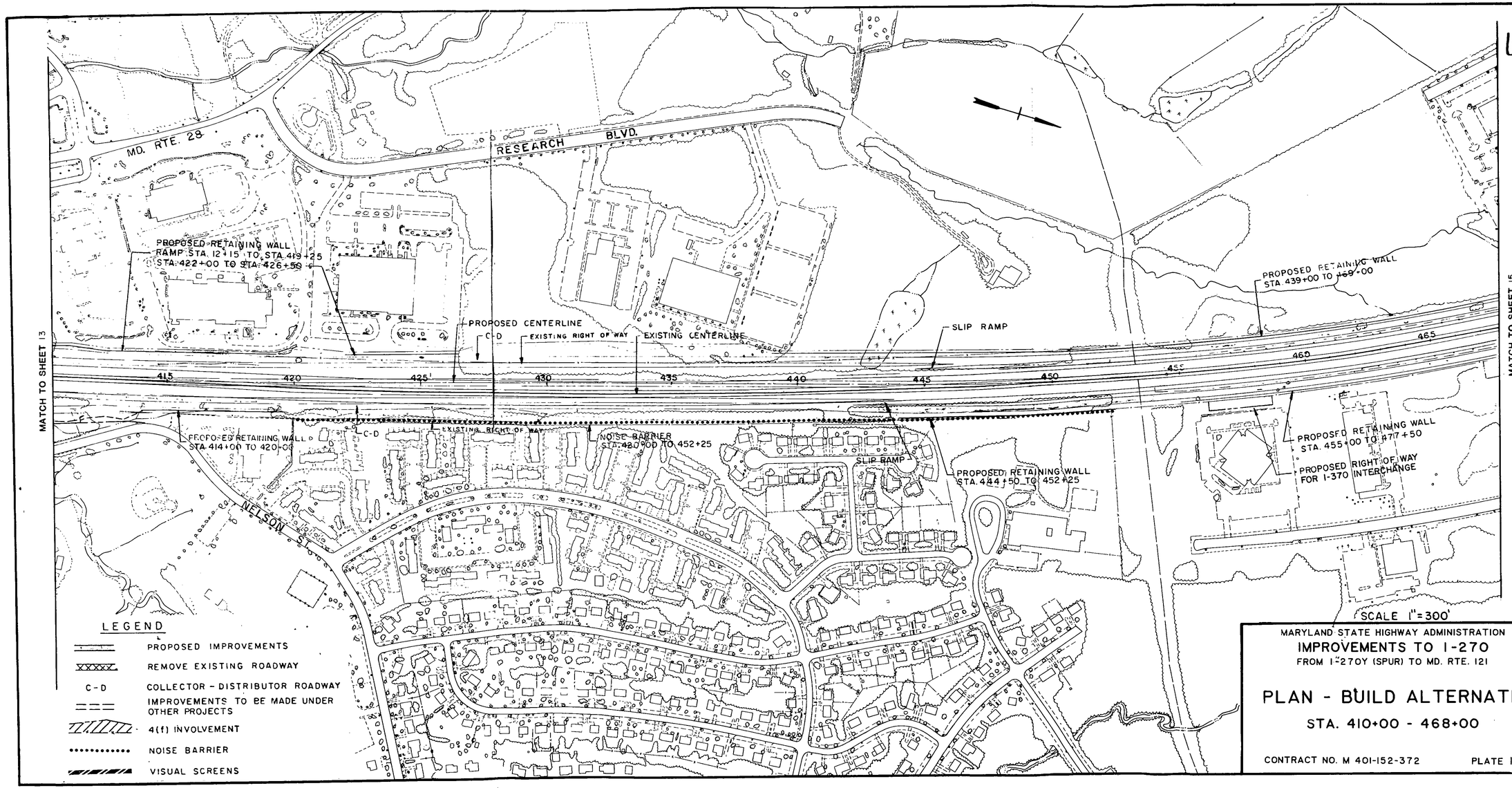
# IMPROVEMENTS TO I-270

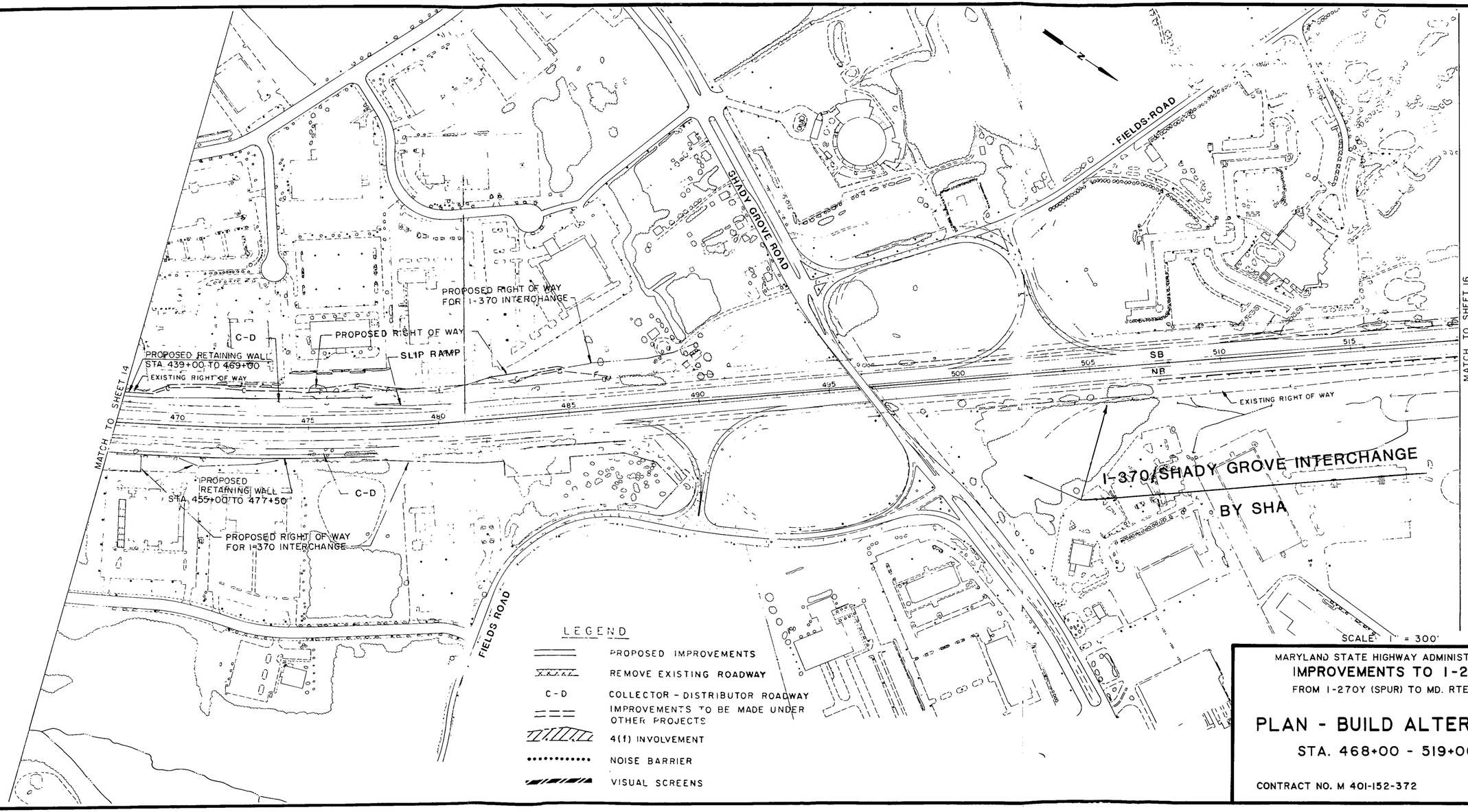
FROM I-270Y (SPUR) TO MD. RTE 121

## PLAN - BUILD ALTERNATE

STA. 360+00 - 410+00

CONTRACT NO. M 401-152-372 PLATE 13


MD. RTE. 28
RESEARCH BLVD.
PROPOSED RETAINING WALL
RAMP STA. 12+15 TO STA. 413+25
STA. 422+00 TO STA. 426+50
PROPOSED CENTERLINE
C-D
EXISTING RIGHT OF WAY
EXISTING CENTERLINE
SLIP RAMP
PROPOSED RETAINING WALL
STA. 439+00 TO 469+00
415
420
425
430
435
440
445
450
455
460
465
MATCH TO SHEET 13
MATCH TO SHEET 15
PROPOSED RETAINING WALL
STA. 414+00 TO 420+00
C-D
EXISTING RIGHT OF WAY
NOISE BARRIER
STA. 430+00 TO 452+25
SLIP RAMP
PROPOSED RETAINING WALL
STA. 444+50 TO 452+25
PROPOSED RETAINING WALL
STA. 455+00 TO 471+50
PROPOSED RIGHT OF WAY
FOR I-370 INTERCHANGE
NELSON ST.
LEGEND
PROPOSED IMPROVEMENTS
REMOVE EXISTING ROADWAY
C-D
COLLECTOR - DISTRIBUTOR ROADWAY
IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
4(f) INVOLVEMENT
NOISE BARRIER
VISUAL SCREENS
SCALE 1"=300'
MARYLAND STATE HIGHWAY ADMINISTRATION
IMPROVEMENTS TO I-270
FROM I-270Y (SPUR) TO MD. RTE. 121
PLAN - BUILD ALTERNATE
STA. 410+00 - 468+00
CONTRACT NO. M 401-152-372
PLATE 14




MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

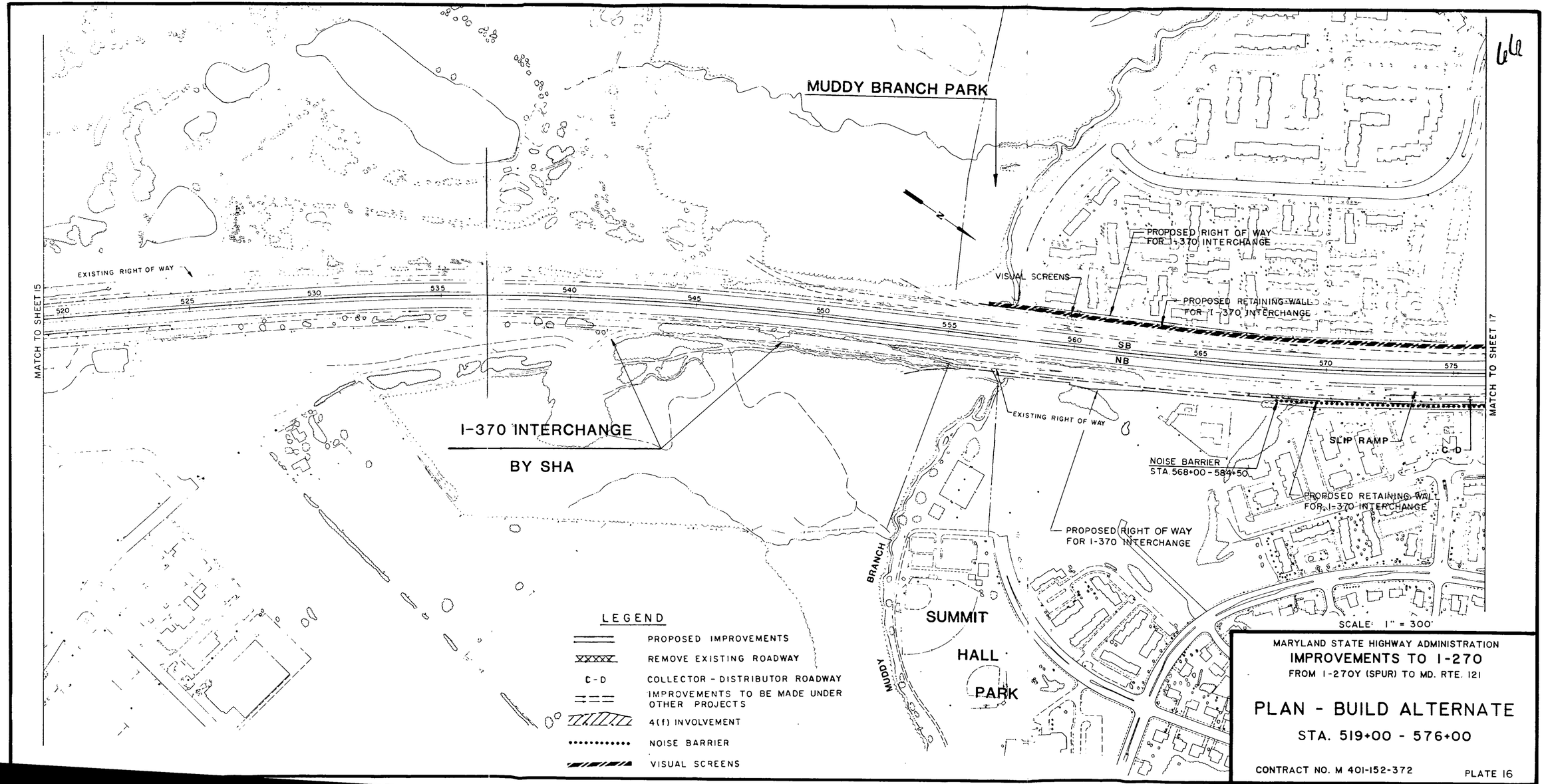
FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 468+00 - 519+00

CONTRACT NO. M 401-152-372

PLATE 15




MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

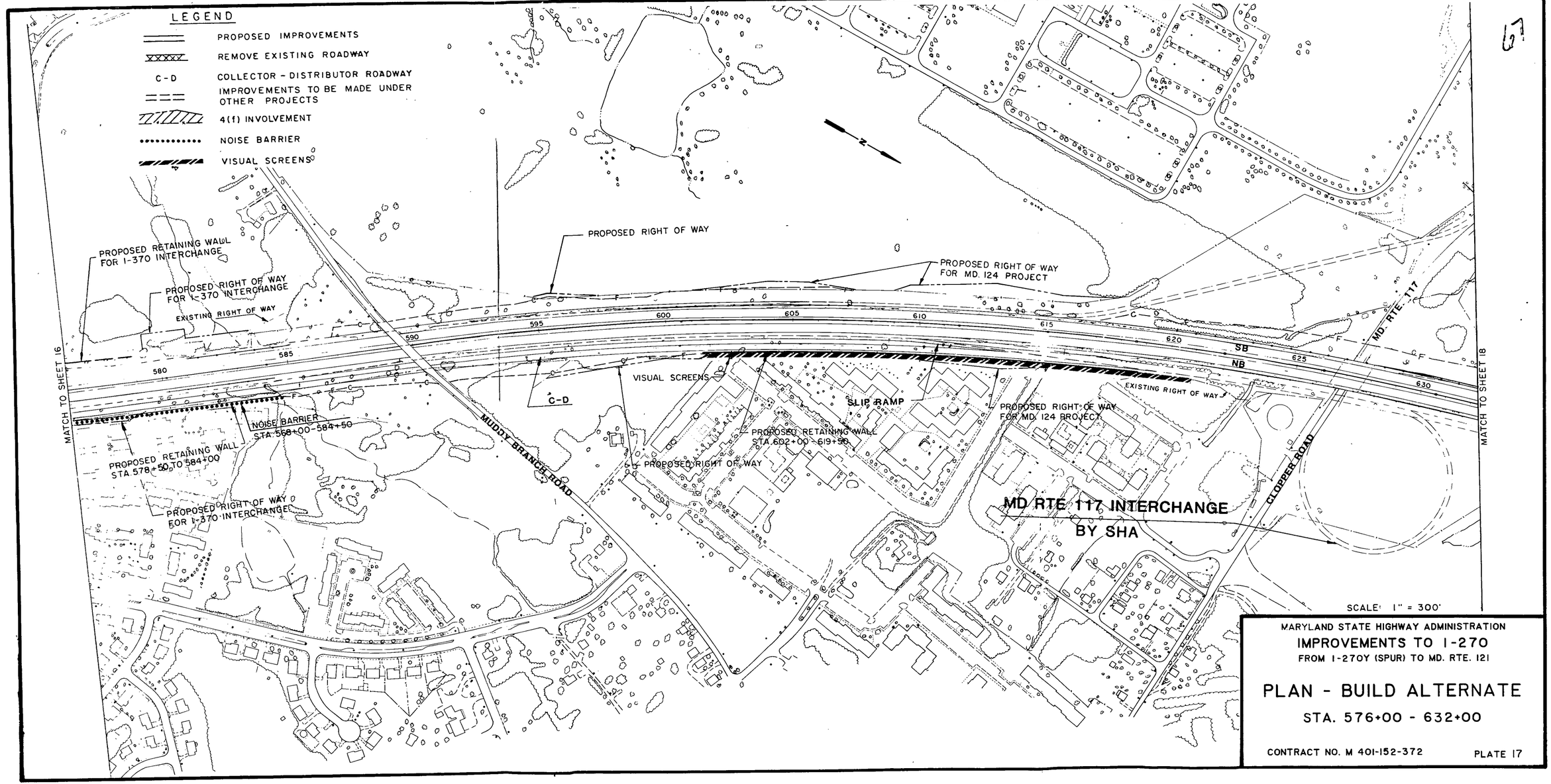
FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 519+00 - 576+00

CONTRACT NO. M 401-152-372

PLATE 16




MARYLAND STATE HIGHWAY ADMINISTRATION

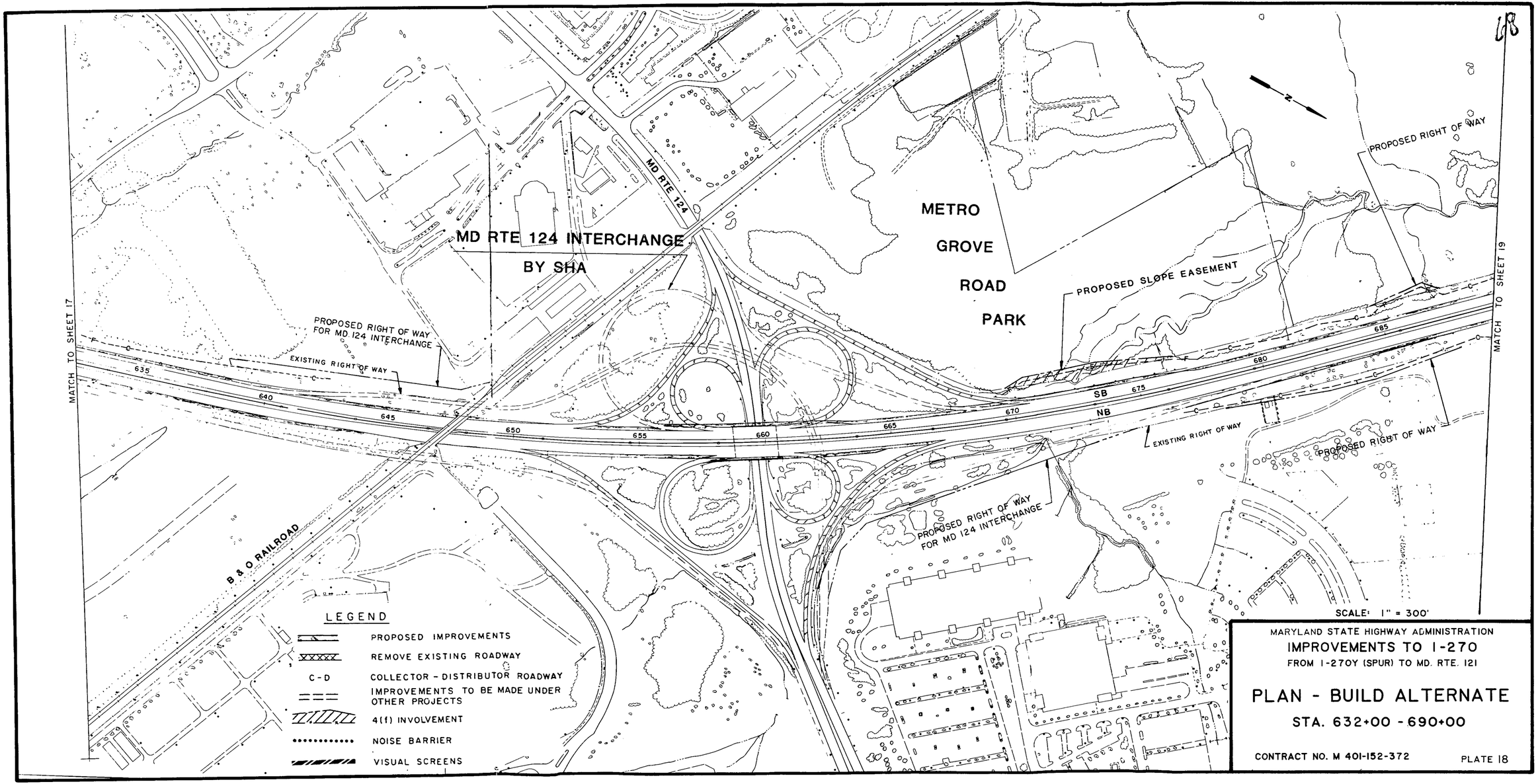
IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 576+00 - 632+00

CONTRACT NO. M 401-152-372 PLATE 17




MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

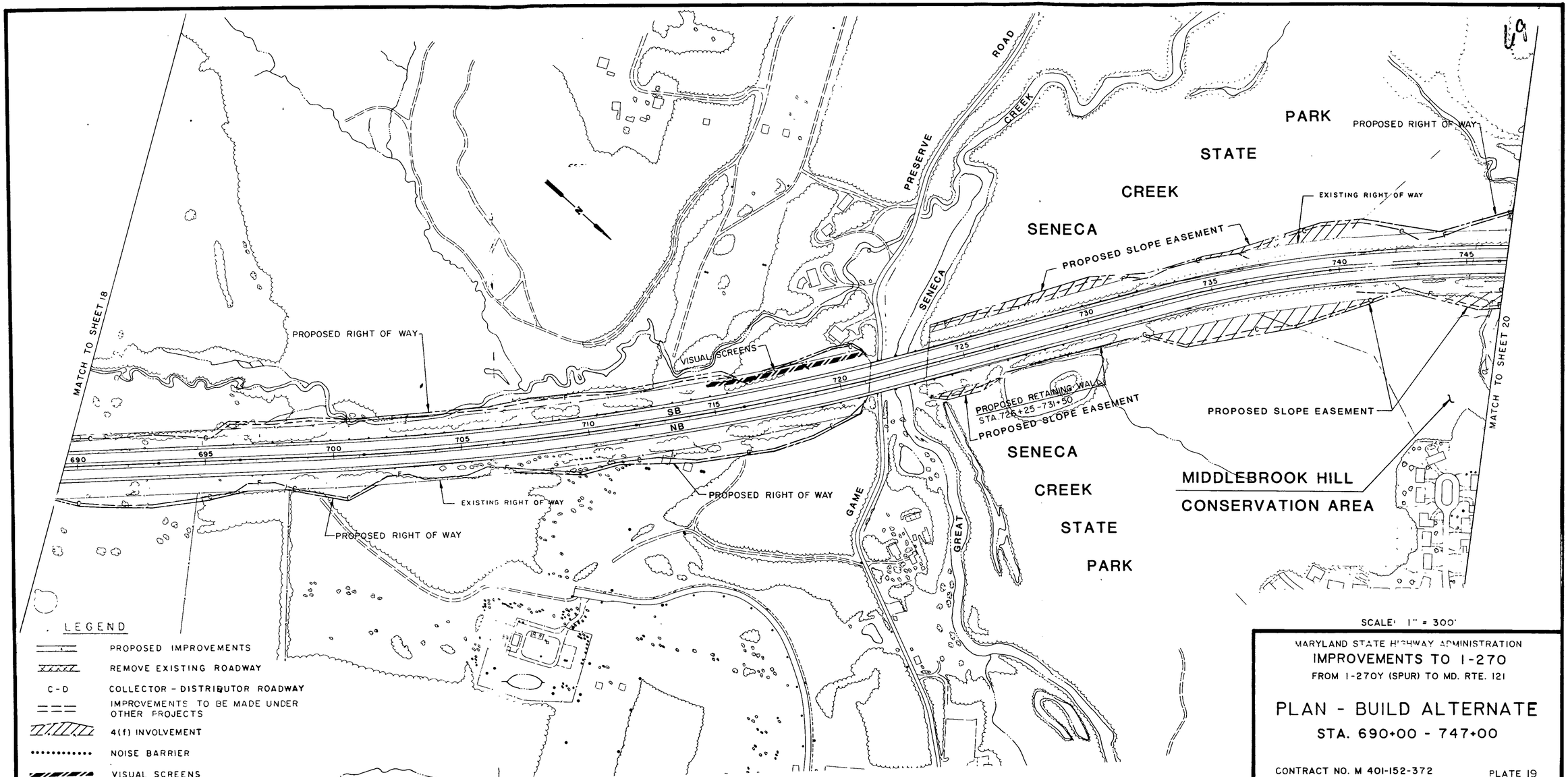
FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 632+00 - 690+00

CONTRACT NO. M 401-152-372

PLATE 18




SCALE: 1" = 300'

MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

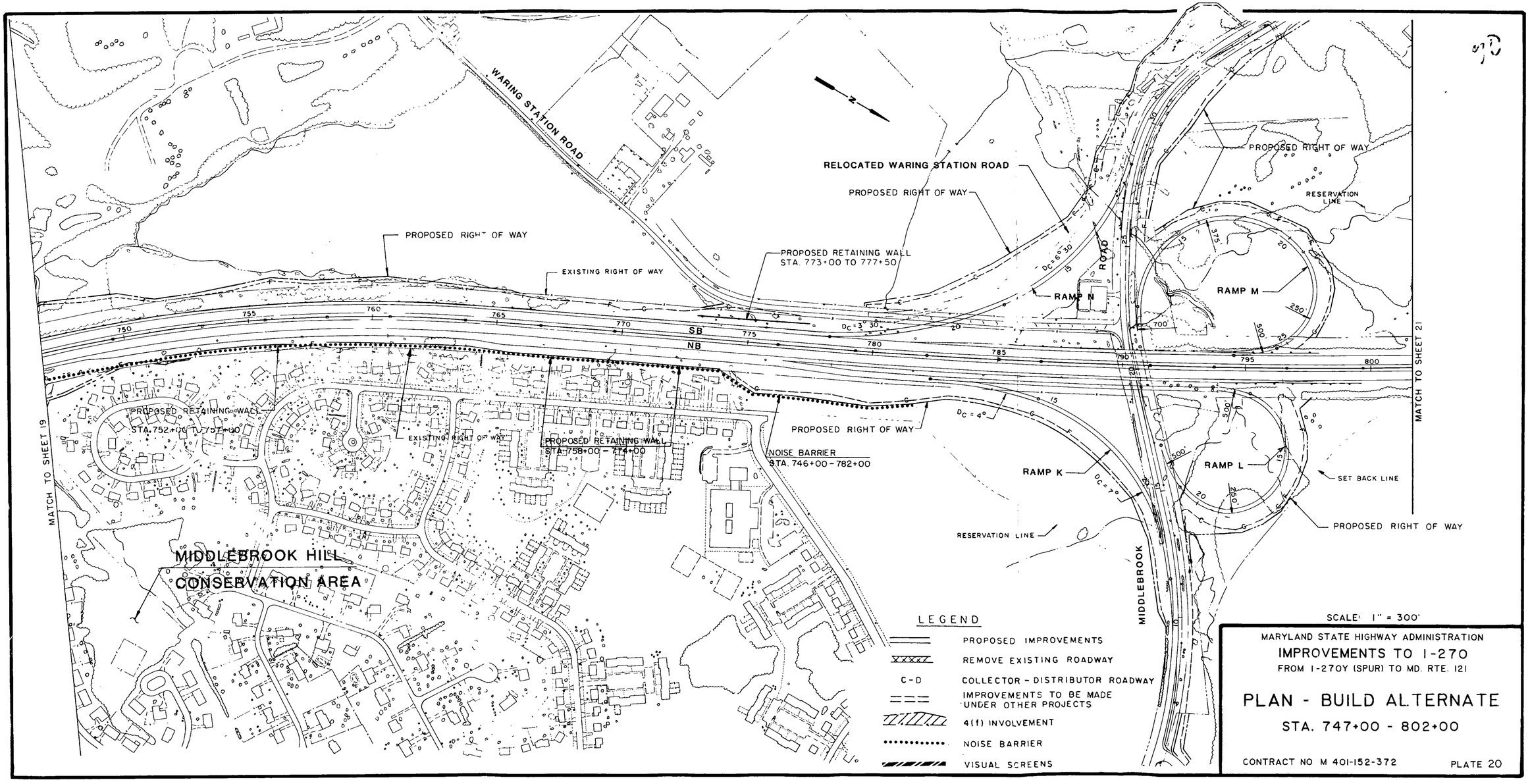
FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 690+00 - 747+00

CONTRACT NO. M 401-152-372

PLATE 19




SCALE: 1" = 300'

MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

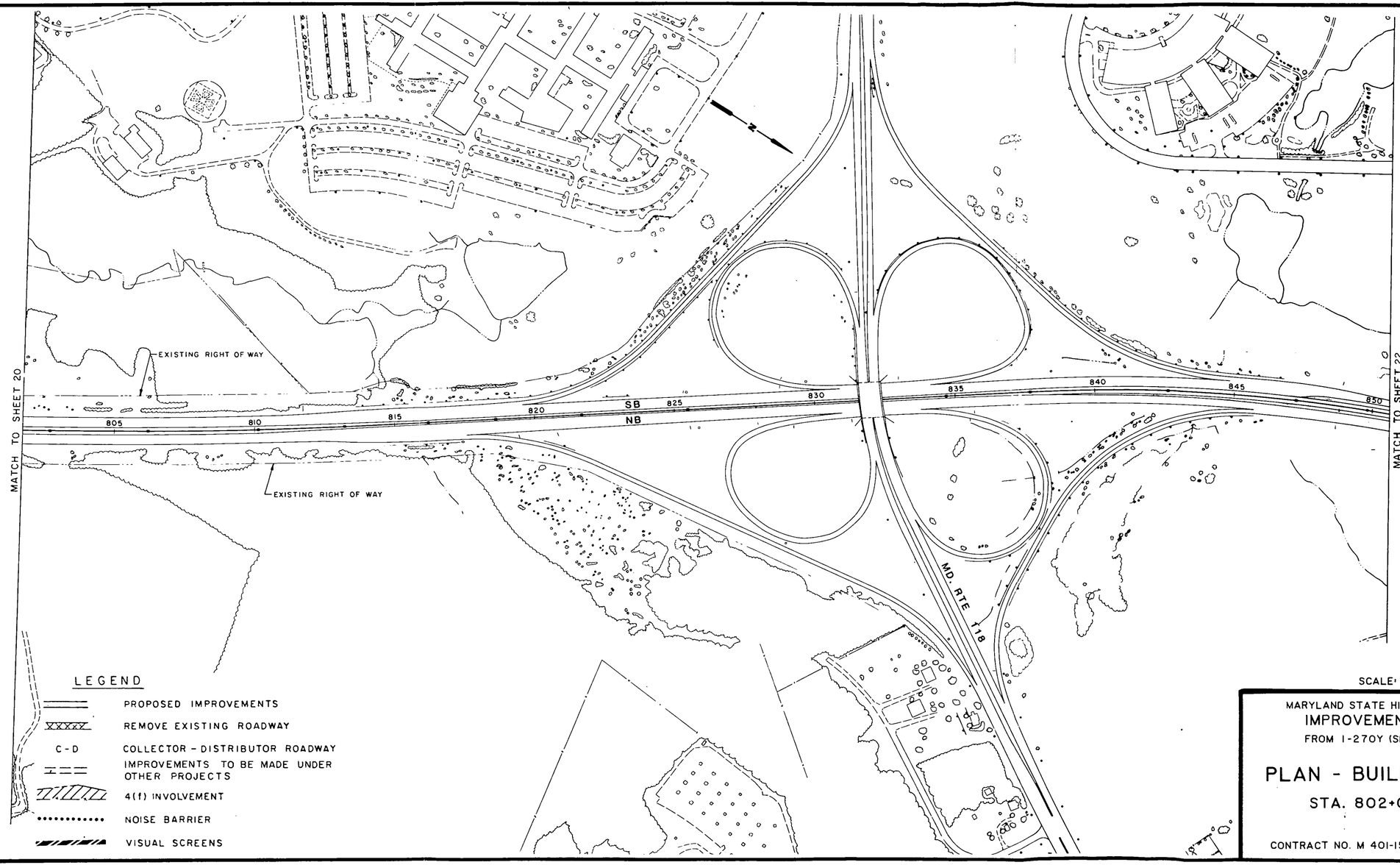
FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - BUILD ALTERNATE

STA. 747+00 - 802+00

CONTRACT NO M 401-152-372

PLATE 20




SCALE: 1" = 300'

MARYLAND STATE HIGHWAY ADMINISTRATION

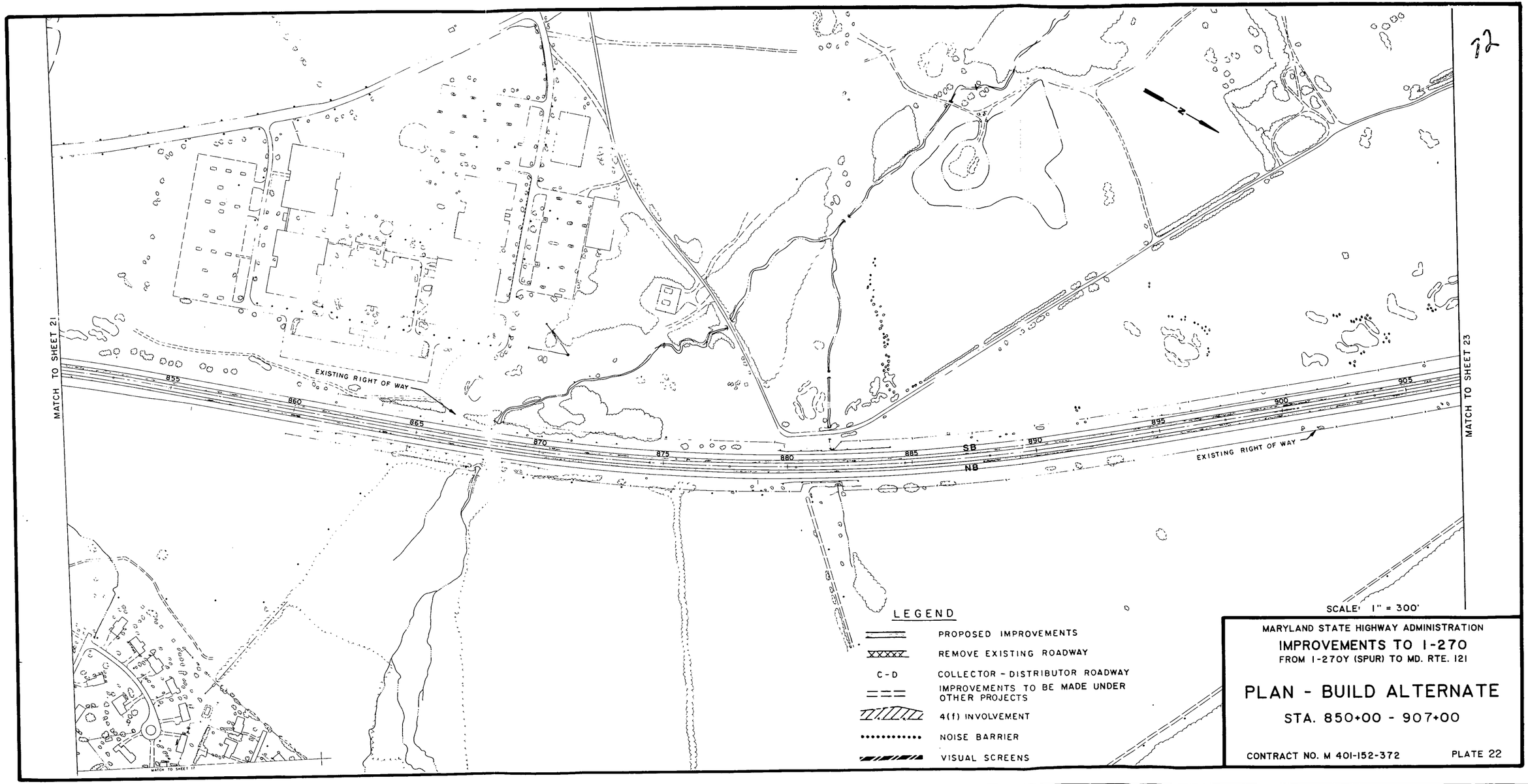
# IMPROVEMENTS TO I-270

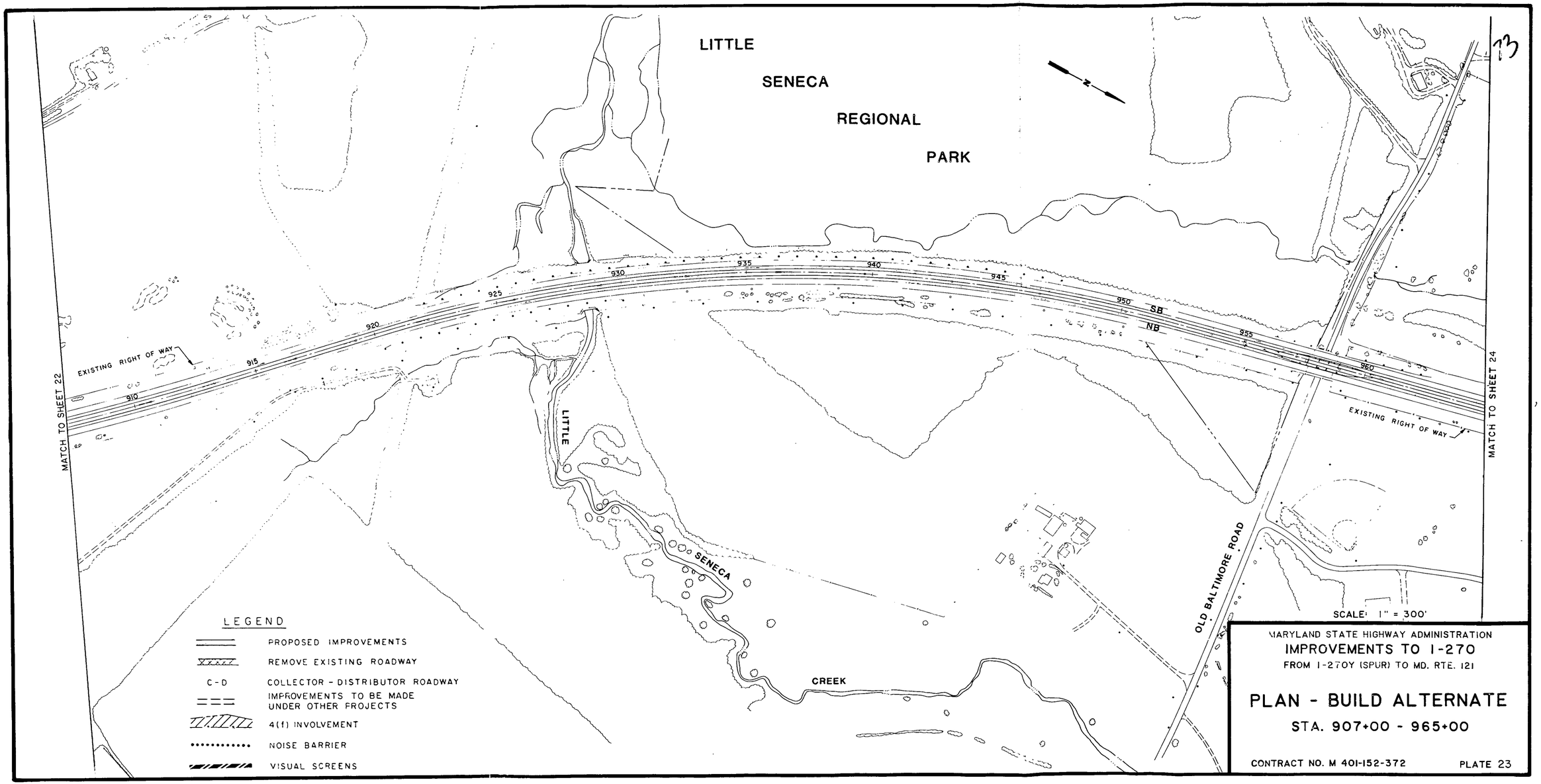
FROM I-270Y (SPUR) TO MD. RTE. 121

## PLAN - BUILD ALTERNATE

STA. 802+00 - 850+00

CONTRACT NO. M 401-152-372 PLATE 21


MATCH TO SHEET 21
MATCH TO SHEET 23
EXISTING RIGHT OF WAY
EXISTING RIGHT OF WAY
855
860
865
870
875
880
885
890
895
900
905
SB
NB
N
MATCH TO SHEET 17
LEGEND
PROPOSED IMPROVEMENTS
REMOVE EXISTING ROADWAY
C-D COLLECTOR - DISTRIBUTOR ROADWAY
IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
4(f) INVOLVEMENT
NOISE BARRIER
VISUAL SCREENS
SCALE: 1" = 300'
MARYLAND STATE HIGHWAY ADMINISTRATION
IMPROVEMENTS TO I-270
FROM I-270Y (SPUR) TO MD. RTE. 121
PLAN - BUILD ALTERNATE
STA. 850+00 - 907+00
CONTRACT NO. M 401-152-372
PLATE 22




MARYLAND STATE HIGHWAY ADMINISTRATION

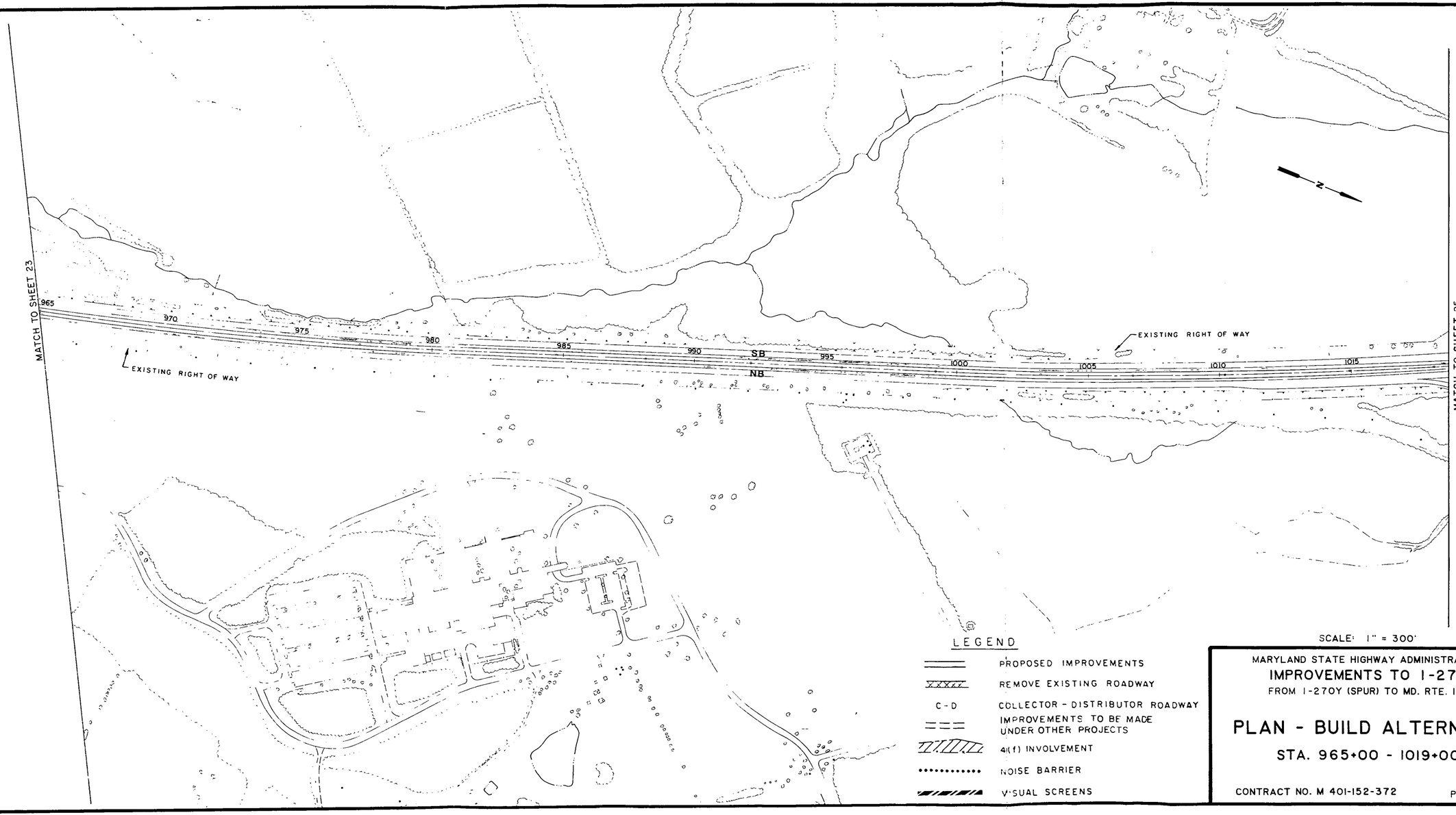
# IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

## PLAN - BUILD ALTERNATE

STA. 907+00 - 965+00

CONTRACT NO. M 401-152-372 PLATE 23




LEGEND

- PROPOSED IMPROVEMENTS
- REMOVE EXISTING ROADWAY
- C-D COLLECTOR - DISTRIBUTOR ROADWAY
- IMPROVEMENTS TO BE MADE UNDER OTHER PROJECTS
- 4(f) INVOLVEMENT
- NOISE BARRIER
- VISUAL SCREENS

SCALE: 1" = 300'

MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I-270

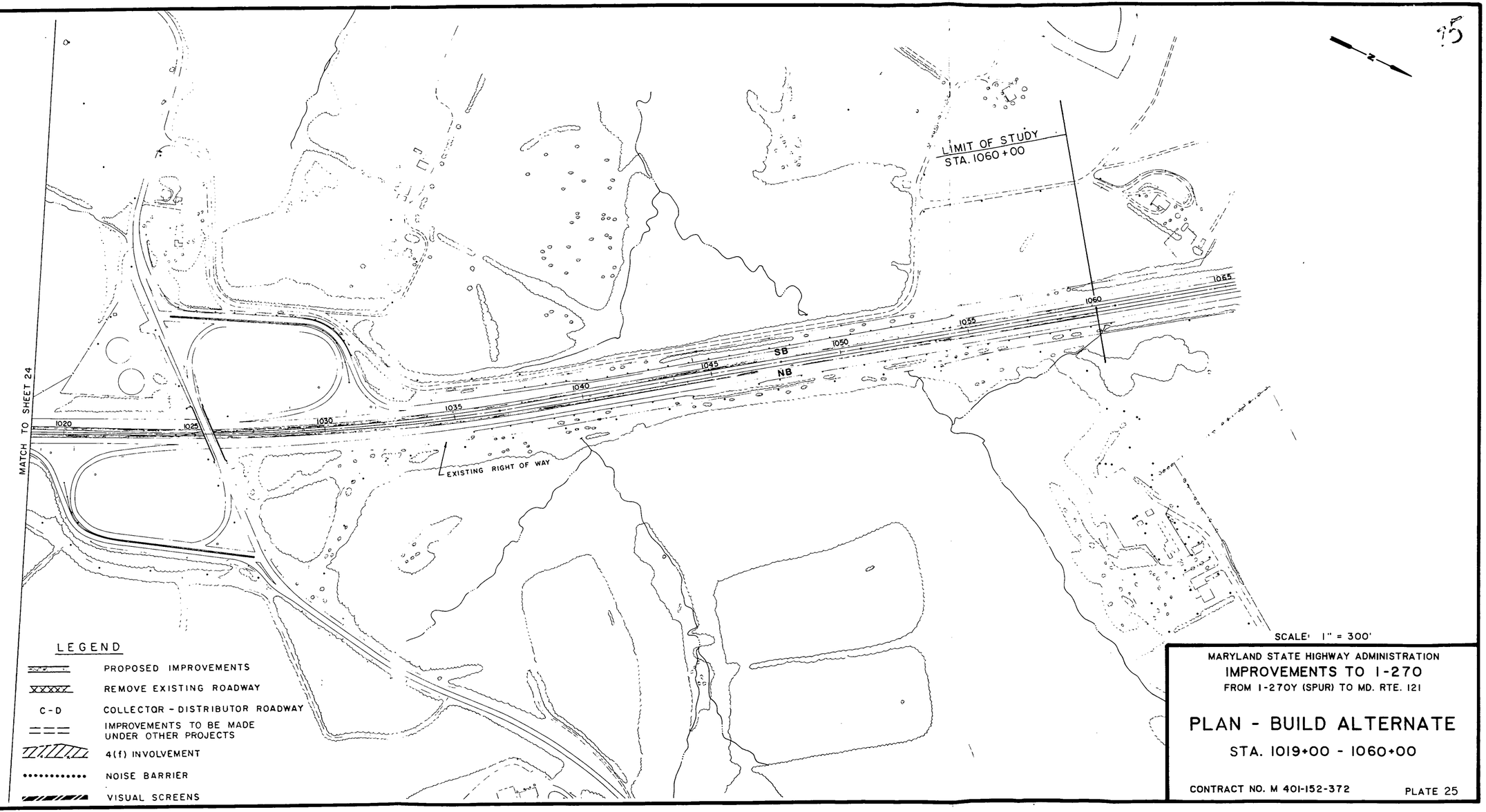
FROM I-270Y (SPUR) TO MD. RTE. 121

## PLAN - BUILD ALTERNATE

STA. 965+00 - 1019+00

CONTRACT NO. M 401-152-372

PLATE 24




SCALE: 1" = 300'

MARYLAND STATE HIGHWAY ADMINISTRATION

# IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

## PLAN - BUILD ALTERNATE

STA. 1019+00 - 1060+00

CONTRACT NO. M 401-152-372 PLATE 25

# VI ALTERNATES CONSIDERED AND REJECTED

In response to comments received during and subsequent to the Public Hearing, additional clarification is being provided to explain why the other alternates studied were not considered reasonable.

## A. WIDENING TO 8 LANES

As described in the Alternates Section, the eight-lane alternate was eliminated from further consideration for several reasons:

1. The level of service provided in the southern sections in the design year would be unacceptable ranging from Level of Service E to F.
2. It was found that the only improvements feasible at the interchanges would be partial c-d roads. The short distances between interchanges created the need for auxiliary lanes for weaving. The connection of the partial c-d roads at the interchanges would reduce the weaving on the main roadway and allow the main roadways to operate more efficiently.
3. The 8-Lane Alternate with the partial c-d roads would create 10 weaving sections on the main roadway, whereas the Continuous C-D Road Alternate would create 6 weaving segments. More diverges and merges would also be created on the main roadway under the 8-Lane Alternate. Therefore, the extension of the c-d roads between the interchanges as provided in the Selected Alternate provides significantly better level of traffic service. The eight-lane alternate was therefore eliminated from further consideration.

## B. EXPRESS LANES

The directional distribution of the traffic during peak hours is fairly even in the south end of the project (55%, 45%). This distribution becomes less balanced as you proceed north. For example, the distribution is 76%, 24% between MD 124 and MD 118. However, as development increases in the corridor, and some long trips are diverted to Metro, this distribution will become even more balanced throughout the corridor. Therefore, since the volumes will be fairly equally

distributed throughout the corridor in design year, the viability of reversing lanes for use in the peak direction becomes less. As described in the Environmental Assessment, the most feasible configuration for the HOV lane alternate was 3-2-2-3 whereby 2 lanes in each direction were added rather than a reversible 2 lane roadway.

None of the existing bridges over I-270 could be utilized with this alternate due to the span locations and lengths required for this alternate. This alternate is not easily adaptable to staged construction due to the locations of the proposed roadways with respect to the locations of the existing roadways. Only four lanes of the existing roadways could be utilized. The use of the express lanes would create weaving and merging maneuvers necessary to gain access to these lanes.

As described in the Alternates Section, there is little commonality of origins and destinations in the I-270 which reduces the number of commuters that would be diverted to HOV lanes. As express lanes, the amount of long distance travel is not sufficient to require two lanes in each direction.

As development continues in the corridor and Metro is opened, the directional distribution of traffic will tend to become more evenly divided, thus lessening the effectiveness of reversible express lanes. This alternate was eliminated from further study because the traffic service and capacity was not increased significantly due to the lack of demand for the express lanes.

C. RAMP METERING

As the traffic volumes on an expressway increase to capacity, the travel speeds drop and traffic flow becomes unstable. The flow could break down at any time and become jammed flow in which the capacity drops significantly. The worst theoretical condition would occur when all traffic is stopped and the flow is 0 vehicles per hour. It has been found that the flow on the main roadway

can be maintained at capacity by metering the on-ramps to a predetermined or continuously determined rate. The results of this metering are: 1) a main roadway that operates at capacity with a minimum of breakdowns in flow; 2) vehicles queuing on the ramp waiting to get onto the expressway since the demand exceeds the rate of flow at the ramps; 3) traffic diversions to alternate routes.

A computer model was used to analyze these various alternates involving ramp metering. The model has the capabilities of determining the maximum queue that will develop at each ramp, the traffic diverted, the metered rates at the ramps, the travel speeds on the expressway and the overall travel times for any metering and expressway scenerio.

The feasibility of ramp metering was determined by studying the net results of the Metering Alternate in terms of vehicle hours of travel as compared to the unmetered alternates (8 lane alternate, No-Build or any other alternate). The total travel time in vehicle-hours produced by the metered and the unmetered alternates include expressway travel, queuing delays and travel diversions.

It was found that ramp metering was not feasible for the following reasons:

1. There are no net savings in vehicle hours of travel in the corridor with metering the 8-lane alternate under the design year traffic.
2. There is no excess demand on I-270 under the continuous collector-distributor road alternate, therefore ramp metering provides no advantage for the C-D Alternate.
3. There are significant benefits accrued to the highway users in the design year if the existing 6-lane roadway (No Build Alt.) were metered. There are no savings accrued when the existing 1980 traffic is analyzed. Therefore, the usefulness of ramp metering would begin sometime after 1985. Metering allows the

roadway to operate efficiently but does not increase the capacity. When the 8-lane alternate without metering is compared to the 6-lane metered condition, there is a significant saving in vehicle hours with widening the roadway.

4. If all on-ramps from MD 118 to Montrose Road were metered, affecting all drivers from Montgomery County using I-270, while the traffic using I-270 from north of MD 118 would be unrestricted, all drivers from the north would benefit from the ramp metering with no consequential offsetting diversions or queuing delays such as those confronting the Montgomery County drivers.

# VII SECTION 4(f) STATEMENT

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. 303 (c) ) requires that the proposed use of any land from a park be given particular attention. Final action requiring the taking of such land must document that there are no feasible and prudent alternatives to its use. Additionally, a full evaluation of measures to minimize harm must be made. Only the No-Build Alternative fully avoids all taking of parklands. This alternative is not considered prudent or feasible because of severe traffic operational and safety problems associated with it.

## A. PROPOSED ACTION

The Selected Alternate consists of widening the main roadway of I-270 by one lane in each direction from the Y-Spur to MD 121 at Clarksburg. In addition, parallel collector-distributor (c-d) roads with a minimum of two lanes will be provided in each direction from south of Montrose Road to the MD 124/117 interchange. Access to and from the c-d roads will be provided through the use of slip ramps. Between the Y-Spur and the beginning of the c-d roads two auxiliary lanes in each direction will be provided in addition to the 8 lanes to provide for lane balance and the weaving maneuvers. (See the description in the Summary of Actions and Recommendations Section and Plates 9 through 25 .)

## B. DESCRIPTION OF 4(f) PROPERTIES

### 1. Tilden Park

This park under the jurisdiction of Maryland National Capital Park and Planning Commission is located on the east side of I-270 just north of Tuckerman Lane along the floodplain

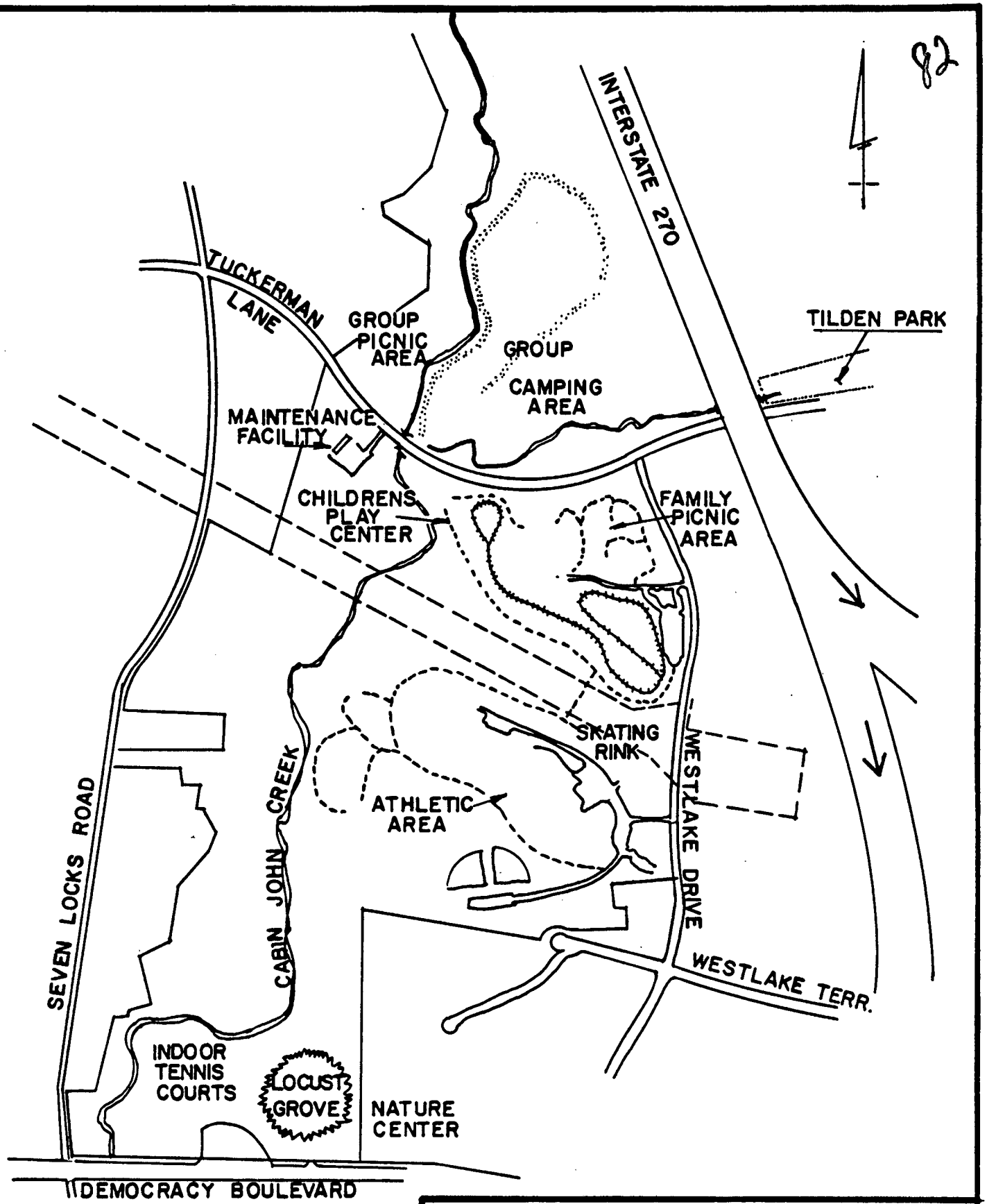
of Old Farm Creek and contains 79 acres of woodlands. There are picnic areas, playground equipment, playing fields, tennis and basketball courts, and a recreational center. None of these facilities are located within 2000 feet of the right of way of I-270.

2. Cabin John Regional Park

This park under the jurisdiction of Maryland National Capital Park and Planning Commission is located on both sides of I-270 between the Y-Spur and Montrose Road and contains 525 acres of woods and recreational facilities. See Plate 26 and Plate 6 in the Environmental Assessment. Cabin John Creek passes through the park. The facilities include primitive camping areas, picnic grounds, playgrounds, nature trails, skating, scenic railroad, and tennis courts. The closest facility to the I-270 right of way is a trail in the primitive camping area which comes within 300 feet of the right of way. There are no plans to develop any area of the park closer to I-270. From August 1981 to August 1982, 579,000 people used the park. (See Plate 26.)

3. Rockmead Park

This park of 28 acres is located on the west side of I-270 just south of the MD 28 interchange in the Fallsmead Subdivision and contains walkways and playgrounds. The two small parcels affected are located between Watts Branch Parkway and I-270 and are designated as open space. There are no plans for utilizing these parcels for any recreational activities since they are isolated parcels and separated from the major portion of the park by Watts Branch Parkway. Both of these parcels were dedicated by developers to the city as park property because they were not developable as residential uses. If the land is not used for parkland, the parcels revert to the developer. See the letter from the City of Rockville in the Agency Comments Section. See Plate 27.

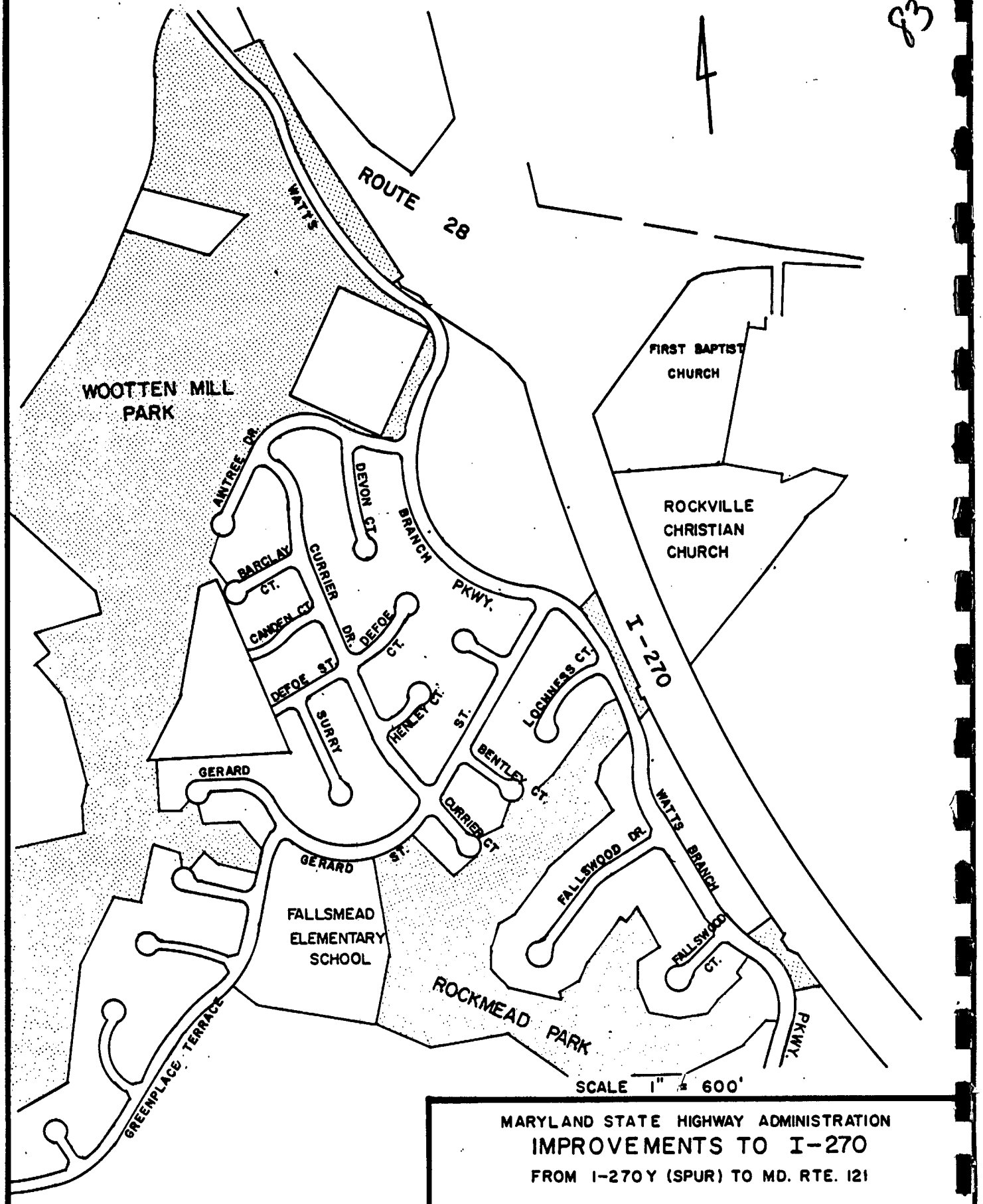



MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

# PLAN—CABIN JOHN REGIONAL PARK FACILITIES

CONTRACT NO. M401-152-372 PLATE 26




MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN – ROCKMEAD PARK AND WOOTTEN MILL PARK

CONTRACT NO. M 401-152-372 PLATE 27

4. Wootten Mill Park

This park of approximately 80 acres, under the jurisdiction of the City of Rockville, is located in the Fallsmead Subdivision along the Watts Branch floodplain. The park consists of walking trails, playground equipment, and picnic areas for the use of local residents. A portion of the land dedicated to the City of Rockville is located between Watts Branch Parkway and the ramp to southbound I-270 and contains about 3 acres. This parcel was undevelopable for residential uses and, therefore, was deeded to the City of Rockville. It is designated as open space with no plans for development for recreational facilities due to its isolation from the rest of the parkland and the residences. See Plate 27.

5. Middlebrook Hill Neighborhood Conservation Area

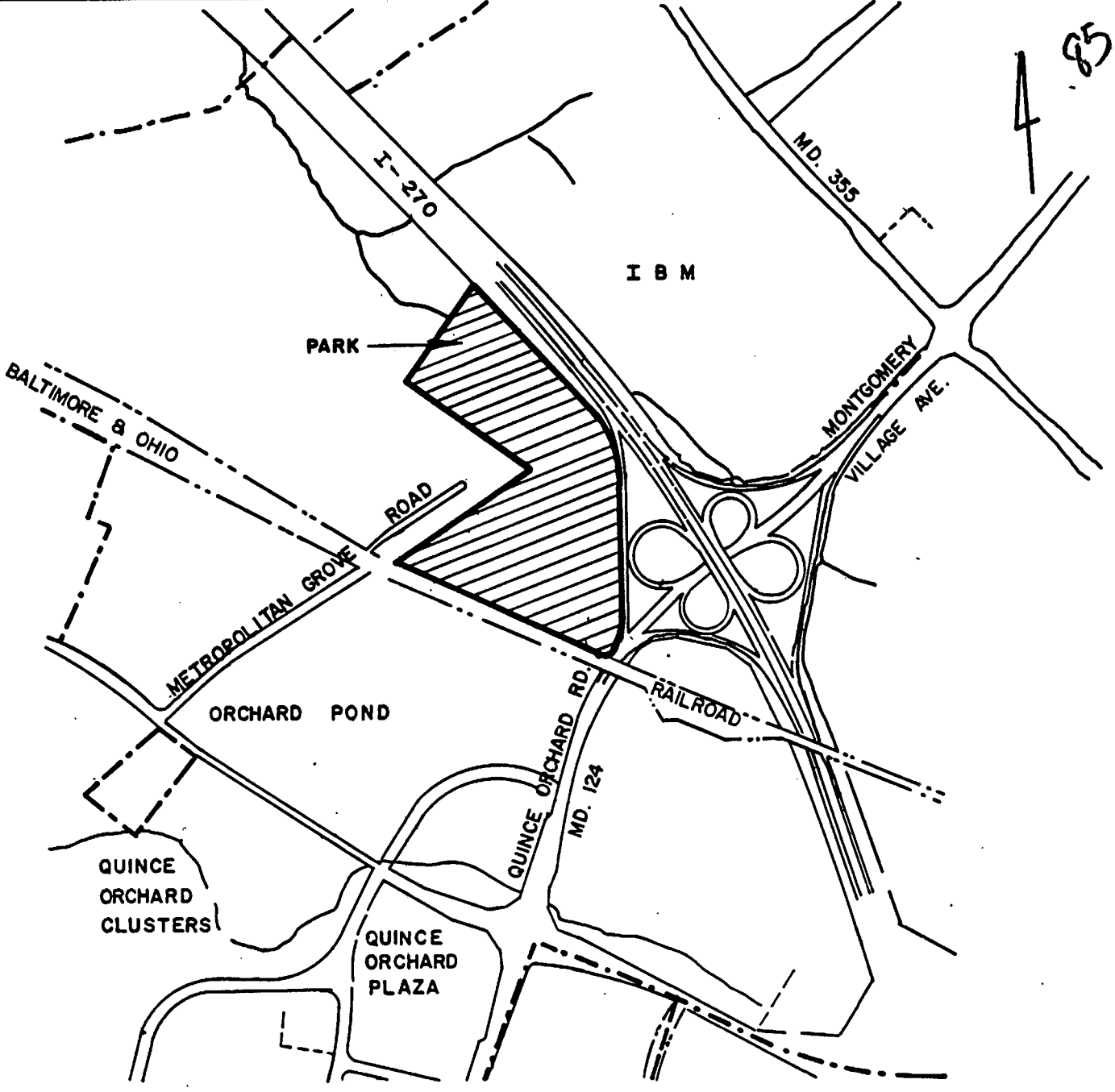
As part of the development of Fox Chapel North and Middlebrook Hill subdivisions, a parcel of 11.5 acres was deeded to the Maryland National Capital Park and Planning Commission along the floodplain of a tributary to Great Seneca Creek. This parcel is located on the east side of I-270 abutting the north boundary of Seneca Creek State Park and the I-270 right of way. There are no plans for developing this parcel and no existing recreational facilities.

6. Metropolitan Grove Road Park

This park, consisting of 31 acres, is under the jurisdiction of the City of Gaithersburg and is located in the northwest quadrant of the MD 124 interchange. There are plans for primitive camping areas, nature trails, ballfields, picnic area, and tennis courts. See Plate 28.

7. Seneca Creek State Park

This park is under the jurisdiction of the Maryland Forest Service and is located south of Middlebrook Road and north of Game Reserve Road along the floodplain of Great Seneca Creek. It extends on both sides of I-270 for a length of approximately 1500 feet along the right of way.




4 85

METROPOLITAN GROVE ROAD PARK MAJOR CITY PARK AREA (31·281 ACRES)

STATUS OF DEVELOPMENT : UNDEVELOPED OPEN SPACE

PROPOSED DEVELOPMENT : FUNDS INCLUDED IN THE 1977–78 CAPITAL IMPROVEMENT PROJECTS BUDGET INCLUDE PLANNING, DESIGN, ENGINEERING AND CONSTRUCTION

SCALE 1" = 1000'

MARYLAND STATE HIGHWAY ADMINISTRATION

IMPROVEMENTS TO I-270

FROM I-270Y (SPUR) TO MD. RTE. 121

# PLAN - METROPOLITAN GROVE ROAD PARK

CONTRACT NO. M 401-152-372 PLATE 28

The total acreage of the park is approximately 5127 acres including a 90 acre lake. The recreational facilities include hiking trails, boating facilities, picnic areas, and shelters. There are no plans for development in the park upstream of Clopper Road except for possible foot paths; however, canoes could use the stream in this area. The park opened in 1980 and the patronage figures have increased from 68,000 in 1980 to 104,500 in 1982. No recreational facilities are planned within 0.9 mile of the I-270 right of way. The nearest activity areas are the visitor center and picnic facilities.

C. DESCRIPTION OF IMPACTS ON 4(f) PROPERTIES

1. Tilden Park (See Plate 10.)

Under the preferred alternate as presented at the Public Hearing, 0.1 acre of Tilden Park would have been required for slopes. This encroachment could have been avoided through construction of a $175,000 retaining wall. With the realignment of I-270 south of Montrose Road, there will be no encroachment into the park as a result of main line roadway construction.

2. Cabin John Regional Park (See Plates 10 and 11.)

Under the preferred alternate as presented at the Public Hearing, 7.3 acres would have been required for slope easements. This encroachment could have been avoided through the construction of 6700 linear feet of retaining wall at a cost of $4,750,000.

Since the Public Hearing, and at the recommendation of Maryland National Capital Park and Planning Commission, the agency having jurisdiction over the park, a shift of the roadway 24 feet to the west has been adopted to reduce the impacts on the residences on the east side of I-270 south of Montrose Road. This shift slightly increases the potential encroachment onto the park for grading.

The avoidance alternate for the Cabin John Regional Park would consist of providing 7150 linear feet of retaining wall at a

cost of $5,461,000. This alternate was not considered prudent and feasible by both the Maryland State Highway Administration and Maryland National Capital Park and Planning Commission (MNCPPC).

Discussions with the Maryland National Capital Park and Planning Commission (MNCPPC) were held to determine mitigation measures to be adopted. In the areas of cut, it was decided that 8 foot retaining walls would be provided from Sta. 208+00 to Sta. 215+50 and from Sta. 227+25 to Sta. 237+00 to reduce the cut slopes in the park. The fill slopes would be allowed to fall onto the park and the MNCPPC would grant temporary construction easements for any grading required within the park. Landscaping and revegetation of the slopes would be performed to the satisfaction of the MNCPPC. This treatment was considered more prudent by MNCPPC than avoidance by retaining wall in that it provided a more natural and aesthetically acceptable treatment of the landscape. A total of 7.8 acres of temporary construction easements will be required. The area will be returned to MNCPPC for park purposes and remain under the jurisdiction of MNCPPC after construction is completed.

3. Rockmead Park (See Plate 13.)

The alternate described in the Environmental Assessment would have required 1.1 acres from Rockmead Park. However, retaining walls will be constructed to avoid any encroachment onto the park.

In addition, since the Public Hearing, a shift in the preferred alternate alignment of approximately 30 feet to the east was adopted. This shift reduces the height of the retaining walls needed along the park to avoid encroachment. Noise barriers will also be provided along the park property.

4. Wootten Mill Park (See Plate 13.)

Design criteria require that the improvements to Ramp D at the MD 28 interchange provide a minimum design

speed of 25 mph. This is the minimum allowable design speed and the minimum proposed throughout the project. Any lesser design would present safety and operational problems. This requirement creates the need to expand both Ramps D and C. A combined ramp at G would avoid the park but would present unacceptable safety and operational probems. Consequently, only Ramp D is operationally acceptable. This expansion would encroach into a small strip of Wootten Mill Park between Watts Branch Parkway and I-270 and require the acquisition of 0.2 acre. This area is not devoted to active park usage. The majority of the parkland is located on the west side of Watts Branch Parkway. A retaining wall could be used to reduce the acquisition to 2600 square feet, or 0.06 acre at a cost of $100,000. Discussions with the City of Rockville indicate that they perfer to let the fill slopes fall and not construct the retaining wall. This is considered a more prudent and aesthetically pleasing alternative treatment. Therefore the slopes will be provided and landscaped.

5. Middlebrook Hill Conservation Area (See Plates 19 and 20.)

A temporary construction easement of 0.5 acre will be obtained from the MNCPPC since MNCPPC prefers slopes to retaining walls. Discussions with MNCPPC were held to discuss their preferences for mitigation measures. MNCPPC decided that the same landscaping treatment that will be applied to the Seneca Creek State Park would be more prudent for this area. (See section on Seneca Creek Park for details.) The area will remain under MNCPPC jurisdiction for park purposes after construction has been completed.

6. Metropolitan Grove Road Park (See Plate 18.)

The Build Alternate would require the acquisition of about 0.2 acre in a strip of land 600 feet long by a maximum width of 40 feet.

The alternative to this acquisition of parkland would be the provision of 500 linear feet of retaining walls at a cost of $240,000. The City of Gaithersburg prefers the use of slopes rather than retaining walls. They believe such treatment is more prudent because it lessens visual impacts. Therefore temporary construction easements will be acquired for grading and the area will be landscaped and revegetated. The area will remain under the City jurisdiction for park purposes after construction has been completed.

7. Seneca Creek State Park (See Plate 19.)

The Build Alternate would require 2.0 acres of land in strips varying in width from 10 to 80 feet for slopes. The alternative would be the provision of 2750 feet of retaining walls at a cost of $1,650,000. The Department of Natural Resources has indicated a preference for temporary construction easements and revegetation. They consider such treatment to be more prudent than the provision of permanent retaining walls adjacent to the park. The details of the commitments made concerning this park are described in the letter dated April 3, 1984 in the Agency Comments section.

## D. AIR AND NOISE IMPACTS ON PARKLANDS

### 1. Air Quality

An air quality analysis was performed to determine the effects of the Build Alternate on the air quality along the project route including parks. It was found that the Build Alternate would provide slightly higher CO concentrations (1-2 ppm) than the No Build Alternate. (See the Effects on Air Quality section.) There were no violations of the National Ambient Air Quality Standards at any receptor, including parklands.

2. Noise Levels

Noise levels were studied at the various parks along the I-270 roadway. Below is a discussion of the various parks and the effects of the project on the activity areas.

a. Tilden Park - There are no activities within 2000 feet of the I-270 right of way and, therefore, the project would have no effect on noise levels at activity areas.

b. Cabin John Regional Park - The nearest activity area to the I-270 right of way is a trail which comes within 300 feet of the right of way. The noise levels at this trail are not above the FHWA Noise Abatement Criteria; therefore, no noise barrier was considered at this site.

c. Rockmead, Wootten Mill Parks and Middlebrook Hill Conservation Area - No activities exist in the open space parcels adjacent to the I-270 right of way at Rockmead or Wootten Mill. The noise levels at the nearest activity center would not be above the FHWA Noise Abatement Criteria. No activities are located in the Middlebrook Hill Conservation area. No noise barriers were considered along I-270 at Wootten Mill Park or Middlebrook Hill Conservation Area. Noise barriers will be provided at Rockmead Park in order that continuous noise walls can be provided through the Fallswood Subdivision.

d. Metropolitan Grove Road Park - The noise levels at this park were studied under the Md 124 interchange project and it was found that there would be a negligible increase (+2 dBA) in noise levels over the ambient and over the FHWA Noise Abatement Criteria. This project would increase the noise levels at the park by about 1 dBA. In the Environmental Assessment for MD 124 it was stated that noise barriers would be studied in the design phase and the study would include a cost effectiveness analysis and involve public input.

e. Seneca Creek State Park - The nearest existing or proposed activities to I-270 are 0.9 mile away south of Clopper Road; therefore no noise barrier was considered along this park boundary.

## E. MITIGATION MEASURES AT PARKS

All means will be employed to reduce the impacts on the various parklands of the encroachments described above. Revegetation and landscaping modifications of the grading areas will be investigated in coordination with the Bureau of Landscape Architecture of the Maryland SHA and the appropriate park authorities.

Means of reducing the effects on the streams and floodplains will be studied as described in the Water Quality section including erosion and sediment control procedures.

Coordiantion will continue during the final design phase with the agencies with jurisdiction over the various parks to obtain their input to ensure a minimization of impact on the parks.

Additional specific mitigation measures at each park are described below:

### Cabin John Regional Park

In order to minimize impacts to park property, retaining walls will be provided in areas of cut. The walls will be provided from Sta. 208+00 to Sta. 215+50 and from Sta. 227+25 to Sta. 237+00. All grading within this park will stay on I-270 side of the ridge paralleling I-270 on the west. Increasing the proposed 2:1 slopes to a steeper grade will be investigated during final design to eliminate the need for walls.

If walls are required, the use of "living walls" will be investigated. Walls will be positioned as close to the right-of-way line as practicable. Where possible, the landscaping area in front of the walls on the park side will be 10 feet wide. If walls are required, a surface treatment with a natural appearance will be used. All landscaping and wall treatment will be coordinated with Maryland National Capital Park and Planning Commission.

Wootten Mill Park

The City of Rockville has indicated that they prefer temporary easements replaced as landscaped slopes rather than the construction of walls. The area of the fill slopes will be landscaped to blend into the existing environment. A landscaping plan will be submitted to the City prior to construction.

Middlebrook Hill Conservation Area

This park is adjacent to Seneca Creek State Park. Maryland-National Capital Park and Planning Commission has indicated it desires the same landscaping technique that is used in Seneca Creek State Park. See that discussion on page VII-10. Maryland National will be provided the landscape plans prior to construction.

Metropolitan Grove Road Park

The temporary construction slopes will be graded and landscaped to blend into the existing environment. The City of Gaithersburg will be provided the landscape plans prior to construction.

Seneca Creek State Park

After the slopes have been graded and seeded, the area will be planted with 3 foot tall trees acceptable to the Park Manager. They will be planted as directed by the Park Manager. The Park Manager will be given the opportunity to inspect the area prior to any clearing of the existing vegetation.

The underpass by the existing bridge will be maintained for use as a proposed trail system.

All timber removed will remain park property and will be hauled to the park workshop.

Landscape plans will be provided to the Department of Natural Resources prior to construction.

Sediment and erosion control will be closely monitored within Seneca Creek State Park. A representative of the contractor doing the job must be identified for contact in case of a problem.

F. COORDINATION

Throughout the planning phase of this project the various agencies with jurisdiction over the parks were contacted to obtain information concerning the parks such as plans, proposed development, locations of activity areas and patronage figures. Copies of the Environmental Assessment were submitted to all agencies for their review and comments.

Discussions were held with the various agencies to discuss the specific impacts on the parks and methods to mitigate them. Walking tours of the affected areas were held with several agencies to examine specific items of concern such as trees and landscaping treatments.

During this coordination, the alternative treatments of retaining walls or temporary easements appropriately landscaped were discussed. In most instances, the park agencies selected the temporary easement approach as being more prudent than retaining walls because of the aesthetics involved.

The specific agreements made with the various agencies are discussed in the Impacts on 4(f) Property section and the Mitigation Measures section.

G. CONCLUDING STATEMENT

Based upon the above considerations, it is determined that there are no prudent or feasible alternates to the use of land from the various parks and that the proposed action includes all possible planning to minimize harm.

# VIII PUBLIC HEARING COMMENTS

## A. Introduction

A combined Location/Design Public Hearing for this project was held on 15 February 1984 at Richard Montgomery High School in Montgomery County. Mr. Ed Meehan, Acting District Engineer, State Highway Administration, presided. Representatives of SHA's Bureau of Project Planning described the study process and the alternatives under consideration and gave an environmental overview of the study area. Representatives of the State Highway Administration explained the right-of-way acquisition process and the relocation assistance program. Persons attending the Public Hearing were provided a copy of the "Public Hearing - Interstate Route I-270" brochure, which summarized features of the alternates. The Draft Environmental Impact Statement and a public information display were available for review prior to and at the hearing.

Official transcripts were prepared of the Location/Design Public Hearing. The hearing record contains the remarks of 27 speakers, along with several written statements. Representatives of five local governments, one private sector firm, ten civic and home associations, and eleven individual citizens were heard. Copies of the transcripts are available for review at the Maryland State Highway Administration.

## B. Summary of Comments

Table 2 includes a list of all individuals and organizations who made comments at the Public Hearing or submitted written comments concerning the project. Also included in the Table, is a list of the comments, by number, made by each commentor. Following the Table is a description of the comments made, their responses, and a list of the commentors, by number, referencing to Table 2. In this way, the commentors, their comments and responses are cross-referenced for easy identification.

# TABLE 2

## I-270 Public Hearing Testimony and Comments Received by Mail

| Commentor # | Name | Agency/Organ. | Comment No. |
|---|---|---|---|
| Public Hearing Test. | | | |
| 1 | Douglas Duncan | Mayor and Council of Rockville | A1, C1, K1, L1, L6, M1 |
| 2 | Dr. Arthur Katz | New Mark Commons Homes Assn. | B1, D1, L2, L3, O1 |
| 3 | Allen Cohen | | B1, D2, Q1 |
| 4 | Dr. Theodore Benzinger | | T1 |
| 5 | Kenneth Sullivan | | A2, F1, J1, K1, R1 |
| 6 | Edgar Neil | Germantown Citizens Assn. | B1, C2, C3, G1, G2, M2 |
| 7 | James Culp | Montgomery Co. Economic Advisory Council | O1 |
| 8 | James Savitz | Gaithersburg and Upper Montgomery Co. Chamber of Commerce | B1, N1, N2, N3, O1 |
| 9 | Leon Reed | North Bethesda Congress of Citizens Assns. | A1, B1, H1, J2, L1, L2, L4, L5, L6, O1, S1, S2, T3 |
| 10 | Jerome Leszkiewicz | Woodley Gardens Homeowners Assn. | A3, B1, E1, J3, L1, L2, L7, M2, N4, O1 |
| 11 | Thomas Wiley | Montgomery Co. Chamber of Commerce | C4, G3, J4, K2, K3, N5, Q1, R1 |
| 12 | Robert Trueland | Montrose Limited Partnership | Q2 |
| 13 | Norman Christeller | MD National Capital Park and Planning Comm. | A1, A4, C4, E2, H2, N6, N7, Q3, S3, T2 |
| 14 | Phyllis Courlander | | A1, B1, E3, L1, Q1 |

TABLE 2 (Cont.)

| | | | |
|---|---|---|---|
| 15 | Janet Gallant | | A1, E3, E4, J3, L1, N4, Q1, R1 |
| 16 | Edward Heffernan | Old Farm and Tildon Woods Assn. | A1, B1, H1, J2, L1, L2, L5, L6, L8, O1, Q1, Q4, S1, T3 |
| 17 | Ruth Calvo | Delegate Gene Counihan | C4, N2 |
| 18 | Ruth Calvo | Montgomery Village Foundation | C5, N2 |
| 19 | Allen Bender | Coalition on Sensible Transportation | C6, G4, L2, L3,L6, L8 L9, L10, L11, L12, O1, Q1, Q5, S1, S4 |
| 20 | David Kaysen | Stockton Town Condo Assn. | E1, I1, O1, P1, Q1, T4 |
| 21 | Reuben Uberman | | G5, L6, L8 |
| 22 | Henry Herman | Regency Estates Citizens Assn. | A5, D3, N8, O1 |
| 23 | Irvin Wolock | | B1, G5, G6, H1, K1, L6 |
| 24 | Chuck Luedtke | | G5, L2, L3, L6, Q1 |
| 25 | Tom VanVechten | | B1, G7, J2, L13, Q6 |
| 26 | Willis Bridell | First Baptist Church of Rockville | Q7 |
| 27 | Kenneth Paston | | L14 |
| 28 | Richard Lerex | | A1, Q1 |
| 29 | Doug Viner | | L6, T5 |
| 30 | Exhibit | New Mark Commons Assn. | A6, B1, C1, D4, L2, L3, O1 |
| 31 | Exhibit | Montgomery Co. Advisory Council | O1 |
| 32 | Exhibit | Gaithersburg and Upper Montgomery Chamber of Commerce | B1, N1, N2, N3, O1 |

| | | | |
|---|---|---|---|
| 33 | Exhibit | North Bethesda Congress of Citizens Assn. | B1, H1,L1, L2, L4,L5 L6, J2, O1, S1, S2 T3 |
| 34 | Exhibit | Montgomery Co. Chamber of Commerce | C4, G3, J4, K2, K3, N5, Q1, R1 |
| 35 | Exhibit | MD National Capital Park and Planning Comm. | A1, A4, C4, E2, H2, N6, N7, Q3, T2, S3 |
| 36 | Exhibit | Germantown Citizens Assn. | B1, C2, C3, G1, G2, M2, Q1 |
| 37 | Exhibit | Luxmanor Citizens Assn. | K1, L6, T3 |
| 38 | Exhibit | Old Farm and Tilden Woods Homeowners Assn. | A1, B1, H1, J2, L1, L2, L5, L6, L8, O1 Q1, Q4, S1, T3 |
| Comments Rec'd. by Mail | | | |
| 39 | Uberman Family | | S1, L2, H1, J2, L1 Q1 |
| 40 | Ronnie Lo | | C7, H1, A7, L1, S2 |
| 41 | S. John Cerniglia | | N2 |
| 42 | E. H. Braun | | T6 |
| 43 | Ronald Crawford | | S1, A1, L1 |
| 44 | Gaither Warfield | | K4, Q1, H1 |
| 45 | Charles Challstrom | Town of Washington Grove | L20, L1, C6, S5, H |
| 46 | Richard Lurix | | L1, Q8, A8, A9, A10, A1, J2 |
| 47 | Mr. & Mrs. Clyde Hess | | L1, L2 |
| 48 | David Friedman | | Q1, J3, A1 |
| 49 | Shirley Ludwig | | H1, L1, S1 |
| 50 | Frederick Evans | | K1 |
| 51 | Linda Matkovic | | H3 |
| 52 | Ronald Seldon | | S1, B1, L2 |
| 53 | Stephen Tawes | | |

| | | | |
|---|---|---|---|
| 54 | | Montgomery Co. Dept. of Police | T7 |
| 55 | Galen Hallick | | O1, B1, Q1, S2, H1, G6 |
| 56 | Richard Freed | | J2, S1 |
| 57 | Ronald Pedowitz | | C4, B1 |
| 58 | Raymond Schmidt | North Bethesda Citizens Assn. | L15 |
| 59 | Charles Phillips, Jr. | Kettler Brothers, Inc. | N6 |
| 60 | Mr. & Mrs. James Burgess, III | | S1, L1, O1, J2, B1, H1, Q1, L2 |
| 61 | Mayor Bruce Goldensohn | City of Gaithersburg | S3, C4, A1, I2, G2 |
| 62 | Jack Carlile | MD Vanpool Assn. Inc. | C8 |
| 63 | Joseph Clancy | Ackerman and Co. | N1, Q9 |
| 64 | K. Birkhoff | | A1, C7, L20 |
| 65 | N. Rawson | | D5 |
| 66 | Gregory Bayor | | A1, K5, E3, L2 |
| 67 | Betty Anne & Alan Levy | | L1 |
| 68 | Steven Selzer | | |
| 69 | Scott & Colleen Macomber | | K1 |
| 70 | Robin Tobin | | L2, B1, A1, S1, O1 |
| 71 | Mr. & Mrs. Davidson | | Q1, A11 |
| 72 | Gwendolyn Brown | | |
| 73 | Fred Geldon | Potomac Springs Civic Assn. | |
| 74 | Kathy Shoobridge | | C4, T8, T2, T9 |
| 75 | John and Lavern Noble | | Q1, A1, B1 |
| 76 | David Wechle | | L5 |
| 77 | Mike Glendening | | B1, Q8, N4 |
| 78 | Theodor Benzinger | | T1 |

| | | | |
|---|---|---|---|
| 79 | Uberman Family | | L1, L6, S1, A1, O1 |
| 80 | Raymond Carroll | | A1, A12 |
| 81 | Mary Kenealy | Treasure Oak Community Assn. Inc. | L6, L10, Q1, O1, B1 |
| 82 | Henry Herman | Regency Estates Citizens Assn. | A5, D3, N8, O1 |
| 83 | | Linowes and Blocher | A13 |
| 84 | James Kelly | | L2, L5, A1, C9, G5 |
| 85 | John Wheeler | | H4, N9, N10, N11, N12, N13 |
| 86 | Mr. & Mrs. Ritchie | | L1, L2 |
| 87 | Arthur Katz | Petition with Signatures of 216 individuals | D6 |
| 88 | David Krantz, Marsha Douma | | L16 |
| 89 | Ruthann Aron | Development Research, Inc. | Q1 |
| 90 | Matthew Werner | | L4 |
| 91 | Robert Bernstein | Luxmanor Citizens Assn. | L6, Q1, K1, T3 |
| 92 | Leon Ludwig | | A1, R1, A14 |
| 93 | Wendell Mohr | | N14 |
| 94 | Luis Valencia | | A1 |
| 95 | | Washington Area Bicyclist Assn. | L2, L1, I3 |
| 96 | John Bowes | Quince Orchard Civic Assn. | C4 |
| 97 | Connie Coleman | | A1 |
| 98 | John Moore | | Q10 |
| 99 | Catherine Brimacombe | | |
| 100 | Scott Kozel | | N15 |
| 101 | Eileen Rubin | | H1, K1 |
| 102 | Thomas McKeon | | S1 |
| 103 | Carl Harris | | S1, A1, R1, C7, L1 |

| | | | |
|---|---|---|---|
| 104 | Barry Loper | | S1, S2 |
| 105 | Frank Kalbacher | | S1, C10, S6, L1, O1 |
| 106 | Carole Forman | | L1, N16 |
| 107 | Howard & Bonnie Burchell | | O1, B1, A1, R1, E3, L1 |
| 108 | Mr. & Mrs. Cohen | | J2, B1, C11, Q1, O1, H1 |
| 109 | G. Burger | | Q5, A1, K6, J5 |
| 110 | Mrs. Robert Meehan | | L2, S1, B1 |
| 111 | Russell Stanford | | B1 |
| 112 | Horacio Chacon | | L6, C2, J2, R1, B1, O1, L2, L1 |
| 113 | Mr. & Mrs. Maroulis | | L2, L1, J2, Q1 |
| 114 | Edgar Douglass | | |
| 115 | Dean Schuyler | | A1, R1, C7, J2, L1 |
| 116 | Jean Clarken | | |
| 117 | David Doman | | A1, R1, G8 |
| 118 | John Abbadessa | | J2 |
| 119 | Mr. & Mrs. Pearlman | | Q11 |
| 120 | Donald Swedenborg | | S1, A1, R1, H1, B1, B2 |
| 121 | Shirley Ludwig | | L2, A1, L17, Q1, S1 |
| 122 | Phyllis Courlander | | L2, D1, Q1, E3, A1, L1 |
| 123 | Jerome Leszkiewicz | Woodley Gardens Homeowners Assn. | L2, A3, A1, A15, L17, Q1, J3, E3, L6, O1 |
| 124 | Carolyn & Paul Huard | | Q1, L8, L10, L2, J3, S2, S1, B1, O1, H1, N17, L1, |
| 125 | Peter de Santis | | L2, L18, J2, R1, L1, A7 |
| 126 | Charles Schueller | | O1, S1, C7, Q1 |
| 127 | Senator Frank Shore | | Q1, S1, O1, B1, E3, J3, L8, H1, L1 |

| | | | |
|---|---|---|---|
| 128 | Michael Courlander | | B1, S1, Q1, J3, E3, L1, N4 |
| 129 | Arthur Katz | New Mark Commons Homes Assn., Inc. | L3, L19, A3, A6, R2, C12, L2, L1 |
| 130 | Mayor John Freeland | City of Rockville | L6 |
| 131 | Emil Keller | | T10 |
| 132 | Alan Blandamer | Hungerford-Stoneridge Civic Assn. | L1, S2 |
| 133 | Kathleen McCrohan | | T10 |
| 134 | Thomas Wolf | Brighton Homeowners Assn. | Q8, O1, Q1, B1, B2, N18, A1, F2 |
| 135 | Jean Hubbell | Randolph Civic Assn. | C4, H1 |
| 136 | M. Sorn | | |
| 137 | Marvin Ott | Citizens Coordinating Committee on Friendship Heights, Inc. | O1, L8, H1, L1, S1, L6 |
| 138 | Robert Enger | | A1, B1, N19, D3, N20, N21, N22, N23 N24 |
| 139 | George Timberlake | | S2, K1, B1, T11, H5, H1 |
| 140 | Kidde Consultants | Churchill Investments | T2, C13, S7, I4 |
| 141 | Leon & Shirley Ludwig | | L1, L17, A3, A1, R1, S1, P1 |
| 142 | Phyllis Courlander | Regents Square Condominium | A1, P1, R1, L1, L2, Q4, E3, J3, N4, O1 |
| 143 | John Townsend, Jr. | Fairchild Space Company | J6, N7 |
| 144 | Page Dillon | | L1, L2 |
| 145 | Gary Yingling | | L6, B1, J2, A1, C7 |
| 146 | Mr. & Mrs. Flanagan | | B1, S1, L1, Q1 |
| 147 | James Weitzman | | A1, J2, H1, L1 |
| 148 | Miles & Robin Goldstein | | A7, A1 |
| 149 | F. R. Hoyt | | B1, O1, H1 |
| 150 | Dr. & Mrs. Richard Kaufman | | A1, R1, H1, B1, O1, T3 |

| | | | |
|---|---|---|---|
| 151 | H. S. Dodge | | A1 |
| 152 | The Kindreds | | S1, H1, A1 |
| 153 | Jean Tower | | A1, C7, R1, Q1 |
| 154 | Robert Bernstein | Luxmanor Citizens Assn. | S1, L2, J2, C2, L1, Q12 |
| 155 | Thomas VanVechten | | N25, N4, A1, B1 |
| 156 | Mr. & Mrs. Schiller | | A1 |
| 157 | Lawrence & Lenore Horowitz | | L1, L2, Q1 |
| 158 | Roy Brown | | L1, J2 |
| 159 | Douglas Greenwold | | S1, R1, A1, Q12, L6 |
| 160 | Delegate Judith Toth | | Q1, O1, S1 |
| 161 | Herman Hartman | | |
| 162 | Chao-Ming, Chuo | Petition of residents of Rockshire Comm. 22 signers | R1, O1, A1, J3, Q12 |
| 163 | Mr. & Mrs. H. R. Mather | | A1, Q1 |
| 164 | Dr. & Mrs. Abdul Hashim | | L1 |
| 165 | Joan Long | | J2, H1 |
| 166 | Dr. & Mrs. Jacob Trombka | | A1, R1, J2, K1 |
| 167 | Edward and Maureen Feroli | | K1, A1, R1, J2, L5, H1 |
| 168 | Edward & Barbara Gaver | | K1, H1 |
| 169 | Mr. & Mrs. Ira Wolpert | | S1, R1, A1, J2, L1, B1 |
| 170 | Les Bankson | | T12, H1 |
| 171 | Joan & Jeff Rohlfs | | S1, L2, H1 |
| 172 | Robert & Mary Worch | | S1, R1, A1 |
| 173 | Paula Viltz | | A1, Q12, C7, T13 |
| 174 | Helen Radford | | Q13 |
| 175 | Mr. & Mrs. Robert Rosen | | S1, L2, H1, L1, J2, Q12 |
| 176 | Michael Moriello | | L2, S1, J2, A1 |
| 177 | Henry & Kathryn Tate | | B1, Q1 |
| 178 | George Boyer | | S1, L2 |

| | | | |
|---|---|---|---|
| 179 | William Arrington | | G6, B1, S1, J2 |
| 180 | J. Trowr | | |
| 181 | Ann Dacy | | |
| 182 | Oliver Moles | | J2, A1, R1 |
| 183 | Mr. & Mrs. Eugene Smoley | | C7, J2, A1 |
| 184 | S. L. Huntington | | L6, C14, L1, S2, Q1 |
| 185 | Albert Paul, III | | Q1, C14, H1, H3, H6 G6, L1 |
| 186 | Doris & Jeff Shapiro | | S1, R1, A1, H1, L1 |
| 187 | Uberman Family | | S1, L2, H1, J2, L1, [illegible]1 |
| 188 | Thomas VanVechten | | C4, B1, N25, A7, L13 |
| 189 | Dr. & Mrs. Gilbert Barkin | | A1, R1, L1, L8 |
| 190 | Laurie & Arnold Havens | | L3, L5, S1, L4, L1 |
| 191 | D. Owen | | B1, T14, N20, D7, |
| 192 | Matthew Werner | | C4 |
| 193 | Ernest Anderson | | A1, S1, H1, Q12 |
| 194 | Anna Keane | | Q1, L1 |
| 195 | Dr. & Mrs. Ernest Hanowell | | R1, H1, A1 |
| 196 | Michael Courlander | | L1, S1, Q1, A16, J3, N4 |
| 197 | Allen Bender | Coalition on Sensible Transportation | N27, S8, S1, B1, O[illegible] L1, L2 |
| 198 | Bert Edwards | | H2, S9 |
| 199 | Carl Royster | | A1 |
| 200 | Victor Barakat | | |
| 201 | Theodore Caris | | D7 |
| 202 | Daniel Spohn | | L1, B1, S1, A1, L6 |
| 203 | Marie Harris | | C2 |
| 204 | Dan Davis | | L8, Q1, S1, L1 |
| 205 | Dr. Roger Clough | | O1 |
| 206 | Phyllis Preston | | O1, N26, A1 |

| | | | |
|---|---|---|---|
| 207 | Marie Garcia-Zamor | | S1, L2, H1, J2, C2, L1, Q12 |
| 208 | George Calise, Jr. | | A1, R1, T15, L1 |
| 209 | Lois Renfer | | A1, R1, S6, B1 H1 |
| 210 | James Staggs | | S1, R1, A1, L2 S6 |
| 211 | Mr. & Mrs. Donald Caplan | | A1, J2, L1, C2 |
| 212 | Ashby Chamberlin | | Q14 |
| 213 | Nancy and Donald Torr | | S1, R1, A1, J2, C2, L1 |
| 214 | Lawrence Friedman | | Q1, O1, B1, S1, L1 |
| 215 | John Heckert | | S1, R1, J2, Q12, A1, C2 |
| 216 | Mr. & Mrs. I. W. Hurt | | S1, H1, J2, B1, L1, L5, Q12 |
| 217 | Jay & Nancy Wechsler | | L2, S1, J2, H1, L5, L1 |
| 218 | Carolyn Gillespie | | L6, S1, A1, Q15, G9, G10 |
| 219 | David Royston | | L2, B1, O1, P1, T15, A17, I5, A1, T16, L18, Q12, N4 |
| 220 | Alice & Carl Harris | | Q1, L8, L1 |
| 221 | G. Liss | | H1, L1, K1 |
| 228 | Joe Fillie | | H3 |
| 229 | Elliot Werner | | H3 |
| 230 | Mrs. Lester King | | |
| 231 | Gunn Goldberg | | A1, A18, L1 |
| 232 | Joseph Rosewater | | S1, L1, S6, T17 |
| 233 | Frank Ferlin | | N28 |
| 234 | Leon Reed | North Bethesda Congress of Citizens Assns. | S1, L8, L10, L6, L2, L5, J2, L4, B1, H1, T3, O1, L1 |

| | | | |
|---|---|---|---|
| 235 | Allen Bender | Coalition on Sensible Transportation | L6, L8, L10, L1, N17, L2, S1, C15, L20, L21, L5 |
| 236 | William Geddes | | Q16 |
| 237 | U.S. Senator McMathias | | |
| 238 | James & Jane Burgess | | S1, L2, Q1, H1, L1, J2, C2, Q12 |
| 239 | Nancy Wechsler | | S1, L2, J2, H1, L5, Q12, L1 |
| 240 | Senator Howard Denis | | K1, G11 |
| 241 | Robert Rabin | | L2, S1, Q12, L1 |
| 242 | Councilperson Rose Crenca | | A16, A1, T15, B1, C2, H1, L1 |
| 243 | Frank Thornton | | Q5, A19, H1, C4, L1 |
| 244 | Mr. & Mrs. Rabin | | C4, L1, Q12, A1, B1, L2, H1 |
| 245 | Dr. & Mrs. Mead | | L1 |
| 246 | Carolyn Huard | | A1, A4, T18 |
| 247 | Linda Elliott | | L2, Q1, A1, C4, L1 |
| 248 | Mrs. A. Bowers | | B1, Q1, A1, L6 |
| 249 | Ruth Fredman | | O1, C2 |
| 250 | Richard & Ardys Odegaarden | | A1, Q12, Q17, Q13 |
| 251 | Dr. & Mrs. Wells | | B1, A1, O1, Q1 |
| 252 | Dr. W. M. Lineham | | |
| 253 | Mrs. Wm. Miles | | L2, A1, O1, P1 |
| 254 | Earl & Vera Chism | | L8, R1, A1, A12, B1, S1, H1 |
| 255 | Janet Gallant | | L1, Q1, C2, O1, B1 |
| 256 | Mark Goldstein | | C2, R1, A1, L2, B1, J2, Q1 |
| 257 | Mr. & Mrs. Hamer | | H1, A1, G8, I6 |
| 258 | Therese Heffernan | | A1, R1, J3, L1 |
| 259 | Robert DeGroot | | B1, Q1 |
| 260 | A. J. Bachicchio | | J2 |

| | | | |
|---|---|---|---|
| 261 | Andrew Gallant | | L1, A1, Q1 |
| 262 | Dona Houseal | | Q1, N4 |
| 263 | Joan Hanley | | Q1, L1, C7, A1, R1 |
| 264 | Mrs. Robert Meehan | | S1, Q12, B1 |
| 265 | E. B. Douglass | | C7, C14 |
| 266 | Joyce Bryant | | Q1, Q19 |
| 267 | Betty Hagan | | L2 |
| 268 | Kathleen Rowe | | L2 |
| 269 | Mary Loome | | L2 |
| 270 | Maurice Rowe | | L2 |
| 271 | Carson Mills | | L2 |
| 272 | William Mills | | L2 |
| 273 | Mrs. Wm. Mills | | L2, A1, R1, J3 |
| 274 | Lois Renfer | | C2, B1, S6, H1 |
| 275 | Phyllis Preston | | L1, B1, O1, A1, C7 |
| 276 | Mr. & Mrs. Carrocio | | L1, A1, R1, Q1, Q12 |
| 277 | Mr. & Mrs. Kalanker | | L1, B1 |
| 278 | Frank Hagan | | L2 |
| 279 | Russell Stanford | | Q12, C7, N29, G5, B1, O1 |
| 280 | Anthony Bullard | West End Citizens Assn. | L2, L6, L8, Q1, S1, N27, O1, L1 |
| 281 | Raymond Carroll | | N14, L1, C14, A1 |
| 282 | Ann May | | G5, T17, B1, L1, P1, A3 |
| 283 | Karen Bourdon | Woodley Gardens Garden Club | Q1, L1, A1, L2 |
| 284 | Delegate Mary Boergers | | L1, H1, B1, L2 |
| 285 | Senator Paul Sarbanes | Inquiry on behalf of Janet Gallant | |
| 286 | Joseph Hecker | | L8, L1, S2, H1, A1 |
| 287 | Allen Bender | Coalition on Sensible Transportation | L6, , S1, L2, B1, O1, C14, H1, L11, C15 L22, L23, L24, L25, N17, J2, L26, L27, L28, Q1, T15, L29, K7, A3, A20, A9, A21, Q12, J3, R2, L8, L10, L6, L20 |

| | | | |
|---|---|---|---|
| 288 | William Wildhack | The Town Council of Chevy Chase | O1, H1, S4 |
| 289 | Susan Langreth | Treasure Oak Community Assn., Inc. | S1, L2, L1, L8, L6, B1, O1, L5, R2, A1 E3 |
| 290 | Sanderson Hoe | | B1, N4 |
| 291 | Ed Gardner | Twinbrook Citizens Assn. | L1, B1, H1, Q1, G8 |
| 292 | Carolyn & Paul Huard | | L8, L2, S1, H1, L1 |
| 293 | Muriel Rabin | | L2 |
| 294 | Dr. Joel Gary | | L2 |
| 295 | Joseph Piff<br>Helen Redmond | | Q1, Q5, A19, H1, C<br>L1, G8 |
| 296 | William Geddes | | L2, S1, H1, B1, C7 C6, K8, A22, A1, A G6, C14 |
| 297 | John May | | G5, T17, B1, P1, A |
| 298 | Mayor John Freeland | City of Rockville | A1 |
| 299 | Eileen Weisman | | C2, H1, J2, L2 |
| 300 | Gerald Boho | | H1, C2, J2, S1, L5 |
| 301 | Suanne Rowe | | A1, R1, H1 |
| 302 | Ellen King | | A1, Q12, R1, S1, H1, C14 |
| 303 | Willis Briddell | First Baptist Church of Rockville | |
| 304 | Kristine Forsberg | | L2, C2, A1 |
| 305 | Muriel Kennedy | | S1, A1, R1, J2, C2 |
| 306 | John Garmat | | |
| 307 | William Hulse | | L1, S1, J2, H1 |

Comment A1: A commitment must be made by SHA to construct noise barriers as part of this project. Various types of noise attentuation such as earth berms or living walls should be studied in consultation with the communities affected by the barriers.

Raised by: 1, 9, 13, 14, 15, 16, 28, 35, 38, 43, 46, 49, 61, 64, 66, 70, 75 79, 80, 84, 92, 94, 97, 103, 107, 117, 120 - 123, 134, 138, 141, 142, 145 147, 148, 150 - 153, 155, 156, 159, 162, 163, 166, 167, 169, 172, 173, 176, 182, 183, 186, 189, 193, 195, 199, 202, 206, 208, 209, 210, 211, 213, 215, 218, 219, 231, 242, 244, 246, 247, 248, 250, 251, 253, 254, 256, 257 258, 261, 263, 273, 275, 276, 281, 283, 286, 287, 296, 298, 301, 302, 304, 305, 289, 109, 115, 289

Response: Noise impacts will be reduced to levels below existing noise levels through the use of noise barriers. As part of the decision to proceed with the project, a commitment is made to incorporate noise barriers at all subdivisions along the right of way where residences are adjacent to the roadway. Meetings will be held with the citizens affected by the barriers during the design phase to obtain their input as to type, height, and locations of barriers to be constructed. In addition a plant seal mix will be used for the surface of I-270 which reduces noise by 3 dBA to 5 dBA.

In addition, several alignment modifications to the Preferred Alternate have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

These shifts will provide additional space to construct the noise barriers and will allow for landscaping.

Nightime noise levels will be monitored along I-270. The possibility of providing second story noise attentuation will be investigated during final design and discussed with the residents along the right of way of I-270 where noise barriers are proposed.

Comment A2: Adequate noise analysis must be done and noise barriers should be constructed close to the source of noise.

Raised by: 5

Response: Ambient noise levels were monitored at 32 representative sites along the I-270 corridor during the worst case noise conditions. In answer to several comments, 24 hour noise measurements will be taken at several sites to show the variations of noise levels throughout the day and night.

Noise levels were predicted at these same receptors for the Preferred Alternate and the No Build Alternate. As a result of these studies, a commitment was made to provide noise barriers along all residential subdivisions adjacent to I-270 throughout the project area. These barriers will reduce the noise levels in the design year (2010) to below those experienced today.

The location of these barriers will be determined during the design phase and will be determined by the grading requirements, types of barriers and landscaping treatments. Meetings will be held with the citizens affected by the barriers to obtain their comments as to type, height, length and location as well as landscaping treatments.

Comment A3: Is adequate space available between homes and proposed improvements to construct noise barriers with landscaping? Will noise barriers reduce levels to Federal Noise Abatement Criteria?

Raised by: 10, 123, 129, 141, 282, 287, 296, 297

Response: Several alignment modifications to the Preferred Alternate have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

These shifts will provide additional space to construct the noise barriers and will allow for landscaping.

The predicted noise levels will be below the Federal Noise Abatement Criteria and below existing noise levels.

Comment A4: Review need for noise barriers at Cabin John Park. Evaluate noise levels at sites proposed for development and incorporate noise barriers into the development of the property. Use noise standards established by the Department of Housing and Urban Development.

Raised by: 13, 35, 246

Response: Undeveloped land is not eligible for noise barriers unless there is a platted residential subdivision on record. The noise report is sent to the appropriate planning agencies within the County for their use in locating future residential development.

After coordination with the Maryland-National Capital Park and Planning Commission, it was determined that noise barriers would not be needed along Cabin John Regional Park.

The Federal Highway Administration requires that their Noise Abatement Criteria and approved computer models (STAMINA 2) be used to determine predicted noise levels and needs for noise barriers. The HUD criteria

are more conservative and weigh the nighttime levels heavier than the daytime hours to arrive at an average day-night noise level.

110

Nighttime noise studies are being performed for this project to determine the need for second story noise attenuation at residences.

Comment A5: Opposed to noise walls and recommends earth berms and landscaping.

Raised by: 22

Response: Several alignment modifications to the Preferred Alternate have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

These shifts will provide additional space to construct the noise barriers and will allow for landscaping. However, due to the restrictions of right of way and the proximity of the residences to the right of way, it is not expected that earth berms will be feasible. The studies as to the type, height and location of the barriers will be performed during final design. Meetings will be held with residents of the areas affected by the barriers to obtain their comments as to type, height, location and landscaping treatments preferred.

Comment A6: A noise analysis was not done for the Potomac Valley Nursing Home nor the Markwood/New Mark Commons communities. Noise levels in the communities of Fallsmead and Saddlebrook were not re-examined from what was completed for the I-270/MD 189 project.

Raised by: 30, 129

Response: The Potomac Valley Nursing Home was not analyzed under the I-270 project because it was analyzed under the MD 189 project and found to have a predicted noise level of 61 dBA. The widening of I-270 and the provision of collector-distributor roads would not increase the noise levels significantly (approximately 2 dBA) to a level where a barrier would be required.

Under the MD 189 project, a noise barrier will be provided along the ramp to eastbound MD 189 to reduce the noise levels at New Mark Commons. This project is in final design and the barrier will be designed based on the latest I-270 traffic. In either case (with or without the I-270 improvements), the barrier will reduce noise levels to below the Federal Noise Abatement Criteria.

A noise barrier is proposed along the community of Saddlebrook under the I-270 project. The extent of this barrier will be determined during final design.

Comment A-7: The community would be better served from a noise standpoint by selection of the No-Build Alternate along with construction of noise abatement measures.

Raised by: 40, 125, 148, 188

Response: Under the present State priority program, there is little possibility for funding the sound barriers separately from the improvement construction. Noise barriers will be constructed as part of the project. After construction of the barriers, noise levels at the homes adjacent to I-270 will be lower than what is currently being experienced. Where possible, noise barriers will be constructed before highway construction.

Comment A-8: Why was noise measured at the Deer Park Tennis Courts rather than at Deer Park Place?

Raised by: 46

Response: Receptors 24 and 25 represent the closest activity areas to the roadway for both the apartments and the tennis courts thereby creating the worst case conditions for the noise analysis. The tennis courts were selected as the most northerly site that could require noise abatement.

Comment A-9: Why is noise projected to decrease at NSA 3, 10, 11, 23 and 30 if I-270 is widened and no noise barriers are constructed?

Raised by: 46, 287

Response: The noise monitoring procedures determines a statistically reliable noise level that is exceeded ten percent of the monitoring period. At times, the periods monitored are not representative due to an unusually high number of trucks or total vehicles passing the meter. In cases where the ambient levels are the determing factor for the provision of noise barriers, these levels would be remonitored during final design. However, in the cases cited, the ambient levels were not the deciding factor for barriers.

Comment A-10: Why can't a noise barrier be erected to protect Deer Park Place?

Raised by: 46

Response: A noise barrier 1650 feet long is proposed to protect the apartments on Deer Park Place.

Comment A-11: A noise barrier should be provided to protect the Fox Chapel Subdivision.

Raised by: 71

Response: Noise barriers are proposed along Fox Chapel as well as all other residential subdivisions along I-270 within the project limits.

Comment A-12: Two correspondents wish to receive a copy of the noise studies.

Raised by: 80, 254

Response: The final noise report will be transmitted to these commentors.

Comment A-13: Undeveloped properties should be protected with a noise barrier so that noise at the property line for residential property is 55 dBA and non-residential property 62 dBA.

Raised by: 83

Response: Undeveloped land is not eligible for noise barriers unless there is a platted residential subdivision on record. The noise report is sent to the appropriate planning agencies within the County for their use in locating future residential development.

The Federal guideline for acceptable noise levels in residential areas is 70 dBA. Noise barriers must be investigated if the predicted noise levels created by the highway improvement are either above 70 dBA or more than 10 dBA higher than the existing noise levels.

Comment A-14: When are steps going to be taken to force trucks to keep mufflers on their engines?

Raised by: 92

Response: The enforcement of the proper maintenance of vehicles is a responsibility of the local and State police. Those agencies enforce the law to the extent possible.

Comment A-15: Sufficiently detailed noise monitoring should be conducted just before and after the morning and evening rush hours. This monitoring should be the basis for determining 60, 65 and 70 dBA contours with and without noise barriers. The projection should also account for noise reflected from a 4 to 7 story building currently under construction. This monitoring and projection should be done by an outside Consultant. The sound barrier system which will ultimately be the outcome of this study should reduce noise to meet County noise regulations, as well as, Federal noise abatement criteria.

Raised by: 123

Response: Twenty four hour noise monitoring will be performed at several locations along I-270 using state-of-the art techniques. Since the ambient levels are used as a basis of comparison with the predicted levels, there is no need to develop existing noise contours. The need for noise barriers is based on the predicted noise levels with the improvements.

During final design, the 4 to 7 story building can be taken into consideration when determining the noise levels with the barriers. The noise barriers will provide a reduction to well below the Federal Design Noise Abatement criteria.

Comment A-16: The proposed noise barriers will be strictly cosmetic and not effective in reducing noise.

Raised by: 196, 242

Response: The noise barriers as proposed in this document will reduce the outdoor noise levels at the residences to below those levels existing today. The possibility of providing noise attentuation for the second story levels will be investigated in final design.

Comment A-17: Why are noise barriers not considered for Rockmead Park as there are residences immediately adjacent to the Park?

Raised by: 219

Response: Noise barriers are proposed along Rockmead Park and continuously from the Falls Road interchange to the MD 28 interchange on the west side of I-270.

Comment A- 18: Why are no noise barriers considered for the Nelson St. Park?

Raised by: 231

Response: In order to reduce the noise levels to below the FHWA Noise Abatement Criteria at the playground at the Woodley Gardens Park on the east side of Nelson Street north of the MD 28 interchange, a barrier 500 feet long with an average height of 9 feet would be needed at a cost of $100,000. The cost of the barrier was considered excessive with respect to the noise reductions gained (5 to 6 dBA) and the type of use of the land (intermittent use as a ballfield).

Comment A-19: The State will not provide noise mitigation in areas where costs are too high or the benefits received are low.

Raised by: 243, 295

Response: Noise mitigation will be provided where the project studies have shown they are clearly needed. They will be considered elsewhere, where technical questions about their justification exist.

Comment A-20: The Environmental Assessment does not specify the methodology of cost-benefit analysis.

Raised by: 287

Response: The construction of a noise barrier is dependent on a number of variables. These include the amount of noise increase in the design year, the number of homes protected, the noise reduction achieved from the barrier and the cost of the barrier.

Comment A- 21: Why were noise barriers not recommended to protect the two residences at NSA 10, the Washingtonian Motel, the Rockville Nursing Home, the Woodley Gardens Senior Center, and two frequently used playgrounds? Explain beyond, "They were not cost effective."

Raised by: 287

Response: NSA 10 is located on the west side of I-270 north of the Montrose Road interchange. Two residences would require a noise barrier 400' long at a cost of $100,000. Since these two residences are isolated and no other residential development is proposed in that area, it appears that the cost of the wall is not justified by the benefits gained.

The Washingtonian Motel, just north of Shady Grove Road on the west side of I-270, was analyzed for noise levels under the I-370 project. It was found that a barrier would not be justified at this site since there are no outside activities and the interior noise levels would be less than 55 dBA.

The Rockville Nursing Home and Rockville Christian Church are located on the east side of I-270 south of the MD 28 interchange. Both buildings are centrally air-conditioned structures. The church utilizes the area behind the church for outdoor nursery school activities. The 1050' long barrier would provide an average reduction of 6 dBA for the play area at a cost of $200,000. The interior noise levels would be about 51 dBA without a barrier. The reduction of noise obtained and the predicted noise levels do not justify a barrier at this location. Discussions are continuing with the staff of these two facilities to determine their preferences with respect to noise barriers.

The predicted noise levels at the Woodley Gardens Senior Center are below the Federal Noise Abatement Criteria. The increase in noise levels between the existing and the predicted levels is 3 dBA at the building which is barely perceptible.

Discussions are being held with members of Woodley Gardens and the Senior Center to determine their preferences regarding the location and extent of the noise barriers. During the final design, the length of noise barriers will be determined to reduce the noise levels in the Woodley Gardens community for all residents below the Federal Noise Abatement Criteria. Wherever noise barriers are not recommended, visual screens will be provided at the Senior Center.

Comment A-22: The number of noise measurement sites was too limited and did not include the worst locations.

Raised by: 296

Response: The noise receptors selected are representative of the residential and recreational areas along I-270. The worst case was found to be off-peak traffic. The locations chosen represented outdoor uses.

Comment B1: How will the legs of the Y-split and the Capital Beltway handle the increased volumes of traffic delivered by I-270, if I-270 is improved as proposed under the C-D alternate?

Raised by: 2, 3, 6, 8, 9, 10, 14, 16, 23, 25, 30, 33, 36, 38, 53, 55, 57, 60, 70, 75, 77, 81, 107, 108, 110, 111, 112, 120, 124, 127, 128, 134, 138, 139 145, 146, 149, 150, 155, 169, 177, 179, 188, 191, 197, 202, 209, 214, 216, 219, 234, 242, 244, 248, 251, 254, 255, 256, 259, 264, 274, 275, 277, 279, 282, 284, 287, 289, 290, 291, 296, 297

Response: Project Planning is underway for Beltway improvements from MD 190 south into Virginia. Project Planning studies are expected to begin early in 1985 for capacity improvements to the two legs of the Y-split and I-495 from MD 355 to MD 190. The design of these segments will be adequate to handle the traffic predicted for I-270 through the design year. Construction is scheduled to begin in FY 1987 for the capacity improvements of I-495 from MD 355 to west of MD 97. It should be noted that the improvements to the two legs of the Y-split would be required with or without this I-270 improvement.

Comment B-2: I-270 north of MD 121 will not have enough lanes to handle the increased traffic attracted/delivered by widening I-270 to the south.

Raised by: 120, 134

Response: In the design year, the I-270 roadway just north of MD 121 will operate at capacity according to the traffic predictions. Studies to widen the section of I-270 north of MD 121 will be performed within the next few years.

Comment C1: The Interstate Route 270 Environmental Assessment shows a dramatic increase in the traffic volumes on Falls Road and Maryland Route 28 over the traffic volumes in the Maryland Route 189/Interstate Route 270 interchange environmental document. Traffic projections are inconsistent within the Environmental Assessment itself. Will there be 190,000 or 220,000 average daily trips on I-270?

Raised by: 1, 30, 235, 287

Response: In the course of the I-270 project planning study, two forecasts of travel were developed. One is a projection of traffic to the year 2010, reflecting the amount and the geographic distribution of population and employment in that year (forecasted by the Maryland-National Capital Park and Planning Commission, in concert with the Metropolitan Washington Council of Governments) as well as the expected network of transportation facilities in that year. This first projection which is comparable to the projection (to year 2006) in the I-270/MD 189 environmental document and which forecasts 190,000 average daily trips on I-270 south of Montrose Road--is also the projection used as the basis for eight mainline lanes and continuous collector-distributor roadways.

In addition, a second forecast was developed to determine what the maximum realistic traffic volumes would be on I-270 if most of its interchanging highways reached capacity as a result of Master Plan development. By producing this forecast, it was possible to use a "conservative" analysis in ensuring that adequate environmental mitigation would be adopted and that capacities of interchange ramps, as well as slip ramps between the collector-distributor roads and the mainline would be in balance with the capacity of the feeder roads. The intent of this forecast was to be "conservatively high" to ensure that traffic operations and environmental mitigation would not be substandard if more traffic were fed onto I-270 from the feeder roads than had been forecast. This second forecast is exhibited on Plate 14 and shows 220,000 average daily trips south of Montrose Road.

Comment C2: Will the Collector-Distributor Road Alternate relieve congestion on I-270 through the year 2010? What is the level of service projection and what are some travel time predictions?

Raised by: 6, 36, 112, 154, 203, 207, 211, 213, 215, 238, 242, 249, 255, 256, 274, 299, 300, 304, 305

Response: I-270 is currently experiencing substandard levels of service, most notably the mainline of I-270 south of Montrose Road, the I-270/Shady Grove Road interchange and the I-270/MD 124 interchange. The alternate consisting of an 8-lane I-270 with continuous C-D roads would operate at an acceptable level of service (LOS = D or better) on all segments through the design year.

Comment C3: The use of the year 2010 as the year of projection seems shortsighted.

Raised by: 6, 36

Response: Highway projects are designed to accommodate the traffic demand for 20 years beyond the time of construction of the project. This has been established as a reasonable time frame on which to commit construction funds. To provide for traffic demand for fifty years is not reasonable considering the amount of funds and right of way that would be required. Another consideration is that traffic projections become very uncertain as they are extended that far into the future. Changes in technology, the economy and land use patterns over such a long period as 50 years could significantly affect the traffic demand.

Comment C4: Existing I-270 is congested today and requires capacity improvements. Of the alternates studied, the Collector-Distributor Alternate will provide the maximum improvement in travel time, satisfies the traffic demand of the design year, and will improve level of service on other radial routes in the vicinity of Interstate Route 270 via diversion of traffic to an improved Interstate Route 270.

The Collector-Distributor Alternate will also facilitate traffic flow by reducing friction experienced at the interchanges.

Raised by: 11, 13, 17, 34, 35, 57, 61, 74, 90, 96, 135, 188, 192, 243, 244, 247, 295

Response: No response required.

Comment C5: The traffic congestion experienced at the Maryland Routes 124/355 intersection is attributable to the traffic congestion in the Maryland Route 124/I-270 interchange.

Raised by: 18

Response: The proximity of the MD 355 intersection to the I-270 interchange has created backups onto I-270 ramps and roadway. The first stage of improvements to the MD 124/117 interchange is now in final design. Construction should begin by the spring of 1985. Further improvements are being studied at the MD 124/MD 355 intersection to alleviate the existing congestion and allow for future growth.

Comment C6: Traffic projections are overstated and show most of the growth occurring in the C-D oriented traffic, negating the need to widen the mainline.

Raised by: 19, 45, 296

Response: The increase in traffic on I-270 will be both for the shorter trips between interchanges in the corridor and for the longer trips from beyond Germantown to the north and from the Capital Beltway to the south. The forecasts dictate the need to improve highway capacity for both types of travel. Furthermore, by separating longer and shorter trips onto the mainline and collector-distributor roads, respectively, the operating conditions of both traffic streams will be improved.

Comment C7: The traffic projections did not acoount for the extension of Metro to Gaithersburg or construction of the Great Seneca Highway which would decrease traffic on Interstate Rte. 270.

Raised by: 40, 64, 103, 115, 126, 145, 153, 173, 183, 263, 265, 275, 279, 296

Response: The traffic projections did account for several other expected radial improvements in the corridor, including the construction of the Great Seneca Highway. The widening and relocation of MD 28 north to MD 124, the widening of MD 355 through Gaithersburg, and the construction of MD 115 Relocated, as well as the opening of Metrorail to Shady Grove were also included in the traffic projections.

Comment C 8: It is believed there is sufficient demand in the Interstate Route 270 corridor to warrant express/HOV lanes and that the improvement represents an opportunity to increase the number of van and car pools (3 HOV).

Raised by: 62

Response: One of the mainline improvement alternates studied in detail was the provision of express lanes or travel lanes for the exclusive use of high occupancy vehicles (HOV) including buses during peak hours.

A lane configuation of 3-2-2-3 was selected as the HOV alternate to be studied in more detail. Preliminary construction costs were developed for this alternate.

The amount of traffic that would be diverted to the HOV lanes is related to the time savings realized by the use of the HOV lanes and the distribution of the employment and residence locations. In the I-270 corridor, residential neighborhoods and employment centers are scattered throughout the corridor. As shown by the origin-destination matrix developed, a relatively small percentage of traffic in the corridor is destined for the Washington central business district. Commonality of origins and destinations is an important factor in the number of carpools and vanpools formed and in the number of patrons utilizing mass transportation. The origins and destinations of I-270 travelers tend to be quite dispersed. When the Metro line is opened to Shady Grove, a large number of CBD-oriented trips will be diverted to the rail line, further reducing the number of commuters that would be diverted to HOV lanes and the potential for bus usage of the express lanes. Also, as development continues in the corridor and Metro is opened, the directional distribution of traffic will tend to become more evenly divided, thus lessening the effectiveness of reversible express lanes. Due to the lack of demand forecast to use the express lanes, significant travel time savings are not expected from this alternate; thus it was dropped from further study.

Comment C-9: The need for improving I-270 between the Y-split and MD 28 was questioned as the Environmental Assessment finds little projected population growth and little long-distance commuter traffic within that segment.

Raised by: 84

Response: The development proposed for the entire corridor was used in developing the design year traffic forecasts which shows a need for additional capacity throughout the project limits including the section between the Y-split and MD 28. The heavy residential development occurring along MD 28 between Rockville and Darnestown is currently contributing to the ever increasing traffic volume on I-270 south of Rockville.

Comment C-10: Construction of the Intercounty Connector and a new highway west of I-270, completion of Metrorail, and improving the existing interchanges would eliminate the need to widen I-270.

Raised by: 105

Response: Traffic projections were developed both with and without the Intercounty Connector assumed in the network. Traffic volumes on I-270 did not vary enough between the two forecasts to change the conclusions regarding need or design requirements to adequately serve the traffic.

The patronage estimates for Metro were included in the traffic predictions and still result in a demand far beyond the capacity of the existing roadway. I-270 will serve short distance travelers, those destined to areas not served by Metro, and long distance travelers passing through the region.

Comment C11: Has a traffic flow study been done similar to the one on Canal Road?

Raised by: 108

Response: Transportation Systems Management (TSM) strategies were examined as part of the I-270 Study. The concept of reverse flow lanes (such as analyzed in the Canal Road Study) was analyzed and rejected due to the even north-south directional split of forecasted peak hour travel. Additionally, center reversible lanes do not conform with the existing configuration of bridges crossing I-270 which have center supports. Other TSM strategies, such as high occupancy vehicle (HOV) lanes and ramp metering, were also studied. The HOV analysis indicated that person throughput would not be significantly enhanced with the assignment of carpools to inside travel lane(s). That is to say that the flow of people, as opposed to vehicles, would not significantly increase through the application of HOV lanes. Metering the flow of vehicles entering the I-270 mainline at on ramps was studied and dismissed as an improvement due to the fact that overall personal average travel time would not be decreased by that strategy.

Comment C12: Traffic projections and capacity analyses failed to consider a proposed zoning change south of proposed Ritchie Parkway to 3 million square feet of light industrial/business/office development.

Raised by: 129

Response: The land use utilized for the I-270 traffic forecast was that which was developed by county and local planners and was adopted by the Metropolitan Washington Council of Governments (the metropolitan planning organization for the region). This land use does not consider the amount of development that could result from the above mentioned zoning change. Until a new set of land use is adopted by the Council of Governments, the SHA is mandated by the Federal Aid Highway Act of 1962 to use the approved land use as a basis for the I-270 corridor. However, the 6-lane (no-build) and 8-lane alternates would be negatively impacted if such a development were to occur. The Selected Alternate (an 8-lane I-270 with continuous collector-distributor roads) should be able to accommodate the maximum number of vehicles that could access the freeway via intersecting and proposed roadways.

Comment C13: What will the level of service be at the MD 118 interchange under the Selected Alternate? What development in Germantown is reflected in the traffic analysis? How sensitive is the analysis to early development, changes in zoning to increase trip generation? What land uses were assumed east of I-270 and north of MD 118? What effect would the development of this land have upon the MD 118 interchange? Would an interchange north of MD 118 be needed to serve Germantown's transportation needs?

Raised by: 140

Response: The latest available Germantown area land use was incorporated into the traffic forecast when it was performed in February 1982. In the case of MD 118 and Middlebrook Road, adequate highway capacity would be available for full Germantown proposed development. The I-270/MD 118 cloverleaf interchange is expected to operate in the level of service "E" range for any build alternate in the design year of 2010. No new interchange other than the proposed Middlebrook Road Interchange would be required to facilitate Germantown's proposed growth in land use.

Comment C14: Traffic projections do not warrant the construction of the Collector-Distributor Alternate.

Raised by: 184, 185, 265, 281, 287, 296, 302

Response: The Collector Distributor Road Alternate was developed from the 8 lane Alternate as a means of better serving interchanging traffic and removing from the main roadways the weaves, merges and diverges necessary at the interchanges. This allows the main roadways to operate more efficiently.

Many segments of I-270 are currently experiencing substandard levels of service (LOS = F). An alternate consisting of an 8-lane I-270 with continuous C-D roads would operate at an acceptable level of service (LOS = D or better) on all segments through the design year.

Comment C15: Traffic projections are inconsistent as shown in the Environmental Assessment. Will the traffic be 190,000 ADT or 220,000 ADT?

Raised by: 235, 287

Response: A forecast was performed using 2010 land use projections for the corridor and taking into account capacity constraints within the network. The average daily traffic volume shown south of Montrose Road of 190,000 reflects this projection.

During the course of the development of the alternates analyzed in the project planning study, a number of questions were raised about the sensitivity of the level of service analyses and environmental impact analyses to the traffic forecasts. The question became particularly critical because Montgomery County was in the process of reevaluating land use plans in the Gaithersburg area. In response to these questions, a traffic forecast was developed in which traffic volumes on all feeder roads to I-270 were assumed to reach the capacity of those feeder roads. The purpose of this exercise was to determine what the maximum realistic traffic volumes were that could be fed onto I-270 if Master Plan development occurred to the point that each feeder road was operating at capacity. By producing this forecast, it was possible to use a "conservative" analysis in ensuring that adequate environmental mitigation would be adopted and that capacities of interchange ramps, as well as slip ramps between the collector-distributor roads and the mainline would be in balance with the capacity of the feeder roads. The intent of this forecast was to be "conservatively high" to ensure that traffic operations and environmental mitigation would not be substandard if more traffic were fed onto I-270 from the feeder roads than had been forecast. It is important to note, however, that the need for improvements in the corridor, as well as the need for the continuous collector-distributor alternate have been based on the lower forecasts.

Comment D1: How is it possible to carry ahead with the design of the Maryland Route 189/Interstate Route 270 interchange design when mainline I-270 has been changed from widening to eight lanes to the collector-distributor alternate?

Raised by: 2

Response: The alternates studied during the I-270 project were coordinated with the design of the Falls Road interchange for compatability. The interchange will be designed to be compatible with the Selected Alternate as described in this document.

Comment D2: Expressed concern that the proposed Maryland Route 189 interchange should possibly be a split interchange with Ritchie Parkway serving the movements to and from the south or with Falls Road one-way east and Ritchie Parkway one-way west.

Raised by: 3

Response: An interchange with Ritchie Parkway (either in part or whole) was not considered for the following reasons:

1. **The Interstate interchange spacing guidelines recommend that a minimum of one mile should exist between Interstate interchanges.**

2. MD 189 better serves the major travel desire between I-270 and Downtown Rockville.

3. A one-way roadway system would result in circuitous travel for local traffic accessing the one-way system and desiring to go in the direction opposite the mandatory flow.

Comment D3: Expressed support for construction of an interchange at Ritchie Parkway instead of at Maryland Route 189 for various reasons.

Raised by: 22, 138

Response: The proximity of Ritchie Parkway crossing of I-270 to the Montrose Road interchange would not permit acceptable weave sections or acceleration and deceleration lengths. Therefore, Falls Road was selected as the site for the interchange.

Comment D4: Construction of Maryland Route 189 (Falls Road) interchange will increase traffic congestion in Rockville and will provide only marginal relief to the Montrose Road interchange, and will ultimately result in the addition of lanes to Falls Road west of Ritchie Parkway.

Raised by: 30

Response: The Maryland 189/Interstate 270 interchange was developed to improve access to the Central Business District of Rockville. The State Highway Administration has performed traffic studies for an extended area including Maryland 28 and Montrose Road as well as other State, County and local roadways. The studies indicate that the Maryland 189 interchange would reduce congestion within the area by minimizing traffic conflicts entering the CBD and the I-270 corridor allowing most major roads and intersections to operate at an improved Level of Service.

There are currently no plans to widen Falls Road west of Ritchie Parkway.

Comment D5: Left turns from Fallsmead Way onto MD Rte. 189 should be allowed.

Raised by: 65

Response: These movements will be allowed.

Comment D6: The Finding of No Significant Impact for the MD 189 Interchange should be withdrawn and included in the study to improve Interstate Road 270 for the following reasons:

1. Not including the MD 189 interchange in the I-270 study is segmentation. The MD 189 interchange will not substantially relieve the Montrose Road Interchange.
2. The MD 189 interchange will not improve access to downtown Rockville; it will increase congestion.
3. The MD 189 interchange will make inevitable a four-lane Falls Road in Potomac.
   The Environmental Assessment of the Falls Road Interchange was inadequate since it failed to consider major environmental and traffic impacts on Rockville and Potomac. The State never examined a serious transportation alternative to the MD 189 interchange.

Raised by: 87

Response: The Federal Highway Administration and the State Highway Administration see no basis for withdrawing the FONSI prepared for the MD 189 interchange as explained below:

1. SHA feels that there is no basis to the contention of segmentation. Segmentation is related to two principal issues:

   - Does the project depend upon any other improvement being made?

   - Does the decision on the project bias the decision on any other improvement?

SHA concludes that the decision regarding the Falls Road interchange does not depend upon any other improvement being made, including improvements in downtown Rockville or other improvements in the Interstate 270 corridor, and does not bias the decision on any other improvement in the area. The purpose of the project is to improve access to downtown Rockville from the Interstate 270 corridor and to relieve congestion problems at the Md. 28 and Montrose Road interchanges, both of which would be overburdened under any circumstances if the Falls Road interchange is not built. The project by itself will achieve its intended purpose and does not depend upon other projects to achieve this purpose. Both the spirit and the letter of all requirements of the National Environmental Policy Act have been met for the Falls Road Interchange project.

2. Build and design year traffic volumes, as well as levels of service have been forecast on a number of critical highway links in downtown Rockville. The findings of this analysis were summarized on page 30 of the Maryland Route 189/Interstate Route 270 FONSI as follows: "Traffic congestion problems in downtown Rockville are . . . projected to be lessened between a No Build and Build Alternative due to the fact that more direct access is afforded a number of trips accessing downtown Rockville, thereby reducing turning movements at several critical intersections in downtown Rockville."

   These data show that traffic conditions in downtown Rockville are projected to improve from Level of Service 'F' (breakdown) conditions in 2005 under the No Build Alternative along Md. 28 to Level of Service 'E' (non-breakdown) conditions under the Build Alternative.

3. SHA's assumption that Falls Road will remain two lanes under the Build Alternative for the Falls Road interchange is based on the policy stated in the May 1980 "Master Plan for the Potomac Subregion", approved by the Montgomery County Council, which states that all roadways other than those specifically listed will be maintained in their current two lane configuration. Since Falls Road is not listed among those roadways planned for widening, it has been assumed that it will remain two lanes in the future. The Planning Board has adopted this policy recognizing that traffic congestion will result during peak periods. SHA's analyses show that travel demand on Falls Road west toward Potomac is not expected to be significantly different between the Build and No Build Alternatives since traffic from Interstate 270 will be able to reach Falls Road toward the west relatively easily from the Montrose Road interchange.

Comment D7: An interchange should be provided at Md. Rte. 189 and I-270.

Raised by: 191, 201

Response: No response required.

Comment E1: Will the construction of retaining walls, sound barriers, etc. result in the need to take construction easements? Will construction adjacent to residential properties be ongoing for three to five years? Will the trees currently screening I-270 be removed during construction?

Raised by: 10, 20

Response: Several alignment modifications to the Preferred Alternate have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

These shifts will provide additional space to construct the noise barriers and will allow for landscaping.

The need for construction easements will be investigated during final design and all feasible means of reducing the need for easements at residences and mitigating the construction impacts will be investigated.

Trees within the proposed limits of the I-270 construction will be removed as necessary.

Where noise barriers are not warranted, visual screens will be provided where requested and appropriate including privacy fencing and/or landscaping.

Construction at any specific location along the project will be completed within 2 to 3 years.

Comment E2: Every effort should be made to minimize impacts to stream valleys during construction.

Raised by: 13, 35

Response: During the construction phase of the project, special care will be taken to reduce to a minimum the erosion and sedimentation resulting from construction. Methods such as prompt reseeding and revegetation, sedimentation basins, riprap, gabions and silt fences will be used to reduce the effects on the streams. The methods of sediment control used by the Maryland State Highway Administration have been approved by DNR. In addition, the specific methods of erosion and sediment control to be utilized on this project will be subject to the review and approval of DNR.

Stormwater management facilities will be provided to maintain the discharge from the I-270 right of way at preconstruction levels in accordance with the latest approved procedures. These facilities will also help to settle out

some of the pollutants from the roadway such as heavy metals and trash. The stormwater runoff will be managed under the Maryland Department of Natural Resources new storm water management practices in the following order of preference:

- on-site infiltration
- flow attenuation by open vegetated swales and natural depressions
- storm water retention structures
- storm water detention structures

It has been demonstrated that these measures can significantly reduce pollutant load and control runoff.

Comment E3: Consideration must be given to construction impacts on properties adjacent to I-270 especially safety hazards to children, visual impacts and the lowering of property values.

Raised by: 14, 15, 66, 107, 122, 123, 127, 128, 142, 289

Response: During both the construction and operational phases of the project, safety to the traveling public and the residents adjacent to the right of way will be a prime concern.

During construction, safety fences and barriers will be installed along the right of way to ensure the safety of residents. Where possible, noise barriers or visual screens will be installed early in the construction phase to minimize the visual and noise impacts on residents.

In areas in fills along residential areas, high strength barriers will be constructed to minimize the possibility of vehicles penetrating the barriers and encroaching on residential properties.

Comment E4: Consideration should be given to the idea of building a temporary fence to separate the residences visually and physically from the construction.

Raised by: 15

Response: During both the construction and operational phases of the project, safety to the traveling public and the residents adjacent to the right of way will be a prime concern.

During construction, safety fences and barriers will be installed along the right of way to ensure the safety of residents. Where possible, noise barriers or visual screens will be installed early in the construction phase to minimize the visual and noise impacts on residents.

In areas in fills along residential areas, high strength barriers will be constructed to minimize the possibility of vehicles penetraing the barriers and encroaching on residential properties.

Comment F1: Will the proposed improvements of Interstate Route 270 include visual enhancement including trees and landscaping?

Raised by: 5

Response: Meetings will be held with residents during the final design phase to discuss design options and landscaping treatments for the noise barriers. In areas where noise barriers are not warranted, but mitigation of visual and noise impacts is suggested, visual screenings through the use of trees, shrubs, or fences will be provided.

Comment F-2: The construction of high retaining walls at Brighton will result in a monstrous and unsightly, vertical barrier.

Raised by: 134

Response: The maximum height of retaining walls along Brighton in the area of the I-370 project could be as much as 30 feet in a fill condition. The State Highway Administration will coordinate with the adjacent property owners during the design of the wall. Landscaping will be used to mitigate the visual impacts of the wall.

In the area north of the swimming pool, the roadway is in a cut condition up to the northern limit of the buildings. The view from the buildings will be the same as exists today since no ground should be disturbed outside of the right of way and the wall will not be visible from outside the right of way.

At the northern end of the community, the retaining wall will vary in height from 3 to 6 feet high in a fill condition. Landscaping will be performed behind the wall to reduce the visual impacts on the residential area.

Comment G1: Will the funding of the proposed improvements to Interstate Route 270 detract from the funding of maintenance for existing roads?

Raised by: 6, 36

Response: Most of the cost of the proposed improvements to Interstate Route 270 is eligible for funding under the Federal Interstate Highway Program and will have no effect on the State's funding of planned roads. The project will not affect the maintenance schedule for existing roadways.

Comment G2: Will the funding of the proposed improvements to Interstate Route 270 detract from the funding of "promised" roads in the Germantown vicinity?

Raised by: 6, 36, 61

Response: Most of the cost of the proposed improvements to Interstate Route 270 is eligible for funding under the Federal Interstate Highway Program and will have no effect on the State's funding of planned roads. The state's portion of the construction cost of I-270 (10%) will compete with other projects for funding. The various state highway projects are funded according to their priority with respect to other projects.

Comment G3: Construction of the Collector-Distributor Alternate would utilize much of the existing roadways and ramps thereby resulting in cost savings.

Raised by: 11, 34

Response: No response required.

Comment G4: Is there an error in the costs when one compares the with retaining walls option vs. the without retaining walls option as displayed on Table 10 vs. Plates 16 through 19 in the Environmental Assessment?

Raised by: 19

Response: There is no error in the costs as displayed on Table 10, Page 38 and Plates 16-19. The costs indicated in Table 10, Page 38 are for the entire I-270 project. The costs indicated on Plates 16 through 19 are for the individual interchange areas only and not the entire project.

Comment G5: This study is being conducted in haste in order to meet a deadline necessary to qualify for Federal funding.

Raised by: 21, 23, 24, 84, 279, 282, 297

Response: The question has been raised as to why the State Highway Administration is proceeding on such a tight schedule for this project. Aside from the question of the apparent need for an improvement in this corridor to relieve existing congested conditions, there is a major problem concerning the funding outlook for the project. The projected cost for the I-270 improvement is well in excess of $100 million. Most of this project cost is eligible for funding under the Federal Interstate Highway Program. This program is scheduled to expire in 1990. Of equal concern is that the Federal Highway Administration is considering measures which could result in reducing the size of this program substantially as early as 1986 when the existing Surface Transportation Act expires. The Department's current FY 1984-1989 Program shows construction for the I-270 project beginning in 1989. On the basis of this information, it should be apparent that the funding for the project is by no means assured.

It should be noted that our schedule for reaching a decision on the design concept for the project does not end the process of consultation on the important detailed aspects of the design that ultimately determine the exact nature of effects on adjacent property owners. The final design phase for the project will occur through the latter part of 1984, all of 1985 and into 1986. During this time frame, the State Highway Administration will be available, as we always are, to meet with individuals or groups to address specific concerns about the design for the project and ways to mitigate the impacts on adjacent communities.

Comment G6: The cost of the proposed improvement is too high and is not affordable.

Raised by: 23, 55, 179, 185, 296

Response: The projected cost for the I-270 improvements is well in excess of $100 million. Ninety percent of this project cost is eligible for funding under the Federal Interstate Highway Program.

Comment G7: Federal Funding should be used to construct noise barriers now.

Raised by: 25

Response: There is little chance for funding the sound barriers separately from the improvement construction since the Federal government will not participate in the costs. State funds for retrofitting noise barriers along existing roadways are allocated by priority.

Comment G8: Part or all of the construction funds allocated to I-270 should be allocated to public transportation.

Raised by: 117, 257, 291, 295

Response: Metrorail will be completed to Shady Grove Station later this year and will serve many of the long commuter trips into Washington, D.C. and along the corridor. Even with the patronage figures assumed for Metro, there is still excess demand for I-270, therefore, Metro does not eliminate the need for improvements to I-270. (See H-1).

Comment G-9: Is the use of federal funds dependent upon selecting either the Collector-Distributor Alternate or the No-Build Alternate only?

Raised by: 218

Response: No. Federal funding is available for any alternate that best improves transportation in the corridor. Through the project planning process, including public meetings, hearings, meetings with citizens and civic associations and written comments, the Preferred Alternate was selected. This alternate was modified in response to comments from the public to include alignment shifts in three areas to reduce the impacts on residential communities. Other Alternates were considered; i.e. 8 lane widening, ramp metering and express lanes but these would not satisfy traffic capacity in the design year and were dropped from consideration.

Comment G10: As federal funds are being used, why are federal noise standards not being met?

Raised by: 218

Response: Federal Noise Abatement Criteria are being met wherever possible. Noise barriers will be constructed along I-270 at residential areas to bring projected noise levels below existing levels and the established criteria.

Comment G11: Construction of the Collector-Distributor Alternate will disrupt financial planning for Metro.

Raised by: 240

Response: The construction of I-270 will not affect the funding for the Metro or the viability of Metro for attracting passengers. (See H-1).

Comment H1: The proposed C-D Alternate will undermine mass transit due to its provision of increased freeway capacity.

Raised by: 9, 16, 23, 33, 38, 39, 40, 44, 45, 50, 55, 57. 60, 101, 108, 120, 124, 127, 135, 137, 139, 147, 149, 150, 152, 165, 167, 168, 170, 171, 175, 185, 186, 193, 195, 207, 209, 216, 217, 221, 234, 238, 239, 242, 243, 244, 254, 257, 274, 284, 286, 287, 288, 291, 292, 295, 296, 299, 300, 301, 302, 307

Response: The improvements to I-270 are compatible with the Metro and do not compete with the facility for patronage. The patronage estimates for Metro were included in the traffic predictions and still result in a demand far beyond the capacity of the existing roadway. I-270 will serve the short distance traveler, those destined to areas not served by Metro and the long distance travelers passing through the region. There is a large percentage of trips on I-270 originating and destined to sites within the corridor which would not be served by Metro. Those destined to sites around the Capital Beltway and Virginia would also not be served by Metro.

The improvements to I-270 will also complement Metro by enhancing the ability of buses and other high occupancy vehicles to reach the Shady Grove Metro Station.

Comment H2: The proposed improvement is complimentary to the Metrorail system in that it will enhance the ability of buses and other high occupancy vehicles to reach the Shady Grove Metro Station.

Raised by: 13, 35, 198

Response: No response required.

Comment H3: Expressed support for construction of a monorail or light rail system in the median of I-270 rather than widening Interstate Route 270.

Raised by: 52, 185, 228, 229

Response: A mass transit facility is already planned and being constructed in the I-270 corridor (METRO). A second mass transit line would not prove cost effective or practical. As was stated in the Environmental Assessment, the long-haul traveler will use the Metro and the short trip traveler will use I-270. The planned development in the I-270 corridor creates the need for more capacity on I-270 to handle these short trips.

Comment H4: Unless I-270 is improved, it will be impossible to get to the Shady Grove Metro Station from Germantown.

Raised by: 85

Response: No response required.

Comment H5: Extend Metrorail from the Shady Grove Metro Station to Germantown up the I-270 right of way.

Raised by: 139

Response: The existing commuter rail between Brunswick and Union Station with a stop in Germantown will satisfy mass transit needs between Germantown and interior points for the present and many years to come. Transfer points between this commuter railline and Metro are currently under study.

Comment H6: Conduct a vigorous campaign to convince employers along the I-270 corridor to stagger their working hours.

Raised by: 185

Response: The State Highway Administration supports and encourages any reasonable method to reduce traffic congestion. While the Highway Administration believes staggered work hours may be reasonable, it can not regulate the work hours of the employers along the I-270 corridor.

As part of Montgomery County Department of Transportation's, forthcoming campaign to facilitate use of the Red Line of Metrorail, the Montgomery County Ridesharing Unit of Montgomery County's Department of Transportation intends to promote ridesharing and flextime to the employers in the corridor. The intent of this campaign is to ease the traffic congestion on the roads leading to the Red Line Metro Stations; thereby, facilitating the use of these stations.

Comment I-1: Concern was expressed regarding impacts to Summit Hall Park, during and after construction of the improvement to I-270.

Raised by: 20

Response: Improvements to I-270 will not encroach onto Summit Hall Park. The construction improvement proposed in the areas of Summit Hall Park are part of the I-370 project which is in final design. Coordination with the City of Gaithersburg has been maintained and the requests of the City were taken into consideration in mitigating the impacts on the park.

Comment I-2: Suggested that parkland be acquired and slopes constructed at the City's Metropolitan Grove Park rather than construction of retaining walls, as the trail referenced in the Environmental Assessment is actually a water line and the proposed lake is no longer under consideration.

Raised by: 61

Response: Slopes will be used at the park instead of a retaining wall. This has been coordinated with and is acceptable to the City of Gaithersburg.

Comment I-3: How much parkland is taken? Environmental Assessment does not indicate.

Raised by: 95

Response: The park encroachments are included in the Environmental Assessment on page 84, Table 17. Agencies with jurisdiction over the various parks have requested that where grading is required, temporary construction easements be used instead of retaining walls. These areas will become landscaped slopes and revert back to the parks at the completion of construction, after appropriate landscaping has been done. Landscaping treatments will be coordinated during detailed design with the appropriate park owner.

The only fee acquisition will be from Wootten Mill Road where reconstruction of Ramps C and D will require 0.2 acres.

Comment I-4: What consideration was given to the Little Seneca Regional Park:

Raised by: 140

Response: There will be no acquisition of Little Seneca Regional Park since the proposed improvements in this area consist of adding one travel lane in each direction in the median. Noise levels in the area are at

70 dBA and will increase to 78 dBA in the design year under the No-Build condition. The Build alternate would increase levels by 1 dBA (79 dBA in the design year) over the No-Build, an imperceptible difference. Since no sensitive uses are existing or planned adjacent to I-270, a noise barrier is not being proposed. There would be no other impacts to the park.

Comment I-5: Rockmead Park will be significantly encroached upon.

Raised by: 219

Response: The alignment of the proposed alternate will be shifted approximately 30 feet to the east in the area of Rockmead Park which will increase the distance between the roadway and the park. In addition, retaining walls and noise barriers will be extended along the park properties, therefore there will be no encroachment on Rockmead Park.

Comment I-6: Construction of the Collector-Distributor Alternate will require acquisition of land from that portion of Cabin John Regional Park on the east side of I-270.

Raised by: 257

Response: Temporary construction easements will be granted for the construction of the slopes within the park area in accordance with decisions reached with the Montgomery County Planning Board of the Maryland-National Park and Planning Commission. No park property will be acquired.

Comment J1: The proposed improvement must give high consideration to safety.

Raised by: 5

Response: During both the construction and operational phases of the project, safety to the traveling public and the residents adjacent to the right of way will be a prime concern.

During construction, safety fences and barriers will be installed along the right of way to ensure the safety of residents. Where possible, noise barriers or visual screens will be installed early in the construction phase to minimize the visual and noise impacts on residents.

In areas in fills along residential areas, high strength barriers will be constructed to minimize the possibility of vehicles penetrating the barriers and encroaching on residential properties.

Comment J2: The weave from the west leg of the "Y" northbound to the exit to the C-D road to access Montrose Road must be accomplished against three lanes of traffic in less than one mile at the same time traffic on the east leg of the "Y" will be weaving left to get into the mainline through lanes. This will be hazardous and will promote congestion. The weaves, merges and diverges at the other entrance and exit points to the C-D roads will also be hazardous.

Raised by: 9, 16, 25, 33, 38, 39, 46, 56, 60, 108, 112, 113, 115, 118, 125, 145, 147, 154, 158, 165, 166, 167, 169, 175, 176, 179, 182, 183, 207, 211, 213, 215, 216, 217, 234, 238, 239, 256, 260, 287, 299, 300, 305

Response: The traffic analyses using the design year traffic shows that this weaving maneuver will operate at an acceptable Level of Service in the design year.

Comment J3: Concern was expressed that sufficient distance existed between the improved roadway and adjacent properties to allow construction of safety devices which would prevent an errant vehicle from entering these properties.

Raised by: 10 , 15, 49, 123, 124, 127, 128, 142, 162, 196, 258, 273, 287

Response: During both the construction and operational phases of the project, safety to the traveling public and the residents adjacent to the right of way will be a prime concern.

During construction, safety fences and barriers will be installed along the right of way to ensure the safety of residents. Where possible, noise barriers or visual screens will be installed early in the construction phase to minimize the visual and noise impacts on residents.

In areas in fills along residential areas, high strength barriers will be constructed to minimize the possibility of vehicles penetrating the barriers and encroaching on residential properties.

In addition, several alignment modifications have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west.

Comment J4: The Collector-Distributor Alternate will improve traffic safety by separating through county travel from local.

Raised by: 11, 34

Response: No response required.

Comment J5: Widening I-270 will increase auto speeds.

Raised by: 109

Response: During the peak travel periods on I-270, speeds are low due to the congestion. However, during off-peak periods, the travel speeds are at the posted limits.

After the improvements are constructed, the travel speeds during the peak hours will increase due to the reduced congestion caused by increasing the capacity. The congestion related accidents such as rear-ends and sideswipes will decrease with the provision of the improvements. During off peak periods, the speeds will be at the posted limits. The posted speed limit will not change.

Comment J6: The merge and weave of northbound to westbound and eastbound to northbound traffic is hazardous at the MD 118/I-270 interchange. This problem is complicated by the termination of the third lane at this location.

Raised by: 143

Response: Under the proposed improvements, the third lane will continue to Md. 121, thereby eliminating this lane drop at Md. 118.

Comment K1: The environment must be protected during and after the construction of an improved I-270.

Raised by: 1, 5, 23, 37, 51, 69, 91, 101, 139, 166, 167, 168, 221, 240

Response: The environmental effects of the project were documented in the Environmental Assessment. Noise impacts created the most concern of the citizens. Noise barriers are proposed along all subdivisions along the right of way. These barriers will reduce the noise levels predicted for the design year to below those levels experienced today. Also, additional noise studies will be performed to determine nighttime noise levels.

The effects of the project on the natural environment, historic and archeological sites will be insignificant, mainly due to the fact that the project is basically widening within the existing right of way.

During the construction phase of the project, special care will be taken to reduce to a minimum the erosion and sedimentation resulting from construction. Methods such as prompt reseeding and revegetation, sedimentation basins, riprap, gabions and silt fences will be used to reduce the effects on the streams. The methods of sediment control used by the Maryland State Highway Administration have been approved by DNR. In addition, the specific methods of erosion and sediment control to be utilized on this project will be subject to the review and approval of DNR.

There are no violations of the National Ambient Air Quality Standards predicted through the design year. All carbon monoxide concentrations anticipated are well within acceptable levels.

Comment K2: **The adaptability of the Collector-Distributor Alternate to staged construction will mitigate impacts to the environment. Several expressed an opinion that the Collector-Distributor Alternate would have negligible effects on water quality and would result in no significant loss of terrestrial habit.**

Raised by: **11 , 34**

Response: **No response required.**

Comment K3: The Collector-Distributor Alternate would have neglible effect on water quality and would result in no significant loss of terrestrial habitat.

Raised by: 11, 34

Response: No response required.

Comment K4: The Collector-Distributor Alternate will change the character of a large segment of lower Montgomery County.

Raised by: 44

Response: The I-270 project is proposed as a means of increasing the capacity of the highway to meet the traffic demand projected by the proposed and existing development in Montgomery County. Since it is a widening project, the need for right of way acquisition and relocations are minimal. The character of lower Montgomery County will not change as a result of this project. Development occurring in this area is controlled by the master planning and development goals of the local jurisdictions.

Comment K5: Expressed concern about the impact to trees and questioned plans for their protection and replacement.

Raised by: 66

Response: Revegetation and landscaping will be part of the construction of this project. The removal of trees will be kept to a minimum and all regulations concerning replacement of trees will be complied with.

There has been close coordination with the agencies having jurisdiction over the affected parkland. The affected areas of parkland will be revegetated and landscaped to the satisfaction of each agency.

Several alignment modifications have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

1. South of Montrose - Shifted 24' to the west
2. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
3. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west.

These alignment shifts will help to reduce the amount of trees and other vegetation that must be removed from the areas of adjacent residents that now serve as a visual barrier. Some trees might have to be removed to allow the construction of the noise barriers.

Comment K6: Widening I-270 will cause slaughter of animals by traffic.

Raised by: 109

Response: The entire right of way of I-270 will be enclosed by a chain link fence as presently provided, thereby reducing to a minimum the opportunity for animals to enter the roadway under the existing and the proposed conditions.

Comment K7: Ten Mile Creek is identified as an extraordinary natural resource in the Environmental Assessment, yet no special attention is given to its protection.

Raised by: 287

Response: Ten Mile Creek does not cross I-270 and will not be affected by the construction of the improvements to I-270. Storm water management facilities and erosion and sediment methods will be implemented to reduce the effects of the project on water quality to a minimum.

Comments K8: What will be the effect to underground streams?

Raised by: 296

Response: Since this project is a widening of an existing highway, there will be a minimum of excavation to provide the improvements. No underground streams will be affected.

Comment L1: A full range of alternates was not and/or must be considered; e.g., 8 lanes, 10 lanes, interchange improvements only, mass transit, reversible lanes, etc.

Raised by: 1, 9, 10, 14, 15, 16, 33, 38, 39, 40, 43, 45, 46, 48, 50, 60, 67, 79, 86, 95, 103, 105, 106, 107, 112, 113, 115, 122, 124, 125, 127, 128, 129, 132, 137, 141, 142, 144, 146, 147, 154, 157, 158, 164, 169, 175, 184, 185, 186, 189, 190, 194, 196, 197, 202, 204, 207, 208, 211, 213, 214, 216, 217, 220, 221, 222, 231, 232, 234, 235, 238, 239, 241, 242, 243, 244, 245, 247, 255, 258, 261, 263, 275, 276, 277, 280, 281, 282, 283, 284, 286, 287, 289, 291, 292, 295, 307

Response: The directional distribution of the traffic during peak hours is fairly even in the south end of the project (55%, 45%). This distribution becomes less balanced as you proceed north. For example, the distribution is 76%, 24% between MD 124 and MD 118. However, as development increases in the corridor, and some long trips are diverted to Metro, this distribution will become even more balanced throughout the corridor. Therefore, since the volumes will be fairly equally distributed throughout the corridor in design year, the viability of reversing lanes for use in the peak direction becomes less. As described in the Environmental Assessment, the most feasible configuration for the HOV lane alternate was 3-2-2-3 whereby 2 lanes in each direction were added rather than a reversible 2 lane roadway.

The interchange improvements proposed will increase capacity and reduce congestion at the interchanges and on the local roads. Signalized at-grade intersections on the crossroads will be eliminated at Montrose Road and MD 28, thereby reducing congestion and increasing capacity. The provision of the missing movements at these locations will also reduce the congestion and backups on the existing ramps by diverting traffic to the proposed ramps.

The provision of an additional lane in each direction from the Y-split to MD 121 was investigated. This would create an 8-lane roadway from the Y split to MD 118 and a 6-lane roadway from MD 118 to MD 121.

The existing ramps were designed for 25 m.p.h. in the 1950's with short acceleration lanes and weaving sections. It was found that, in order to provide an acceptable connection to the main roadway with today's design criteria, the ramps would have to be expanded to 30 mtp.h. design and the weaving sections would have to be lengthened. These improvements would create the need for extensive right-of-way acquisition and relocations.

The bridges carrying the crossroads over I-270 were all designed to accommodate four lanes in each direction. Therefore, the widening to 8 lanes would require reconstruction of all bridges since the interchanges would require 4 lanes in each direction plus a weaving lane.

It was found that the most acceptable solution for the interchanges under the 8-lane widening alternate was to provide collector-distributor (c-d) roads through the interchanges. In this way, the existing 25 m.p.h. design ramps could be utilized because they connect to a lower design speed road (c-d). Also, by constructing the c-d roads behind the existing piers, the main spans of the bridges could be salvaged.

The number of conflict points with mainline traffic will be reduced through the use of the Collector-Distributor roads by removing the weaving, diverging, and merging to and from the ramps from the main roadways.

Due to the proximity of the interchanges at Montrose Road, Falls Road, and MD 28, auxiliary lanes would be needed between the interchanges in both directions for weaving, acceleration and deceleration, creating a 10-lane roadway section between these interchanges. In a number of instances, the space between the end of the c-d road in one interchange and the beginning of the c-d road in the next interchange was shorter than should be designed for along the mainline at an Interstate highway. This proximity of the interchanges and the need for auxiliary lanes between the interchanges led to the development of the Preferred Alternate, the Continuous-Collector Distributor Road Alternate.

Comment L2: The Environmental Assessment is deficient legally and technically. An Environmental Impact Statement should be prepared.

Raised by: 2, 9, 10, 19, 24, 30, 33, 38, 39, 48, 53, 60, 66, 70, 84, 86, 95, 110, 112, 113, 121, 122, 123, 124, 125, 129, 142, 144, 154, 157, 171, 175, 176, 178, 197, 207, 210, 217, 219, 234, 235, 238, 239, 241, 244, 247, 253, 256, 267, 268, 269, 270, 271, 272, 273, 278, 280, 283, 284, 287, 289, 292, 293, 294, 296, 299, 304

Response: The Environmental Assessment was prepared in accordance with the U.S. DOT Order 5610.1C All analyses were completed in accordance with the latest state-of-the-art and accepted methodology. The same analysis that would have been completed for an Environmental Impact Statement were completed for the Environmental Assessment.

Comment L3: The project has been segmented and an Environmental Impact Statement should be prepared assessing the cumulative effect of the highway projects in the Interstate Route 270 corridor; e.g., Maryland Route 189/Interstate Route 270 interchange, Interstate Route 270 itself, Interstate Route 370/Interstate Route 270 interchange, Maryland Routes 124/117 Interstate Route 270 interchange, etc.

Raised by: 2, 19, 24, 30, 129, 190

Response: All of the projects mentioned have been the subject of specific environmental documents. All have independent utility and are required with or without the improvements to I-270.

Comment L4: The Environmental Assessment ignores impacts on mass transit usage and energy consumption.

Raised by: 9, 33, 190, 234

Response: The improvements to I-270 are compatible with the Metro and do not compete with the facility for patronage. The patronage estimates for Metro were included in the traffic predictions and still result in a demand far beyond the capacity of the existing roadway. I-270 will serve the short distance traveler, those destined to areas not served by Metro and the long distance travelers passing through the region. There is a large percentage of trips on I-270 originating and destined to sites within the corridor which would not be served by Metro. Those destined to sites around the Capital Beltway and Virginia would also not be served by Metro.

The improvements to I-270 will also complement Metro by enhancing the ability of buses and other high occupancy vehicles to reach the Shady Grove Metro Station.

Comment L5: The Study ignores environmental impacts caused by the I-270 project in areas outside the study area such as impact of widening the two Interstate Route 270 spurs, the Capital Beltway, the Cabin John Bridge and other roads which would experience increased traffic as the result of an improved Interstate Route 270 delivering or attracting additional traffic to these facilities.

Raised by: 9, 16, 33, 38, 76, 84, 167, 190, 216, 217, 234, 235, 239, 289, 300

Response: Separate studies are under way for the I-270 spurs and the Capital Beltway. The potential environmental impacts of the projects will be discussed in specific environmental documents. The improvements to the Cabin John Bridge were discussed in a 4(f) document which was approved in March, 1984.

Comment L6: The closing date for comments should be extended in order to allow for further examination of study material and to allow for meaningful input into the study decision.

Raised by: 1, 10, 16, 19, 21, 23, 24, 33, 37, 38, 79, 81, 91, 112, 123, 130, 137, 145, 159, 184, 202, 218, 234, 235, 248, 280, 287, 289

Response: The Hearing Record deadline was extended from March 2 to March 9 to accommodate those that would like to submit written comments. In addition, the project record is kept open for the duration of the project and comments are received and addressed at any time.

Comment L7: Did not recall having seen the Collector-Distributor Alternate with two-lane collector-distributor roads on each side of the mainline during a meeting with the State Highway Administration in June, 1983.

Raised by: 10

Response: The Continuous Collector Distributor Road alternate was described at all the civic association meetings held in the Spring of 1983 and at the Alternates Meeting held in June, 1983.

Comment L8: There was inadequate public notice of project and no previous meetings of citizen association with SHA.

Raised by: 16, 19, 21, 38, 124, 127, 137, 189, 204, 220, 234, 235, 254, 280, 286, 287, 289, 292

Response: Recognizing the importance of this project to Montgomery County and the potential impacts to those living along the highway, the State Highway Administration has taken extraordinary measures to establish good communication with those living and working in the area. In fact, last year a list of 23 civic associations was established based upon our understanding of those groups which would be most directly affected by the project. These civic associations were all contacted to determine if they were interested in meeting with us to discuss the nature of the project and its potential effects on their area. Unfortunately, two civic associations were overlooked. As a result of this effort, ten meetings were held with various civic groups. In addition, several meetings were held with the business groups in the area who were also affected by conditions in the I-270 corridor.

On June 11, 1983, an all-day public workshop was held at Julius West Middle School to review the alternatives. This workshop was purposely held on a Saturday from 10:00 in the morning until 4:00 in the afternoon to afford a maximum opportunity for people in the area to have access to information about the project. Notice for this open house workshop was sent to our mailing list of approximately 1,300. (By now this list has grown to nearly 2,500.)

In a further effort to ensure maximum public awareness of the project, the State Highway Administration, for the first time in Maryland, and possibly for the first time anywhere, utilized a Highway Advisory Radio System for the purpose of informing the public about a proposed major improvement and letting people know how they might offer comments. This radio system was installed in December, 1983 at the Shady Grove Road Interchange along I-270, and broadcasts with an effective radius of about five miles in each direction on the frequency 530 for AM radio.

The February 15th public hearing was announced in newspapers, in notices to our mailing list, and in the message broadcast on Highway Advisory Radio.

The Public Meeting was advertised in the following news media:

Montgomery Sentinel
Montgomery Journal
Suburban Record
D.C. Afro American

All area radio stations were furnished with a copy of ads for their use in notifying their listeners.

Comment L9: It was requested that the hearing be invalidated and rescheduled after procedural requirements have been met.

Raised by: 19

Response: All procedures established for the processing of environmental documents, public involvement and engineering developed by the Federal Highway Administration and the Maryland State Highway Administration were followed in this project. Special efforts were made to acquaint the public with the proposed improvement alternates. (See Response to Comment L8).

Comment L10: Study documents were not made available for public inspection.

Raised by: 19, 81, 124, 234, 235, 287

Response: The Environmental Assessment was put on public display 30 days before the Public Hearing according to Federal regulations. The technical reports prepared are available for inspection at the Maryland State Highway Administration. The Environmental Assessment was on display at the following locations:

- State Highway Administration
  District 3 Office
- Rockville City Hall
- Gaithersburg City Hall
- Gaithersburg Regional Public Library
- Montgomery County Department of Public Works
- State Highway Administration Library-Baltimore

Comment L11: Major assumptions concerning road and land use are not specified.

Raised by: 19, 287

Response: Two networks of traffic projections were developed for use in the traffic analysis for I-270, one assuming no ICC and one assuming ICC. The differences in traffic volumes on I-270 varied from 0.5% to 2%. The Rockville Facility was not assumed in the networks. The projections used do not include the new development zone approved by the County Council. Round 2 of the employment and population forecasts prepared by COG were used.

Comment L12: Retaining walls were selected rather than grading, which may be more cost effective, so as to qualify this project under the limited assessment procedure.

Raised by: 19

Response: Retaining walls will be provided wherever grading would encroach on residential properties along I-270. This decision was made to reduce the impacts on residential properties to a minimum. In addition, several alignment modifications have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

a. South of Montrose - Shifted 24' to the west
b. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
c. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west.

Comment L13: An alternate with a 3-3-3-3 configuration was suggested.

Raised by: 25, 188

Response: The traffic utilizing the C-D roads is anticipated to be only that traffic gaining access to the interchanges on the main roadways.

The C-D roads are not designed as additional capacity for through traffic. The traffic analysis for the Continuous C-D Road Alternate showed that the slip ramps would operate at an acceptable level of service. If through traffic were assigned to the C-D roads, more traffic would utilize the slip ramps thereby increasing the congestion at these points and reducing the effectiveness of the C-D road as a means of increasing the efficiency of the main roadways.

Comment L14: It was suggested that a configuration similar to the New Jersey Turnpike be studied. Ramps would be provided from the interchanges to both the C-D roads and the main roadway.

Raised by: 27

Response: The provision of separate ramps to serve the C-D roads would require significantly more right of way and higher construction costs. See response to Comment L13 above.

145

Comment L15: Requested information updates and timely announcements of future public meetings. Would like additional information regarding a timetable and costs/revenue.

Raised by: 58

Response: Those citizens, civic associations and elected officials on the mailing list will be informed of the latest status of the project as it progresses. Meetings will be held during the final design phase with groups of residents affected by the project for their input regarding noise barriers, retaining walls and landscaping treatments.

Comment L16: Data regarding the impact of the Collector-Distributor Alternate upon the proposed MD 189 interchange was vague or unavailable at the Public Hearing.

Raised by: 88

Response: The Md. 189 interchange will be designed to be compatible with the Selected Alternate for I-270. Access to and from Md. 189 will be the same as under the original Md. 189 project except the ramps will connect to the c-d roads rather than the main roadways. The traffic volumes for the design year 2010 will be the same under either alternate.

Comment L17: Air pollution analysis was inadequate. Studies should be done during peak hours on smog days and take into account odor.

Raised by: 121, 123, 141

Response: The air quality analysis was performed to compare the carbon monoxide (CO) concentrations at sensitive receptors between the No Build and the Build Alternates and to assess the impact of the project with respect to the National Ambient Air Quality Standards. Peak hours of travel were analyzed. Whether smog was present or not has no effect on the concentrations of CO predicted. Projected CO levels will be well below the established standards. The technical analysis was reviewed by the Environmental Protection Agency and the Maryland Air Management Administration

There are no standards against which odor can be evaluated and, therefore, no analysis was reviewed by the Enfironmental Protection Agency and the Maryland Air Management Administration.

Comment L18: No study was done on the effectiveness of the proposed noise barriers.

Raised by: 125, 219

Response: The noise analysis studied the effectiveness of the noise barriers and established a preliminary height, length and location for all barriers. The amount of attenuation (decrease in number of decibels) is shown in the Environmental Assessment, Table 13, pp. 63-64.

Comment L19: Segmentation of the Md. 189/I-270 interchange from the I-270 study is illustrated by the rejection of a collector-distributor alternate for the Md. 189/I-270 interchange (page 4 of that project's Environmental Assessment). This concept was later adopted by the I-270 study.

Raised by: 129

Response: The Maryland 189/Interstate 270 interchange was designed to provide improved access to the Central Business District of Rockville. It could function adequately with no improvements made to I-270.

Comment L20: The Environmental Assessment is lacking in analysis, uses vague, subjective terms, contains no purpose statement, and contains no estimate of economic impact.

Raised by: 45, 64, 235, 187

Response: The Environmental Assessment was completed in accordance with the latest state-of-the-art and accepted methodology. Technical analyses were completed for the various potential impacts and were summarized and presented objectively in the Environmental Assessment. Identical analysis would have been completed if an Environmental Impact Statement would have been completed. The Environmental Assessment was prepared in accordance with Federal Highway Administration regulations which are in accordance with U.S. Department of Transportation Order 5610.1C.

Comment L21: Engineering quality was sacrificed to minimize impacts, scale, and costs.

Raised by: 235

Response: The project was designed in accordance with AASHTO and Maryland State Highway Administration standards and therefore provides a facility acceptable to both national and state standards for highway design. As part of the studies, the impacts of the project were analyzed and means of mitigating these impacts without sacrificing design standards were studied. Such mitigation measures such as noise barriers, retaining walls, visual screens, stream relocations and alignment shifts were incorporated into the design of the improvements without reducing the design standards.

Comment L22: The description of alternates in the Environmental Assessment is characterized by a lack of analysis and documentation. Disadvantages cited for rejected alternates are ignored in discussion of the Collector-Distributor Alternate; similarly advantages cited for the C-D Alternate are not cited for the rejected alternate.

Raised by: 287

Response: All Alternates considered and studied were adequately analyzed and documented in the Environmental Assessment. The advantages and disadvantages were presented objectively and applied to each alternate as appropriate.

Comment L23: The eight lane widening alternate was rejected solely because it failed to satisfy SHA traffic projections, which were inflated, and because it was not considered in conjunction with interchange improvements. One of the disadvantages given for this alternate was the need to construct new bridges over I-270 wherever it was necessary to accomodate acceleration, deceleration, and merge lanes at the inner loops of interchanges. Could not it have been possible to propose constructing these lanes behind the piers, as in the C-D Alternate, and thus save the bridges?

Raised by: 287

Response: The provision of an additional lane in each direction from the Y-split to MD 121 was investigated. This would create an 8-lane roadway from the Y-split to MD 118 and a 6-lane roadway from MD 118 to MD 121.

The existing ramps were designed for 25 m.p.h. in the 1950's with short acceleration lanes and weaving sections. It was found that, in order to provide an acceptable connection to the main roadway with today's design criteria, the ramps would have to be expanded to 30 m.p.h. design and the weaving sections would have to be lengthened. These improvements would create the need for extensive right-of-way acquisition and relocations.

The bridges carrying the crossroads over I-270 were all designed to accommodate four lanes in each direction. Therefore, the widening to 8 lanes would require reconstruction of all bridges since the interchanges would require 4 lanes in each direction plus a weaving lane.

It was found that the most acceptable solution for the interchanges under the 8-lane widening alternate was to provide collector-distributor (c-d) roads through the interchanges. In this way, the existing 25 m.p.h. design ramps could be utilized because they connect to a lower design speed road (c-d). Also, by constructing the c-d roads behind the existing piers, the main spans of the bridges could be salvaged.

The number of conflict points with mainline traffic will be reduced through the use of the Collector-Distributor roads by removing the weaving, diverging, and merging to and from the ramps from the main roadways.

Due to the proximity of the interchanges at Montrose Road, Falls Road, and MD 28, auxiliary lanes would be needed between the interchanges in both directions for weaving, acceleration and deceleration, creating a 10-lane roadway section between these interchanges. In a number of instances, the space between the end of the c-d road in one interchange and the beginning of the c-d road in the next interchange was shorter than should be designed for along the mainline at an Interstate highway. This proximity of the interchanges and the need for auxiliary lanes between the interchanges led to the development of the Preferred Alternate, the Continuous-Collector Distributor Road Alternate.

Comment L24: The Environmental Assessment fails to demonstrate a lack of commonality of origins and destinations.

Raised by: 287

Response: The origin destination matrix developed for the HOV studies clearly indicate the lack of commonality of origins and destinations. This matrix is available for review at the Maryland State Highway Administration but was not included in the document.

Comment L25: A disadvantage of the HOV Express Lane Alternate was the weaving and merging at Express Lane access points. This disadvantage was not cited for the C-D Alternate.

Raised by: 287

Response: The weaving for the HOV Alternate would involve weaving across the through lanes of traffic to gain access to the HOV lanes. In the case of the Continuous C-D Alternate, the weaving would take place in the right lanes and not affect all through travel lanes.

Comment L26: The increased capacity which the Collector-Distributor Alternate will provide appears to be its sole advantage and reason why it was selected.

Raised by: 287

Response: As described in the Environmental Assessment, the advantage of the Continuous Collector-Distributor Alternate are as follows:

1. Separates the through travel from the existing and entering traffic at the interchanges. Most weaving, merge, and diverge maneuvers are removed from the through traffic, thereby increasing the efficiency of the through travel lanes.

2. Increase the capacity of the mainline of I-270 to serve the traffic demand for the design year.

3. Can easily be adapted to staged construction.

4. The problem of maintaining traffic on I-270 during construction is reduced under this alternate relative to the 8-Lane or Express Lane Alternates.

5. All of the existing roadways can be utilized.

6. The existing ramps can be utilized due to the lower design speed of the c-d roads.

Comment L-27: The Environmental Assessment responds superficially on page 55 to questions 14, 15, 16, 21 and 22 on the Environmental Assessment Form.

Raised by: 287

Response: The discussion on page 55 of the Environmental Assessment was intended to be a generalized discussion of possible methods available for erosion and sedimentation control and the regulations that have to be satisfied. The details of erosion and sedimentation control are coordinated and approved by the Maryland Department of Natural Resources during the final design of I-270. The Department of Natural Resources has recently adopted new stormwater management regulations that include the following in order of preference:

1. On-site infiltration
2. Flow attenuation by open vegetated swales and natural depressions
3. Stormwater retention structures
4. Stormwater detention structures

It has been demonstrated that these measures can significantly reduce pollutant loads and control runoff.

Comment L-28: Question 32 inquires whether the project will "...result in a change in population density or distribution." The Environmental Assessment does not address the significant changes in population density or distribution that would occur in the aftermath of the Collector-Distributor Alternate's construction.

Raised by: 287

Response: The Collector-Distributor Alternate is a response to the planned population densities and distributions listed in the Corridor Master Plans. Therefore, no significant change in population density or distribution is expected to occur as a result of constructing the Collector-Distributor Road Alternate.

Comment L29: There is no discussion of whether construction of the Collector-Distributor Alternate will accelerate the preemption of farmland by commercial or residential development.

Raised by: 287

Response: As shown on Plate 3 in the Environmental Assessment, there is no farm or rural zoning classifications along the right of way of I-270 within the project limits. There are two locations along the right of way where farming is presently being pursued. Therefore, the pressure to develop these parcels already exists in the zoning classifications. The improvements to I-270 will have little effect on the conversion of these parcels.

Comment M1: Communities adjacent to the I-270 should be consulted during design of the noise barriers.

Raised by: 1

Response: Meetings will be held with the citizens affected by the barriers during the design phase to obtain their input as to type and locations of barriers to be constructed.

Comment M2: Some expressed a desire to participate in the planning and design of the improvements to I-270 and a need to see the study's data in order to provide meaningful input.

Raised by: 6, 10, 36

Response: The Environmental Assessment was put on public display 30 days prior to the Public Hearing in conformance with Federal regulations. In addition, all technical reports are available for review at the Maryland State Highway Administration. Throughout the planning and design phases of the project, comments and suggestions can be submitted for review and analysis. The State Highway Administration is willing to meet with any individuals or groups as the project proceeds through final design. Several meetings were held with civic groups along I-270 during project planning activities.

151

Comment N1: Alternatives should be explored to provide immediate relief to existing traffic congestion such as increasing the length of access ramps or the use of shoulders during rush hour as travel lanes or high occupancy vehicle lanes.

Raised by: 8, 32, 63

Response: Thought has been given to staging the improvements in order to relieve the worst existing conditions. During final design, the priorities of construction projects will be set.

Comment N2: The proposed construction of the Collector-Distributor Alternate should be expedited.

Raised by: 8, 17, 18, 32, 41

Response: The design schedule of the project allows for construction to begin in 1989. Everything possible is being done to expedite the design and construction of this project.

Comment N3: All highway improvements in the corridor should be compatible with each other so as to eliminate redesign and reconstruction.

Raised by: 8 , 32

Response: Coordination with all adjacent projects is being maintained to ensure compatibility including coordination with the local jurisdictions such as the Cities of Rockville and Gaithersburg and Montgomery County.

Comment N4: Alignment shifts away from existing residential development should be investigated.

Raised by: 10, 15, 77, 128, 142, 155, 196, 219, 262, 290

Response: Alignment shifts to increase the distance between the proposed roadways and adjacent residences will be adopted in three locations as described below:

1. South of Montrose - Shifted 24' to the west
2. Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
3. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west.

Comment N5: The Collector-Distributor Alternate can be adapted to staged construction.

Raised by: 11 ., 34

Response: No response required.

Comment N6: Provision should be made for the possible extention of the Collector-Distributor Roads north of Maryland Route 124.

Raised by: 13, 35, 59

Response: In the same manner as that used to add C-D roads to the I-270 roadway south of MD 124, they could be added in the future north of MD 124. The right of way is sufficient but the bridges over Seneca Creek and Middlebrook Road would have to be widened. The C-D roads would have to be built behind the existing piers at MD 118 and MD 124 as is being done at MD 28.

Comment N7: Middlebrook Road interchange was strongly endorsed and it was suggested that it might be constructed at an early stage in this project.

Raised by: 13 , 35, 143

Response: The various construction projects will be set by priorities based on need during the final design phase.

Comment N8: Ramp G of the Montrose Road interchange should be constructed as soon as possible.

Raised by: 22

Response: See response to comment N7 above.

Comment N9: Consideration should be given to using the center 2 lanes in each direction of the Collector-Distributor Alternate as HOV 3 lanes.

Raised by: 85

Response: See response to Comment C-11 which explains that there is not the demand for two lanes of HOV traffic. Therefore, to designate two out of four of the through lanes to HOV traffic would create severe congestion on the through lanes and c-d roads. The benefits to the few HOV travelers would not be justified by the costs of the improvements and the reduced capacity of the roadway.

Comment N10: The proposed flyover ramp at the Maryland Route 124 Interchange should connect directly to the southbound collector-distributor road.

Raised by: 85

Response: During the traffic analysis phase, this configuration was studied. It was found that beginning the southbound c-d at Md. 124 would create weaving problems and a need for 5 lanes on the c-d south of I-370 due to the heavy volumes interchanging at Md. 124 and I-370. It was found that the preferable solution is to put all Md. 124 traffic onto I-270 before beginning the southbound c-d road at I-370.

Comment N11: Flyover ramps should be constructed from the west leg of the Y-spur to the northbound collector-distributor road and from the southbound collector-distributor road to the east leg of the Y-spur.

Raised by: 85

Response: The weaving maneuvers between the west leg and the northbound c-d road and between the southbound c-d road and the east leg were analyzed for the design year traffic and found to operate at an acceptable level of service (Level of Service D). The provision of the flyovers mentioned would require substantial construction costs and right of way acquisition from the Cabin John Regional Park as well as the residential communities on the east side of I-270 south of Montrose Road. Since the weaves will operate satisfactorily, it was felt that these additional costs and impacts were not justified.

Comment N12: Install pavement reflectors on the improved I-270.

Raised by: 85

Response: The use of pavement reflectors will be decided during final design. This type of lane markings is generally used to define ramps or sharp curvature.

Comment N13: All ramps should be designed to a 30 m.p.h. minimum speed.

Raised by: 85

Response: Design standards require that ramps that connect to a 60 or 70 m.p.h. designed highway have a minimum design speed of 30 m.p.h. However, ramps that connect to a 50 m.p.h. design collector-distributor road can be designed with a minimum design speed of 25 m.p.h.

If the existing ramps were reconstructed to 30 m.p.h., there would be significant property acquisition and relocations required. By providing collector-distributor roads through the interchanges, the existing 25 m.p.h. designed ramps can be utilized.

Comment N14: Long entry and exit ramps should be provided.

Raised by: 93, 281

Response: The acceleration and deceleration lanes provided at the interchanges and slip ramps are well beyond the minimum lengths required by accepted design standards.

Comment N15: The outside shoulder of the mainline of the Collector-Distributor Alternate should be a minimum of ten feet wide.

Raised by: 100

Response: The outside shoulder of the main roadway is 12 feet wide to the face of the barrier separating the c-d from the main roadway.

Comment N16: The proposed improvement of I-270 should improve traffic flow with the least amount of cost and impact to the environment.

Raised by: 106

Response: The selected alternate is being designed to have minimal impacts to the environment. Where impacts cannot be avoided, appropriate mitigation measures will be developed.

Comment N17: The Collector-Distributor Alternate is unique and thus unproven in its ability to provide adequate traffic service and safety.

Raised by: 124, 235, 287

Response: Collector-distributor roads have been used for many years as a means of removing the interchanging movements from the main roadways. Continuous collector-distributor road systems have also been used in several locations for many years. The accepted traffic analysis procedures are well suited to analyzing these systems and therefore the levels of service predicted can be accepted as reliable.

Comment N18: The MD 121 interchange should be improved.

Raised by: 134

Response: The traffic analysis prepared for this project showed that no improvements would be required at Md. 121 through the design year.

Comment N19: Improve interchanges by making them directional.

Raised by: 138

Response: The traffic analysis showed that the improvements proposed for the interchanges analyzed would provide an acceptable level of traffic service through the design year. The significant additional costs and relocations created by directional interchanges were not justified. As shown by the plans in the Environmental Assessment, the traffic volumes at the I-370 and Md. 124 interchanges warrant directional ramps for some movements.

Comment N20: Construct an interchange at Gude Drive.

Raised by: 138, 191

Response: The proximity of the MD 28 and Shady Grove interchanges to the Gude Drive crossing eliminates the possibility of providing an interchange at Gude Drive. The weaving lengths between the acceleration and deceleration lanes between the interchanges would be unacceptable.

Comment N21: Construct I-270 so as to allow travel speeds of 70 m.p.h.

Raised by: 138

Response: The original highway was constructed using a 70 m.p.h. design speed which would allow a posted speed of approximately 60 m.p.h. Any improvements proposed for the main roadway will also be designed for 70 m.p.h. with respect to horizontal and vertical alignment and safety grading. However, the posted speed in accordance with Federal law will be 55 m.p.h. A 50 m.p.h. design speed will be used for the collector-distributor roads due to the restricted right of way and many ramp merges and diverges. The posted speed on the c-d roads will probably be about 40 m.p.h.

Comment N22: Use plant seal mix for pavement.

Raised by: 138

Response: Plant seal mix will be used for the pavement on I-270 to reduce the noise levels.

Comment N23: At closely spaced interchanges extend the acceleration and deceleration ramps so that they interconnect.

Raised by: 138

Response: The design criterion for connecting acceleration and deceleration lanes is 1500 to 2000 feet according to the latest design practices. This criterion was used in the design of I-270.

Comment N24: Interchange spacing should not be an overriding concern.

Raised by: 138

Response: The concern for spacing of interchanges is based on the number of conflict points and lengths of weaving sections created by the interchanges. These must be analyzed from a traffic operation and safety point of view before the introduction of an interchange can be approved.

Comment N25: Land which may be needed for future highway expansions should be bought now while it is still available.

Raised by: 155, 188

Response: The adopted alternate and other programmed transportation improvements in the I-270 corridor will satisfy requirements for transportation capacity in the I-270 corridor through the year 2010. Expenditure of transportation funds is programmed according to projected availability of funds and priority of the various transportation projects. To expend monies now on right of way acquisition would be to spend monies which are not available or require the deferral of other needed transportation projects.

Comment N26: Consideration should be given to allowing rush hour traffic to use the shoulders as travel lanes.

Raised by: 206

Response: The use of the shoulders as travel lanes during rush hours is implemented strictly as a remedial, temporary measure and is not a desirable long-term solution to congestion. Shoulders are designed as refuge areas and offsets from obstructions such as bridge piers and retaining walls. Eliminating this refuge area during the peak hours of travel increases the risk of accidents and eliminates the refuge for disabled vehicles.

Comment N27: The Collector-Distributor Alternate will require the entire width of the existing right of way. The shoulder will come right up to neighboring property lines, with no room for grading or buffers.

Raised by: 197, 280

Response: In the areas where the collector-distributor (c-d) road is 3 lanes wide, the outside edge of the c-d shoulder would be 125' from the centerline or at the right of way line where the roadway utilizes the existing centerline. However, several alignment modifications have been adopted in order to increase the distance between the proposed roadway and the existing residential development. The locations of these shifts are as follows:

1. South of Montrose - Shifted 24' to the west
2. Between Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
3. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

Wherever necessary, retaining walls will be used to avoid acquisition of residential property.

Comment N28: The MD 124 interchange should be improved immediately.

Raised by: 233

Response: Final design is being completed on the first stage of the MD 117/124 interchanges. Construction should begin in fiscal year 1985.

Comment N29: Present traffic systems should be upgraded to take some of the pressure off I-270; e.g., coordinate traffic signals on MD 355, upgrade MD Rtes. 185 and 97.

Raised by: 279

Response: There are many programmed improvements in the I-270 corridor other than the planned improvement to I-270. However, no substitute improvement to any roadway parallel to I-270 is feasible in order to support the proposed increases in land use and associated future desire in this corridor. Major planned projects that complement an I-270 improvement area:

-- I-370: providing access from I-270 to Metro and surrounding development.
-- MD 355: widening the two lane section through Gaithersburg
-- Great Seneca Highway: providing continuous local access west of I-270 between MD 28 and MD 118.
-- Metrorail Line: providing rapid rail transportation between the I-270 corridor and the Washington Metro core.

Major upgrading of MD 185 and MD 97, where feasible, would not address the need for transportation improvements in the I-270 corridor. These highways are east of Rock Creek and facilitate transportation in another corridor.

Comment 01: The study indicates that much of the congestion arises at interchanges and on local roads. The data suggests that improvement of the local roads and interchanges should be addressed and not I-270.

Raised by: 2, 7, 8, 9, 10, 16, 19, 20, 22, 30, 31, 32, 33, 38, 55, 60, 70, 79, 81, 105, 107, 108, 112, 122, 123, 124, 126, 127, 134, 137, 142, 149, 150, 160, 162, 197, 205, 206, 214, 219, 234, 247, 249, 251, 253, 255, 275, 279, 280, 287, 288, 289

Response: The interchange improvements proposed will increase capacity and reduce congestion at the interchanges and on the local roads. Signalized at-grade intersections on the crossroads will be eliminated at Montrose Road and MD 28, thereby reducing congestion and increasing capacity. The provision of the missing movements at these locations will also reduce the congestion and backups on the existing ramps by diverting traffic to the proposed ramps. However, the traffic demand for the design year indicates the need for increased capacity on the mainline as well as the interchanges.

The Maryland State Highway Administration will honor any commitments made in the Consolidated Transportation Plan to improve any state routes in the area including MD Rtes. 28 and 118 according to the priorities established by funding restrictions and need.

Comment P1: Much concern was expressed over the increased vibration caused by the construction improvements. An estimate of transmitted vibrations must be made for both the construction and operations phases.

Raised by: 20, 141, 142, 219, 253, 282, 297

Response: Vibration studies will be made during the final design phase of the project. Air transmitted vibrations will be reduced by the construction of the proposed noise barriers.

Comment Q1: It was expressed that the Collector-Distributor Alternate has minimal impact on adjacent properties.

Raised by: 3, 11, 14, 15, 16, 19, 20, 24, 28, 34, 36, 38, 39, 44, 49, 55, 60, 71, 75, 81, 89, 91, 108, 121, 122, 123, 124, 126, 127, 128, 134, 146, 153, 157, 160, 163, 177, 184, 185, 194, 196, 204, 214, 220, 238, 248, 251, 255, 256, 259, 261, 262, 263, 266, 276, 280, 283, 287, 291, 295

Response: No response required.

Comment Q2: Disatisfaction was expressed with the State Highway Administration's recommendation that no access be provided to Montrose Road for the commercial property located adjacent to Interstate Route 270, Montrose Road and Seven Locks Road.

Raised by: 12

Response: The criteria for access control along a ramp from an expressway established by the MD SHA are based on the need to avoid conflicts of vehicles entering the roadway from the ramp and vehicles entering from adjacent properties. These criteria are desighed to reduce the accident potential for these movements and allow the ramp traffic to enter the cross road traffic flow before any conflicts are introduced by other entering traffic. Beyond the limit of access control required by the State for the ramp, access control becomes a County responsibility.

Comment Q3: The relocation of Waring Station Road, as shown for the Preferred Alternate is inconsistent with the County's Master Plan. Therefore, the three houses shown as displaced at this location may not need to be acquired after all.

Raised by: 13, 35

Response: The relocation of Waring Station Road shown on the plans is a "worst case" condition and will be revised according to the County Master Plan at the time the development of the proposed realignment takes place. Coordination with MNCPPC on this issue will continue during the design phase.

Comment Q4: There is insufficient right-of-way to construct the Collector-Distributor Alternate and provide proper grading to protect adjacent residences. Instead, retaining walls are proposed as an expediency.

Raised by: 16, 38, 142

Response: Wherever the acquisition of residential property can be avoided through the use of retaining walls, the walls will be provided. In this way, relocation and impacts on residences will be minimized while providing for full design criteria.

In addition, alignment shifts to increase the distance between the proposed roadways and adjacent residences will be adopted in three locations as described below:

1. South of Montrose - Shifted 24' to the west
2. Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
3. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west.

Comment Q5: The proposed Collector-Distributor Road Alternate would extend almost to the edge of the right-of-way; leaving no room for screening or grading, trash would blow from the highway into yards, and run-off would also end up in yards.

Raised by: 19, 109, 243, 295

Response: See response to comment Q4 above.

No runoff will be diverted into the backyards of residences. All runoff from the project will be collected and carried to the nearest natural outfall. The right of way fence, noise barrier, or visual screens will prevent any trash from reaching the backyards of adjacent properties.

Comment Q6: It was recommended that abutting property owners be paid for damages.

Raised by: 25

Response: It is the policy of the State Highway Administration to compensate any property owner for any property acquisition or construction easements, and any damages resulting from these acquisitions.

Comment Q7: Concern was expressed about impact to the Baptist Church property south of MD 28. Officials wish to meet with SHA to resolve details.

Raised by: 26

Response: Meetings are being held with this property owner to discuss the impacts on the property and mitigation measures that could be used to reduce the effects.

Comment Q8: Why was the Deer Park Place (Brighton East) or Montrose Woods communities not shown on project mapping?

Raised by: 46, 77, 134

Response: The aerial photography prepared for use in these studies was prepared before the construction of these two subdivisions. However, the existence of these residences were taken into consideration in the environmental and engineering studies performed. The mapping used for final design will show these communities.

Comment Q9: Minimize impacts to homeowners, landowners, and business owners.

Raised by: 63

Response: The impacts on adjacent properties will be mitigated by such treatments as retaining walls, noise barriers and visual screene. In addition, alignment shifts to increase the distance between the proposed roadways and adjacent residences will be adopted in three locations as described below:

1. South of Montrose - Shifted 24' to the west
2. Falls Road and MD 28 - Shifted a maximum of 30 feet to the east
3. Between MD 28 and proposed Gude Drive - Shifted a maximum of 45 feet to the west

Comment Q10: It was questioned why the three families displaced at the proposed Middlebrook Road interchange were identified as minorities.

Raised by: 98

Response: According to the regulations governing the preparation of environmental documents, part of the socio-economic impact analysis is to determine the effects on minorities. Any minority neighborhoods must be identified and the project's effects on these neighborhoods. Also any relocations of minorities must be identified as well as the availability of decent, safe and sanitary housing for the families relocated. These provisions are to protect minorities from undue adverse effects.

Comment Q11: Will I-270 be widened where it passes the Windermere Swimming Pool?

Raised by: 119

Response: Under this project there will be no widening in the area of Windermere Swimming Pool. However, Project Planning studies are expected to begin shortly for capacity improvements to the two legs of the Y-split and I-495 from MD 355 to MD 190. The design of these segments will be adequate to handle the traffic predicted for I-270 through the design year.

Comment Q-12: Construction of the Collector-Distributor Alternate will lower the value of affected real estate holdings without a concommitant benefit to the public.

Raised by: 154, 159, 162, 173, 175, 193, 207, 215, 216, 219, 238, 239, 241, 244, 250, 264, 276, 279, 287, 302

Response: The construction of that alternate includes noise walls, privacy fencing and landscaping. Future noise levels will be less than what is being experienced today. This will allow individuals to use backyards without the high noise levels that are currently experienced. The privacy fencing and landscaping will provide a screen for homes that currently look directly on to I-270. The public will receive a benefit through the use of a safe and efficient transportation system.

It is the State Highway Administration's belief that adjacent property values will not be lower following the construction of the Collector-Distributor Alternate.

Comment Q-13: When will my property be acquired as it is one of those required to improve the MD 28 Interchange?

Raised by: 174

Response: Acquisition of property required for the proposed improvement is currently programmed to begin in fiscal 1989 (July 1, 1988). Acquisition of this property will be after this date.

Comment Q-14: The widening of I-270 should include the use of retaining walls in order to preserve the integrity of adjacent properties.

Raised by: 212

Response: Retaining walls will be utilized along the entire corridor to avoid right-of-way taking from the majority of residential areas.

Comment Q-15: Will construction easements be required?

Raised by: 218

Response: It is not anticipated that construction easements from residential properties will be needed for roadway construction. In some areas easements might be required for the construction of noise barriers or for landscaping. The actual need for easements will be determined during the design phase of the project and will be dependent on the type of barrier used. The design and type of barrier will be coordinated with affected property owners, and compensation will be made for any construction easements required.

Comment Q-16: A citizen wanted to know how project impacts on his property.

Raised by: 236

Response: The citizen was informed that no land would be acquired from his property.

Comment Q-17: The properties acquired along Route 28 should not be allowed to remain vacant.

Raised by: 250

Response: All properties acquired will be rented or properly protected (boarded up) until demolished or otherwise removed for construction.

Comment Q-18: The size of the property at 4 Nelson St. should not be reduced.

Raised by: 250

Response: Every attempt will be made to eliminate the need to acquire land from this property.

Comment Q-19: Several homes will be acquired in Regents Square.

Raised by: 266

Response: No homes will be acquired in Regents Square.

Comment R-1: Widening I-270 will aggravate existing air pollution. What will be done to alleviate existing and future air pollution? What will be the future level of pollution? What will the emissions consist of, and are they toxic?

Raised by: 5, 11, 15, 34, 92, 103, 107, 112, 115, 117, 120, 125, 141, 150, 153, 159, 162, 166, 167, 169, 172, 182, 186, 189, 195, 208, 209, 210, 213, 215, 254, 256, 258, 263, 273, 276, 301, 302, 305

Response: The effect of the project on the air quality of the project area was analyzed with respect to increased concentrations of carbon monoxide (CO) at sensitive receptors adjacent to the roadway. The results of the analysis showed no violations of the National Ambient Air Quality Standards. The standards are 35 ppm for 1 hour peaks and 9 ppm for the 8 hr. peak. The concentrations in the design years varied from 1.9 ppm to 4.4 ppm for the 1 hr. peak and from 1.2 to 3.3 for the 8 hour peak. As shown, the concentrations predicted with the Build Alternate are well within the acceptable range. The project is also consistent with the State Implementation Plan for air quality.

Comment R-2: No reasons were given for ignoring the NOx, hydrocarbons and other pollutants. The analysis should also be done for hot, humid days and should take into account retaining walls and noise barriers.

Raised by: 287, 289, 129

Response: The computer model does take into account fill sections and cut sections, with and without retaining walls. Retaining walls would have no effect on CO concentrations in fill areas. In cut sections, the resident time of the pollutants in the cut section (or mixing zone) is increased which results in lower concentrations at receptors outside the cut section than an at-grade section.

Carbon monoxide is a direct result of pollutants emitted by cars and trucks. Unlike carbon monoxide, hydrocarbons and ozone are not emitted directly by specific sources. Instead smog is formed in the air by chemical reactions between nitrogen oxides and organic compounds. The nitrogen oxides and other pollutants could originate miles from the area being analyzed and, if atmospheric conditions are right, could react and result in high pollutant levels in the project area.

Comment S-1: The various area Master Plans (Gaithersburg, Rockville, North Bethesda/Garrett Park) propose widening Interstate Route 270 to eight lanes. The Collector-Distributor Alternate proposes to reconstruct mainline Interstate Route 270 to eight lanes and to construct two lane Collector-Distributor roads to each side of the mainline for a total of twelve travel lanes. This is inconsistent with the cited Master Plans.

Raised by: 9, 16, 19, 33, 38, 39, 43, 50, 53, 56, 60, 70, 102, 103, 104, 110, 120, 121, 124, 126, 127, 128, 137, 141, 146, 152, 154, 159, 169, 171, 172, 175, 176, 178, 186, 190, 193, 196, 197, 202, 204, 207, 210, 213, 213, 215, 216, 217, 218, 232, 234, 235, 238, 239, 241, 264, 280, 287, 289, 292, 296, 300, 302, 307

Response: The provision of an additional lane in each direction from the Y-split to MD 121 was investigated. This would create an 8-lane roadway from the Y split to MD 118 and a 6-lane roadway from MD 118 to MD 121.

It was found that the most acceptable solution for the interchanges under the 8-lane widening alternate was to provide collector-distributor (c-d) roads through the interchanges. In this way, the existing 25 m.p.h. design ramps could be utilized because they connect to a lower design speed road (c-d). Also, by constructing the c-d roads behind the existing piers, the main spans of the bridges could be salvaged.

Due to the proximity of the interchanges at Montrose Road, Falls Road, and MD 28, auxiliary lanes would be needed between the interchanges in both direction for weaving, acceleration and deceleration, creating a 10-lane roadway section between these interchanges. In a number of instances, the space between the end of the c-d road in one interchange and the beginning of the c-d road in the next interchange was shorter than should be designed for along the mainline at an Interstate highway. This proximity of the interchanges and the need for auxiliary lanes between the interchanges led to the development of the Preferred Alternate, the Continuous-Collector Distributor Road Alternate.

The above description clearly indicates that the C-D Alternate was developed as an 8-lane alternate, and not a twelve lane alternate. The c-d lanes allow the mainline to operate more efficiently, but do not operate as additional main lanes for capacity.

Comment S2: The proposed improvement of I-270 (the C-D Alternate) will facilitate excessive levels of development.

Raised by: 9, 33, 40, 55, 104, 124, 132, 139, 184, 286

Response: The levels of development is constrained by local and secondary roads. The I-270 corridor is where the County is planning the most intense development.

The traffic projections prepared for the project were based on the development proposed by the County and local agencies. The State Highway Administration must respond to the needs of these plans in providing transportation facilities to accommodate the development. Therefore, the transportation facilities are provided in answer to development pressures.

Comment S3: It was expressed that Collector-Distributor Alternate is consistent with the Master Plan.

Raised by: 13, 35

Response: No response required.

Comment S4: The Collector-Distributor Alternate is in conflict with the County Master Plan in that it will promote one corridor city rather than three separate cities and in that it does not support mass transit, a transportation policy of Montgomery County.

Raised by: 19, 288

Response: The existing interchanges serve the corridor cities of Rockville, Gaithersburg, and Germantown. The improvements to I-270 will increase the capacity of I-270 and the interchanges but since the interchanges are all existing, the improvements should not encourage additional development at these locations.

The improvements to I-270 are compatible with the Metro and do not compete with the facility for patronage. The patronage estimates for Metro were included in the traffic predictions and still result in a demand far beyond the capacity of the existing roadway. I-270 will serve the short distance traveler, those destined to areas not served by Metro and the long distance travelers passing through the region. There is a large percentage of trips on I-270 originating and destined to sites within the corridor which would not be served by Metro. Those destined to sites around the Capital Beltway and Virginia would also not be served by Metro. Also, the I-270 improvements will allow the roadway to better accommodate the feeder bus service that will be provided for the Metro Station.

Comment S5: Master Plans are currently undergoing revision, which may change basic assumptions of study.

Raised by: 45

Response: The State Highway Administration has reviewed the current status of Master Plan development with those responsible for their development.

The Transportation Element of the Rockville Master Plan is in the process of being updated. To date, no significant changes have been incorporated.

The Gaithersburg Master Plan is currently being amended. The development proposed in this amendment was modeled and compared to the Master Plan road network. It was determined that the proposed road network will support the planned development. As a further check, the planned development will be accomplished in stages with the adequacy of the public facilities evaluated prior to the beginning of the next stage of development.

The Germantown and Clarksburg Master Plans are scheduled for revision. No significant changes are envisioned.

It should be noted that this study and other transportation studies can only be based upon approved master plans.

Comment S-6: It was recommended the construction of a highway west of I-270 for use by long-distance travellers.

Raised by: 105, 209, 210, 232, 274

Response: Montgomery County is preparing plans for the Great Seneca Highway which is west of I-270 and extends from Middlebrook Road to Md. 28. This highway will serve the residential and employment development occurring west of I-270.

The provision of another interstate route to carry long distance travellers in the I-270 corridor is not feasible when the existing I-270 roadway can be expanded to accommodate the traffic demand through the design year.

Comment S-7: How is the study consistent with the Germantown Master Plan when the Germantown Master Plan includes an interchange with I-270 north of MD 118 and this study does not?

Raised by: 140

Response: The proposed improvement of Interstate Route 270 is consistent with the Germantown Master Plan in that decisions currently being made do not preclude construction of an interchange north of Maryland Route 118.

Comment S-8: The Collector-Distributor Alternate will have a major impact on zoning, land use, and transportation in Montgomery County.

Raised by: 197

Response: The traffic projections prepared for the project were based on the development proposed by the County and local agencies. The State Highway Administration must respond to the needs of these plans in providing transportation facilities to accommodate the development. Therefore, the transportation facilities are provided in answer to development pressures.

Comment S-9: Widening I-270 will permit orderly land development.

Raised by: 198

Response: No response required.

Comment T-1: It was requested that an interchange (full or directional) to the north be considered at Old Baltimore Road to provide access to the employment centers adjacent to I-270.

Raised by: 4 , 78

Response: Traffic information developed for the I-270 Study has not shown the need for an interchange at this location.

Comment T-2: It was suggested that provision be made for a partial interchange north of Maryland Route 118.

Raised by: 13, 35, 74, 140

Response: Based on the traffic information prepared for the I-270 project, an interchange would not be required north of MD 118. However, the need for this interchange could develop beyond the design year of I-270 (2010). At that time, the provision of an additional interchange at that location could be investigated.

Comment T-3: Requested that data be made available to their association - traffic surveys, traffic matrix of origins and destinations, documentation that formed the basis for rejecting alternatives and selecting the Preferred Alternate.

Raised by: 9, 16, 33, 37, 38, 91, 150, 234

Response: All traffic data and matrices of origins and destinations were submitted to those community associations requesting them. All technical reports documenting the studies are available for review at the Maryland State Highway Administration. The Environmental Assessment was put on public display 30 days before the Public Hearing in accordance with Federal regulations.

Comment T-4: It was recommended that Montgomery County, the Chamber of Commerce and MNCPPC forego growth until a transportation system is in place which can accommodate traffic demand.

Raised by: 20

Response: The recommendation that the County establish a moratorium on development is essentially the procedures applied through the Adequate Public Facilities Plans in effect in Montgomery County.

Comment T-5: Concern was expressed that structures crossing Interstate Route 270 give proper consideration to bicyclists.

Raised by: 29

Response: Bikers will be able to cross I-270 at the interchanges as they do now. Specific designs for bicyclists will be addressed during final design.

CommentT-6: A project brochure was requested.

Raised by: 42

Response: A brochure was sent to the party requesting it.

CommentT-7: Requested that an interchange be considered between Muddy Branch Road and Interstate Route 270.

Raised by: 54

Response: The proximity of Muddy Branch Road to the proposed interchanges at MD 117 and I-270 does not comply with Interstate interchange spacing guidelines.

CommentT-8: It was questioned whether there was a way to keep trucks out of the passing lane.

Raised by: 74

Response: During the final design phase of the project, the signing will be designed. At that time, it will be determined if it is necessary to install a sign reading TRUCKS KEEP RIGHT.

Comment T-9: It was requested that MD 355, in particular the Gaithersburg Bridge, be improved.

Raised by: 74

Response: Maryland Route 355 from South Summit Avenue to Chestnut Street including the bridge over the B & O Railroad, is scheduled for reconstruction beginning in the Summer of 1985. The new bridge will be 6 lanes wide with five foot sidewalks on each side.

Comment T-10: Refers to Great Seneca Highway, not I-270.

Raised by: 131, 133

Response: The concerns of these correspondents have been forwarded to Montgomery County, Department of Transportation.

Comment T-11: Why is I-370 not completed to the Shady Grove Metro Station?

Raised by: 139

Response: I-370 is now in final design. Construction will begin in Fiscal 1985.

Comment T-12: A respondent wants to see plans for widening I-270.

Raised by: 170

Response: The correspondent has been sent a set of 1"=300' scale plans.

Comment T-13: How may I further voice my opinion on the project?

Raised by: 173

Response: Written comments that are received by the MDSHA throughout the design phase will be answered and the suggestions evaluated by the Bureau of Highway Design. In addition, there will be meetings held during the design phase with residents along I-270 to discuss types, locations and landscaping treatments for noise barriers and retaining walls.

Comment T-14: The governments of Frederick and Montgomery Counties should be encouraged to maintain large lot, residential zoning in order to prevent sprawl.

Raised by: 191

Response: No response required.

Comment T-15: Construction of the Collector-Distributor Alternate will result in flooding and poor storm drainage. There is no discussion of changes in the watershed in the Environmental Assessment.

Raised by: 208, 219, 242, 287

Response: Storm water management facilities will be designed to maintain the storm water discharges after construction to the same levels as preconstruction. There will be no additional flooding as a result of the project. Any additional runoff due to the increase in impervious area (pavement) will be managed by these facilities. There are no longitudinal encroachments in flood plains that would cause significant changes in the watershed. In most cases, existing culverts will be lengthened.

Comment T-16: There is a large natural gas line running parallel to I-270 between Route 28 and Falls Road. The Environmental Assessment contains no discussion of how this line will be protected during construction.

Raised by: 219

Response: This gas line was studied and there will be no conflicts with the proposed construction.

Comment T-17: The Collector-Distributor Alternate fails to take into account advances in technology and changes in life style which will obviate the need for an expanded I-270.

Raised by: 232, 282, 297

Response: The design year of the project is 2010, approximately 26 years in the future. The traffic demand projected for the design year using existing trends of employment and residential location, auto usage and future mass transit clearly show a need for capacity improvements to I-270. In fact the existing conditions indicate a need for improvements. In the short time frame used for design, it is not felt that technology and life styles will change significantly to eliminate the need for highway improvements.

# IX ENVIRONMENTAL ASSESSMENT COMMENTS

The agencies (federal, state, regional and local) from whom Environmental Assessment comments were solicited and received are reproduced on the following pages and arranged alphabetically by level of government. Eleven letters were received. Each substantive comment in each letter is identified by a comment number in the right margin of the letter, and responses are correspondingly numbered and set forth to the page at right or following the letter. The responses are either complete in themselves or provide appropriate reference to material contained elsewhere in the document.

A list of the agencies responding is shown below:

| Agency | Date of Letter |
|---|---|
| U.S. Dept. of Agriculture | March 8, 1984 |
| U.S. Dept of Housing & Urban Develop. | March 26, 1984 |
| U.S. Dept. of the Interior | April 12, 1984 |
| Federal Emergency Mgmt. Agency | April 6, 1984 |
| MD Historic Trust | March 3, 1984 |
| MD Dept. of Natural Resources | |
| MD Forest, Park and Wildlife Service | February 23, 1984 |
| | April 3, 1984 |
| MD Dept. of Natural Resources | March 7, 1984 |
| Water Resources Administration | June 20, 1984 |
| MD National Capital Park & Planning Comm. | March 21, 1984 |
| | |
| City of Gaithersburg | February 22, 1984 |
| City of Rockville | May 2, 1984 |
| Mayor City of Rockville | March 22, 1984 |

Comment T-18: There is a bump in the I-270 roadway at the Tuckerman Lane Bridge which causes trucks to make a large noise when they roll over it.

Raised by: 246

Response: The Assistant District Engineer for Maintenance in District 3 has been informed of this concern. He has stated that he will investigate this matter.

United States Department of Agriculture | Forest Service | Northeastern Area State & Private Forestry | 370 Reed Road Broomall, PA 19008

174

Reply to: 1950

Date: March 8, 1984

Mr. William F. Schneider, Jr.
Chief, Bureau of Project Planning
State Highway Administration
Room 310
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Schneider:

We have reviewed the Environmental Assessment 4(f) Involvement Contract #M401-132-372P, FAP #1-270-7(SC)71 and have no comments. We would like to make an observation, however.

It is extremely difficult for any agency to assess environmental impacts without being able to visually inspect the area involved.

Yet, in our attempt to reduce costs, most of us are electing to stay at home and rely on printed and visual information, such as that contained in the review instrument. We have reviewed many documents. Some present information in a very complete way and make excellent use of visual presentations. Both of these assist us in doing a creditable job of assessing impacts to the areas' natural resources.

This document lacks much of the information which would enable us to render an adequate assessment.

We realize that much of the data we are referring to is probably contained in previous portions of the study. We cannot maintain a complete library of all documents involved in the 500 some areas of concern we cover. We suggest that future documents contain enough basic information to enable non-local agencies to produce an accurate appraisal of natural resource impacts.

Thank you for the opportunity to review the document.

Sincerely,

DUANE L. GREEN
Deputy Director

Department of Agriculture (3/8/84)

The Federal Highway Administration and the State Highway Administration feel that the document adequately describes all potential impacts.

U.S. Department of Housing and Urban Development
Washington, D.C. Office, Region III
Universal North Building
1875 Connecticut Avenue, NW
Washington, D.C. 20009

MAR 26 1984

Mr. William F. Schneider, Jr.
Chief, Bureau of Project Planning
State Highway Administration
707 Nort Calvert Street, Room 310
Baltimore, Md. 21202

Dear Mr. Schneider:

The Region III office of the Department of Housing and Urban Development has requested that I respond directly to you on the Draft Environmental Assessment for Route I-270 in Montgomery County, Maryland. The Draft Environmental Assessment is generally adequate in identifying potential impacts of the various alternatives. We have specific comments on the discussion of the Collector-Distributor alternative and mitigative measures for noise.

Description of Alternative:

The text contains several vague references to the Collector-Distributor (C-D) alternative. The text would be clearer if this alternative is described as an 8 lane highway with adjacent C-D roads. One has to flip back and forth between the text and the various plates to determine the exact extent of improvements proposed under the C-D alternative.

Noise:

The statement identified many noise sensitive areas that have or will have noise levels that exceed the Federal Highway Administration's Noise Abatement Criteria. The use of barriers has been recommended to mitigate noise impacts. In several instance noise attenuation was rejected if the use of a barrier was not considered cost-effective. For such locations, other less costly measures could be considered such as visual screens with plantings and or building attenuation. (1)

We hope these comments will assist you in meeting your National Environmental Policy Act responsibilities.

Sincerely,

for I. Margaret White
Manager

cc: LaFge

Department of Housing and Urban Development (3/26/83)

RESPONSE

1) Visual screens will be included in areas where noise barriers were not needed or appropriate. Those visual screens will consist of landscaping, shrubbery or privacy fences and will be coordinated with the adjacent property owners.

178

# United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER 84/131

APR 12 1984

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
711 West 40th Street
The Rotunda, Suite 220
Baltimore, Maryland 21211

Dear Mr. Elinsky:

This is in response to the request for the Department of the Interior's comments on the Environmental Assessment/Section 4(f) Statement concerning **I-270 (from I-270 spur to SH-121)**, Montgomery County, Maryland.

**SECTION 4(f) STATEMENT COMMENTS**

Should the Federal Highway Administration (FHWA) determine that the Build Alternative is necessary to satisfy the transportation needs of Montgomery County, we would then concur that there is no feasible and prudent alternative to the potential use of some Section 4(f) land adjacent to the existing I-270 right-of-way.

As the draft statement points out, however, design solutions exist (i.e., retaining walls) to confine construction to the existing right-of-way, thus avoiding or greatly reducing direct use of protected lands. Since the project is located in an area of rapid urban/suburban development, and the need to protect park and recreation resources in such areas is critical and will increase as development intensifies, we strongly recommend the provision of adequately landscaped retaining walls in response to the second proviso of Section 4(f). (1)

The use of properly designed walls would prevent restrictions that would be placed on recreational planning by fill slopes, and would reduce impairment of the integrity and aesthetic value of the affected parkland. We do not consider the cost of such walls excessive in the context of Section 4(f), nor as a percentage of total project costs. We note that the cost of retaining walls may be reduced somewhat if the need to lengthen culverts under fill slopes is considered.

We do not agree with statements in the draft document indicating that noise barriers will not be considered for parkland unless recreational activity areas exist near the proposed construction. Any noise impacts on parkland exceeding $L_{10}$ values of 70dBA ($L_{eq}$ values of 67dBA) would seriously affect future recreation planning in an area and should be mitigated. We suggest that design of noise barriers be combined with the design of retaining walls, and the two presented as a coordinated Section 4(f) mitigation package.

Where noise barriers are not deemed necessary to satisfy the noise standard, adequate landscaping which would serve as a visual and noise reduction barrier (albeit minor) should be planned for implementation as a part of the project. (2)

All planned Section 4(f) mitigation measures, including land replacement, should be approved by the appropriate park and recreation agency, and evidence to that effect included in the final statement.

Other instances where Section 4(f) lands may be involved.

The draft statement indicates that Muddy Branch and Summit Hall Parks (City of Gaithersburg) will not be affected by the I-270 project. We note, however, that associated work by the Maryland Department of Transportation (MDOT) may directly use land from these parks. Since the MDOT work appears to be directly related to the I-270 project, and would in any case probably require FHWA approval, Section 4(f) would seem to apply. If so, this should be discussed further in a supplemental statement and should include the results of coordination with the involved official, i.e., Director of Parks and Recreation. (3)

Plate 6 shows a tract labeled Woodley Gardens Elementary School, a portion of which it is understood will be used for improvements to I-270. Montgomery County Public School officials advise that this school was closed in 1978. The tract was turned over to Montgomery County. Subsequently, the City of Rockville's Department of Parks and Recreation has been administering and using the property for a wide variety of park and recreational pursuits - - for example, there are several ballfields, a children's playground and the school building is a community and senior citizen recreational facility. Based on information provided, we conclude that Section 4(f) should be applicable to the taking of any land from this parcel for highway purposes and that the two provisos of Section 4(f) should be discussed in a supplemental 4(f) statement. (4)

Plate 22 shows that the project requires the use of Julius West Junior High School land which has been identified for us as part of the school's recreational area. Also, it appears from the information on Plate 8 that the project would use land that is part of Montgomery College at Germantown - - land which we are advised is open to public use for passive recreational pursuits and on which there is a nature trail. The General Counsel, US-DOT, has determined that Section 4(f) applies to the use for transportation purposes of school land used for recreational purposes and that is open to unrestricted public use. Any involvement with such school lands should be addressed in a supplemental Section 4(f) statement and should include the results of consultations with the appropriate responsible officials. (5)

FISH AND WILDLIFE COORDINATION ACT COMMENTS

The U. S. Fish and Wildlife Service developed a wetlands classification system in 1979. Most agencies have adopted the new system which replaces Circular 39. In future documents, it would be helpful if the new system were utilized since it is less restrictive and more descriptive.

On Plate 24 at Sta. 443, a wetland, or what appears to be a wetland, is depicted. There is no discussion of this area. Plans also indicate that a number of streams must be relocated where widening is proposed or new ramps will be constructed (Sta.'s 406, 673, (6)

703, 727, and 790). The use of retaining walls, especially at Sta. 703, would appear to preclude the need for stream relocation and is strongly encouraged. In locations where retaining walls would encroach into the stream, a new channel of equal length and similar hydrologic parameters should be constructed. Land within the interchanges could be used for wetland creation and for storm water management. (7)

The Environmental Effects section is overly optimistic. The addition of over 200 acres of impervious surface, and the development which the increased roadway capacity will facilitate, will have a significant adverse impact on water quality. The runoff from the roadway will contain higher levels of oils and greases, heavy metals, and trash. The runoff from the newly-developed areas will also be poorer in quality. Most importantly, the volume of runoff will increase with the density of development, transforming the flow regimes to flashy, high-volume, erosive flows, i.e., urban streams. Preventing excessive siltation is subject to interpretation. We view any siltation from construction as excessive and indicative of lack of or poor maintenance of what controls are in place. A discussion should be provided in the final statement on the storm water management measures that will be incorporated into the design of this project and what impacts these may have on other resources. (8)

Since the first settlers arrived in America, this country has lost more than one-half of its wetlands. In areas such as Montgomery County where development pressures are high, the losses may be greater or occurring at a faster rate. Since, for purposes of environmental evaluation, this project cannot be divorced from the area surrounding it, we do not believe that the wetland losses for the project can be considered negligible. This should be acknowledged in the final statement and in-kind replacement provided for wetlands taken. (9)

Although the statement indicates that further coordination will occur, to provide details in the final document of where replacement wetlands will be constructed would be in accord with your "one-stop environmental process." (DOT ORDER 5610.1C).

The document indicates that Corps of Engineers Section 404 permits may be required. The U. S. Fish and Wildlife Service advises that its most probable position would be to offer no objection to the issuance of these permits provided all lost wetlands are replaced and the impacts of stream channelization are minimized. (10)

## SECTION 6(f) COMMENTS

Seneca Creek State Park has been assisted through the Land and Water Conservation Fund (L&WCF), administered by the National Park Service (NPS) of the Department of the Interior (Projects #24-00297, #24-00309, and #24-00323). Any project impact on this park requires sponsor compliance with the Section 6(f) land replacement provisions of the L&WCF Act. (11)

The NPS, Mid-Atlantic Regional Office, would be willing to consider a Section 6(f) conversion request upon submission of a request by the State Liaison Officer who is Mr. Louis N. Phipps, Jr., Deputy Secretary, Department of Natural Resources, Annapolis, MD 21401. However, any NPS action on the request first requires prior Section 4(f) approval of the project by the U. S. Department of Transportation.

## WILD AND SCENIC RIVERS ACT COMMENTS

Great Seneca Creek, from the confluence with Seneca Creek to the headwaters (6 miles), has been included in the final List of Potential Wild Scenic and Recreational Rivers which have been considered under the criteria of the Wild and Scenic Rivers Act (Public Law 90-542, as amended). This list constitutes the results of the Nationwide Rivers Inventory, a program administered by the National Park Service. Identified are natural and undeveloped rivers and river segments that meet the minimum criteria for further study and/or potential inclusion under the Wild and Scenic Rivers Act. Each of these rivers meet the criteria of Public Law 90-542 which specifies that an eligible river must:

1. Be 5 miles or more in length.

2. Be a free-flowing river or stream (rivers may have undergone some impoundment or diversion in the past).

3. Be generally undeveloped (river corridors may be developed for the full range of agricultural uses and can include small communities as well as dispersed or cluster residential housing). Be readily accessible by road or railroad, or be largely undeveloped (rivers or sections of rivers with shorelines or watersheds essentially primitive or largely undeveloped).

4. Be adjacent to or within a related land area that possesses an outstandingly remarkable geologic, ecologic, cultural, historic, scenic, botanical, recreational or other similar value. (Interpreted to mean an area of multi-state or national significance.)

In addition, the National Park Service Mid-Atlantic Regional Office, with the help of the Maryland Department of Natural Resources, is conducting an inventory and assessment of 25 Maryland rivers. The purpose of this effort, entitled the Maryland Rivers Study, is to provide Maryland with a list of rivers which deserve further study under the provisions of the Maryland Scenic and Wild Rivers Program. The draft report, "Maryland Rivers Study," was released for review in August 1983 and is available from the National Park Service. Preliminary findings indicate that one issue associated with Great Seneca Creek is the potential non-point sources of pollution, agricultural runoff, urban runoff, and failing septic systems. The final statement should discuss how the proposed project will contribute to these pollution problems with regard to the resources and values of the creek, and should propose appropriate mitigation for any adverse impacts. We also recommend coordination with the NPS to protect this valuable water resource. (12)

## SUMMARY COMMENTS

The Department of the Interior fully recognizes and appreciates the need for improvements to I-270, and we offer no objection to Section 4(f) approval for the use of such parkland as is needed for the construction of retaining walls, appropriate noise barriers and adequate landscaping, and as is described in the subject Environmental Assessment/Section 4(f) Statement.

However, in the "Section 4(f) Comment" part of this letter, we brought to your attention that record information indicates the potential use of land from 3 other parks (includes Woodley Gardens Elementary School property) and 2 school properties - - some or all of which may require the applicability of Section 4(f). Accordingly, we suggest that a supplemental 4(f) document be prepared and circulated, which document addresses the two provisos of Section 4(f) for each involvement. We commit to an expedited review of the supplement. Should it be determined that Section 4(f) is not applicable to any or all of those five areas, we would appreciate being advised of the assessment, design plans, and coordination with the land manager leading to the determinations.

We appreciate the opportunity to provide these comments. For technical assistance about park/recreation matters, please consult with the Regional Director, Mid-Atlantic Region, National Park Service, 143 South Third Street, Philadelphia, PA 19106 (phone: FTS 597-9013; comm. 215/597-7013). For matters relating to fish and wildlife resources and wetlands, please contact the Field Suupervisor, U. S. Fish and Wildlife Service, 1825-B Virginia Street, Annapolis, MD 21401 (phone: FTS 922-2007; comm. 301/269-5448).

Sincerely,

Joseph T. Bonme

for Bruce Blanchard, Director
Environmental Project Review

cc: (see attached list)

cc: State Highway Administrator
MD Department of Transportation
P.O. Box 717
Baltimore, MD 21203-0717

Secretary
MD Department of Natural Resources
State Office Bldg.
Annapolis, MD 21401

Chief, Park Planning & Acquisition
MD National Capital Park and Planning
Commission
8787 Georgia Avenue
Silver Spring, MD 20907

Director
Recreation and Parks
City of Rockville
Rockville, MD 20850

Director
Department of Park & Recreation
City of Gaithersburg
Gaithersburg, MD 20877

Director of School Facilities
Montgomery County Public Schools
Rockville, MD 20850

Director of College Facilities
Montgomery College
Germantown, MD 20850

Chief, Department of Facilities & Services
Attn: Space and Leasing
Montgomery County Government
Rockville, MD 20850

Department of Interior (4/12/84)
RESPONSES

1) The Maryland State Highway Administration has coordinated with all agencies with jurisdiction over the parks along I-270 including Maryland National Capital Park and Planning Commission (MNCPPC) and Department of Natural Resources. It was agreed that at Wootten Mill, Metropolitan Grove and Seneca Creek Park and Middlebrook Conservation Area temporary construction easements would be obtained and the slopes constructed. The various jurisdictions have requested various landscaping treatments which will be incorporated into the design plans. See the various letters from agencies.

The Maryland State Highway Administration and the Maryland National Capital Park and Planning Commission have agreed to provide two retaining walls along the west side of I-270 in the area of Cabin John Regional Park in cut sections. These walls are shown on the plans in the document. The specific requirements for landscaping are described in the 4(f) Section of this document.

It should be noted that the use of retaining walls to avoid construction easements was discussed with the local park agencies and it was their determinations concurred in by SHA/FHWA that such mitigation was not as prudent as revegetated construction easements. Where retaining walls were considered more prudent, they have been added.

2) Visual screens are proposed as part of this project and are shown on the plans in this document. The coordination with the agencies with jurisdiction over all the parks will be continued in final design to assure all concerns are satisfied.

3) The effects on Muddy Branch Park and Summit Hall Park are created by the improvements proposed under the I-370 project. It was thought during the preparation of the FEIS on I-370 that impacts to the parkland could be avoided. The potential encroachment was identified during final design with the development of field surveys and larger scale mapping. A supplemental 4(f) evaluation will be issued to address the impacts to these parks. The document will be circulated to the appropriate agencies. Coordination has begun with the City of Gaithersburg which has jurisdiction over both parks.

4) The retaining wall at the north end of Woodley Gardens will be extended north to Gude Drive to avoid any acquisition from the Senior Citizens Center. The noise barrier will also be extended across this property to Gude Drive.

5) The alignment has been shifted in the vicinity of Julius West Junior High School. There will be no recreational property required from the school. Under the proposed alternate with the Middlebrook Road interchange, no acquisition would be required from Montgomery College.

6) The wetland at Sta. 443 is Type II and will be replaced. Coordination with the Maryland Department of Natural Resources (DNR) is being maintained and potential replacement land will be identified in the final design phase of the project.

7) A retaining wall is proposed in the area of Sta. 727 to avoid encroachment on the pond north of Great Seneca Creek. At Sta. 406, Watts Branch will be enclosed in a box culvert between the I-270

outlet and the MD 28 inlet. The possibility of relocating a section of the stream about 250 feet long will be investigated during final design. During discussions with DNR, it was decided that a complete enclosure would be acceptable as long as acceptable means of reducing velocities and protecting stream banks were utilized.

The use of retaining walls to eliminate the need for stream relocations at Sta. 673 and Sta. 703 will be investigated during final design. If the walls are determined not to be feasible, close coordination will be maintained with DNR to develop mitigation measures when relocating the streams.

8) During the construction phase of the project, special care will be taken to reduce to a minimum the erosion and sedimentation resulting from construction. Methods such as prompt reseeding and revegetation, sedimentation basins, riprap, gabions and silt fences will be used to reduce the effects on the streams. The methods of sediment control used by the Maryland State Highway Administration have been approved by DNR. In addition, the specific methods of erosion and sediment control to be utilized on this project will be subject to the review and approval of DNR.

Stormwater management facilities will be provided to maintain the discharge from the I-270 right of way at preconstruction levels in accordance with the latest approved procedures. These facilities will also help to settle out some of the pollutants from the roadway such as heavy metals and trash. The stormwater runoff will be managed under the Maryland Department of Natural Resources new storm water management practices in the following order of preference:

- on-site infiltration
- flow attenuation by open vegetated swales and natural depressions
- storm water retention structures
- storm water detention structures

It has been demonstrated that these measures can significantly reduce pollutant load and control runoff.

The increase in density of development is a direct result of County or regional planning decisions. The volume of runoff from these areas should be maintained by storm water management facilities incorporated in the development according to County regulations.

9) In accordance with regulations, any Type II wetlands, Inland Fresh Meadow will be replaced. A total of 0.5 acres are affected by the project. Replacement land will be determined in the final design phase in coordination with DNR.

Department of Interior (cont'd.)
RESPONSES

10) The requirements for Section 404 permits will be complied with in this project. Any applications will be processed during final design.

11) No parkland acquired or improved with Land and Water Conservation Funds will be acquired for the I-270 improvements. Temporary construction easements will be obtained from the parks during the construction of the grading and slopes. This action will be coordinated through the National Park Service and Maryland Department of Natural Resources.

12) A discussion on the methods to mitigate the impacts of the project on the streams and the water quality was made in response to number 8 above.

# Federal Emergency Management Agency

Region III 6th & Walnut Streets Philadelphia, Pennsylvania 19106

April 6, 1984

Maryland Department of Transportation
State Highway Administration
Office for Planning and Preliminary
Engineering
Box 717
Baltimore, Maryland 21203-0717

RE: State Project No. M-401-152-372(P)
Federal Project No. I-270-7(86)-71
Interstate Route 270 from Y-Split
to Maryland Route 121

Dear Sirs:

In regard to your Public Hearing Notice for the referenced project, we would like to offer the following comments:

1. Executive Order #11988 issued on May 24, 1977 instructs all Federal Agencies "... to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative ..." (pgs. 8-19). Sections 1 thru 9 of the enclosed Floodplain Management Guidelines For Implementing E.O. 11988 provide detailed discussion of the Order.

2. The Federal Highway Administration has developed "Procedures for Coordinating Highway Encroachments on Floodplains with FEMA". The intention of this document is to comply with Executive Order #11988. These procedures have been coordinated with and endorsed by FEMA for implementation.

3. You can obtain copies of the completed Flood Insurance Studies from the State Coordinator. The State Coordinator for Maryland is:

   Margie Whilden
   Water Resources Administration
   Department of Natural Resources
   Tawes Office Building
   Annapolis, Maryland 21401

4. Once you have reviewed the "Procedures", please feel free to contact Martin Frengs in our office if you have further questions.

Sincerely,

Walter P. Pierson
Chief
Natural and Technological
Hazards Division

Enclosures
Floodplain Management Guidelines
"Procedures"

## Federal Emergency Management Agency (4/6/84)

RESPONSES

1) The project is being developed under Federal Aid Highway Program Manual 6-7-3-2 which implements EO #11988.

189

Maryland Historical Trust

March 3, 1984

Mr. William F. Schneider, Jr.
Chief
Bureau of Project Planning
State Highway Administration
Maryland Department of Transportation
707 North Calvert Street
Baltimore, Maryland 21202

RE: I-270 from the I-270 spur to
north of Md. Rt. 121
Contract No. M 401-151-372
F.A.P. No. I-270-7(80)71

Dear Mr. Schneider:

Thank you for your letters of December 12, 1983, and January 4, 1984, regarding the project listed above. Our office agrees that the proposed improvements will have no effect on historic properties.

Sincerely,

George J. Andreve

George J. Andreve
Environmental Review Adminstrator

GJA/bjs

cc: Mrs. George Kephart
Ms. Anita Hall
Mr. Mark Walston
Gary Hitchcock

Maryland Historical Trust

January 9, 1984

Mr. Louis H. Ege, Jr., Chief
Environmental Management
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Interstate Route 270
From the I-270 Spur to North of
Maryland Route 121
Contract No. M 401-151-372
F.A.P. No. I 270-7 (80) 71

Dear Mr. Ege:

Thank you for your letter of December 13, 1983 regarding our comments of September 1, 1981.

The information you provided regarding points 1, 2, 3 and 6 (as identified in your letter of 12/13/83) provides the clarifications which we requested. For points 4, 5, 6 and 7, however, it is best that we address them individually.

Point 4 - While the report states that all high potential areas were examined and low-moderate potential areas were not, it is our opinion that a more detailed discussion of the factors used in defining the categories of low, moderate and high potential areas should be presented. The report does state that "map research and topographic situation" were used in defining the potential of the different sections of the study area. The report does not, however, adequately explain what "topographic situations" were used to define low, moderate and high potential areas (for prehistoric resources). Such a discussion would allow a better assessment to be made of the probability for site occurrence in unsurveyed areas.

Point 5 - The Guidelines for Archeological Investigations in Maryland specify that a copy of all site survey forms for newly discovered sites must be included in final reports.

191

Point 6 - We will await receipt of the additional documentation and information regarding project impact to the sites.

Point 7 - It appears that the main comment here was that the old system of defining cultural material finds as either a site or a random find should be retained and that the creation of a new category of "activity areas" was unnecessary and potentially confusing. The term "activity area" implies more about intra-site functional classification than about artifact densities.

The preliminary alignments which are depicted on the maps provided, the measures which will be undertaken to avoid impacting certain sites and previous determinations of significance allow us to conclude that no further investigations will be required for sites 18 MO 175, 18 MO 184, 18 MO 185, 18 MO 186, 18 MO 188, 18 MO 189 and 18 MO 191. In addition, the SHPO has determined, based on the information in the Pase I report, that site 18 MO 187 is not eligible for inclusion on the National Register. Therefore, no further work is recommended at this site.

A preliminary site examination as outlined in the Guidelines for Archeological Investigations in Maryland should be conducted at sites 18 MO 182 and 18 MO 183 to determine their eligibility for the National Register.

Thank you for allowing us this opportunity to comment.

Sincerely,

J. Rodney Little
Director
State Historic Preservation Officer

JRL/RBH/mbh
cc: Mr. Tyler Bastion
Mrs. George Kephart
Ms. Anita Hall
Mr. Mark Walston
Mr. James Helm

August 28, 1984

Response:

The final report is being revised to incorporate Points 4 and 5. A preliminary site examination will be conducted at Sites 18MO182 and 18MO183 during the final design of the project.

192

DEPARTMENT OF NATURAL RESOURCES
Maryland Forest, Park & Wildlife Service
TAWES OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

TORREY C. BROWN, M.D.
SECRETARY

DONALD E. MacLAUCHLAN
DIRECTOR

February 23, 1984



TO: Paul Clement

FROM: Jim Burtis, Jr.

SUBJ: I-270 from Y Spur to MD 121

We have reviewed the EIS for the above referenced project and have the following comment.

The build alternate includes two plans for crossing Seneca Creek State Park. The first would require construction of a retaining wall within the existing right-of-way. This would eliminate the need to take any Park property. The other alternative would require 2 acs. of parkland (a strip varying from 10 to 80 feet wide).

The Service has decided that the benefits to the Park from construction of the retaining wall would not be so great as to justify the $1.75 million reportedly necessary to build it. There are some conditions we will impose, however, in agreeing to sell the 2 acs. necessary to widen the road.

1. The underpass provided by the existing bridge must not be worsened. Any further constriction would make placement of a coherant trail system difficult, if not impossible. (1)

2. Any timber removed as a result of construction will remain Park property. Further, it must be hauled by the contractor to the Park workshop complex for use as the Service sees fit. (2)

3. At the time of clearing, the contractor will, under direction/supervision by Park personnel, remove any trees which may at a later date pose a maintenance problem along the widened right-of-way. (3)

Ext. 3195

Telephone IX-20

TTY FOR DEAF: STATEWIDE 1-800-[illegible], BALTIMORE 383-[illegible]

4. SHA should take care of purchasing the replacement land. The property selected must be approved by the Service before said property is actually purchased.

We appreciate the opportunity to comment on the project. Please let us know if you need additional information regarding any of the foregoing.

JB:SEM:dec

cc: Cliff Denny

## Department of Natural Resources (2/23/84)
RESPONSES

1) The existing structure will be extended. The existing opening will be maintained.

2) All vegetation removed will remain park property. All trees identified by DNR will be hauled to the park workshop complex.

3) Park personnel will be provided this opportunity.

4) It has been agreed between the Maryland State Highway Administration and the Department of Natural Resources that no replacement land is necessary since all grading within the park property will be performed with temporary construction easements. See letter dated 4/3/84 from DNR.

195

TORREY C. BROWN, M.D.
SECRETARY
JOHN R. GRIFFIN
DEPUTY SECRETARY

JAMES W. PECK
DIRECTOR

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
**WATER RESOURCES ADMINISTRATION**
TAWES STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401
(301) 269-2265

March 7, 1984

Mr. William F. Schneider, Jr., Chief
Bureau of Project Planning
State Highway Administration
Room 310
707 North Calvert Street
Baltimore, MD 21202

Re: WRA No. 80-PP-0381
SHA No. M-401-152-372
Description: I-270 from "Y" Split to MD 121 - Environmental Assessment/4(F)
Clearinghouse No. 80-10-422

Dear Mr. Schneider:

The Department of Natural Resources has completed a review of the above referenced Environmental Assessment Document for the project in Montgomery County. As a result of that review, several agencies addressed concerns over items in the document. Some of these concerns are as follows:

The Capital Programs Administration was concerned about the loss of land due to right-of-way acquisition. Mitigation measures should be discussed for replacement of these lands. The loss of over six acres of wetlands was also a major concern. The document did not address how any of the wetlands lost would be replaced. The mitigation of loss wetlands should be addressed in the document. In addition to the loss of land and wetlands, the Capital Programs Administration had the following comments:

1. The Seneca Creek State Park is under the jurisdication of the Maryland Forest, Park and Wildlife Service (pg. 82). Coordination for obtaining plans and discussing development should be within the Capital Programs Administration (pg. 85).

2. The total acreage of the park is 5.127 acres as of January 1, 1984 (pg. 82).

3. The Concept Plan for Seneca Creek State Park recommends limited use in the area of the park bordering I-270. Hiking is a future activity considered for the area (pg. 82 and 83).

Telephone:_____
TTY FOR DEAF-BALTIMORE 269-2609 WASHINGTON METRO 565-0450

The Tidewater Administration's Fisheries Division was concerned about the secondary impacts of the highway construction on the fisheries resource of the area. The document often states that impacts would be "negligible"; however, in highly developed areas or areas of high development potential, any impacts to the fisheries, or environmental, resources are significant. The document should address in more detail what the impacts would be rather than state they are negligible. Also, the Fisheries Division was concerned about the ability of the SHA to provide adequate erosion and sediment control. ②

The Watershed Permits Division is concerned over the erosion and sediment control aspects of the project as well. The document overstates the ability of the SHA to handle the erosion and sediment control aspects of the project. Certainly, the SHA and the WRA will cooperate in developing a method of construction to minimize erosion and sedimentation. However, it will take efforts beyond the "standard" efforts exerted by the SHA to achieve adequate control. The document should emphasize that more than "standard" erosion and sediment control will be required to be developed during the design phase.

The document states that waterway construction permits will be required at nine stream crossings (pg. 56). This is based on a drainage area of 400 acres or more. This is true only for Class I waters not shown to be in a flood hazard area. Trout streams with drainage areas of 100 acres or more and any stream shown within a flood hazard area requires a waterway construction permit. These requirements have been in effect since August 11, 1978. The requirements in current use during the design phase will be used to determine whether a waterway construction permit is required for stream work.

The document did not address the need for development of stormwater management for the project. The Water Resources Administration will require that stormwater management for the project be addressed. The stormwater management for the project will be required to address both the quantity and quality of the stormwater runoff. ③

Thank you for the opportunity for comment for the I-270 project from the "Y" Split to MD 121. I hope these comments will be of use during the development of the final document.

Very truly yours,

Charles K. Cover, P.E.
Chief, Watershed Permits Division

CKC:PFC:das

cc: Diane Moll
*Mr. L. H. Ege, Jr. (3/7/84)*
*Mr. Garrett Hitchcock "*

Maryland DNR Water Resources Administration (3/7/84)
RESPONSES

1) Loss of wetland habitat can be addressed by replacement. Less than one half acre of Wetland Type II (fresh marsh) will be lost in the part of the Project addressed by this study. The replacement of this land will be investigated during final design with the coordination of DNR Water Resources Administration.

The Type V Wetland habitat east of the Great Seneca Creek crossing will be negatively impacted by sedimentation during the construction phase of the Project. A retaining wall will be provided along the pond northeast of the Seneca Creek crossing to eliminate any encroachment onto the pond.

In the Watts Branch area of the Project, adverse impacts on Types I and V Wetlands will potentially result from either stream relocation or piping. Stream relocation would result in a greater degree of sedimentation for a greater period of time than the piping option. Increased velocity potentially would result in the piping option and would produce accelerated stream bank erosion.

Sedimentation can be limited to the construction phase of the Project by using erosion and sedimentation control devices. Intensive use of erosion cloth fences, rip-rap, sediment traps and basins, gabions, and other soil erosion and water velocity control procedures is especially important in areas adjacent to wetlands, near streams and along stream banks.

If piping is employed rather than stream relocation at the Watts Branch crossing, it should be utilized in conjunction with baffles, rip-rap, and other water velocity control procedures and devices.

2) Sedimentation will be the chief cause of water quality degradation during the construction phase of the Project. For the most part, the water quality of the crossed streams is described as "permissible" or fair to "good". It is expected that water quality indices will be within the permissible range following Project completion. All erosion and sedimentation procedures will be coordinated and approved by DNR.

Maryland DNR Water Resources Administration (cont'd.)
RESPONSES

3) Potential sites for storm water management facilities will be identified during the final design phase of the project. The design of these facilities will be in accordance with the latest criteria. The storm water runoff will be managed under the Department of Natural Resources new storm water management practices in the following order of preference:

- on-site infiltration
- flow attenuation by open vegetated swales and natural depressions
- storm water retention structures
- storm water detention structures

A meeting was held with the staff of DNR, Water Resources Administration on March 19, 1984 to discuss the impacts of the project on the various streams. It was stated by DNR staff that none of the proposed culvert extensions or stream relocations should present problems.

DEPARTMENT OF NATURAL RESOURCES
Maryland Forest, Park & Wildlife Service
TAWES OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

TORREY C. BROWN, M.D.
SECRETARY

DONALD E. MacLAUCHLAN
DIRECTOR

199

MEMORANDUM

TO: Paul Clement

FROM: Carlo R. Brunori CRB

SUBJ: I-270 from Y spur to MD 121

DATE: April 3, 1984

Park Manager, Cliff Denny and I visited the area SHA needs for slope work. The area they'd need is not immediately adjacent to any activities planned for the future.

We, therefore, have no objection to granting a temporary construction easement allowing SHA to change the existing slopes as necessary. Conditions of the permission are as follows:

1. Once the affected Park property is surveyed, the Park Manager must have an opportunity to inspect the site before clearing and earth moving actually begins.

2. Sediment and erosion control must be closely monitored. A representative of the contractor doing the job must be identified for contact in case of a problem.

3. After final grading and seeding, the reverting Park property will be planted with 3 ft. tall (substitutions possible, on approval of Park Manager) white pine. These should be planted 16 foot on center, in a staggered grid.

4. All other points in our Feb. 23, 1984 memo are still applicable. Of particular concern are the additional piers necessary to widen the bridge. Particular care must be taken to avoid restricting trail placement opportunities. This should be worked out with the Park Manager.

CRB:SEM:dec

cc: Cliff Denny
Pat Bright
Lou Ege, Jr. ✓
G. Hilchcock

Telephone Ext. 3195
TTY FOR DEAF: STATEWIDE 1-800-492-5062; BALTIMORE 269-2609

Department of Natural Resources (4/3/84)
RESPONSE

Temporary construction easements will be obtained for the grading of the necessary slopes. The conditions listed will be conformed to during construction.

201

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20907

March 21, 1984

Mr. Neil Pedersen
Deputy Director
Office of Planning &
Preliminary Engineering
State Highway Administration
707 N. Calvert Street
Baltimore, Maryland 21201

Re: I-270 Widening
Contract #M401-152-372P
FAP #I-270-7 (86)71

Dear Mr. Pedersen:

This letter is to confirm the decision reached during our discussion of the referenced project on Monday, March 19, 1984. The Parks Department of M-NCPPC prefers that SHA widen that portion of I-270 south of Montrose Road and adjacent to our parkland through the use of temporary construction easements.

This process will retain the existing park boundaries but will require State Highway Administration to regrade, reseed, and reforest the area to the satisfaction of the Parks Department. This procedure would assure us that the area would be returned to the conditions similar to those that exist today.

Sincerely,

Stanton G. Ernst, Director
Department of Parks

SGE:PBW:pa

RECEIVED

MAR 23 1984

DEPUTY DIRECTOR
OPPE

-FYI-

cc: H. Kassoff
Wm. F. Schneider, Jr.
J. Helm

Maryland-National Capital Park and Planning Commission (3/21/83)

Temporary easement will be utilized. All grading, reseeding and landscaping will be completed to the satisfaction of the Maryland-National Capital Park and Planning Commission, as stated in the 4(f) Statement.

203

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20907
(301)~~270-4000~~
565-7479

June 20, 1984

RECEIVED
#18
JUN 25 1984
DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

Mr. Neil Pedersen
Acting Director
Office of Planning & Preliminary Engineering
State Highway Administration
707 N. Calvert Street
Baltimore, Maryland 21202

Dear Mr. Pedersen:

The Montgomery County Planning Board of the Maryland-National Capital Park and Planning Commission approves the State Highway Administration's plans for the placing of slope easements in the Cabin John Regional Park and Middlebrook Hill Conservation areas, as depicted by the submitted 1" = 300' scale maps dated June 12, 1984. We realize the proposed shift of the centerline of I-270 by 24 feet to the west will reduce the impact of the future widening of I-270 on the communities of Old Farm, Old Hickory Woods, and Tilden Woods. This alignment shift requires slope easements from our parklands, together with the possibility of the construction of two retaining walls on State Highway Administration's right-of-way in order to reduce the impact on these residential communities.

The Montgomery County Planning Board strongly suggests that the State Highway Administration, in its Final Design Phase of the I-270 widening project, explore the possibility of slightly increasing the slope from the proposed 2:1 slope to a steeper grade without increasing the slope encroachment beyond that shown on the submitted drawings, and thereby eliminate the need for building these retaining walls. We realize that it is not possible at this point, without further test borings, to determine the feasibility of the construction of a steeper grade. However, we wish the State Highway Administration to give serious attention to this construction technique.

If the State Highway Administration is not able to increase the slope of the grade and eliminate the need to build these retaining walls, then they should explore the construction of "living wall" retaining walls. A living wall would soften the visual effect to the motorists from the I-270 roadway. Examples of a living wall concept are attached for your reference. In addition, if any walls are essential, they should be positioned as close to the R.O.W. line as practical so that adequate area is provided for the placement and maintenance of plant materials at the base of the wall. Wherever possible, the planting area should be at least ten feet in width.

If the State Highway Administration is not able either to eliminate the need for the retaining walls or to construct a living wall, then the Planning Board recommends the construction of the retaining walls using surface treatments with a natural appearance such as stone veneer or other appropriate materials.

The Planning Board notes that a small parcel of property adjacent to Interstate Route 270, Tuckerman Lane and Cabin John Park, is owned by Mr. Floyd Davis. A portion of this parcel will probably be required for the I-270 improvements. If the entire parcel is acquired by SHA, that portion not needed for roadway should be dedicated to the Maryland-National Capital Park and Planning Commission as an addition to Cabin John Regional Park.

During the design phase of the I-270 widening, SHA should also investigate the feasibility of providing a visual screen near the Board of Education bus depot, located on the west side of Interstate Route 270, south of Tuckerman Lane, and should incorporate such screening into the project if it is determined to be feasible.

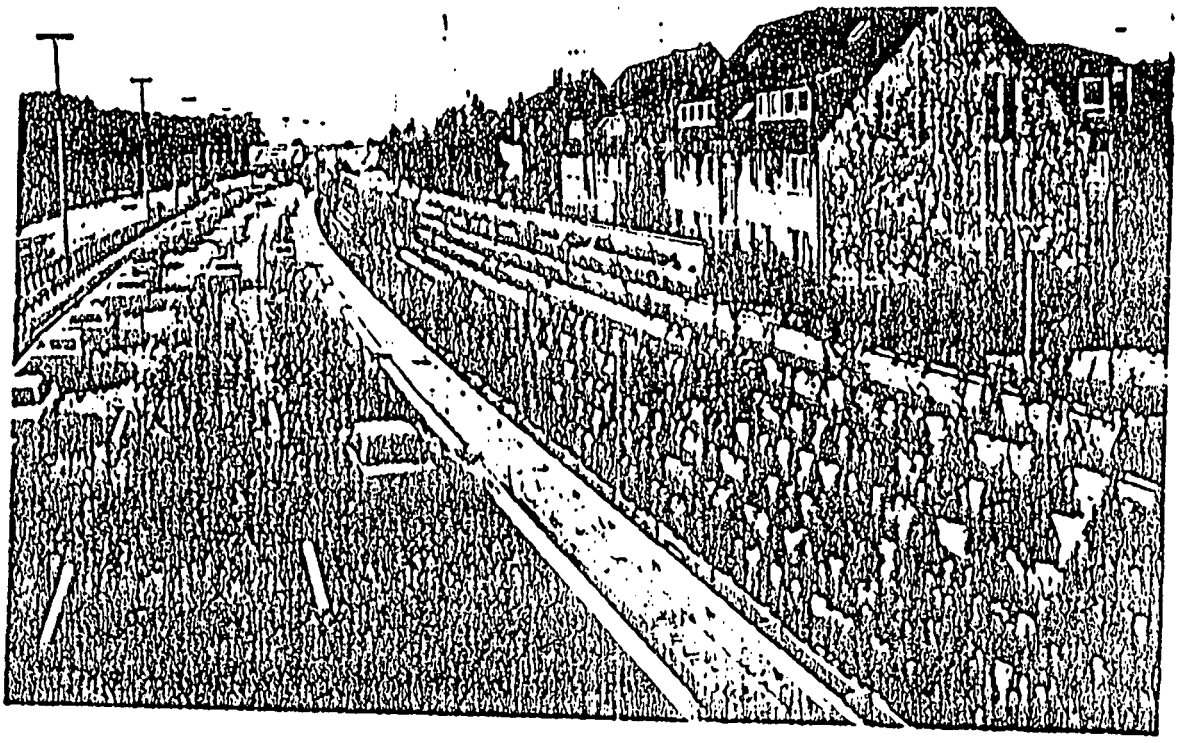
I hope these comments are useful and that we can work together in the further design phase of the I-270 project.

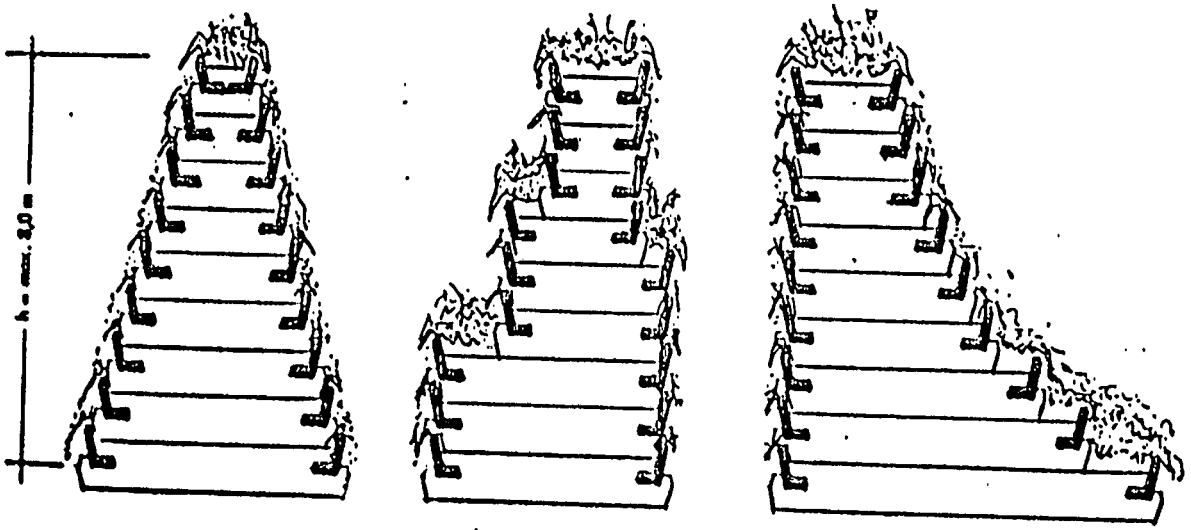
Sincerely yours,

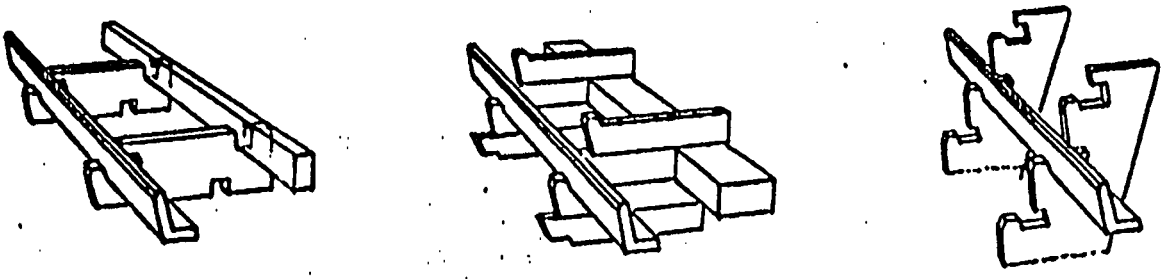
Norman L. Christeller
Chairman, MCPB

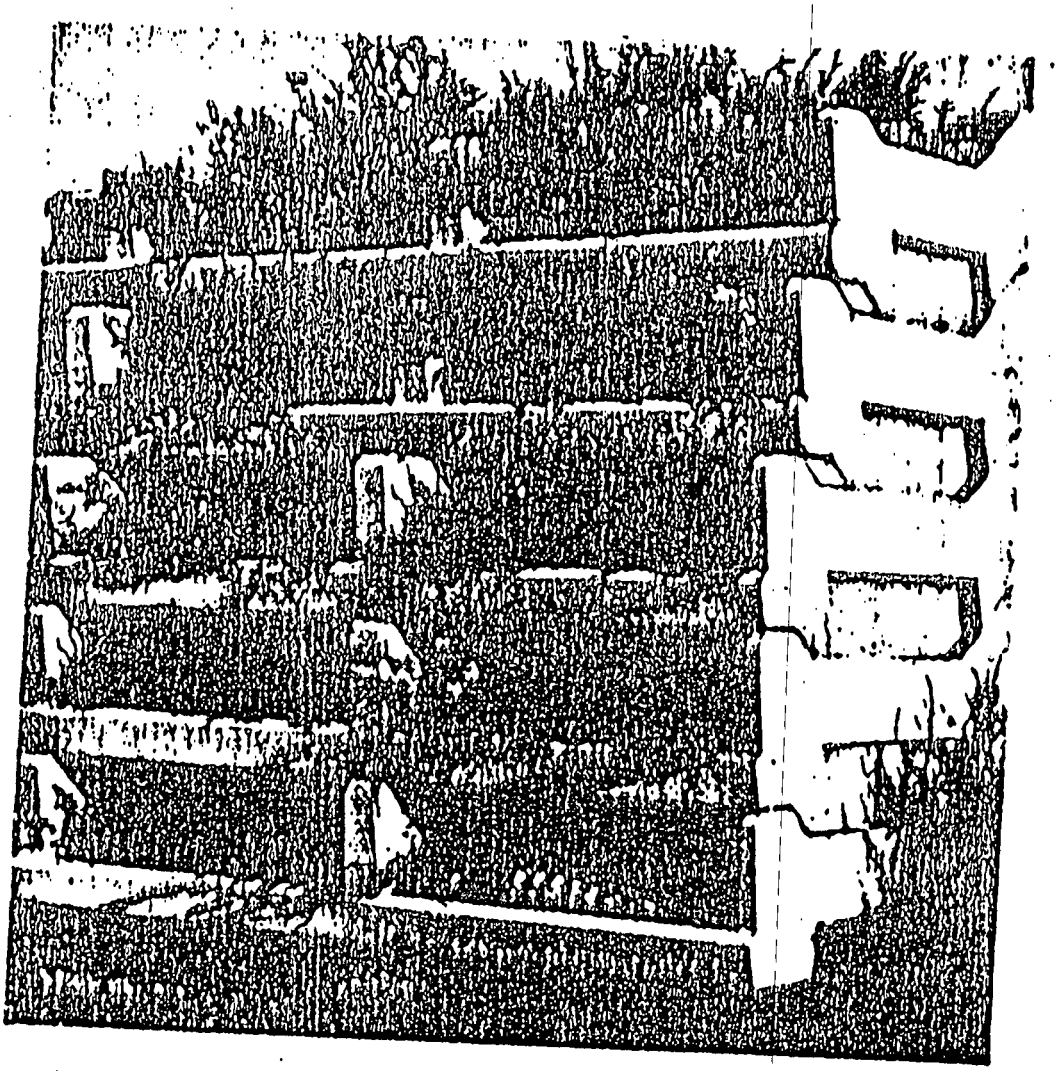
NLC:PB:dws
Attachment

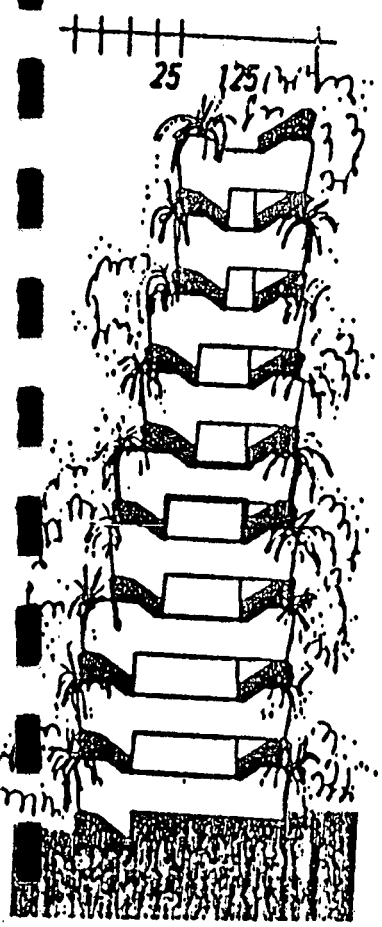
EXAMPLES OF LIVING WALLS,
NOISE BARRIERS, AND
RETAINING WALLS USED IN
GERMANY

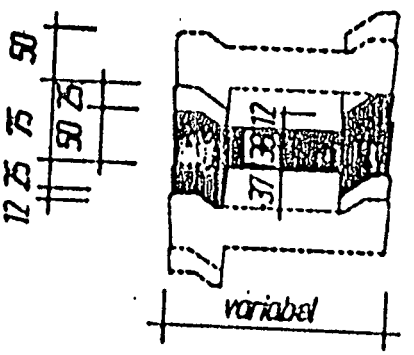


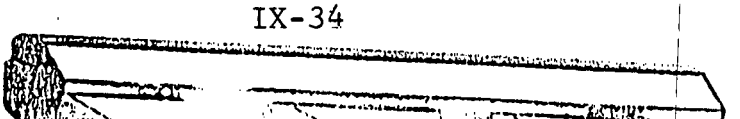


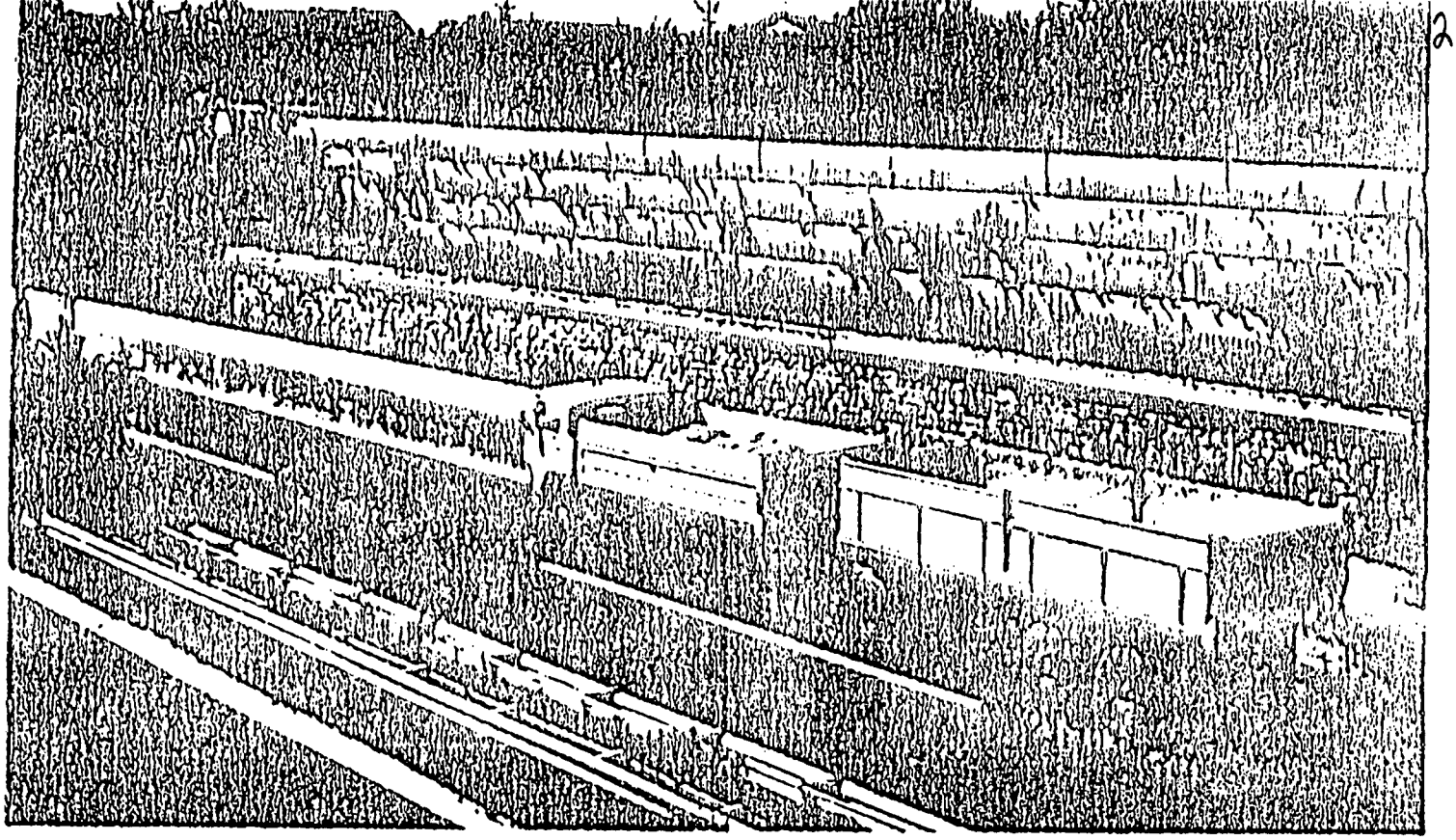





25
125
75
75
75
75
75
75
675

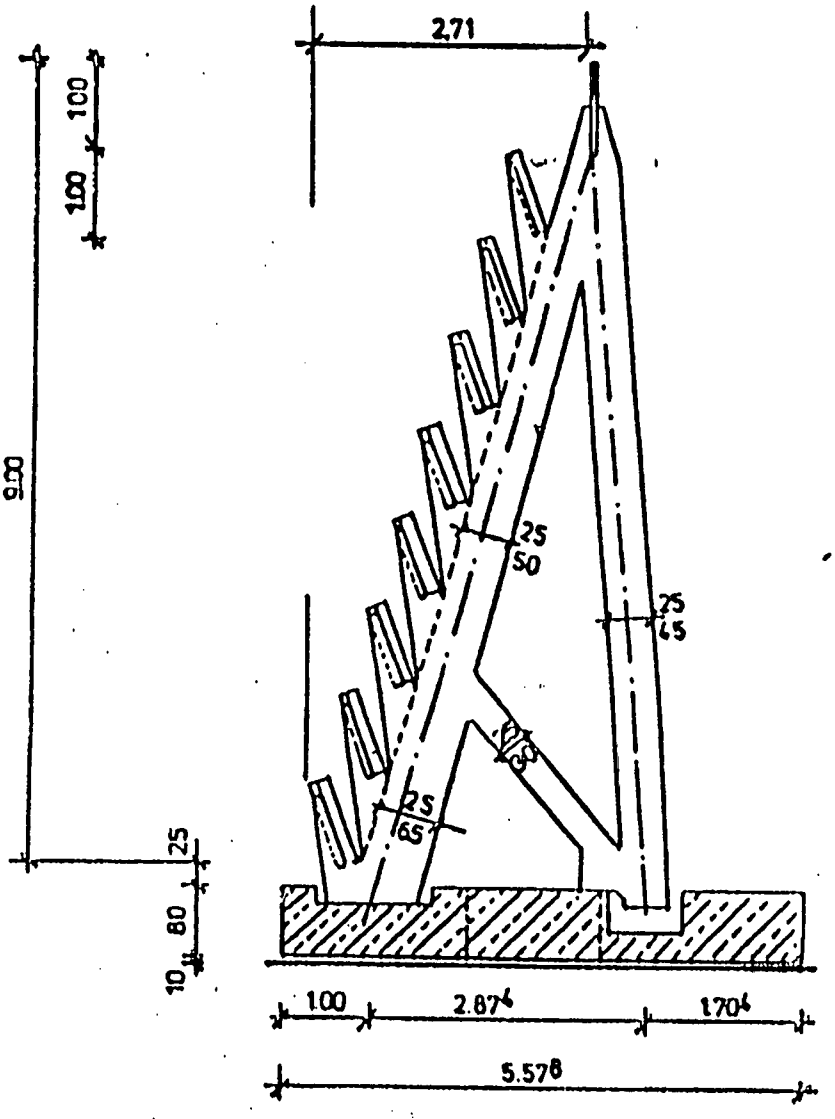

12 25 75 50
50 25
37 38 12
variabel

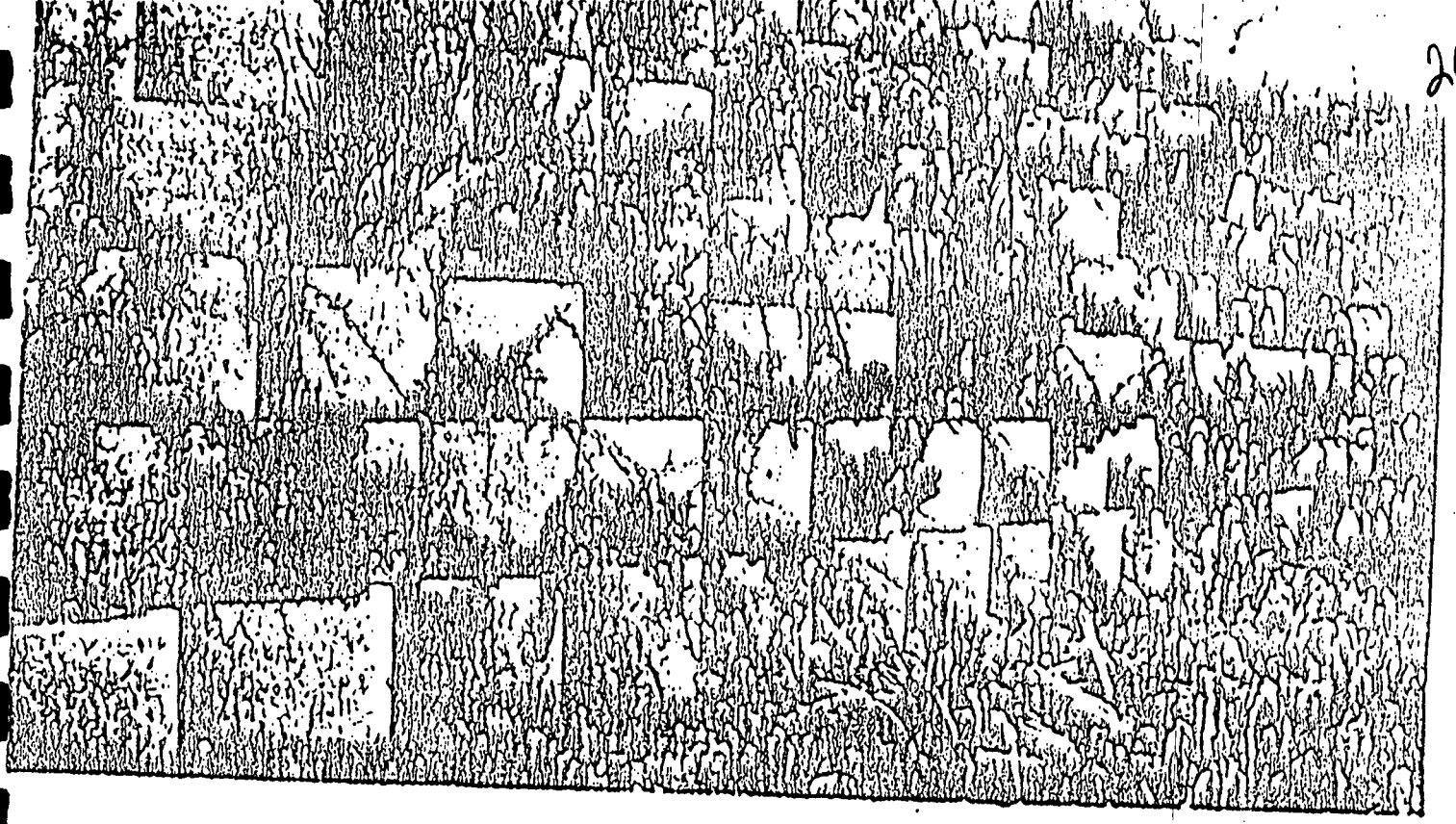


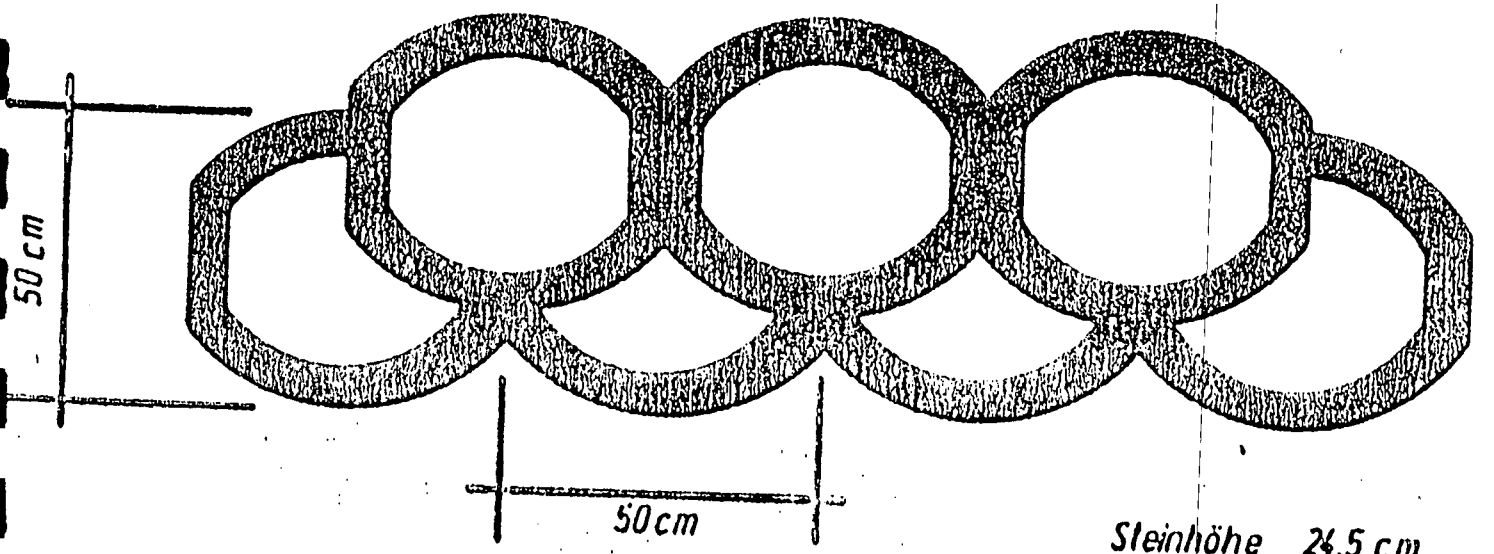


| Wall-höhe | Basis-breite A-Stütze | Basis-breite Seiten-wand-platte | Basis-breite Funda-ment |
|---|---|---|---|
| 3,00 | 2,08 | 2,22 | 2,10 |
| 4,00 | 2,62 | 2,74 | 2,60 |
| 5,00 | 3,15 | 3,28 | 3,30 |
| 6,00 | 3,69 | 3,82 | 3,85 |
| 7,00 | 4,22 | 4,35 | 4,40 |
| 8,00 | 4,76 | 4,87 | 4,95 |
| 9,00 | 5,30 | 5,42 | 5,45 |
| 10,00 | 5,83 | 5,96 | 6,00 |

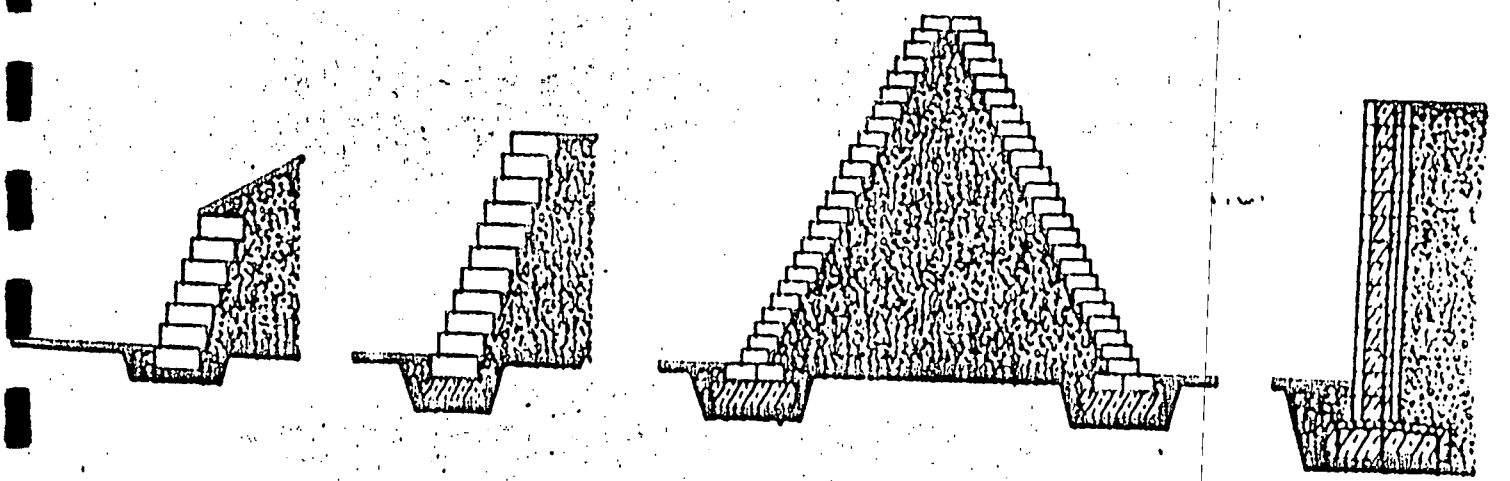
Alle Maßangaben in m

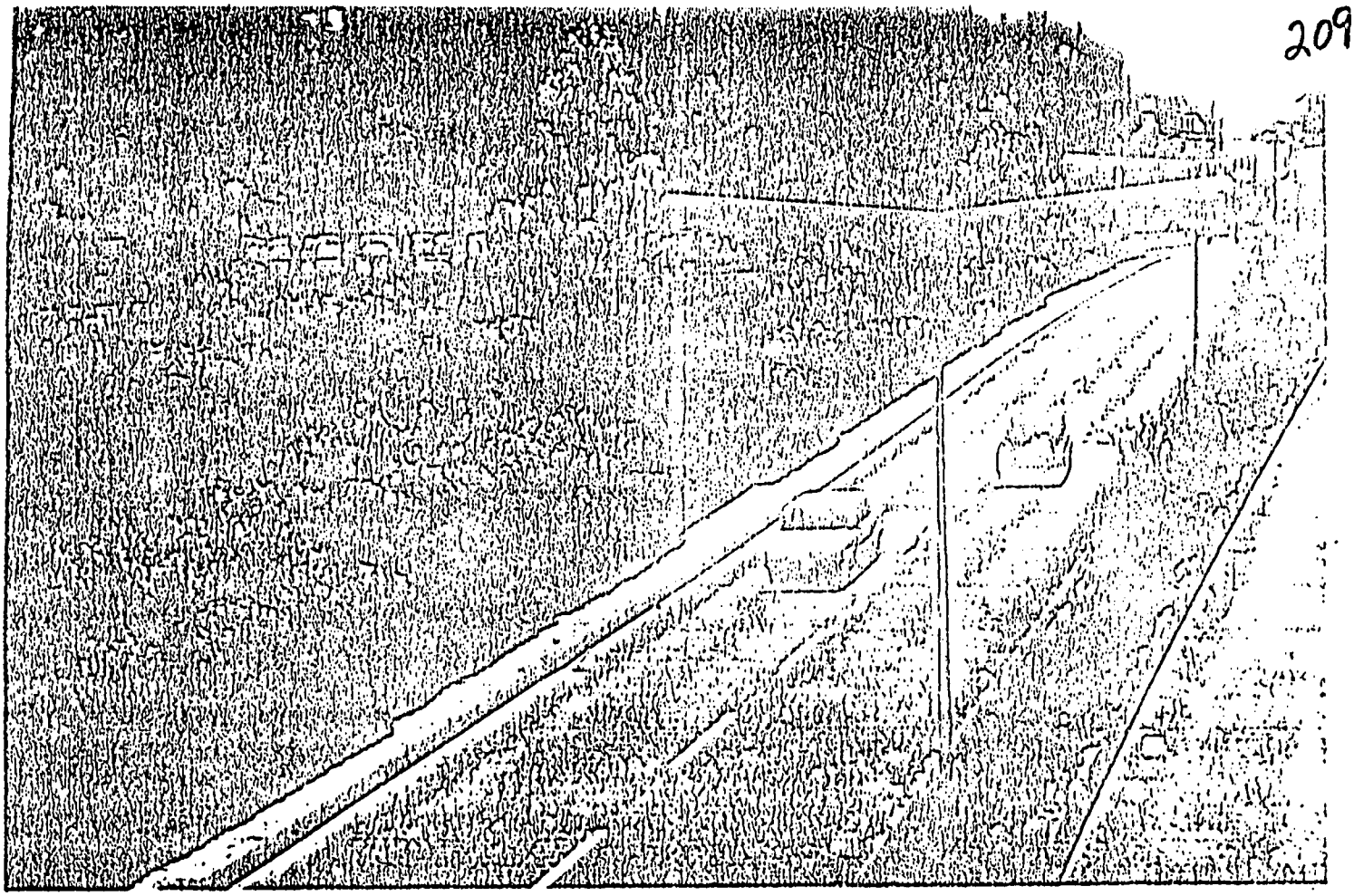




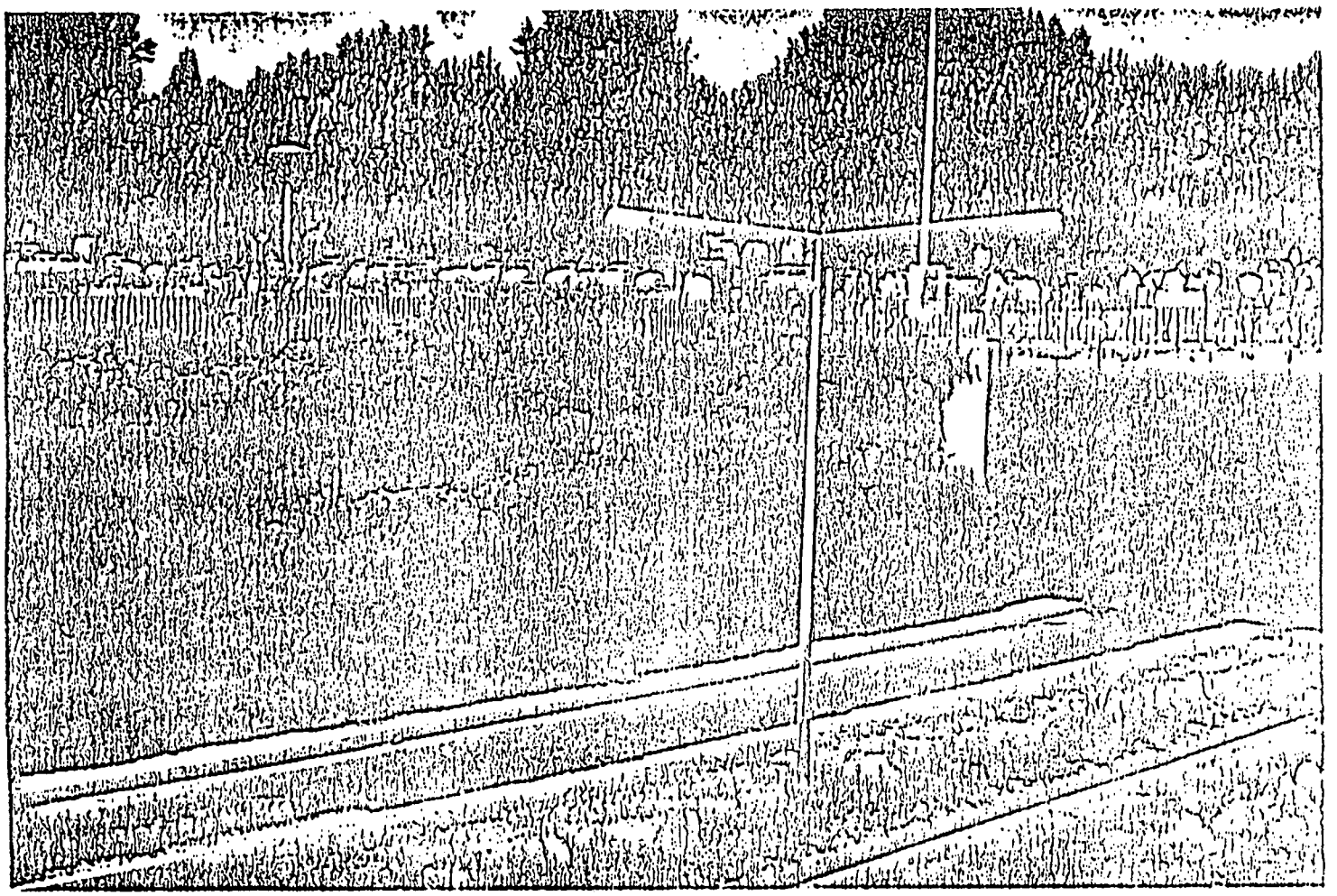



Steinhöhe 24,5 cm

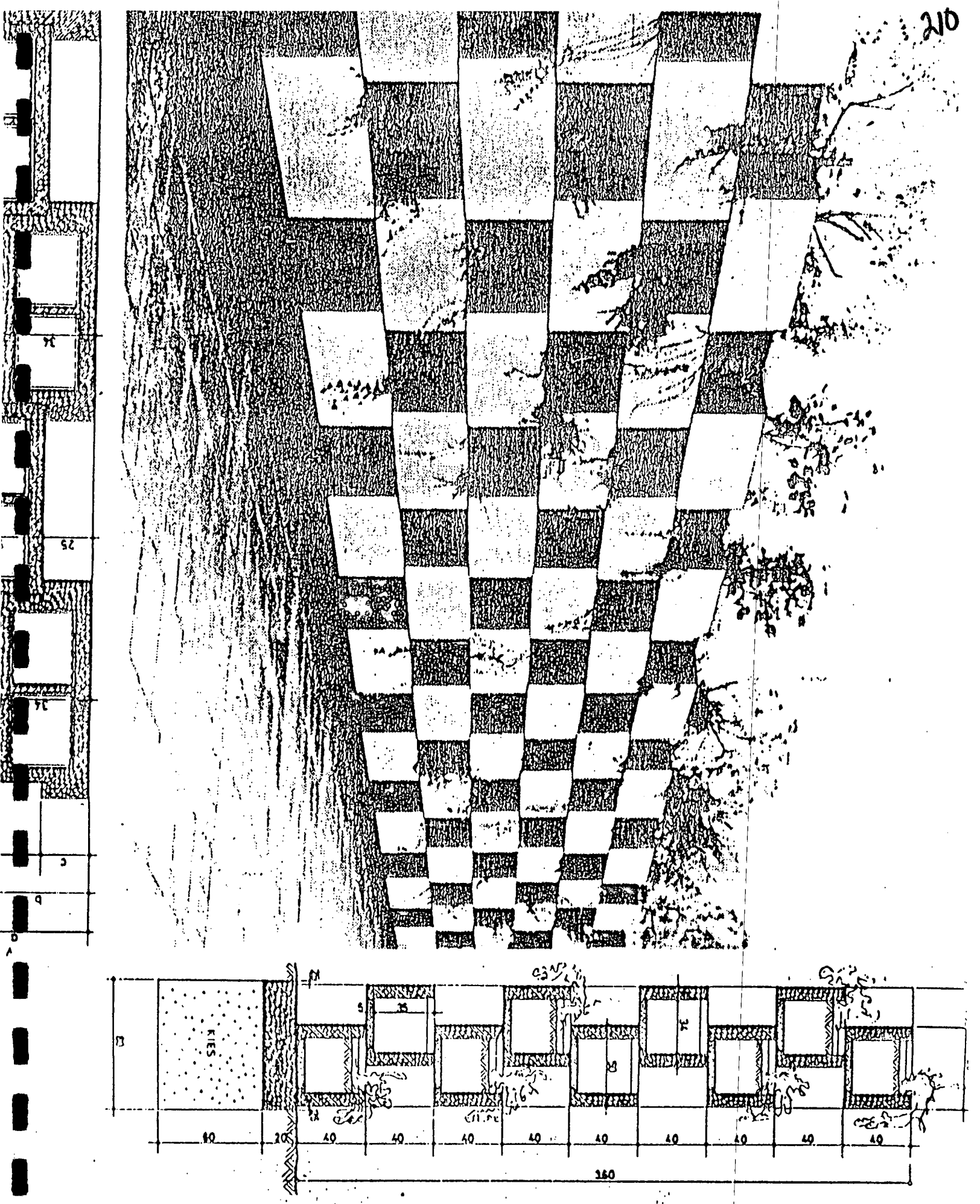




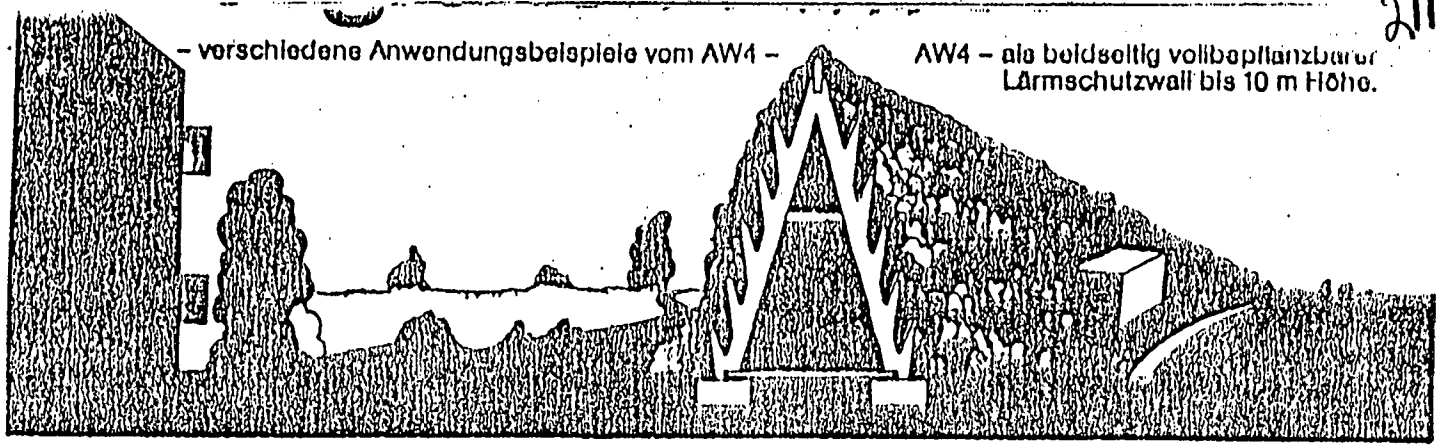
▲ Bild 1: Schallschutz durch Tieferlegung einer Straße



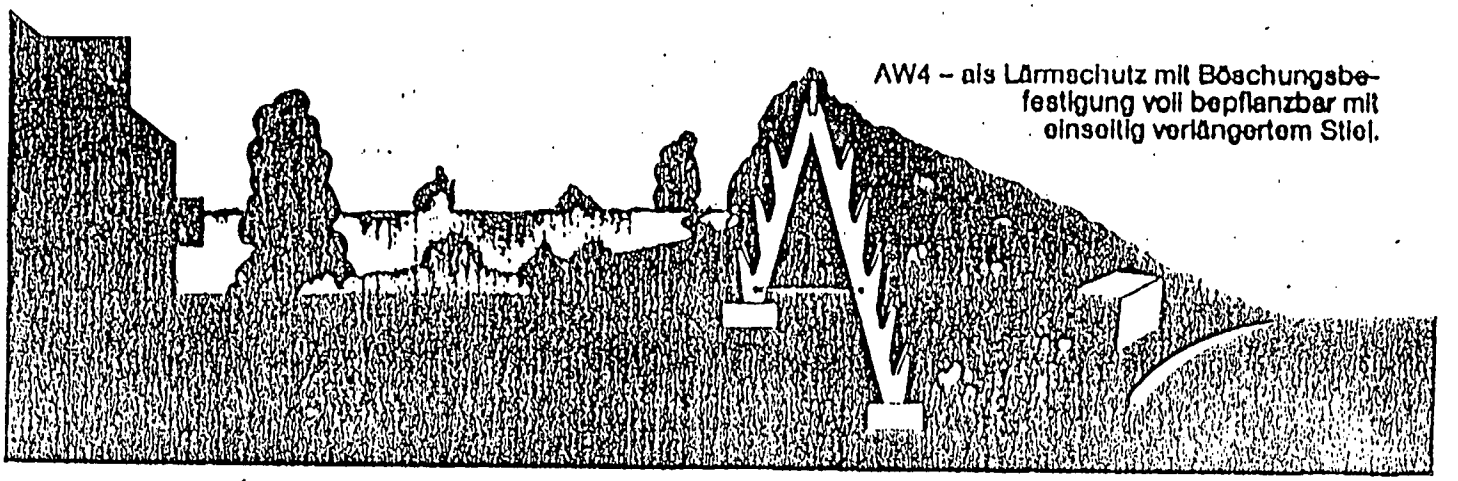
▼ Bild 2: An den Stützwänden schallabsorbierende Begrünung


KIES
40
20
40
40
40
40
40
40
40
40
40
160

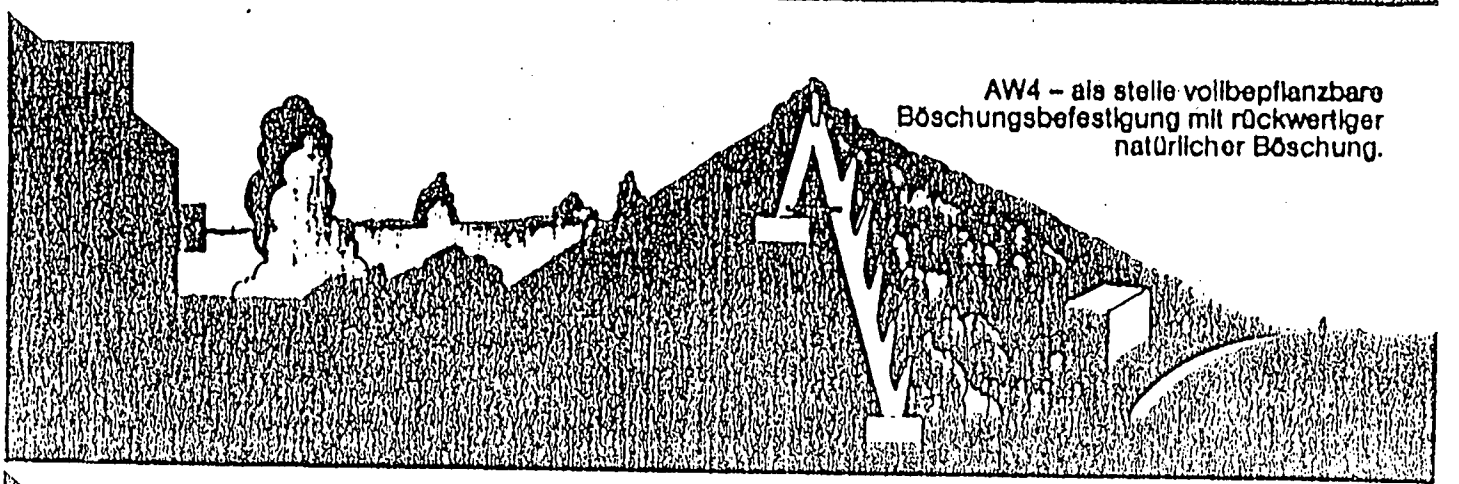
– verschiedene Anwendungsbeispiele vom AW4 –



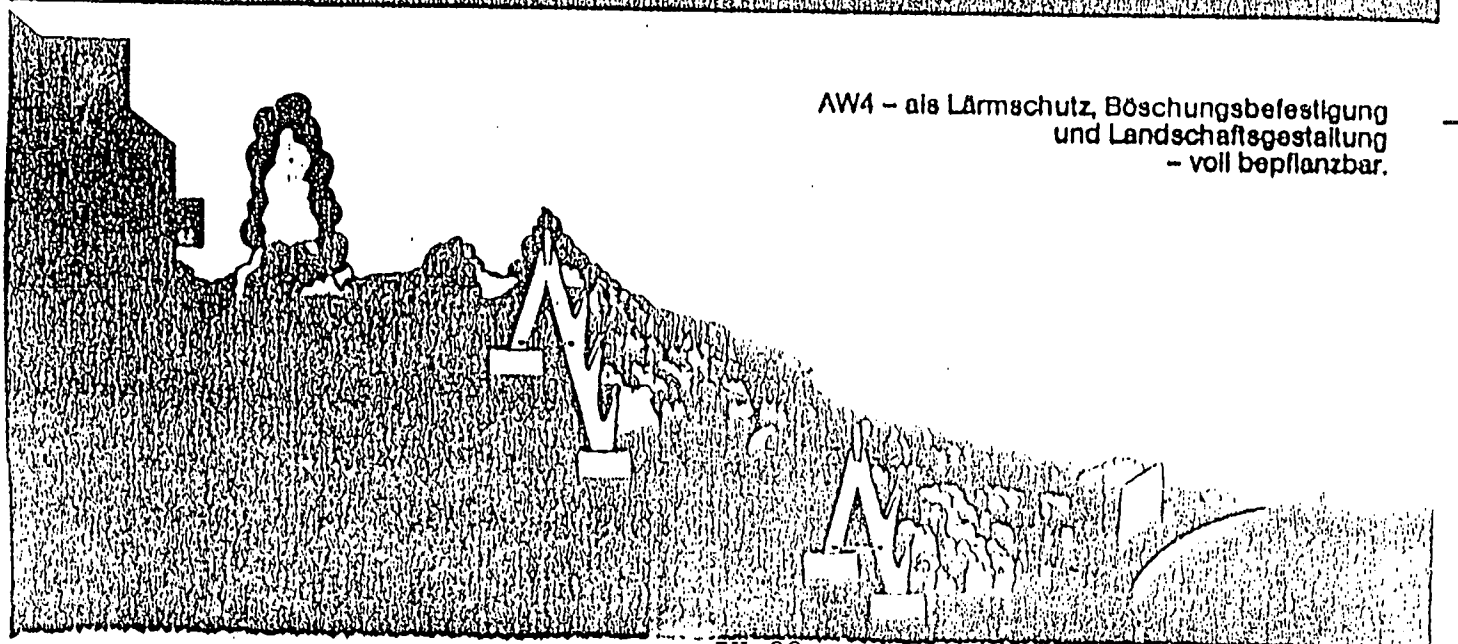
AW4 – als beidseitig vollbepflanzbarer Lärmschutzwall bis 10 m Höhe.



AW4 – als Lärmschutz mit Böschungsbefestigung voll bepflanzbar mit einseitig verlängertem Stiel.



AW4 – als steile vollbepflanzbare Böschungsbefestigung mit rückwertiger natürlicher Böschung.



AW4 – als Lärmschutz, Böschungsbefestigung und Landschaftsgestaltung – voll bepflanzbar.

**Maryland Department of Transportation**
State Highway Administration

William K. Hellmann
Secretary
Hal Kassoff
Administrator



RE: Contract No. M 401-152-372
Interstate Route 270
From I-270 Spur to Maryland
Route 121
P.D.M.S. No. 151024

Mr. Norman L. Christeller, Chairman
Maryland National Capital Park and
Planning Commission
8787 Georgia Avenue
Silver Spring, Maryland 20907

Dear Mr. Christeller:

Thank you for your letter dated June 20, 1984 concerning the placement of slope easements in the Cabin John Regional Park and Middlebrook Hill Conservation areas. Your comments regarding tighter slope ratios, the use of "living wall" type retaining walls, the use of standard retaining walls utilizing surface treatments with natural appearance and the use of planting areas have been forwarded to the Bureau of Highway Design for consideration in the Final Design Phase of the I-270 widening project. The State Highway Administration is committed to working with the Maryland National Capital Park and Planning Commission to ensure the suggestions made in our letter are incorporated in our Final Design to the degree feasible and practical.

The Maryland State Highway Administration is currently in the process of retaining Consultant Engineering firms to perform final design activities for the sections of the project from the I-270 spur to south of Maryland Route 117. At this time it is expected that design of the remainder of the project (from south of Maryland Route 117 to Maryland Route 121) will be accomplished by in-house design forces. Following receipt of Location/Design Approval sometime this Summer, control and responsibility for the project will be turned over to the Bureau of Highway Design. Future staff contact on the project should be directed to Mr. Anthony M. Capizzi, Acting Chief of the Bureau of Highway Design.



My telephone number is (301)659-1110
Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North [illegible]t St., Baltimore, Maryland 21203 - 0717

Mr. Norman L. Christeller

Page 2 JUL 13 1984

I would like to take this opportunity to thank you and your staff for the cooperation given in the planning and development of the proposed improvements to I-270. The Maryland State Highway Administration is committed to working closely with the Maryland National Capital Park and Planning Commission throughout the Final Design phase of the project.

Very truly yours,
ORIGINAL SIGNED BY:
NEIL J. PEDERSEN

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP/jmw

cc: Mr. E. H. Meehan

bcc: With Attachments
Mr. G. E. Dailey
Mr. E. M. Loskot
Mr. E. S. Freedman
Mr. J. K. Gatley
Mr. A. M. Capizzi
Mr. L. Ege
Mr. J. L White
Mr. G. Hitchcock (Wilson T. Ballard Co.)


**CITY OF GAITHERSBURG**

31 SOUTH SUMMIT AVENUE TELEPHONE: 948-3220
GAITHERSBURG, MARYLAND 20877

*February 22, 1984*

*Mr. James Helm, Project Manager*
*Bureau of Project Planning*
*State Highway Administration*
*707 N. Calvert Street*
*Baltimore, Maryland 21202*

*Dear Mr. Helm:*

*The City of Gaithersburg would like to offer comments into the public hearing record for the Interstate Route 270 Public Hearing held on February 15, 1984. The City would like to go on record in support of the widening of I-270 and the implementation of the Collector-Distributor Road preferred alternate.*

*As early as the mid 1960's, the City advocated improvements to I-270 in the form of the collector-distributor concept. The introduction of the collector-distributor road is in keeping with a long-held City belief that although I-270 is an Interstate facility, it carries an enormous amount of local traffic, the movement of which through the corridor must be streamlined. Accordingly, we feel that the extension of mainline I-270 plus the collector-distributor concept, which will ultimately deliver 12 lanes, are in keeping with the City's master plan. From an engineering perspectiv, we feel that the proposal will function well and will ultimately improve local conditions which are sorely overtaxed at present. In addition, the fact that interstate trucks will be confined to the mainline of I-270 will be a beneficial result of this undertaking. Institution of the collector-distributor between Montrose and the Maryland 124/117 Interchange will actually fill in the gaps since collector-distributor roads are proposed for the split interchange and the I-370 project.*

*The City has worked for many years in conjunction with County and State officials to expedite the construction of internal roads which service this area. Although progress has been made in that direction with many major projects funded and ready to implement within the next 5-6 years, much of the improvement of our local transportation network is undeniably linked to the capacity problems on I-270. Accordingly, we view the widening of the Interstate as the logical accompanyment to the City's local efforts to see major arterials upgraded.*

*Inasmuch as the environmental assessment document supports construction of a widened I-270 without any reference to the level of development currently under consideration by Montgomery County as a part of the new Gaithersburg Vicinity Master Plan, we can only*

assume that the new development projections would only underscore the need for increasing the roadway's capacity. However, we do feel that some effort should be made to evaluate widened I-270's role in view of the type of growth and economic development being encouraged in the Shady Grove West area of the new master plan, particularly as it relates to the staging of anticipated development and the projected build out of widened I-270.

The City would like to express concern relative to the impact noise levels are expected to have on five buildings in the Fireside Condominium and Brighton East developments in the City and would hope to have an opportunity to review in detail the design and appearance of the suggested noise barriers in that location. (1)

Additionally, we would suggest that acquisition of parkland rather than construction of a retaining wall adjacent to the City's Metropolitan Grove Park be undertaken. It is our feeling that outright acquisition would not affect the City's long range plans for development of this park since the trail referred to in the assessment document is actually a water line installed by W.S.S.C. within a 40 ft. right-of-way granted by the City. The proposed lake referred to is a now outdated concept for a storm water management facility, no longer under consideration. Based upon cost considerations, for the wall, acquisition is recommended. (2)

We would like to see firm funding commitments for this project so that the new paving can be in place to link up effectively with many of the other major road projects planned and underway in the Gaithersburg area. (3)

Sincerely yours,

Bruce A. Goldensohn

Bruce A. Goldensohn
Mayor

cc. Lou Eq

City of Gaithersburg (2/22/84)
RESPONSE

1) Noise barriers are proposed along the Fireside Condominiums and the Brighton East subdivision. Therefore, the noise levels predicted for the design year (2010) with the noise barriers will be less than the existing noise levels. During the design phase, meetings will be held with the residents of these areas to help determine their preferences with respect to height, location, materials and landscaping of the barriers.

2) Fill slopes will be allowed to fall into the park. The City will be provided landscape plans prior to construction.

3) The project is funded for design and construction.

ROCKVILLE
City of Rockville ▫ Maryland Avenue at Vinson ▫ Rockville, Maryland 20850 ▫ (301) 424-8000

RECEIVED

MAY 4 1984

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

May 2, 1984

Mr. Neil J. Pedersen
Deputy Director
Office of Planning and
Preliminary Engineering
Maryland Department of Transportation
P. O. Box 717
Baltimore, Maryland 21203

Dear Neil,

The purpose of this letter is to confirm the understanding that we discussed concerning the impact of I-270 widening on the City of Rockville owned park land abutting the road.

1) Woottons Mill Park - You indicated that 0.2 acres of land would be acquired to construct the improvements to Ramp D at the Maryland Route 28 interchange. We agreed that the state would continue the noise wall past the adjacent homes to the northwest to protect the homes. Also, the area beyond the wall adjacent to the ramp road will be graded and landscaped to create an effective visual screen. A detailed plan is to be provided the city for approval prior to construction. (1)

2) The two park land parcels located on the west side of I-270 are not to be encroached upon; however, the noise wall will continue through this section of road. (2)

3) Rockville Senior Center property (formerly Woodley Gardens Elementary School) - Since the Woodley Gardens homes are adjacent to this property, we want to insure that you continue to consider extending the noise walls beyond the last home along the back of the center property to insure that lateral noise from the road is blocked. This is of concern to the local residents. Also, we want to preserve the large trees along the rear of the property. (3)

On all of the areas we want to review and approve the detail preliminary construction plans as they become available. Should you have any questions, please don't hesitate to contact me on extension 331.

Sincerely,

Ronald A. Olson
Director of Recreation and Parks

cc: Mike Davis Greg Bayor Judy Beck
Robert Goodin John Hayes

Rockville (5/4/84)

1) The noise wall will be continued to provide maximal protection to the area.

2) Noise wall will be continued through this area.

3) A retaining wall and noise barrier will be extended beyond Woodley Gardens along the Senior Center property to Gude Drive.

March 22, 1984

219

Mailgram

Mr. M. Slade Caltrider
707 North Calvert Street
Baltimore, MD 21201

The Mayor and Council of Rockville, Maryland, after further study of the materials produced for the February 15, 1984 public hearing on the I-270 Widening, agree that there is a need to increase the capacity of I-270 in Montgomery County. However, we also recognize that the proposed expansion in capacity will severely affect existing residential development immediately adjacent to and within 500 feet of the existing right-of-way.

This is to respectfully request that flexibility in design be assured in order to minimize environmental impacts. Also, in our opinion thruput on I-270 could be enhanced by constructing the Falls Road Interchange and by improving the interchanges between I-495 and Germantown.

The City is anxious to work with SHA to identify more clearly the negative impacts and work toward acceptable solutions. We join Montgomery County in requesting flexibility in design width and minor alignment changes where appropriate.

We appreciate the efforts of the SHA to address the acute traffic problems confronting the County. We look forward to working with you on this very important project.

John R. Freeland
Mayor, City of Rockville

City of Rockville 3/22/84

No response required.