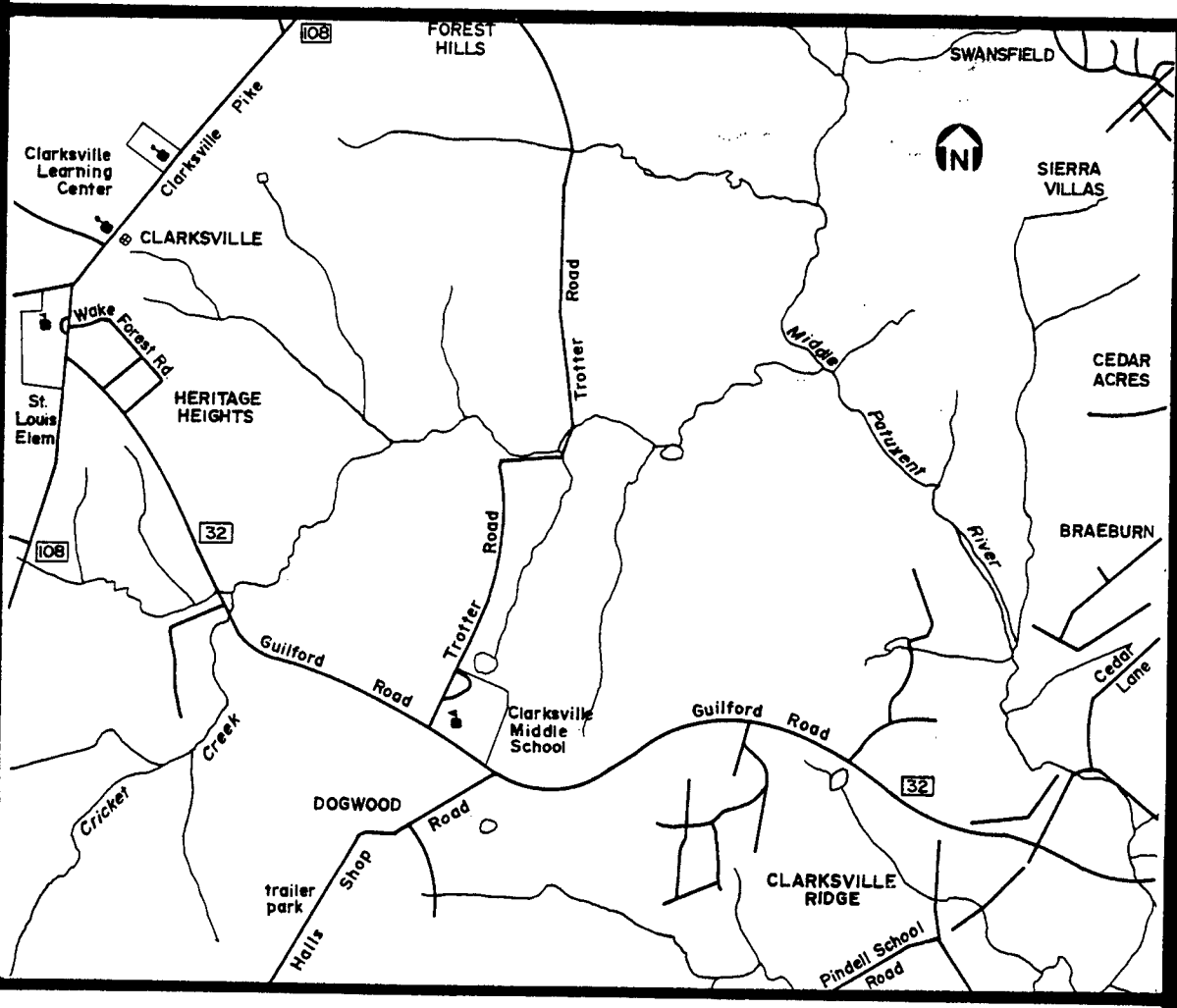
SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT

SECTION 4(f) STATEMENT

RELOCATED MARYLAND ROUTE 32

From Maryland Route 108 to Pindell School Road
Howard County, Maryland

CONTRACT NO. HO 292-202-770



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

and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

REPORT NUMBER FHWA-MD-EIS-72-07-FS

REGION III

RELOCATED MARYLAND ROUTE 32
FROM PINDELL SCHOOL ROAD
TO MARYLAND ROUTE 108

SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT/
SECTION 4(f) STATEMENT

Submitted Pursuant to 42 U.S.C. 4332(2) (c) and 49 U.S.C. 303 (c)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
COOPERATING AGENCY
U.S. ARMY CORPS OF ENGINEERS

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State Highway Administration
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Hours: 8:15 a.m. - 4:15 p.m.

3/28/89
Date

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5/5/89
Date

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The purpose of the project is to upgrade MD Route 32 from Pindell School Road to MD Route 108. Two alternates, the No-Build Alternate and the Build Alternate B, are currently under consideration. The project is consistent with existing and planned development.

Environmental impacts associated with the project include right-of-way acquisition, archeological site impacts, and floodplain/wetland involvements.

Summary

SUMMARY

1. ADMINISTRATIVE ACTION

Supplemental Environmental Statement

(X) Final
( ) Draft
(X) Section 4(f) Evaluation

2. INFORMATIONAL CONTACTS

The following persons may be contacted for additional information concerning this document:

Mr. Herman Rodrigo
Planning, Research, Environment and Safety Engineer
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3. DESCRIPTION OF SELECTED ACTION

The project involves the construction of Relocated MD Route 32 from MD Route 108 to Pindell School Road. Within this segment are two proposed interchanges; one at existing MD Route 108 and one at existing Pindell School Road. Also included is construction of two service roads; one connecting existing MD Route 32 to relocated Sanner Road/Pindell School Road on the south, the other on the north connecting Cedar Lane to the W.R. Grace entrance and the Riverhill Game Farm entrance.

Relocated MD Route 32 and the service road construction, along with the MD Route 108 improvements, will be built to current State and Federal highway standards. Improvements to Trotter Road and Pindell School Road will be to County standards. A box culvert would be constructed where relocated MD Route 32 passes over Cricket Creek. A bridge structure will be constructed where relocated Pindell School Road/Cedar Lane passes over the Middle Patuxent River.

Three alternates have been studied. All three have the same typical section and follow the same alignment horizontally and vertically for approximately 2,000 feet at the western terminus. The differences among these alignments are discussed below.

4. ALTERNATES CONSIDERED

No-Build Alternate

This alternate will involve no new construction. The No-Build Alternate will provide no significant improvements to existing roads. Only routine safety and maintenance operations will be performed on the roadway. These routine operations will in no way improve the ability of the existing east-west roadway to accommodate predicted traffic increases through the design year, thereby creating unsafe conditions.

Alternate A (Original SHA alignment from EIS)

Alternate A is the original SHA alignment as presented in the Environmental Impact Statement approved by FHWA on July 7, 1977. This alignment originates at the existing northbound lanes of MD Route 32 just west of MD Route 108. The alignment passes through the Trotter Road area approximately 2,800 feet north of existing MD Route 32. Proceeding easterly, the alignment passes through the W.R. Grace property and the Stretmaster Pond area just north of existing MD Route 32 to meet existing relocated MD Route 32 construction east of Pindell School Road. Bridges would be constructed at MD Route 108 and Pindell School Road. Full diamond-type interchanges would be constructed at MD Route 108 and Pindell School Road. Alternate A was dropped from further study because it was determined that a shift to the south, as with Alternate B, would lead to a reduction in the acreage of impacted wetlands and floodplains.

Alternate B (Selected)

Alternate B originates at the same western terminus as Alternate A and passes through the Trotter Road area approximately 440 feet south of Alternate A. In the vicinity of the W.R. Grace property and Stretmater Pond, the alignment has been shifted 100 feet north of the Alternate A alignment in order to reduce impacts to Stretmater Pond and existing residences along the south side of old MD Route 32. The alignment proceeds easterly to meet the existing MD Route 32 construction east of Pindell School Road at the same point as Alternate A. Full diamond-type interchanges will be constructed at MD Route 108 and Pindell School Road. A cul-de-sac will be constructed at Trotter Road on both the north and south sides of relocated MD Route 32. With this alternate, a bridge option is also under consideration (see Option 3).

Alternate C

This alternate originates at the common western terminus of Alternates A and B. The alignment passes through the Trotter Road area approximately 700 feet south of Alternate A. All other aspects of this alternate are the same as Alternate B. This alternate was dropped from consideration because it had greater environmental impacts than Alternate B and was located closer to an existing community.

Cedar Lane (Selected)

Improvements to Cedar Lane, including a new bridge over the Middle Patuxent River, have been included as part of the MD Route 32 project. These proposed improvements are necessary due to the projected traffic volumes and the poor horizontal and vertical alignment of Cedar Lane. These improvements will be necessary with the selection of any alternate, including the No-Build Alternate.

Option 1 - Service Roads (Selected)

A service road is proposed north of the alignment to allow access to the W.R. Grace and Riverhill Game Farm properties from old MD Route 32. On the south, another service road is proposed to connect existing MD Route 32 to relocated Sanner Road/Pindell School Road.

Option 2 - Service Roads with Underpass

This option shows an alternate means of access to the W.R. Grace and Riverhill Game Farm properties via an underpass from the south service road to the location of the existing W.R. Grace entrance. Under this option, a portion of the north service road from the existing W.R. Grace entrance to the eastern terminus at Mill Road would be eliminated.

Option 3 - Trotter Road

Option 3 shows improvements to Trotter Road and a new bridge structure to carry Trotter Road over the mainline of MD Route 32. No direct access would be provided from relocated MD Route 32 to Trotter Road.

5. SUMMARY OF ENVIRONMENTAL IMPACTS

Two historic sites on, or eligible for, the National Register of Historic Places have been identified in the project area. The project will not require right-of-way from any historic property. A concurrence in the determination of no effect has been received from the State Historic Preservation Officer.

There are no recreational facilities affected by the project. Minor strips of right-of-way may be required from the Middle Patuxent Environmental Area.

An archeological survey has been completed. Two sites may be affected and will require further investigation. Further coordination is required with the Maryland Historic Trust.

The project will require the acquisition of one home as well as woodland and farm land. The project will not require the acquisition of any businesses or public facilities.

The project will require eight stream crossings and subsequent impacts to the associated floodplains. Also, the project will impact approximately 2.35 acres of non-tidal wetlands.

Air and noise analyses were completed for this project. The N.A.C. are exceeded at 3 receptor sites. There will be no violations of the State and National Ambient Air Quality Standards.

A summary of the impacts is presented in Table 1.

6. PERMITS REQUIRED

Construction of this project will require review and approval for the following permits:

- U.S. Army Corps of Engineers - Section 404 Permit
- Maryland Department of the Environment - Approved Sediment Control Plan
- Maryland Department of the Environment - Approved Stormwater Management Plan
- Maryland Department of Natural Resources - Waterway Construction Permit
- Maryland Department of the Environment - Water Quality Certificates

7. AREAS OF CONTROVERSY/UNRESOLVED ISSUES

There are no known areas of controversy. The citizens of Trotter Road have voiced opposition to an interchange at Trotter Road; therefore, an interchange is no longer proposed at this location.

TABLE 1

COMPARISON OF ALTERNATES

	No-Build Alternate	Alternate B
Socioeconomic Impacts		
1. Residential Displacements	0	1
2. Minorities Relocated	0	0
3. Business Displacements	0	0
4. Historic Sites Affected	0	0
5. Archeological Sites Affected	0	2
6. Public Lands Affected (acres)	0	1
7. Effects on Residential Access	None	Improved
8. Consistent with Land Use Plans	No	Yes
Natural Environmental Impacts		
1. Loss of Natural Habitat (Woodland acres)	0	29
2. Effects on Threatened or Endangered Species	0	0
3. Stream crossings	0	8
4. Wetland Acres Affected	0	2.35
5. 100-year Floodplain Affected (acreage)	0	3.52
6. Prime Farmland Soils Affected (acreage)	0	28.50
7. Air Quality Impacts (Sites exceeding S/NAAQS)	0	0
8. Noise Sensitive Areas (NSAs exceeding Federal Noise Abatement Criteria or experiencing a 10 dBA or greater increase)	0	3

Total cost (1988 dollars in thousands)

Alternate B with Service Roads Option 1 41,000
Alternate B with Service Roads Option 2 45,000
Alternate B with Service Roads Option 1
and Trotter Road Option 3 43,000
Alternate B with Service Roads Option 2
and Trotter Road Option 3 45,000

The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with the provisions of 1500.4 (k) and 1506.2 and .6 of the Council of Environmental Quality Regulations, effective July 31, 1979, which recommend that duplication of Federal, State, and Local procedures be integrated into a single process.

The checklist identifies specific areas of the natural and social-economic environment which have been considered while preparing this environmental assessment. The reviewer can refer to the appropriate sections of the document, as indicated in the "Comments" column of the form, for a description of specific characteristics of the natural or social-economic environment within the proposed project area. It will also highlight any potential impacts, beneficial or adverse, that the action may incur. The "No" column indicates that during the scoping and early coordination processes, that specific area of the environment was not identified to be within the project area or would not be impacted by the proposed action.

ENVIRONMENTAL ASSESSMENT FORM (EAF)

	YES	NO	COMMENTS
A. Land Use Considerations			
1. Will the action be within the 100 year flood plain?	X		III-8
2. Will the action require a permit for construction or alteration within the 50 year flood plain?		X	
3. Will the action require a permit for dredging, filling, draining, or alternation of a wetland?	X		III-9 IV-8
4. Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?		X	
5. Will the action occur on slopes exceeding 15%?		X	
6. Will the action require a grading plan or a sediment control permit?	X		S.4 IV.5
7. Will the action require a mining permit for deep or surface mining?		X	
8. Will the action require a permit for drilling a gas or oil well?		X	
9. Will the action require a permit for airport construction?		X	
10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?		X	
11. Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?		X	
12. Will the action affect the use of any natural or man-made features that are unique to the County, State, or Nation?		X	

	YES	NO	COMMENTS
13. Will the action affect the use of an archeological or historical site or structure?	___	X	IV.21
B. Water Use Considerations			
14. Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water?	X	___	S.4 IV.8
15. Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction?	___	X	___
16. Will the action change the overland flow of storm water or reduce the absorption capacity of the ground?	X	___	III.8 IV.5
17. Will the action require a permit for the drilling of a water well?	___	X	___
18. Will the action require a permit for water appropriation?	___	X	___
19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	___	X	___
20. Will the project require a permit for the construction and operation of facil- facilities for sewage treatment and/or land disposal of liquid waste derivatives?	___	X	___
21. Will the action result in any discharge into surface or sub-surface water?	X	___	IV.6
22. If so, will the discharge affect ambient water quality limits or require a discharge permit?	___	X	___

	YES	NO	COMMENTS
C. Air Use Considerations			
23. Will the action result in any discharge into the air?	___	X	_____
24. If so, will the discharge affect ambient air quality limits or produce a disagreeable odor?	___	X	_____
25. Will the action generate additional noise which differs in character or level from present conditions?	___	X	_____
26. Will the action preclude future use of related air space?	___	X	_____
27. Will the action generate any radiological, electrical, magnetic, or light influences?	___	X	_____
D. Plants and Animals			
28. Will the action cause the disturbance, reduction, or loss of any rare, unique or valuable plant or animal?	___	X	_____
29. Will the action result in the significant reduction or loss of any fish or wildlife habitats?	___	X	_____
30. Will the action require a permit for the use of pesticides, herbicides or other biological, chemical, or radiological control agents?	___	X	_____
E. Socio-Economic			
31. Will the action result in a pre-emption or division of properties or impair their economic use?	___	X	_____
32. Will the action cause relocation of activities or structures, or result in a change in the population density of distribution?	___	X	_____

	YES	NO	COMMENTS
33. Will the action alter land values?	___	X	
34. Will the action affect traffic flow and volume?	X	___	I.2
35. Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?	___	X	
36. Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	___	X	
37. Is the action in accord with federal, state, regional and local comprehensive or functional plans-including zoning?	X	___	
38. Will the action affect the employment opportunities for persons in the area?	___	X	
39. Will the action affect the ability of the area to attract new sources of tax revenue?	___	X	
40. Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	___	X	
41. Will the action affect the ability of the area to attract tourism?	___	X	
F. Other Considerations			
42. Could the action endanger the public health, safety, or welfare?	___	X	

	YES	NO	COMMENTS
43. Could the action be eliminated without deleterious affects to the public health, safety, welfare, or the natural environment?	___	X	___
44. Will the action be of statewide significance?	___	X	___
45. Are there any other plans or actions (Federal, State, County or Private) that, in conjunction with the subject action, could result in a cumulative or synergistic impact on the public health, safety, welfare, or environment?	___	X	___
46. Will the action require additional power generation or transmission capacity?	___	X	___

G. Conclusion

47. This agency will develop a complete environmental effects report on the proposed action.	X	___	See Note Below

Note: This Supplemental Final Environmental Impact Statement has been prepared in accordance with the National Environmental Policy Act and 23 CFR 771

*References refer to sections of the document

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1

Purpose and Need

I. PURPOSE AND NEED

A. PROJECT LOCATION AND DESCRIPTION

The proposed MD Route 32 project is located in central Howard County (see Figure 1).

MD Route 32 extends from Westminster in Carroll County to proposed Interstate Route 97 near Annapolis in Anne Arundel County, a distance of approximately 59 miles.

The connection with Interstate Route 97 provides an important transportation corridor between the City of Annapolis and the rapidly developing areas of eastern Howard County.

The study area is bordered on the west by MD Route 108, on the east by Pindell School Road and Cedar Lane, and on the south by existing Md Route 32 (see Figure 2).

Additional information on Alternate B, as well as the other alternates which were considered but dropped from the study, is available in Section II.

B. BACKGROUND

The MD Route 32 project in Howard County was originally studied from the Anne Arundel County line to MD Route 108. This study began early in the 1970's. A Final Environmental Impact Statement (FEIS) (Report Number FHWA-MD-EIS-72-07-(F)) was approved and circulated in July of 1977. Location approval was granted by the Federal Highway Administration in August of 1977. Subsequently, the portion of MD Route 32 from the Anne Arundel/Howard County line to Pindell School Road was constructed and is now open to traffic.

In the time elapsed since the FEIS study was completed, the existing and planned development has greatly increased in the Clarksville area of Howard County. The resulting traffic demands created the need for a reevaluation of the project location approval granted in 1977. Furthermore, an interchange at MD Route 108 was not discussed in the 1977 FEIS, thus the decision was made to prepare a Supplemental Environmental Impact Statement.

C. NEED FOR THE PROJECT

1. Regional Growth and Development

The purpose of this planning and preliminary engineering study is to examine the feasibility for the construction of additional highway capacity in central Howard County between MD Route 108 and Pindell School Road/Cedar Lane. The extension of MD Route 32 on a new location will provide a vital highway link in this rapidly developing area.

Existing MD Route 32 (Guilford Road) is a narrow, two-lane highway which experiences congestion and delay during peak hours. Planned residential and

commercial development throughout the study corridor will place increased demands on the existing roadway network.

A controlled access high-speed east-west highway will relieve much of the congestion experienced on the existing roadway network by removing much of the truck and commuter traffic. In addition, traffic utilizing relocated MD Route 32 will no longer be diverted through Clarksville.

The construction of relocated MD Route 32 will provide a safe and efficient highway link that will move people, goods, and services quickly and directly. The completion of this segment of MD Route 32 will create a continuous, high-speed highway between Interstate Route 70 near Cooksville in Howard County and the city of Annapolis, the State capital in Anne Arundel County, a total distance of approximately 40 miles. The segment of MD Route 32 from I-70 to Westminster is not programmed for upgrading at this time. The purpose of this highway is to provide a safe and efficient transportation link between the eastern shore and western Maryland, which bypasses both Baltimore and Washington, D.C.

Improvements to Cedar Lane, including a new bridge over the Middle Patuxent River, have been included as a part of the Maryland Route 32 project. These proposed improvements are necessary to handle the projected traffic volumes on Cedar Lane.

The existing Average Daily Traffic (ADT) on Cedar Lane is 15,500 vehicles per day. The projected ADT for the design year is 32,000 vehicles per day.

Howard County is proposing to improve Cedar Lane to a four-lane roadway north of the Middle Patuxent River. The State Highway Administration will then improve Cedar Lane north of the proposed Maryland Route 32/Pindell School Road interchange to tie into the County project.

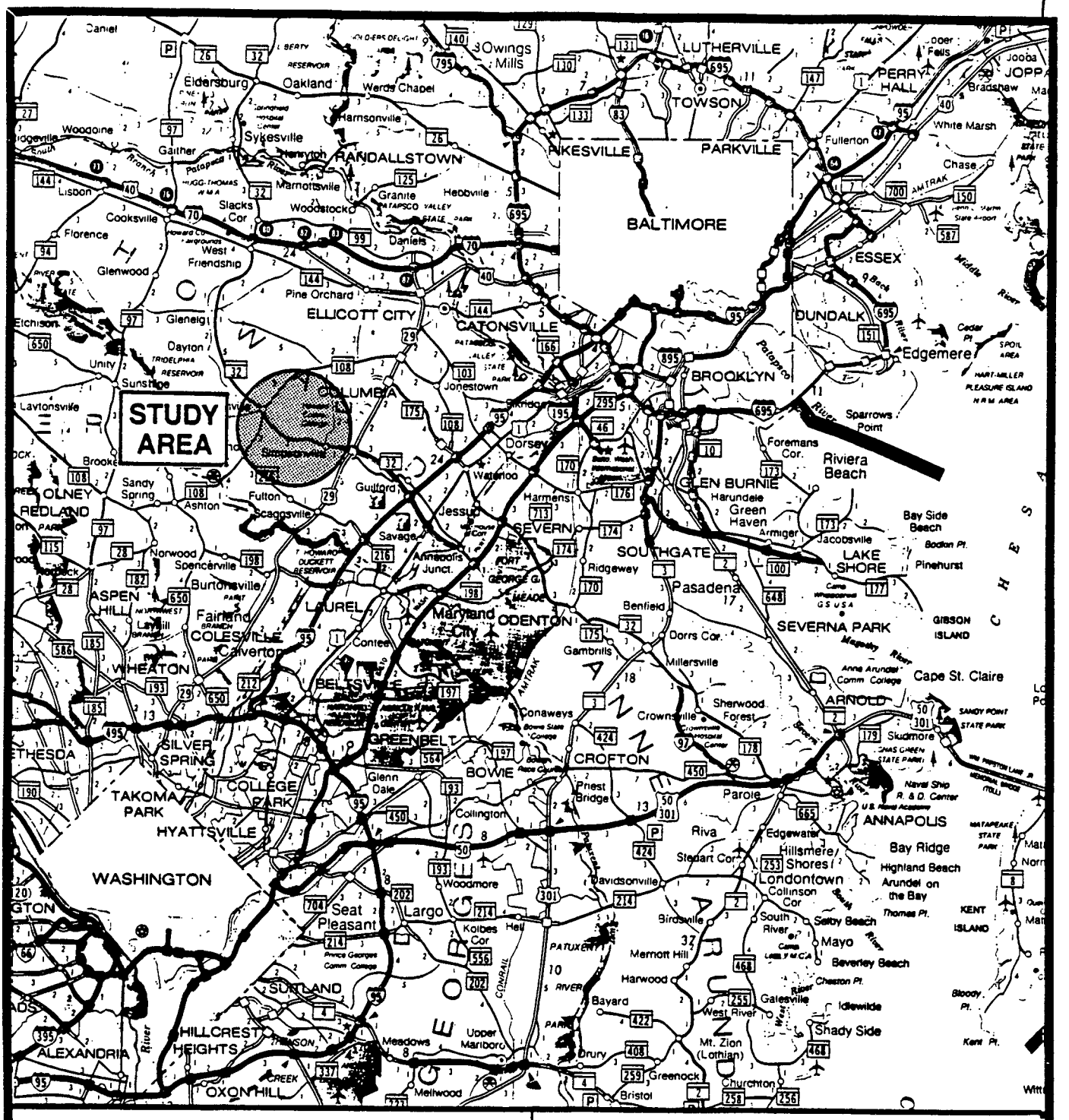
2. Traffic Operations

Traffic operations on the existing roadway network are characterized by congestion and delay during peak periods. Future development planned throughout the study area will cause traffic operations to deteriorate.

The current ADT on MD Route 32 varies from 23,000 vehicles per day east of Pindell School Road to 10,000 vehicles per day west of MD Route 108. Traffic forecasts for the design year 2015 predict that traffic on MD Route 32 will increase to 53,000 vehicles per day east of Pindell School Road and to 13,800 vehicles per day west of MD Route 108 (see Figure 3 and 4). Projected Levels of Service are illustrated on Figures 5 and 6.

3. Accident Analysis

MD Route 32, from Cedar Lane to MD Route 108, experienced a total of 90 accidents during the three-year period 1984 through 1986. The average rate for the study section was 287 accidents for every hundred million vehicles miles of travel (accidents/100 mvm). This accident rate is considerably higher than the statewide average rate of 207 accidents/100 mvm for similarly designed highways.



MARYLAND ROUTE 32

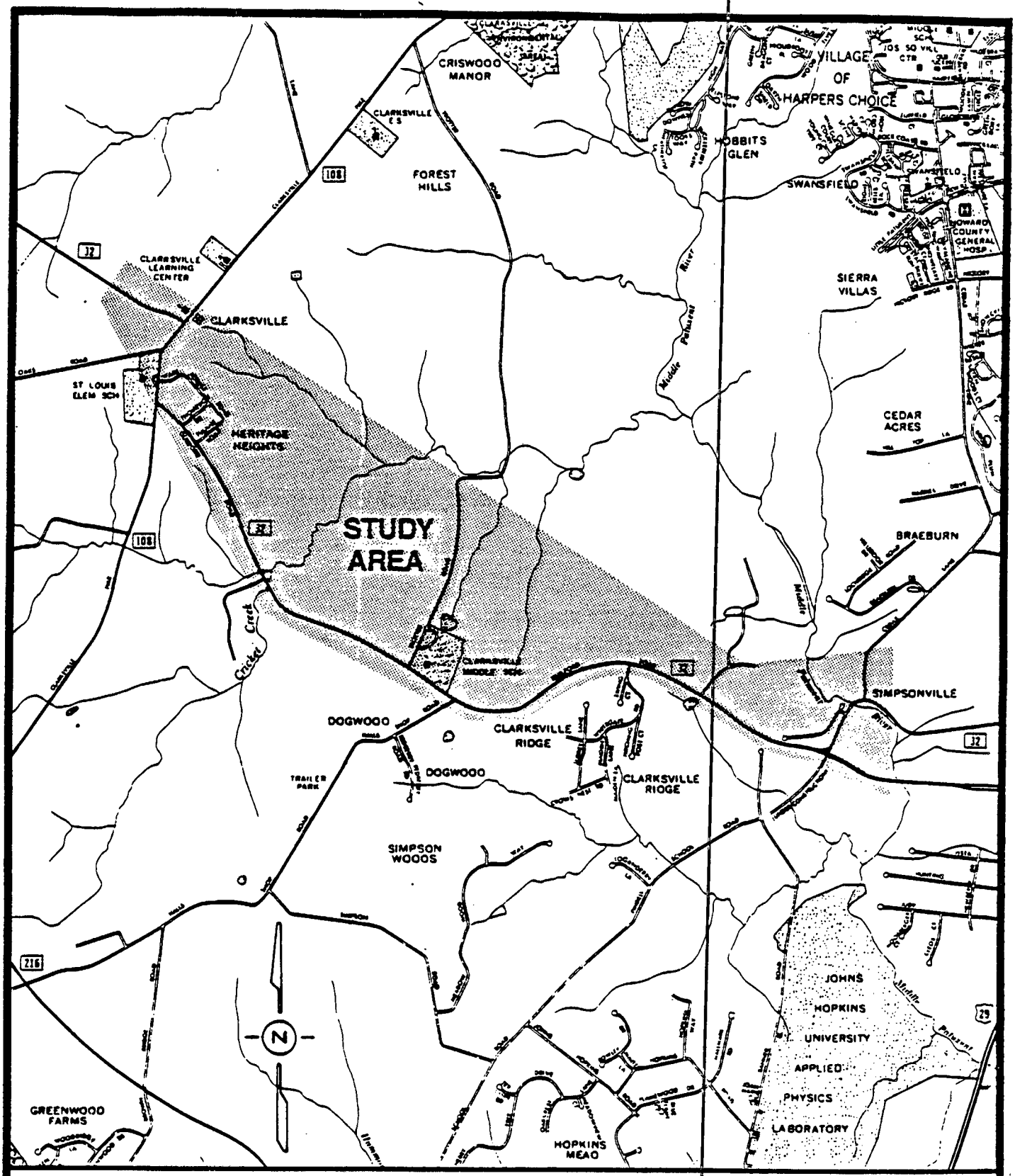
From Maryland Route 108 to Pindell School Road

LOCATION MAP

SCALE

0 6 12 MILES

FIGURE 1



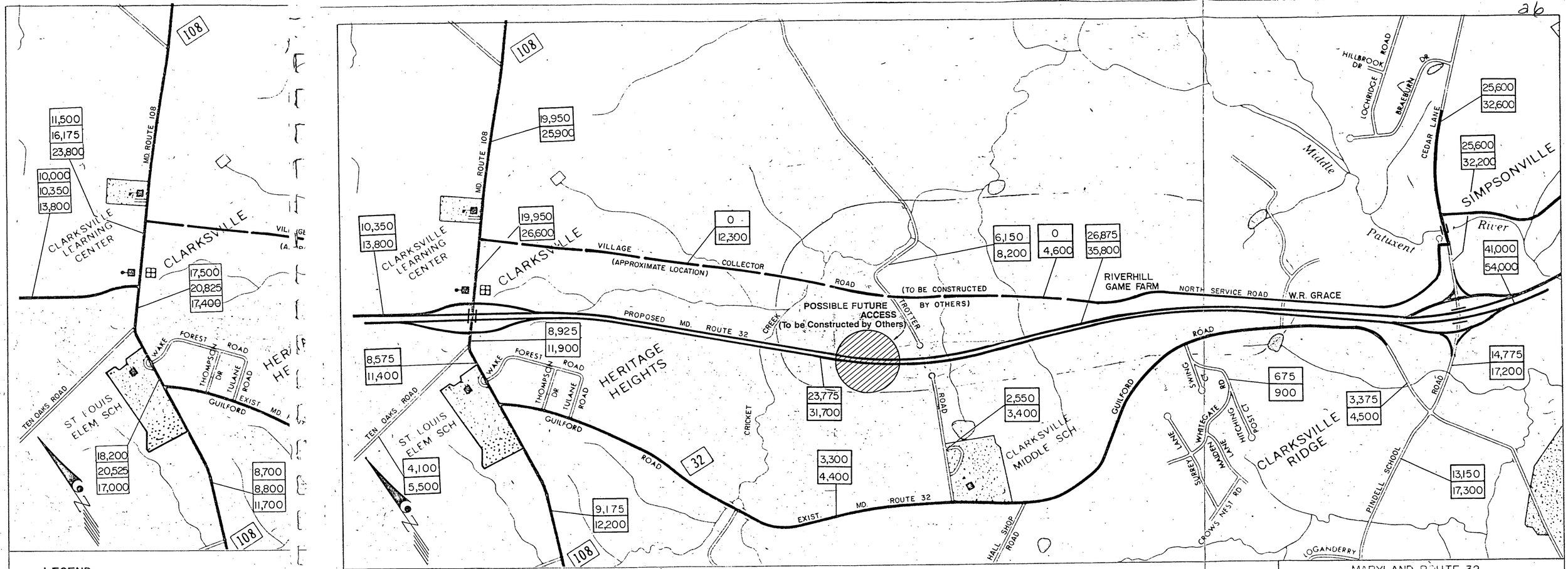
MARYLAND ROUTE 32

From Maryland Route 108 to Pindell School Road

STUDY AREA MAP

Scale in Feet: 0' 2000' 4000'

FIGURE 2



LEGEND:

12,000	DENOTES YEAR 1987
24,000	DENOTES YEAR 1995
36,000	DENOTES YEAR 2015

LEGEND:

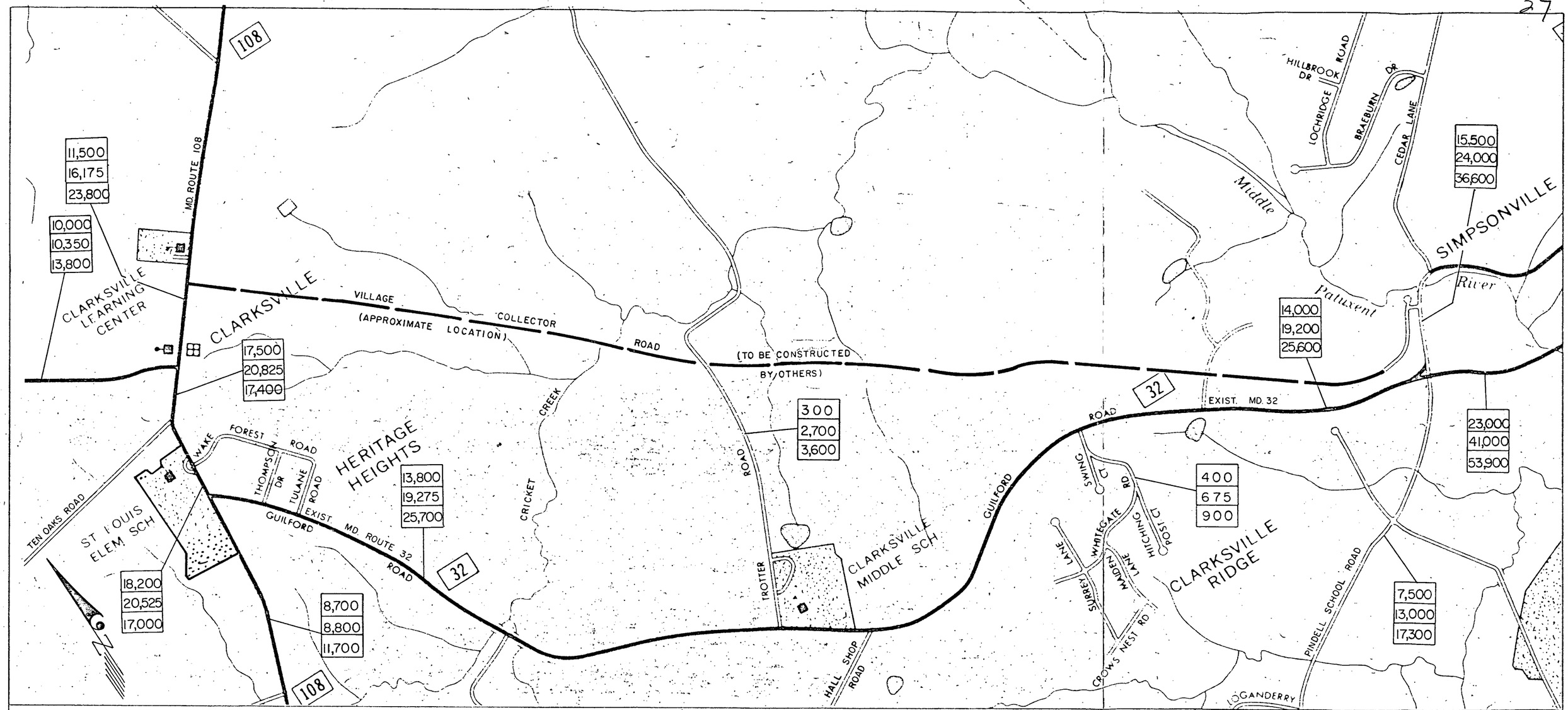
3,000	DENOTES YEAR 1995 A.D.T.
6,000	DENOTES YEAR 2015 A.D.T.

MARYLAND ROUTE 32
FROM MD. 108 TO PINDELL SCHOOL ROAD

BUILD ALTERNATE B
AVERAGE DAILY TRAFFIC

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

DATE: 1987 FIGURE: 3
SCALE: 1"=1000



LEGEND:

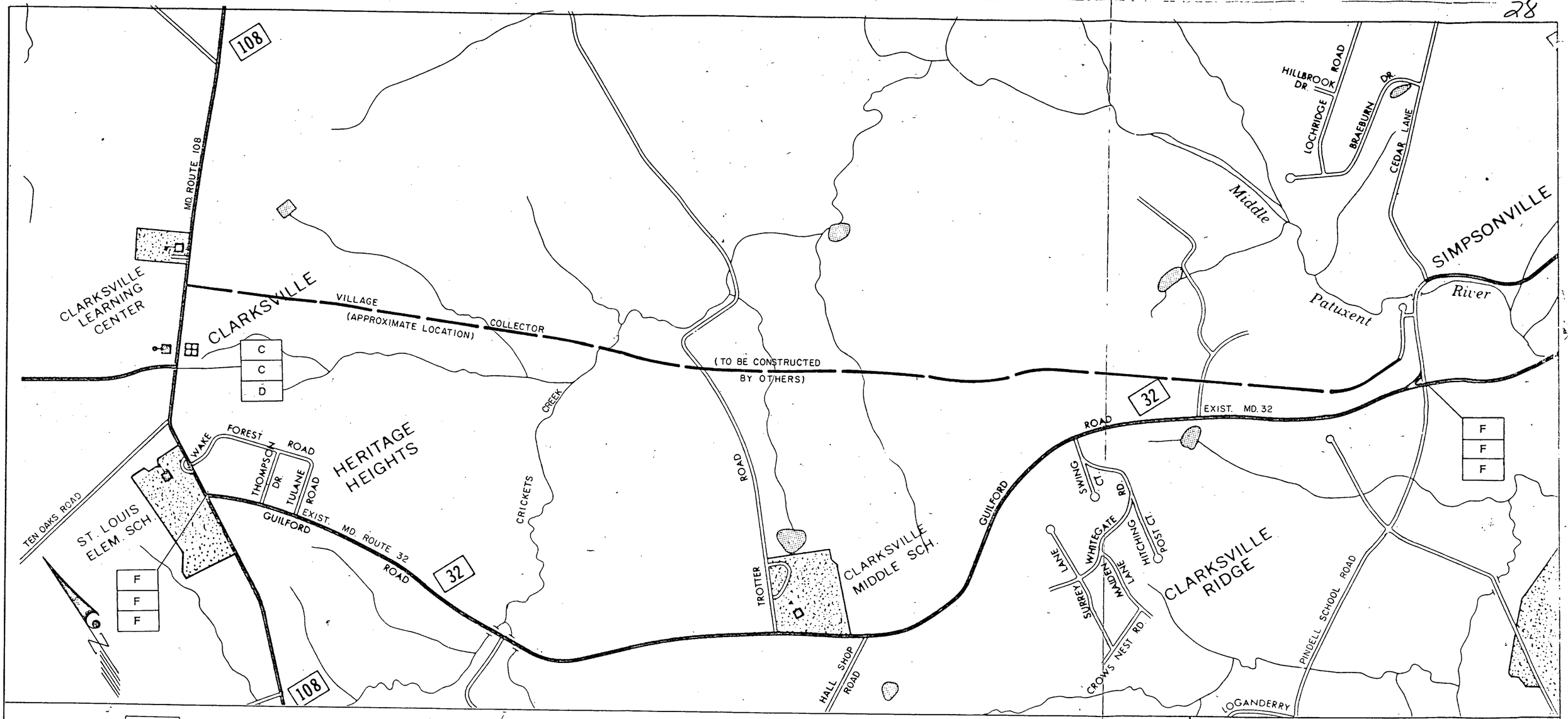
12,000	DENOTES YEAR 1987 A.D.T.
24,000	DENOTES YEAR 1995 A.D.T.
36,000	DENOTES YEAR 2015 A.D.T.

MARYLAND ROUTE 32
FROM MD. 108 TO PINDELL SCHOOL ROAD

NO BUILD
AVERAGE DAILY TRAFFIC

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

DATE: 1987 | FIGURE 4
SCALE: 1"=1000'



LEGEND:

1987 LEVEL OF SERVICE
1995 LEVEL OF SERVICE
2015 LEVEL OF SERVICE

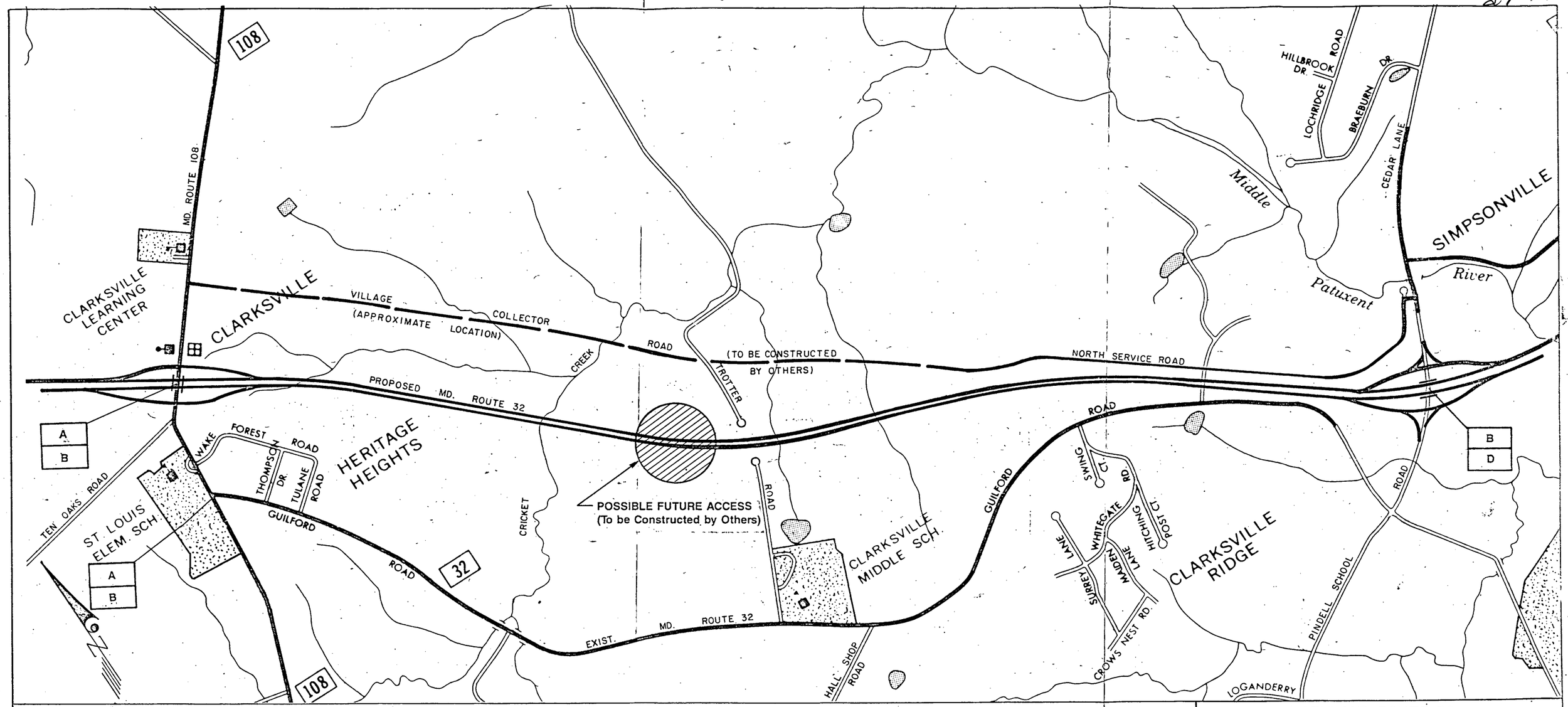
MARYLAND ROUTE 32
FROM MD. 108 TO PINDELL SCHOOL ROAD

NO BUILD
LEVEL OF SERVICE

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

DATE: 1987
SCALE: 1"=1000'

FIGURE 6



LEGEND:

1995 LEVEL OF SERVICE

2015 LEVEL OF SERVICE

MARYLAND ROUTE 32
FROM MD. 108 TO PINDELL SCHOOL ROAD

BUILD ALTERNATE B
LEVEL OF SERVICE

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

DATE: 1987
SCALE: 1" = 1000'
FIGURE: 5

These accidents resulted in a monetary loss to the motoring and general public of $2.7 million/100 mvm. The accident experience for the study section is listed below by severity, year, and rate. The statewide average rate for this type of design highway is also listed for comparison purposes.

Severity	1984	1985	1986	Total	Rate/ 100 mvm	Statewide Average Rate
Fatal Accidents	0	1	0	1	3.2	3.1
Injury Accidents	10	16	30	56	178.5*	109.6
Prop. Damage only	6	13	14	33	105.2	94.6
Total Accidents	16	30	44	90	286.8*	207.3

*Significantly higher than statewide rate.

There was one fatal accident during the study period. The fatal accident involved a northbound vehicle that left the highway and struck a tree.

Within the study limits, there were three sections of highway that met the criteria as a High Accident Section (HAS). These locations are listed below indicating year and number of accidents.

1) MD Route 32 from 0.03 mile north of Pindell School Road north to 0.06 mile south of Whitegate Road (1986 - 7 accidents).

2) MD Route 32 from 0.29 mile south of Halls Shop Road to Trotter Road (1985 - 6 accidents).

3) MD Route 32 from Trotter Road to 0.50 mile north of Trotter Road (1986 - 7 accidents).

There was one intersection that met the criteria as a High Accident Intersection (HAI). This location was MD Route 32 at Pindell School Road (1985 - 13 accidents; 1986 - 12 accidents).

The collision types experienced within the study area, in comparison to their statewide average rates for similarly designed highways, are listed below.

Collision Type	No. Accidents	Rate/100 mvm	Statewide Average Rate
Angle	20	63.7*	26.9
Rear End	12	38.3	33.7
Fixed Object	26	82.9*	59.8
Opposite Direction	12	38.3*	16.3
Sideswipe	2	6.4	11.5
Left Turn	8	25.5*	12.3
Pedestrian	1	3.2	4.3
Other Collision	9	28.7	18.9

*Significantly higher than statewide rate.

The collision types that noticeably exceeded the statewide average rate were angle, left turn, fixed object, and opposite direction. Most of the angle and

left turn accidents occurred on MD Route 32 at Pindell School Road. The fixed object and opposite direction accidents are due to horizontal and vertical curves that currently exist along the study area.

Under a No-Build Alternate, the conditions mentioned above will continue to exist. If the highway remains unchanged, the number of accidents will rise as traffic volumes and conflicts increase.

The construction of relocated MD Route 32 should bring about an accident rate of approximately 58 accidents/100 mvm of travel. Considering that the existing MD Route 32 highway will still be utilized, the accident rate for the corridor will be approximately 85 accidents/100 mvm of travel. This lower accident rate will generate an estimated accident cost for the total system of approximately $1.0 million/100 mvm and will result in an approximate societal savings of $1.7 million/100 mvm over the cost of the existing conditions.

Other highways within the study limits were also reviewed. MD Route 108, from MD Route 32 (Guilford Road) north to Trotter Road, experienced a total of 57 accidents. The average accident rate for this section was 303 accidents/100 mvm. This accident rate is within the statewide average of 301 accidents/100 mvm. County-wide accident rates by type of access control have not been developed; therefore, only accident frequency is indicated at the following locations: Trotter Road from MD Route 108 to MD Route 32 experienced seven accidents; Pindell School Road from MD Route 32 to Sanner Road experienced five accidents; and Cedar Lane from MD Route 32 to Braeburn Road experienced six accidents.

In conclusion, the relocation of MD Route 32 will improve overall traffic operations. The accident rate on existing MD Route 32 is considerably higher than the statewide average rate. Because the relocation of MD Route 32 will reduce traffic volumes on existing MD Route 32 and surrounding routes, it would be reasonable to assume a reduced accident frequency for these locations. The construction of the new MD Route 32 will create a smoother traffic flow in the corridor between MD Route 108 and Pindell School Road/Cedar Lane.

II

Alternates

II. ALTERNATES

A. PRIOR STUDIES AND DECISIONS

The relocated MD Route 32 project, from MD Route 108 to the Baltimore-Washington Parkway, first appeared in the State Highway Administration's Twelve-Year Road Construction and Reconstruction Program for 1954 through 1965. It was envisioned at that time simply as a replacement of a typical rural highway to improve the poor geometrics. The portion from MD Route 108 to U.S. Route 29 was first listed for construction in the State's program in the Fiscal Year 1969-1970.

On April 14, 1972, a Draft Environmental Impact Statement (DEIS) was circulated.

A corridor location public hearing for the segment from MD Route 108 to west of U.S. Route 29 was held on August 15, 1973.

On September 8, 1975, an administrative review session was held by the Maryland State Highway Administration in which the decision was made to build relocated MD Route 32 along the alignment described as Alternate A in this document.

A Final Environmental Impact Statement (FEIS) was completed, and the Federal Highway Administration gave location approval to Alternate A in July of 1977.

In 1983, a Location Study Report presented an alternate alignment to the State Highway Administration's approved alignment for that segment between MD Route 108 and Pindell School Road. This alternate alignment, suggested by Howard Research and Development (HRD), passes the Trotter Road area approximately 900 feet south of the approved alignment.

A technical report was prepared in January of 1985 in which three alternate alignments were compared to the State Highway Administration's approved alignment for the segment between MD Route 108 and Pindell School Road. The recommendation of this report was to proceed into design of this portion of the project based on an alternate alignment with a southerly shift of approximately 110 feet from the approved alignment through the Trotter Road area. Due to the recent expanded jurisdiction of the U.S. Army Corps of Engineers over non-tidal wetlands, it was determined that this recommendation should be studied further.

On June 24, 1986, an Alternates Public Meeting was conducted for the MD Route 32/MD Route 108 interchange. Presented at this meeting were a No-Build Alternate and three Build Alternates for the proposed interchange.

On March 24, 1988 a Combined Location/Design Public Hearing was conducted for MD Route 32 from MD Route 108 to Pindell School Road.

B. ALTERNATES CONSIDERED

Three Build Alternates, in addition to the No-Build Alternate, were studied for the proposed extension of MD Route 32 from Pindell School Road/Cedar Lane to MD Route 108 in Clarksville.

The No-Build Alternate would involve no new construction for the extension of MD Route 32 on a new location. In addition, no significant improvements to the existing roadways would be provided other than for routine maintenance and traffic safety. These routine improvements would in no way improve the ability of the existing roadways to accommodate the projected traffic growth through the design year (2015). Existing MD Route 32 presently experiences severe traffic congestion during peak hour conditions. These conditions will continue to deteriorate under the No-Build Alternate, creating unsafe traffic conditions.

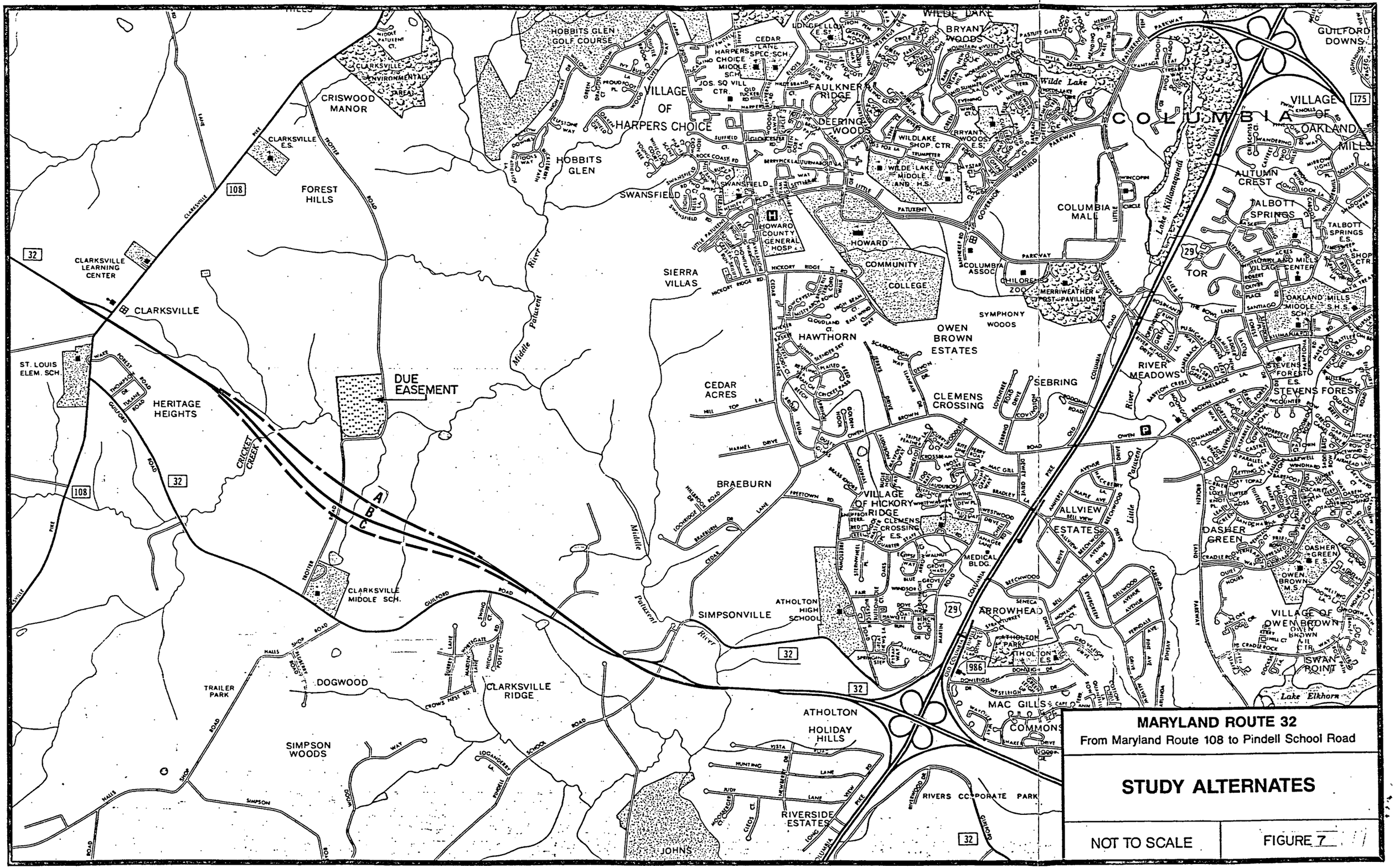
Alternate A extends directly between MD Route 108 and Pindell School Road, passing Trotter Road approximately 2,800 feet north of the existing Md Route 32 (Guilford Road). This alignment received Location Approval from the Federal Highway Administration in July 1977. Due to the recent expansion of jurisdiction by the U.S. Army Corps of Engineers over wetlands and floodplains, it was determined that a shift of this alignment to the south would lead to a reduction in the acreage of wetlands and floodplains impacted. Alternate A was dropped from further study due to the associated wetland and floodplain impacts.

Alternate B extends between MD Route 108 and Pindell School Road, bisecting Trotter Road approximately 440 feet south of Alternate A (see Figures 7). Interchanges would be constructed at MD Route 108 and Pindell School Road. In addition, an option is considered at Trotter Road. Option 3 proposes building a bridge carrying Trotter Road over MD Route 32 without a connection.

Alternate C extends between MD Route 108 and Pindell School Road, bisecting Trotter Road approximately 700 feet south of Alternate A. Alternate C was studied in an effort to further reduce impacts to wetlands and floodplains. However, the impacts are slightly greater than for Alternate B. In addition, Alternate C would be located closer to the south Trotter Road community. Alternate C was dropped from further study because it had greater environmental impacts than Alternate B and was located closer to an existing community.

A diamond interchange is proposed with Alternate B for the connection of MD Route 32 and MD Route 108. In addition, this interchange will include improvements to MD Route 108 through Clarksville. At the June 24, 1986 Alternates Public Meeting for the MD Route 32/MD Route 108 interchange, three alternates were presented at this location. Two of the alternates presented at that meeting are considered stage construction options for the full diamond interchange. However, the diamond interchange is required as the ultimate connection for MD Routes 32 and 108. (Alternate B is shown on Figures 8 through 17.)

A diamond interchange is also proposed for the connection of relocated MD Route 32 and Pindell School Road/Cedar Lane. Construction of this road will include improvements to Pindell School Road and Cedar Lane. A new structure crossing the Middle Patuxent River will be constructed as part of the Cedar Lane improvements.



MARYLAND ROUTE 32
From Maryland Route 108 to Pindell School Road

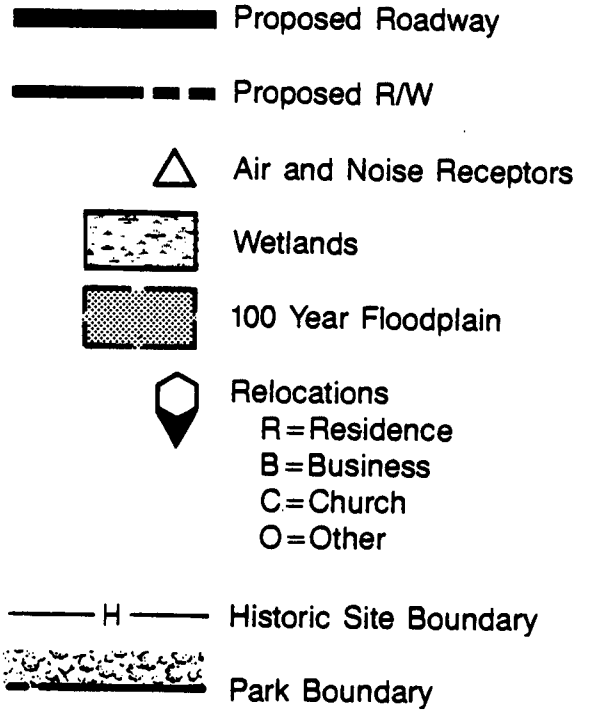
STUDY ALTERNATES

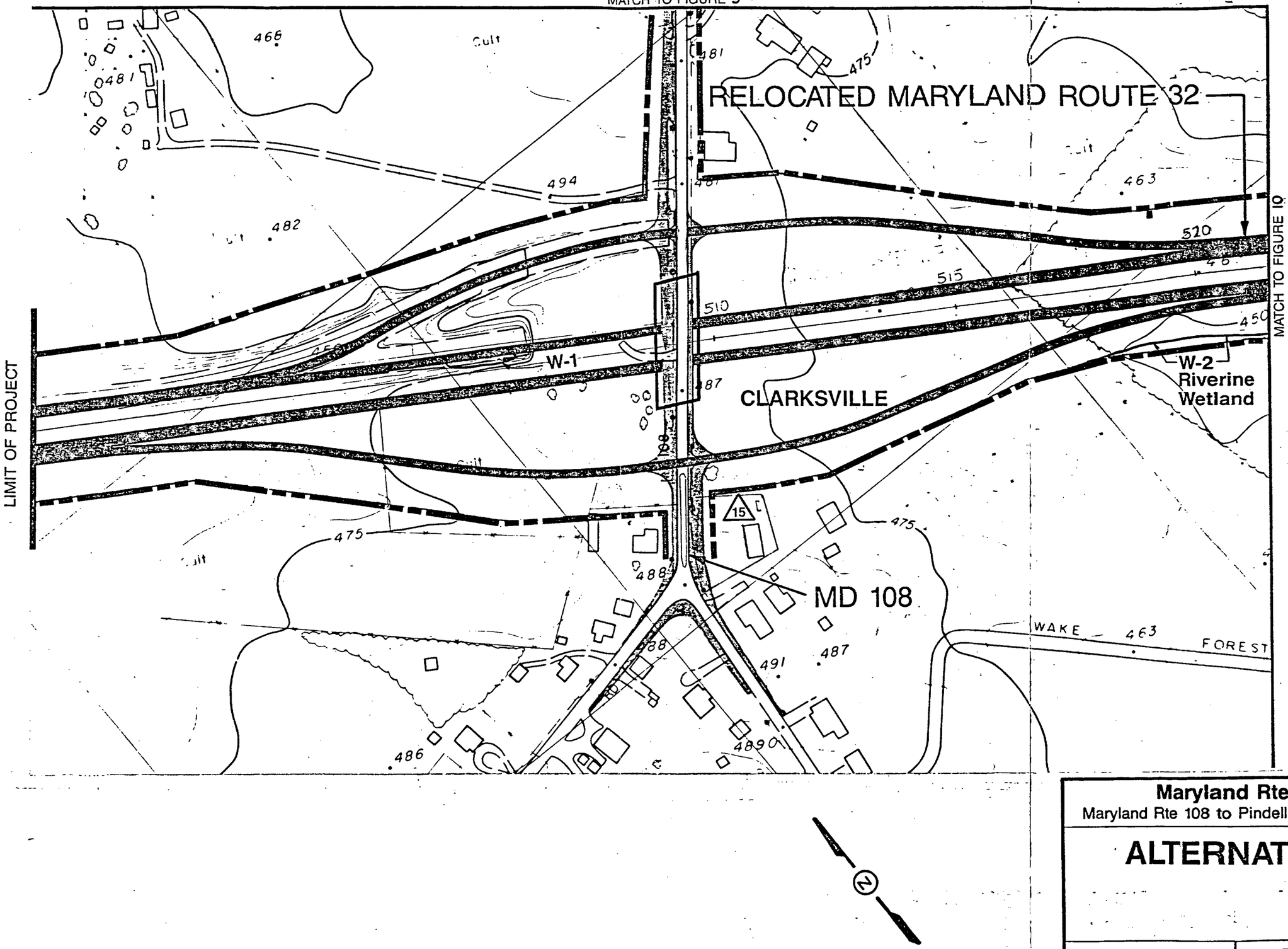
NOT TO SCALE

FIGURE 7

MARYLAND ROUTE 32
From Maryland Route 108 to Pindell School Road

LEGEND
FOR ALTERNATE MAPPING

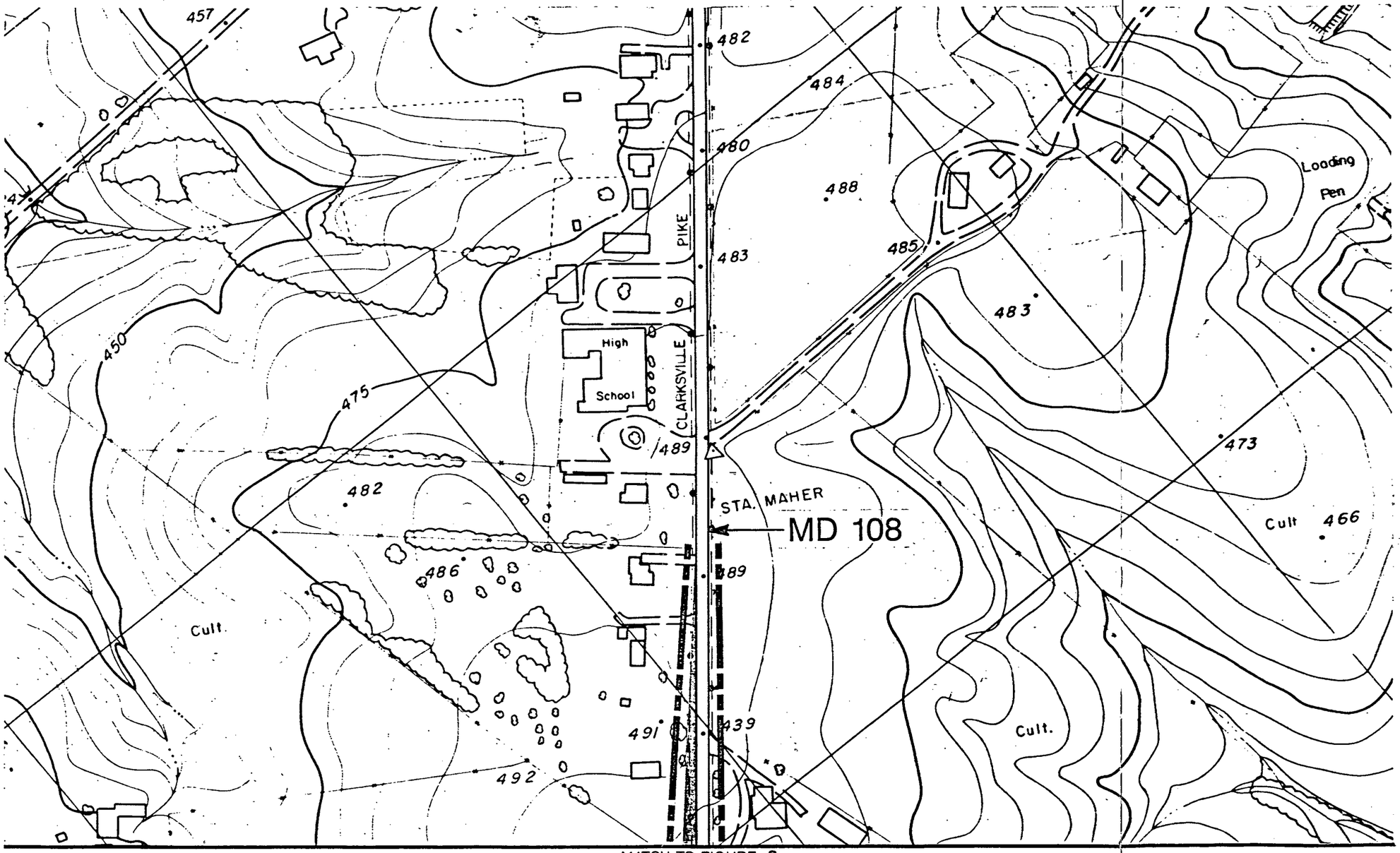




Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1″=200′ | FIGURE 8



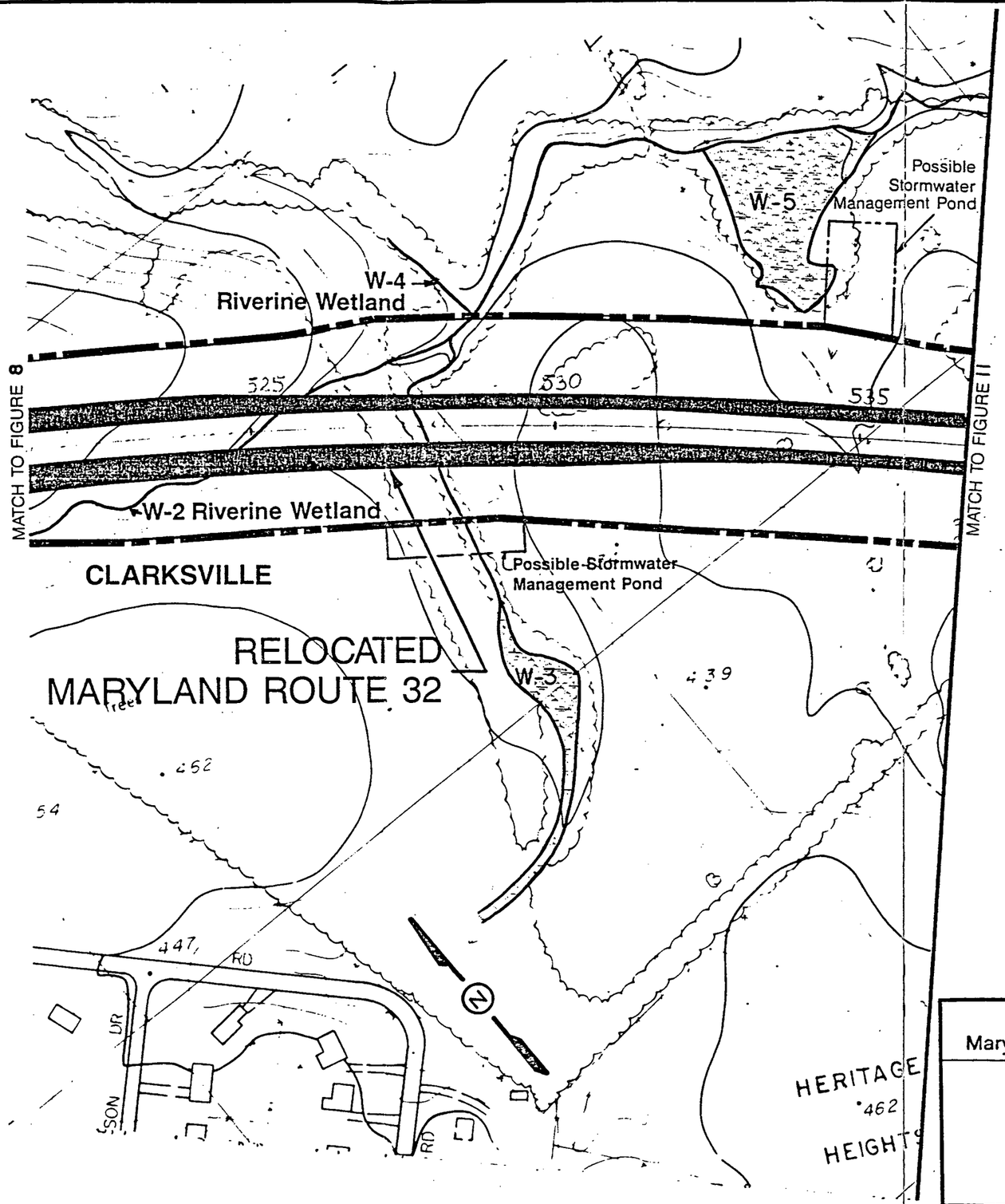
MATCH TO FIGURE 8

Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1"=200'

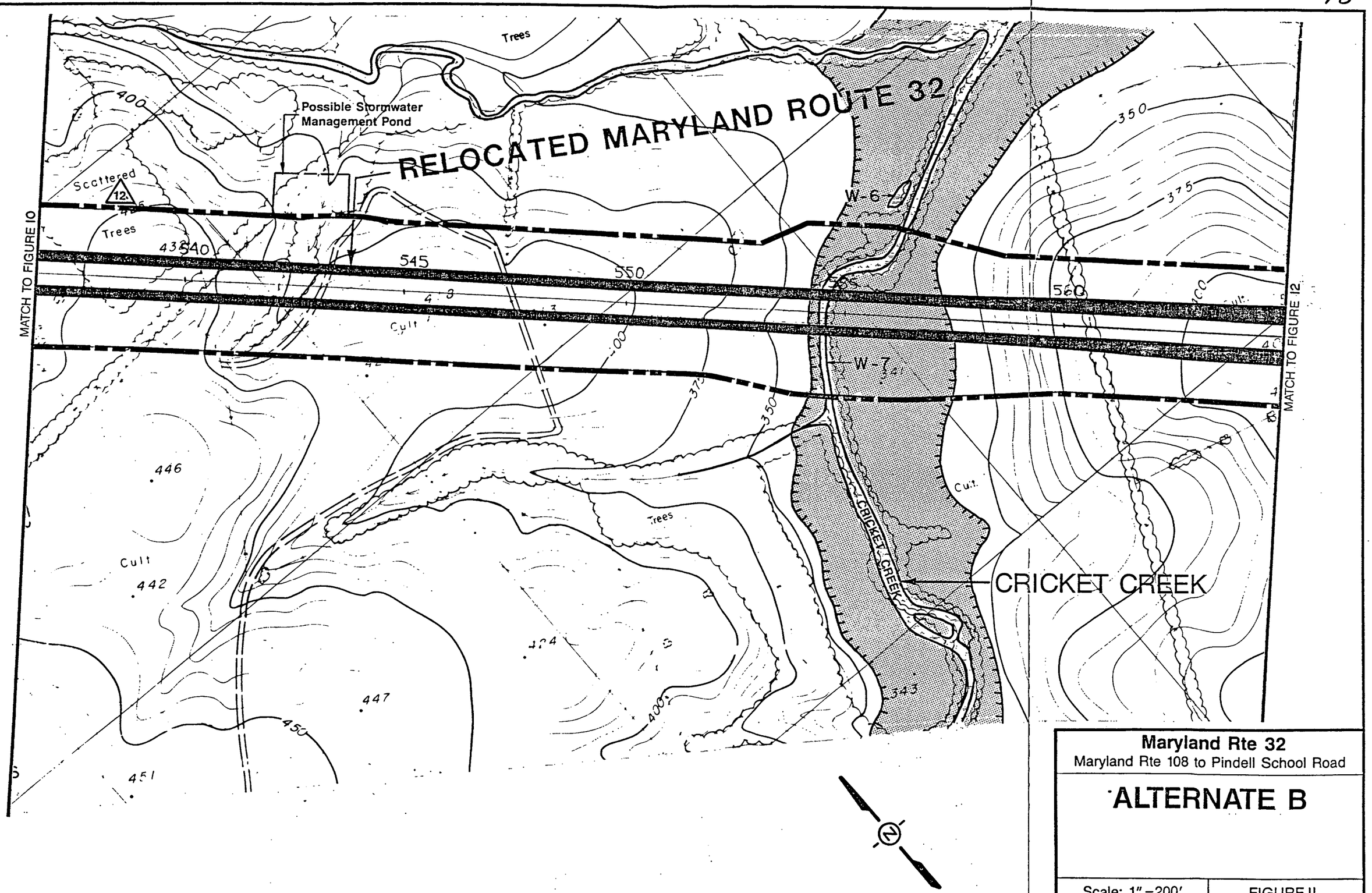
FIGURE 9



Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

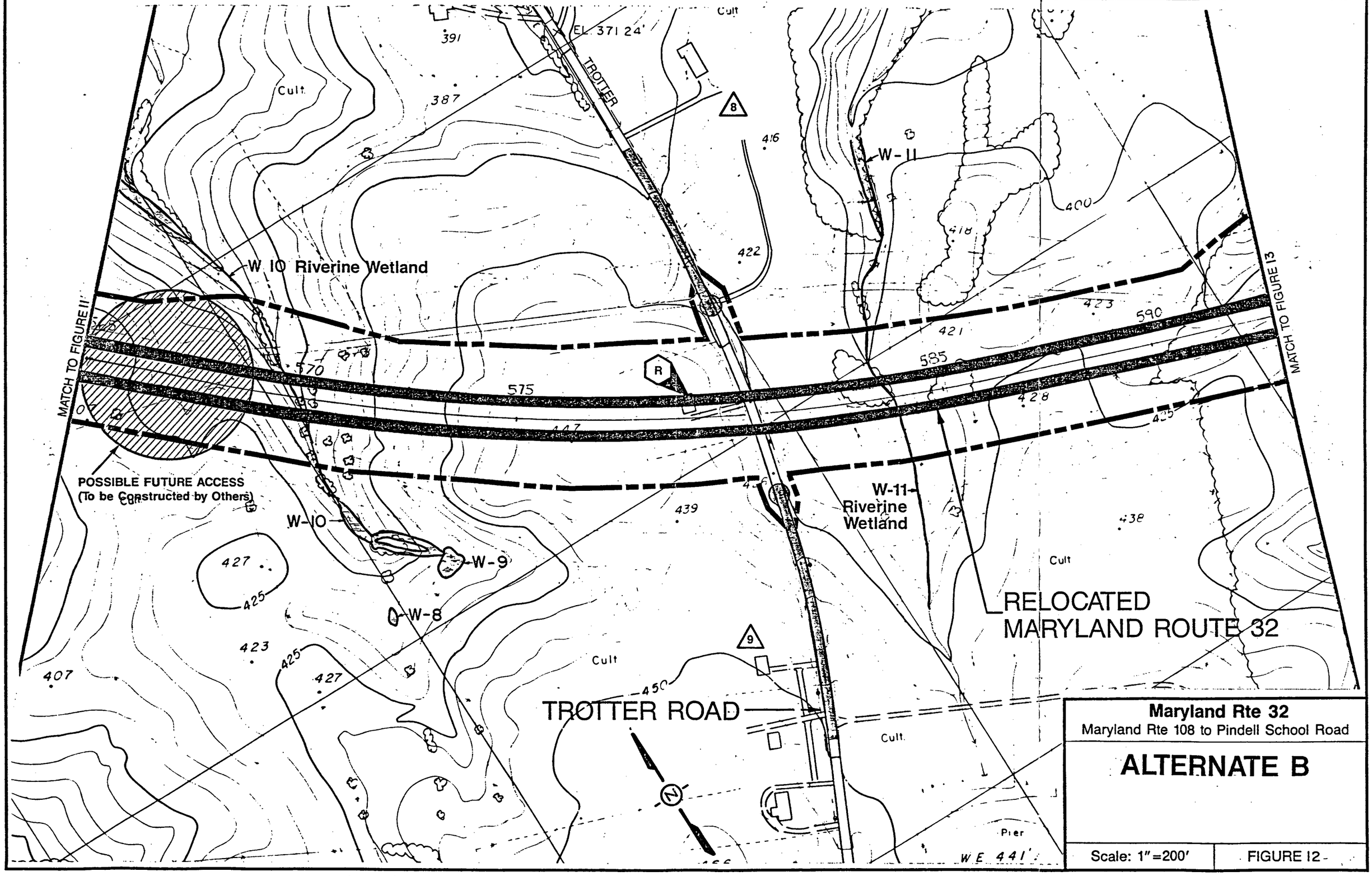
Scale: 1″=200′ | FIGURE 10



Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1″=200′ | FIGURE II

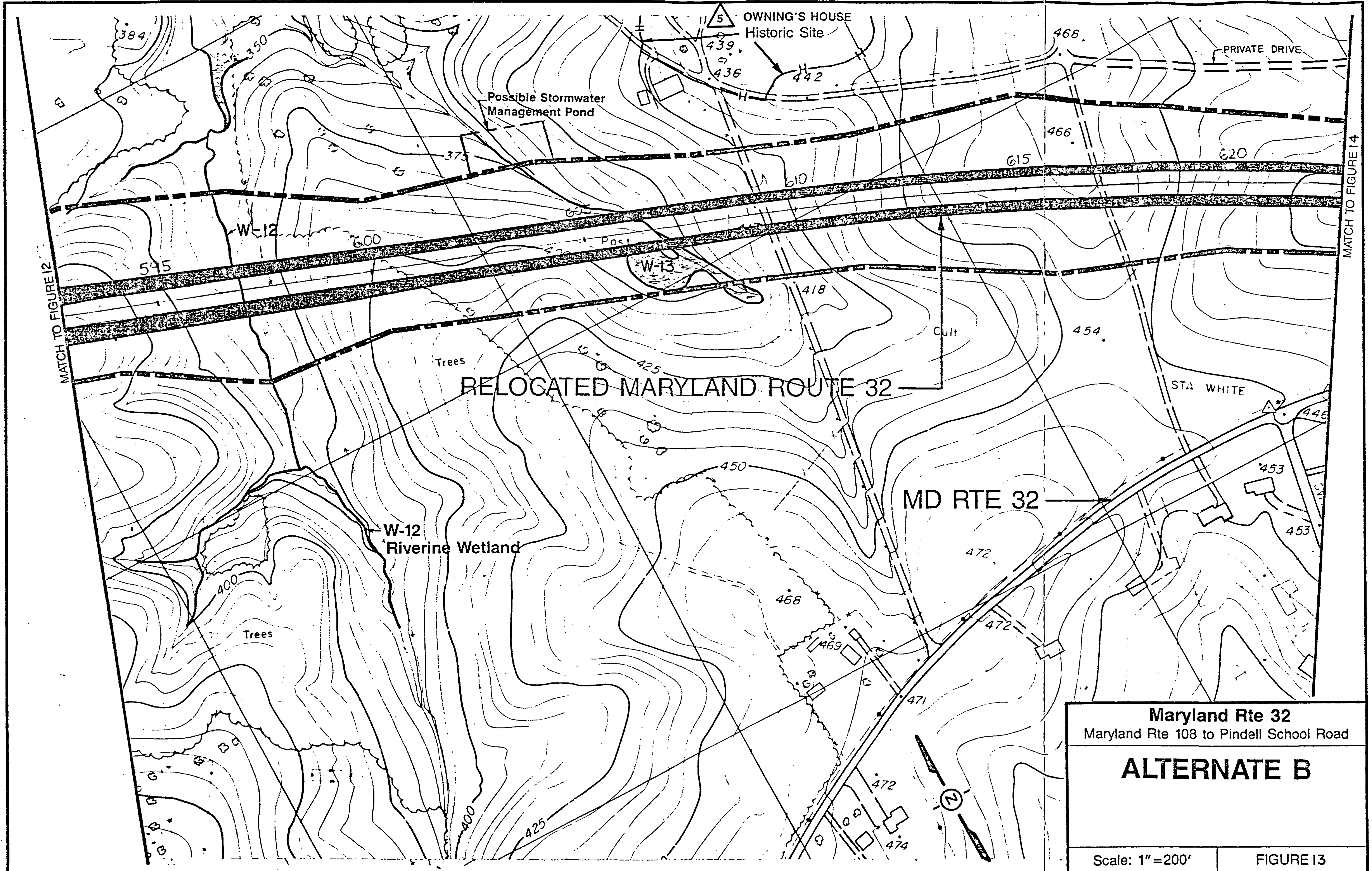


Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1"=200'

FIGURE 12

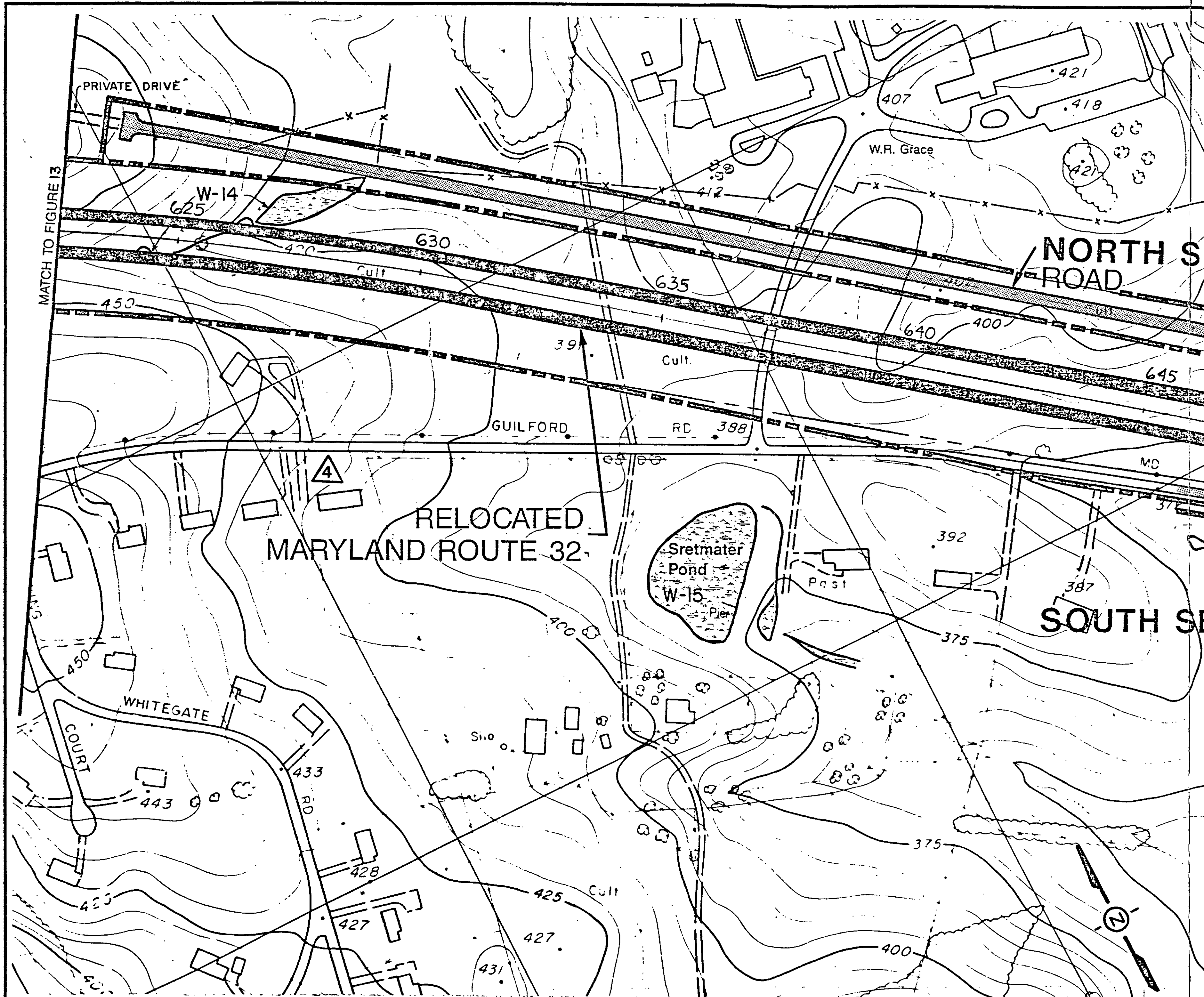


Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1"=200'

FIGURE 13



Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B
OPTION 1

Scale: 1″=200′ | FIGURE 14

MATCH TO FIGURE 17

MIDDLE PATUXENT ENVIRONMENTAL AREA

RELOCATED MARYLAND ROUTE 32

W-16 Riverine Wetland

W-17

W-18

PINDELL SCHOOL ROAD

MATCH TO FIGURE 14

MATCH TO FIGURE 16

Trees

Silo

Cult

Maryland Rte 32

Maryland Rte 108 to Pindell School Road

ALTERNATE B

OPTION 1

Scale: 1"=200'

FIGURE 15

MATCH TO FIGURE 15

ACCESS TO INTERCHANGE

Cult

PINDELL SCHOOL ROAD

Trees

SANNER

RD

Pond
WE 362

EL 367.68'

PINDELL SCHOOL ROAD

POOL

EL 392.06'

Cult.

Trees

Trees

351

341

343

356

341

347

325

300

393

398

398

400

403

404

400

350

375

386

377

383

288

393

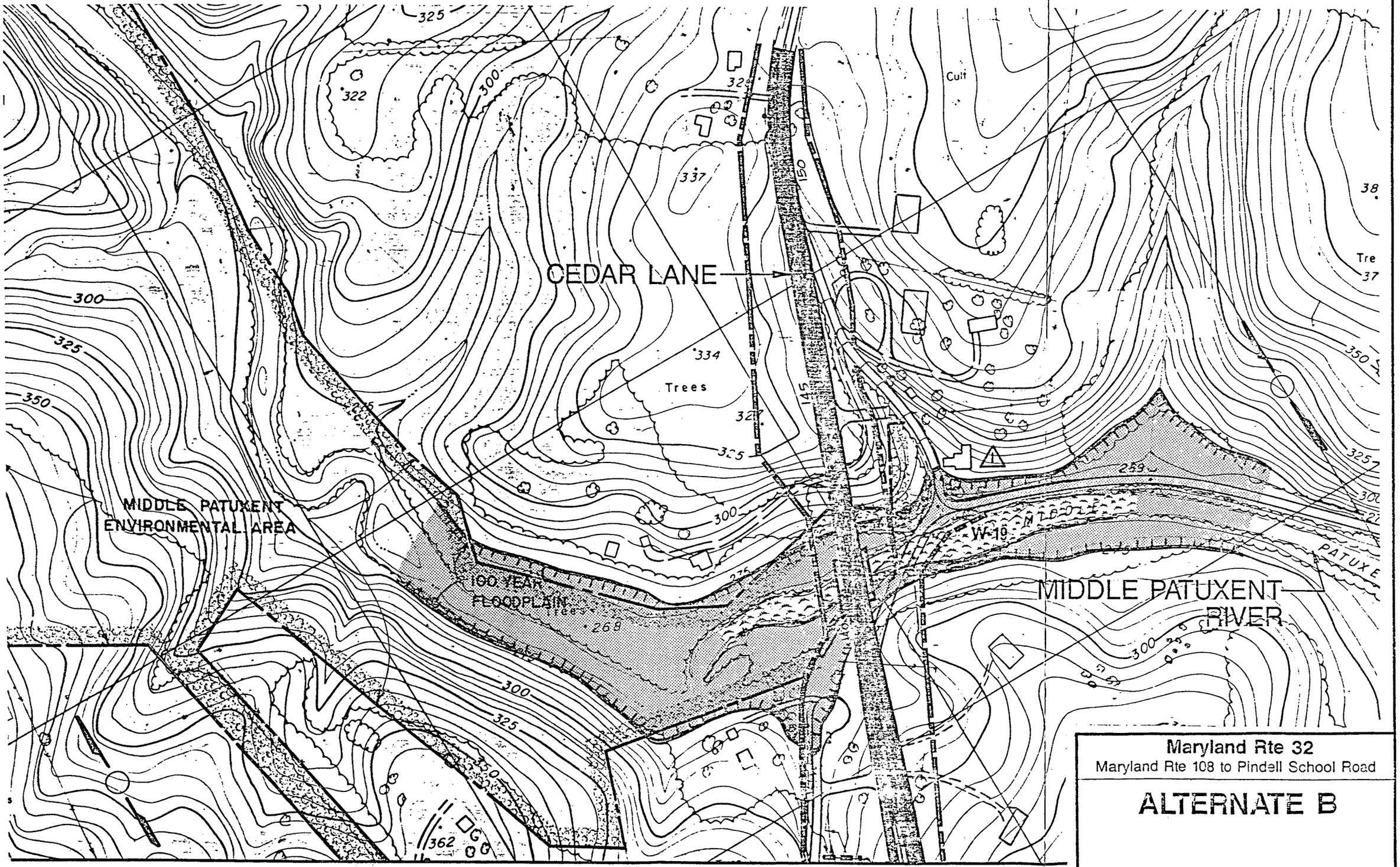
N

Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1"=200'

FIGURE 16



MATCH TO FIGURE 15

Maryland Rte 32
Maryland Rte 108 to Pindell School Road

ALTERNATE B

Scale: 1"=200'

FIGURE 17

Service roads are proposed at relocated MD Route 32 and Pindell School Road/Cedar Lane interchange. This option is explained in detail in the Alternates for Detailed Studies section of this document.

The construction of relocated MD Route 32, the service roads, and improvements to MD Route 108 would be in accordance with current state and Federal highway standards. Improvements to Trotter Road, Pindell School Road, and Cedar Lane would be designed and constructed in compliance with the appropriate Howard County standards. Typical sections are shown on Figures 18 and 19.

C. ALTERNATES FOR DETAILED STUDIES

1. No-Build Alternate

This alternate will involve no new construction. The No-Build Alternate will provide no significant improvements to existing roads. Only routine safety and maintenance operations will be performed on the roadway. These routine operations will in no way improve the ability of the existing east-west roadway to accommodate predicted traffic increases through the design year (2015), creating unsafe conditions.

2. Alternate B (Selected)

Alternate B originates at the existing northbound lanes of MD Route 32 just west of MD Route 108. The alignment then traverses through the Trotter Road area where cul-de-sacs will be constructed on both the north and south sides of relocated MD Route 32 (see Figure 12). Relocated MD Route 32 will be depressed to provide for a future Trotter Road bridge over Relocated MD Route 32 should future traffic warrant the construction. In the vicinity of the W.R. Grace property and Stretmater Pond, the alignment has been shifted 100 feet north in order to reduce impacts to the pond and existing residences along the south side of existing MD Route 32. The alignment proceeds easterly to meet the existing MD Route 32 construction east of Pindell School Road. Bridges will be constructed at MD Route 108 and Pindell School Road. Full diamond-type interchanges will be constructed at MD Route 108 and Pindell School Road. This alternate will have full control of access with a design speed of 70 miles per hour. This alternate will be contained within a minimum right-of-way of 300 feet. See Figure 18 for typical highway sections.

3. Option 1 - Service Roads (Selected)

A service road will also be constructed north of the alignment to allow access to the W.R. Grace and Riverhill Game Farm properties from old MD Route 32. On the south, another service road will be built to connect existing MD Route 32 to relocated Sanner Road/Pindell School Road.

4. Option 2 - Service Roads with Underpass

This option shows an alternate means of access to the W.R. Grace and Riverhill Game Farm properties via an underpass from the south service road at the location of the existing W.R. Grace entrance. Under this option, a portion

of the north service road from the existing W.R. Grace entrance to the eastern terminus at old MD Route 32 would be eliminated.

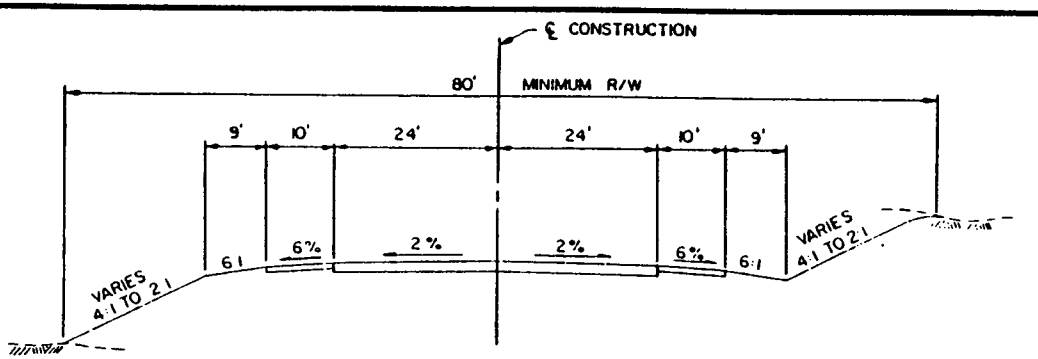
5. Option 3 - Trotter Road

Option 3 shows improvements to Trotter Road and a new bridge structure to carry Trotter Road over the mainline of MD Route 32. No direct access would be provided to Trotter Road from relocated MD Route 32.

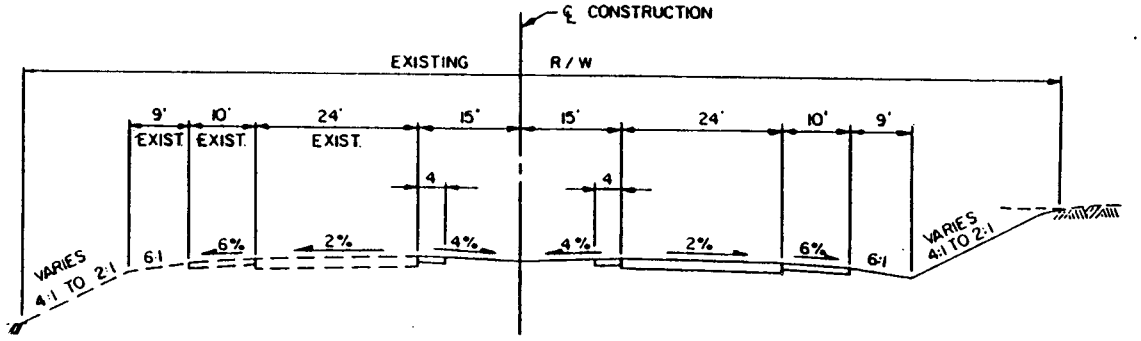
6. Cedar Lane (Selected)

Improvements to Cedar Lane, including a new bridge over the Middle Patuxent River, have been included as part of the MD Route 32 project. These proposed improvements are necessary due to the projected traffic volumes and the poor horizontal and vertical alignment of Cedar Lane. These improvements will be necessary with the selection of any alternate, including the No-Build Alternate.

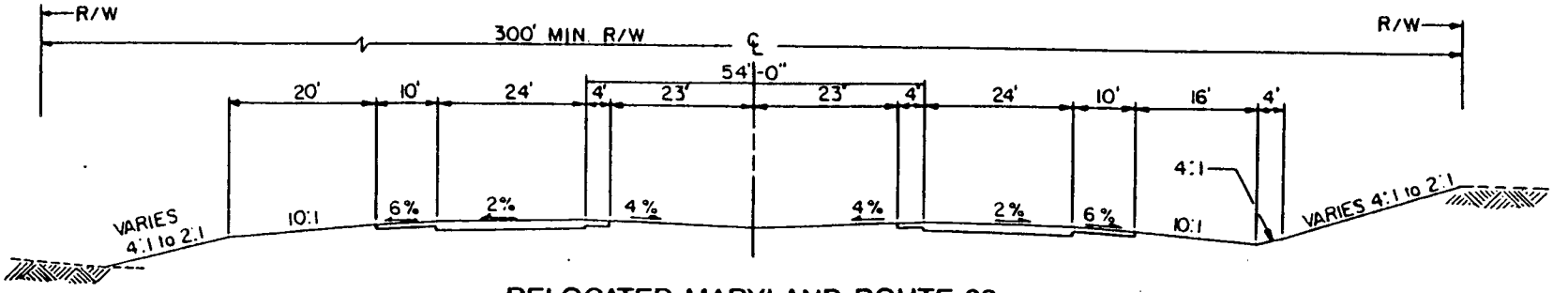
TYPICAL SECTIONS



PINDELL SCHOOL ROAD/CEDAR LANE
BEYOND INTERCHANGE AREA



PINDELL SCHOOL ROAD/CEDAR LANE
THROUGH INTERCHANGE AREA



RELOCATED MARYLAND ROUTE 32

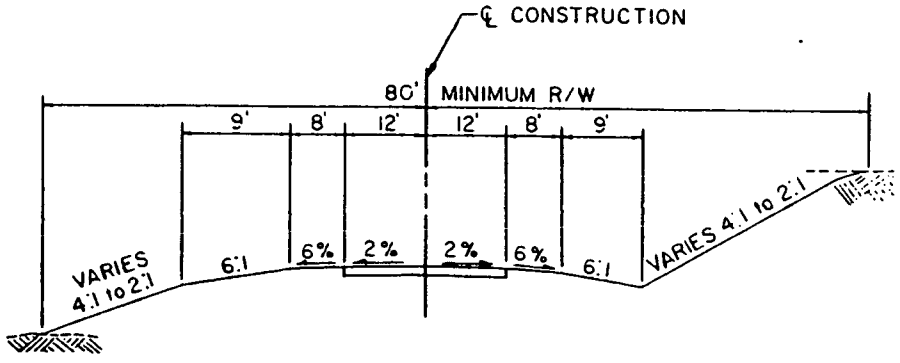
Note: These typical sections are common for all Build Alternates (A,B & C) and all Options (1-3)

Note:
The dimensions shown are for the purpose of determining cost estimates and environmental impact and are subject to change during the final design phase.

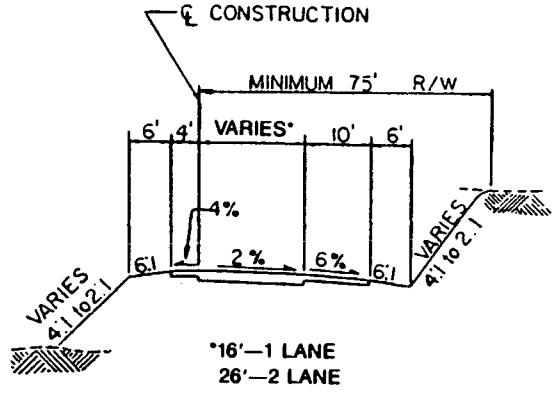
ALTERNATES A, B AND C

FIGURE 18

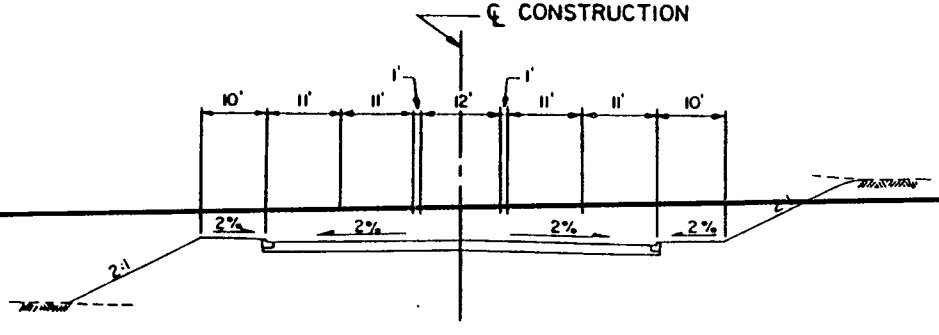
TYPICAL SECTIONS



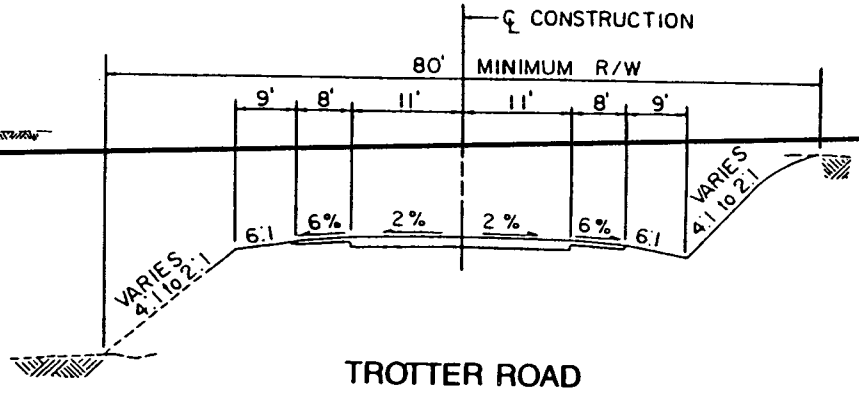
SERVICE ROADS



INTERCHANGE RAMPS



MD. RTE. 108



TROTTER ROAD

Note: These typical sections are common for all Build Alternates (A,B & C) and all Options (1-3)

Note:
The dimensions shown are for the purpose of determining cost estimates and environmental impact and are subject to change during the final design phase

ALTERNATES A, B AND C

FIGURE 19

III

Affected Environment

III. AFFECTED ENVIRONMENT

A. SOCIAL, ECONOMIC, AND LAND USE

1. Social Environment

a. Population

In the last decade, the population in Howard County has nearly doubled. This resulted from: (a) its strategic location near the center of the expanding Baltimore-Washington metropolitan region; (b) the shift of the major transportation corridor connecting the two metropolitan areas from Anne Arundel County (MD Route 295) to Howard County (Interstate Route 95 and U.S. Route 29); and (c) the improvement to the Interstate Route 70 and the U.S. Route 40/48 corridors to Western Maryland.

Because it is centrally located between the expanding Baltimore and Washington areas, Howard County is absorbing a high percentage of this metropolitan growth. From 1960 to 1970, Howard County experienced a population increase of 72.6 percent (36,152 to 62,394), and from 1970 to 1980, an increase of 91.5 percent (61,911 to 118,572). A population of 230,100 is projected for Howard County for the year 2005; an increase of approximately 65 percent over 1985 levels. Only 31,282, or about 26 percent, of this growth is expected to be absorbed by Columbia. Much of the remaining population increase will continue to occur in the eastern half of the county, chiefly in areas in and around Columbia, Ellicott City, along U.S. Routes 1 and 29, and Interstate Route 95. As the eastern half of the county develops and vacant areas are filled in, annual population growth rates and percentage changes are expected to decline.

The study area is located within census tract 6053.01 (see Figure 20). For population comparison purposes between 1970 and 1980, this census tract must be combined with 1980 census tract 6053.02. Together they comprise the area equivalent to the boundaries of Census Tract 6053 in 1970.

From 1970 to 1980, the population in the area defined by these census tracts increased by approximately 366 percent (1,535 to 7,149).

According to the U.S. Census of Population and Housing (1980), census tract 6053.01 had a population of 3,173, two percent of the total county population of 118,572 (see Table 2).

TABLE 2

Population and Growth in the Study Area

	1970	1980	% of Change
Howard County	62,394	118,572	90.0
Census Tract 6053.01	--	3,173	--
Census Tract 6053*	1,535	7,149	365.7

*This census tract was subdivided into census tracts 6053.01 and 6053.02 after 1970.

b. Ethnic Characteristics

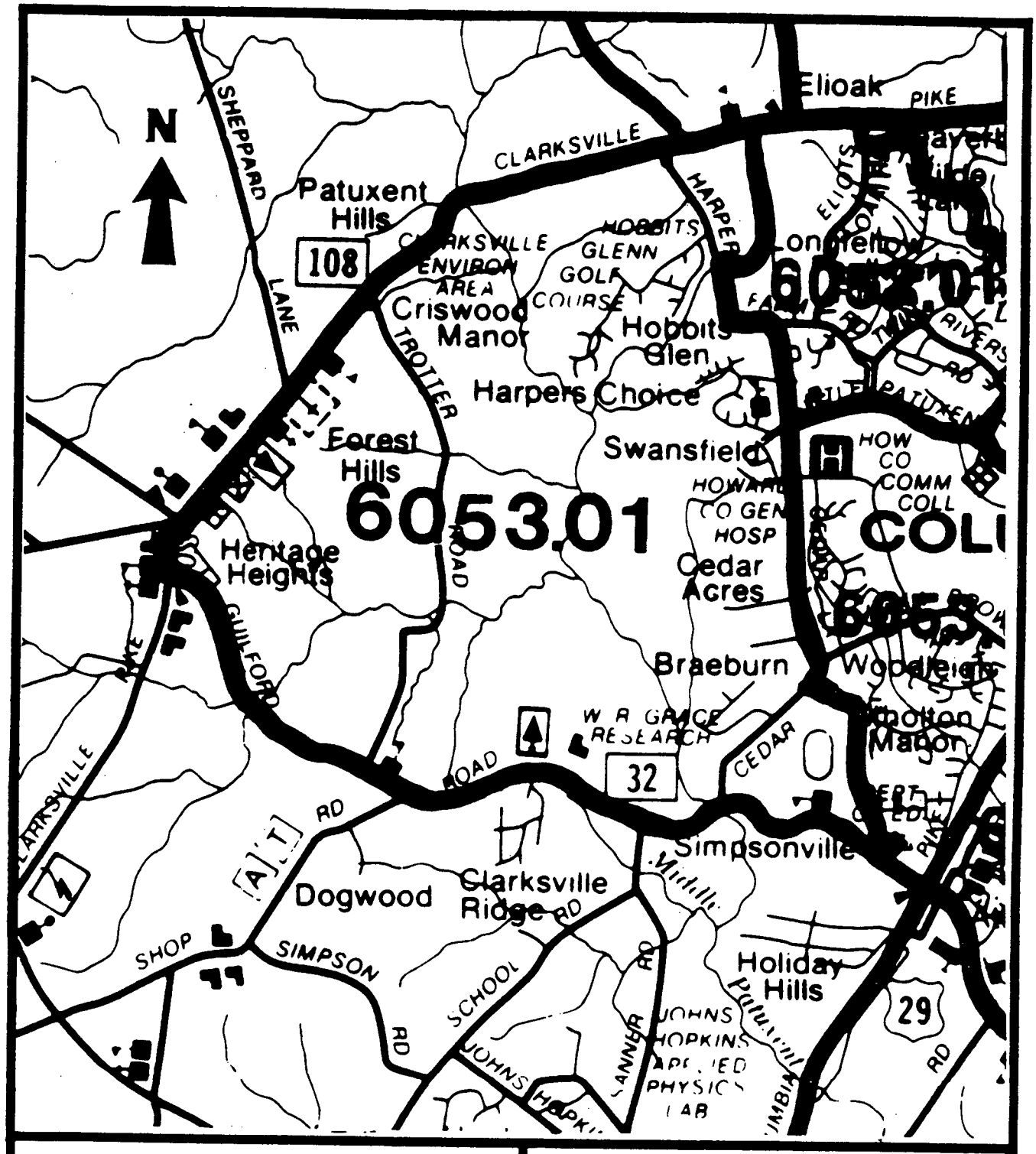
An analysis of the 1980 Census data indicates that, of the total population (census tract 6053.01 only), 83 percent were white, 16 percent were black, and 1 percent were Oriental. Furthermore, 6 percent of the population in this census tract were identified as being age 65 or older. No concentrations of minorities were identified within the study area. However, a concentration of elderly residents has been identified west of Cedar Lane; it is known as Harmony Hall, a retirement area for the aged which includes a nursing and convalescent home (see Figure 20).

c. Neighborhoods

The Howard County General Plan defines a distinctive planning goal of creating a series of physically and socially unified neighborhoods for Howard County.

The study area is comprised of sparsely populated concentrations of older and newer residential subdivisions just outside the Columbia area. These neighborhoods include Braeburn, Clarksville, Fox Pause, Spring Lake Farms, Forest Hills, Meadows, Dogwood, and Heritage Heights. These neighborhoods consist of single-family dwellings situated in wooded, open space, or agricultural settings. More rural and less developed portions contain more widely spaced single-family homes, including several farms in the Clarksville area.

Many other subdivisions are planned for development in the study area in the near future as part of the Columbia New Town development. The largest of these subdivisions will be River Hill, a village consisting of 2,400 units planned for completion between 1991 and 2000. As a result of rezoning, 33 acres of the new village will contain apartments and townhouses. Other large farms are selling land to developers, which will alter the character of the countryside.



NOT TO SCALE

MD ROUTE 32/MD ROUTE 108 INTERCHANGE

CENSUS TRACT

FIGURE 20

2. Community Facilities and Services (Figure 21)

The study area is effectively serviced by many community facilities and services located in Clarksville and in nearby Columbia.

a. Schools

The study area and surrounding area contain the following schools:

1) Clarksville Elementary
2) Clarksville Middle
3) St. Louis Elementary
4) Howard County Gateway
5) Atholton High.

These schools are shown on Figure 21. As growth occurs in the MD Route 103/MD Route 108 corridor, additional elementary and middle schools will be built to accommodate anticipated population increases.

b. Churches

Places of worship in the study area include St. Louis Catholic Church Linden Linthineum United Methodist Church, and Abiding Savior Lutheran Church.

c. Parks

The Middle Patuxent Environmental Area lies along the segment of the Middle Patuxent River between MD Route 32 and MD Route 108 (see Figure 21). The Howard County Department of Recreation and Parks has 1,238 acres under passive usage or management. This resource is addressed in detail in Section IV of this document.

d. Emergency Services

Fire and ambulance services are provided by the Fifth District Volunteer Fire Company in Clarksville, Columbia Company #7, located on Little Patuxent Parkway, and Lisbon Company #4 on MD Route 94.

e. Law Enforcement

The Howard County Police Department, located in Ellicott City, and the Maryland State Police, Waterloo Barracks, serve the Clarksville area.

f. Health Care Facilities

Health services are provided by the Howard County General Hospital in Columbia.

LEGEND

- School
- Post Office
- Church
- Fire Station

MARYLAND ROUTE 32
From Maryland Route 108 to Pindell School Road

COMMUNITY FACILITIES AND SERVICES

Scale in Feet
0 500 1000 2000

FIGURE 21

CLARKSVILLE E.S.
FOREST HILLS
ROTTER ROAD
108
CLARKSVILLE
32
CLARKSVILLE LEARNING CENTER
CLARKSVILLE
OAKS ROAD
ST. LOUIS ELEM. SCH
WAKE FOREST ROAD
THOMPSON DR
TULANE ROAD
GUILFORD ROAD
HERITAGE HEIGHTS
MIDDLE PATUXENT ENVIRONMENTAL AREA
HARMONY HALL
1 Mile North
HAWTHORN
CEDAR ACRES
BRAEBURN
VILLAGE OF HICKORY RIDGE
CLEMENS CROSSING E.S.
ATHOLTON HIGH SCHOOL
SIMPSONVILLE
W.R. GRACE
RIVER HILL/OWINGS RESIDENCE
HO 159
RIVERHILL GAME FARM
WELLINGS STONE HOUSE
HO 164
CLARKSVILLE MIDDLE SCH.
DOGWOOD
HALLS SHOP ROAD
REDBERRY ROAD
TRAILER PARK
CLARKSVILLE RIDGE
SWING CT
WHITEGATE LANE
HITCHING POST CT
MAIDEN LANE
CROWS NEST RD
ATHOLTON HOLIDAY

3. Economic Setting

The county's location between the Baltimore and Washington metropolitan areas and the establishment of Columbia were the two primary reasons for the county's economic growth in the past two decades. Both new industry and the expansion of the established economic base are encouraged. Planned economic growth and development are dependent upon efficient transportation systems. U.S. Route 29, Interstate Route 95, and Interstate Route 70 serve as primary arteries for the transportation of goods and services in Howard County and to surrounding regional markets. MD Route 32 serves as the primary connector between Annapolis and Interstate Route 70 in Howard County.

The Howard County General Plan gives high priority to attracting high technology industries, research and development facilities and new office and light manufacturing uses. Employment forecasts indicate that overall employment in Howard County will increase nearly 126 percent - from 45,000 jobs in 1979 to 101,900 jobs in 2005.

The primary source of employment within the study area is the W.R. Grace Research Lab, which employs approximately 500 employees. Other areas of employment and economic activity include businesses located in Clarksville, small convenience shopping center along MD Route 108, several schools throughout the area, and the Johns Hopkins Applied Physics Laboratory. Census information indicates that public administration, educational services, retail trade, and business repair services provide the highest percentage of employment within census tract 6053.01.

The 1979 median household income within the study area census tract was $31,188, which was slightly higher than the county median of $27,612.

4. Land Use

a. Existing (See Figure 22)

Land in the study area is predominantly forested and flanked by extensive tracts of farmland; interspersed throughout the study area are low density residential and light commercial/industrial uses.

Commercial and institutional land use is concentrated in the western portion of the study area in Clarksville and further north along MD Route 108. Light industrial and commercial land use is also located along MD Route 32.

The central portion of the study area is forest land, some of which is designated for rural conservation. This area is bisected by Trotter Road, along which low density residential uses are located.

Several low density residential subdivisions consisting of 3-acre lots exist along MD Route 32 between Pindell School Road and MD Route 108.

b. Future (See Figure 23)

The Howard County General Plan (1981) contains long-range guidelines for future land development and growth. Its prime objective is to channel land development to those locations where public utilities are available and sufficient to serve anticipated needs. The Plan also indicates that development would be minimized in areas outside of the planned service areas in order to preserve prime agricultural and conservation areas. The county has designated the central and western portions of the county as areas where the natural environment and the rural agricultural character are to be preserved and protected from development. The eastern portion of the county has been designated as a development district. MD Route 108 appears to serve as the boundary between the eastern and central portions of the county.

Future land use plans for the study area indicate that significant residential development will occur. Much of the wooded area is designated for residential development as an extension of Columbia's New Town. When the last village of Columbia, River Hill, is completed, it will occupy much of the farm community's vacant land and will extend to the intersection of MD Routes 32/108 in the center of Clarksville.

River Hill will include 2,400 units, housing approximately 7,000 people along with a commercial center. The village is scheduled for completion between 1991 and 2000. River Hill is designed to be Columbia's most expansive village, having the lowest density, larger lots, and more open space, approximately 950 acres. As a result of rezoning, 33 acres of the new village will contain apartments and townhouses.

Other farms along MD Route 108 have been sold for development as estate lots of three- to seven-acre homesites.

B. NATURAL ENVIRONMENT

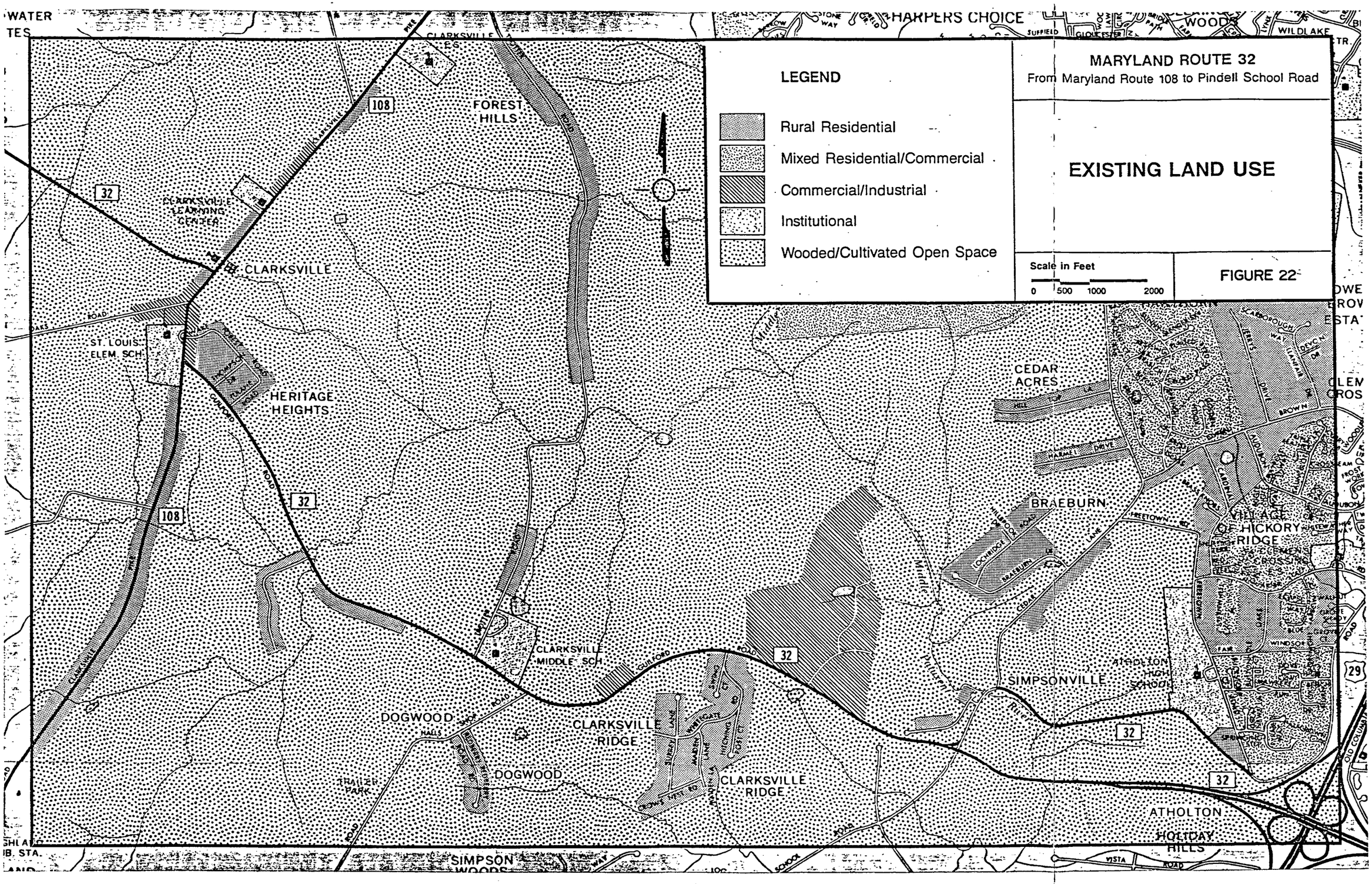
1. Geology, Topography, and Soils

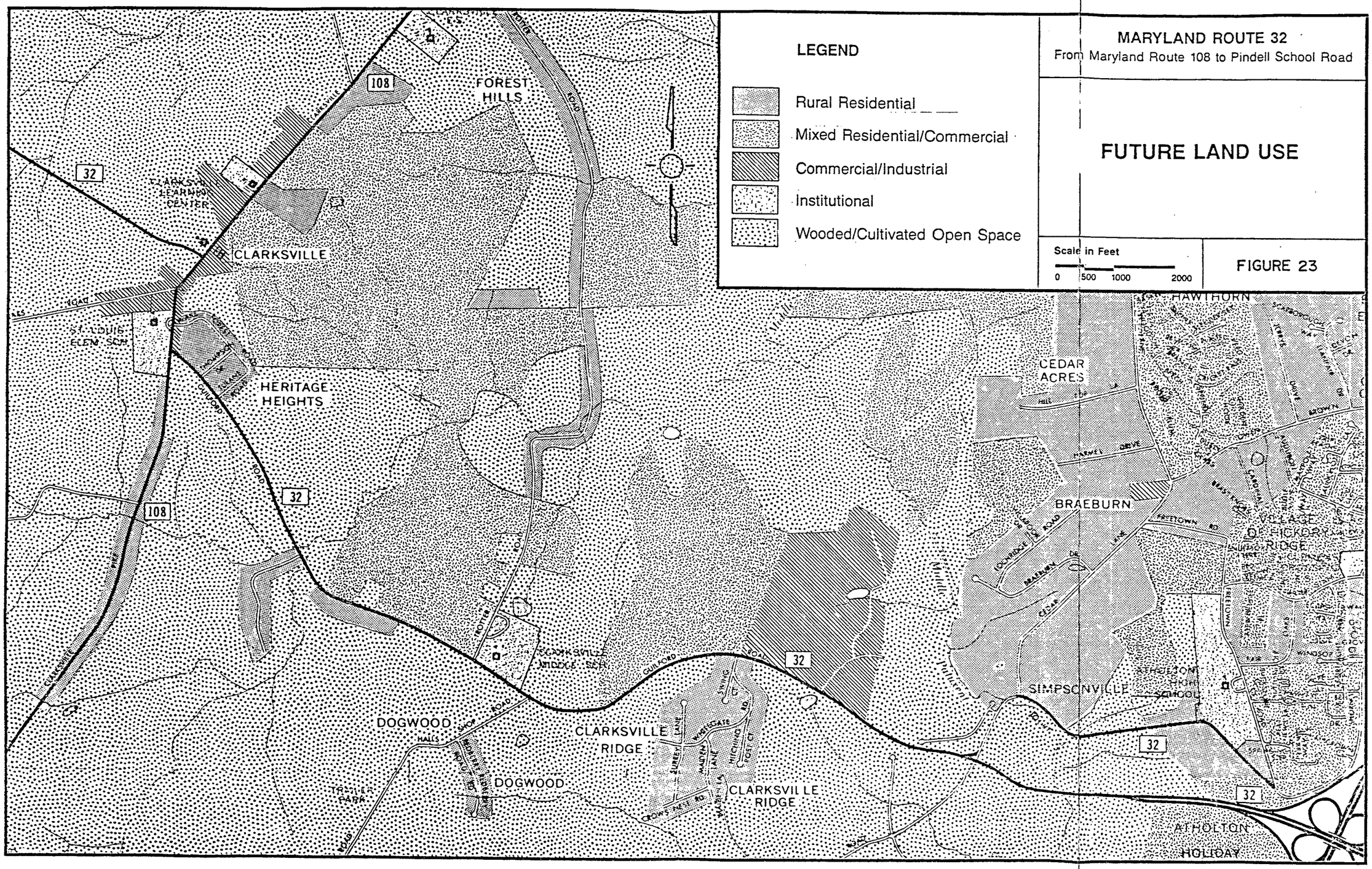
a. Physiography/Topography

The study area is located west of the Chesapeake Bay, approximately half way between Washington, D.C. and Baltimore in the Piedmont Physiographic Province. The terrain in the area is generally rolling and dissected by tributaries of the Patuxent River system. Elevations range from approximately 500 to 300 feet above sea level. Existing slopes are within a range of 0 to 10 percent, although they may be as much as 20 percent in the vicinity of streams.

b. Geology

The Piedmont Province, which encompasses the study area, consists of highly deformed Precambrian Age metamorphic rocks and Paleozoic Age plutonic rocks. The study area is underlain to the east by a pelitic schist of the Wissahickon Formation and to the west by the Baltimore Gneiss. The Guilford Quartz Monzonite also occurs in the area as discontinuous lenticular bodies. Bedrock is approximately 0 to 20 feet below the surface; however, outcrops are generally restricted to stream beds and valleys.


LEGEND
Rural Residential
Mixed Residential/Commercial
Commercial/Industrial
Institutional
Wooded/Cultivated Open Space
MARYLAND ROUTE 32
From Maryland Route 108 to Pindell School Road
EXISTING LAND USE
Scale in Feet
0 500 1000 2000
FIGURE 22
HARPERS CHOICE
CLARKSVILLE ES
FOREST HILLS
CLARKSVILLE LEARNING CENTER
CLARKSVILLE
ST. LOUIS ELEM. SCH
HERITAGE HEIGHTS
CEDAR ACRES
BRAEBURN
VILLAGE OF HICKORY RIDGE
CLARKSVILLE MIDDLE SCH
DOGWOOD
CLARKSVILLE RIDGE
SIMPSONVILLE
ATHOLTON HIGH SCHOOL
TRAILER PARK
ATHOLTON
HOLIDAY HILLS
SIMPSON WOODS
108
32
29


LEGEND
Rural Residential
Mixed Residential/Commercial
Commercial/Industrial
Institutional
Wooded/Cultivated Open Space
MARYLAND ROUTE 32
From Maryland Route 108 to Pindell School Road
FUTURE LAND USE
Scale in Feet
0 500 1000 2000
FIGURE 23
FOREST HILLS
CLARKSVILLE
CLARKSVILLE LEARNING CENTER
ST. LOUIS ELEM. SCH.
HERITAGE HEIGHTS
CLARKSVILLE MIDDLE SCH.
DOGWOOD
CLARKSVILLE RIDGE
TRAILER PARK
CEDAR ACRES
HAWTHORN
BRAEBURN
VILLAGE OF HICKORY RIDGE
SIMPSONVILLE
ATHOLTON HIGH SCHOOL
ATHOLTON
HOLIDAY
108
32

Mineral resources in the Piedmont Province include building and crushed stone, slate, small deposits of base metals, and chromite. No mining activity is in progress within the study area.

c. Soils

Soils in the study area belong to the Glenelg-Chester-Manor association to the west and the Glenelg-Manor-Chester association to the east. They are generally deep, well-drained soils, and range from gently sloping in the west to steep in the east. Soil associations are named for the major soil series present in them, although minor soils are also present. Table 3 lists the soils series present in the study area. These soils are generally acceptable for highway construction, although some limitations do exist. For instance, Glenelg and Manor soils are highly susceptible to erosion; Baile soils are poorly drained and have a seasonally high water table; and Glenville soils have a fragipan that impedes drainage. The soils in the study area are also well-suited for agricultural and residential uses.

Preliminary assessment shows the presence of prime farmland soils within the study corridor. When these soils are in agricultural use and are zoned for agriculture, any change in use must be coordinated with the U.S. Soil Conservation Service by completing a Farmland Conversion Impact Rating, Form AD-1006. This coordination has been completed. Because the site assessment totals less than 160 points, the farmlands impacted by the project qualify for only a minimal level of consideration for protection.

TABLE 3

Soil Series in Study Area

Name	Symbol
Baile silt loam	Ba
Chester gravely silt loam	CgB2, CgC2
Chester silt loam	ChA, ChB2, ChC2, ChD2
Comus silt loam	Cs
Elioak silty clay loam	E1D3
Elioak silt loam	EkA, EkB2, EkC2, EkD2
Glenelg loam	G1A, G1B2, G1C2, G1D2
Glenville silt loam	GnA, GnB2
Manor loam	M1A, M1D2, M1D3, M1E
Manor gravel loam	MgB2, MgC2, MgC3

Source: Soil Survey - Howard County, Maryland, U.S.D.A

2. Water Resources

a. Surface Water

Surface water of the study area is part of the Middle Patuxent River drainage basin (see the Alternates Mapping). The drainage area is primarily agricultural and residential.

The Maryland Department of Natural Resources, Water Resources Administration, classifies all surface waters of the state into four use categories:

Class I - Water contact recreation, habitat for fish, other aquatic life, and wildlife
Class II - Shellfish harvesting
Class III - Natural trout waters
Class IV - Recreational trout waters.

All waters of the state are Class I with additional protection provided by higher classifications.

Streams within the study area are designated as Class I. Water quality standards are being met.

The Patuxent River, including the Middle Patuxent River, was declared a Scenic River by the Maryland General Assembly in 1972. The state monitors all modifications and construction in order to preserve the River in a condition consistent with this designation. This River is neither listed nor does it have potential for listing as a National Wild and Scenic River.

One man-made pond is located near the proposed MD Route 32 corridor within the study area. This large farm pond is located on the Stretmater property across the road from the W.R. Grace Company. The water in this pond appears to be of high quality and is extremely clear for a pond of this type. Abundant submerged vegetation and fish were observed in it during the site visit. The original alignment of the proposed MD Route 32 would have infringed upon this pond, but the alignment has been shifted further to the north to avoid disturbing the pond.

b. Groundwater

The normal precipitation in this area is about 41 inches, but only a small percentage infiltrates to recharge groundwater aquifers. Some important factors that determine the rate of infiltration are as follows:

- Duration, intensity, and periodicity of rainfall;
- Type of soil or rock at surface; and
- The general topography of the landscape.

In Howard County, the groundwater is solely derived or recharged by rainfall. These types of aquifers are usually considered to be sole source aquifers under a water table condition. However, this area is outside the

EPA-designated sole source aquifer. There are three major rock formations in the MD Route 32 corridor which are important water-bearing formations: the Patuxent Formation, the New Oxford Formation, and the early Paleozoic and PreCambrian Formations.

The Patuxent Formation, Potomac Group, is Lower Cretaceous in age. It is approximately 140 feet thick and is located only in the eastern part of the county. Its rate of yield varies from 8 to 35 gallons per minutes (gpm).

The New Oxford Formation, Newark Group, is Upper Triassic in age. Its approximate thickness is 0-1,500 feet. However, very good yields are reported from 0.2 to 183 gpm from the following geologic units:

- Wissahickon Formation (albite and oligoclase faces)
- Harpers Phyllite
- Ijamsville Phyllite
- Baltimore Gneiss
- Sykesville Formation
- Laurel Gneiss
- Kensington Granite Gneiss
- Ellicott City Granite
- Guilford Granite
- Relay Quartz Diorite
- Cockeysville Marble.

The groundwater availability in these areas is moderate. The amount of water pumped from wells is small (1 percent) when compared to the large reservoirs in the area which serve as the water supply. Due to the area's topography and geology, the potential for contamination is moderate to high. The greatest potential for contamination exists where there has been an increase in development near recharge areas. Moreover, the aquifers in the study area are close to the surface (ranging from 43 to 136 feet) and are susceptible to contamination. The well-drained Glenelg-Chester-Manor soils are the most significant obstruction to pollutants entering the aquifer.

c. Floodplains

The 100-year floodplains within the study area are located adjacent to the Middle Patuxent River. The floodplain limits (shown on the Alternates Mapping) are based on the Federal Insurance Administration's Flood Insurance Study for Howard County, 1986.

3. Ecology

a. Terrestrial Habitat

Most of the forested land in the study area is of the central hardwood association; primarily oak, hickory, tulip-poplar, maple, walnut, black locust, and beech. Some softwoods are found within the study area, mostly Virginia pine. The forest resources are typically regrowths of cutover woodlands or of abandoned agricultural lands and are, therefore, primarily second-growth woodlands.

Agricultural areas are mainly pasture, hay fields, and grain crops. Most of the impacted agricultural areas are presently in use as pasture land.

Woodlands within the study area provide suitable habitat for a variety of small mammals and birds, as well as whitetail deer. Deer sign was abundant in many of the wooded areas. There is also extensive edge habitat in the area where forest lands abut agricultural areas. This edge habitat is typically very beneficial for small game animals and birds, as are the areas of regrowth on the abandoned agricultural lands.

b. Aquatic Habitat

The aquatic habitat of the study area consists of farm ponds, the Middle Patuxent River, Cricket Creek, and small unnamed tributary streams of the Middle Patuxent River.

The main stem of the Middle Patuxent River provides the most extensive aquatic habitat within the study area. A variety of pools and small backwater areas with large rocks and overhanging tree roots provide cover for small fish species. Riffle areas are abundant and probably provide a diversity of well oxygenated macroinvertebrate habitats. These macroinvertebrates would, in term, constitute a good source of food for fish within the stream.

The smaller tributary streams probably provide minimal aquatic habitat because their flow is less reliable during dry conditions. On August 25, 1987, during the field reconnaissance performed for the wetlands mapping (under very dry conditions), these streams were observed to have very low flows and no fish species were present in any of them. The overhanging vegetation along these smaller streams can, however, provide a supply of exogenous food in the form of insects and leaf litter which may be carried downstream to areas where fish are present.

c. Wetlands

In accordance with Executive Order 11990, wetland impacts of the proposed construction have been quantified. All three alternative alignments impact the same wetlands, differing only in the acreage impacted.

Non-tidal wetlands occur in the study area along the Middle Patuxent River and the tributaries. The classification of these wetlands is given in Table 4. Wetland areas potentially affected by the proposed project were identified through field surveys.

An initial wetland field review with the U.S. Army Corps of Engineers and other state and Federal representatives was held on August 25, 1987. Minutes of that meeting are included in Appendix A. Comments from the U.S. Fish and Wildlife Service are also included.

Characteristics of the predominant wetland types are classified by the U.S. Fish and Wildlife Service, and briefly described below:

- o System - Palustrine, Riverine
- o Classes - Forested, Scrub-Shrub, Emergent, Open Water, Streambed,

TABLE 4

Description and Classification of Wetlands

Location	Wetland Number	Site Description	Classification
Clarksville	1	Wetland approximately 400 feet west of MD Route 108 and 200 feet south of existing MD Route 32.	Palustrine Forested
Clarksville	2	Stream approximately 750 feet north of Wake Forest Road and Thompson Drive intersection.	Riverine Streambed
Clarksville	3	Wetland and stream approximately 800 feet east of Wake Forest Road and Thompson Drive intersection.	Palustrine Forested and Riverine Streambed
Clarksville	4	Stream approximately 1,200 feet northeast of Wake Forest Road and Thompson Drive intersection.	Riverine Streambed
Clarksville	5	Wetland approximately 1,650 feet east of Wake Forest Road and Thompson Drive intersection.	Palustrine Forested
Clarksville	6	Wetland approximately 3,450 feet southeast of Wake Forest Road and Thompson Drive intersection.	Palustrine Forested
Clarksville	7	Stream approximately 3,200 feet southeast of Wake Forest Road and Thompson Drive intersection.	Riverine Streambed
Clarksville	8	Wetland approximately 2,150 feet north of Trotter Road and Guilford Road intersection.	Palustrine Forested
Clarksville	9	Wetland approximately 2,250 feet north of Trotter Road and Guilford Road intersection.	Palustrine Forested Scrub-Shrub
Clarksville	10	Wetland approximately 3,000 feet north of Trotter Road and Guilford Road intersection.	Palustrine Forested
Clarksville	11	Stream approximately 2,400 feet northeast of Trotter Road and Guilford Road intersection.	Riverine Streambed

TABLE 4
(Cont'd)

Description and Classification of Wetlands

Location	Wetland Number	Site Description	Classification
Clarksville	12	Stream approximately 2,600 feet northeast of Trotter Road and Guilford Road intersection.	Riverine Streambed
Clarksville	13	Wetland and stream approximately 1,500 feet northwest of Swing Court and Guilford Road intersection.	Palustrine Forested, Scrub-Shrub, and Riverine Streambed
Columbia	14	Wetland approximately 500 feet northeast of Swing Court and Guilford Road intersection.	Palustrine Scrub-Shrub and Riverine Streambed
Columbia	15	Wetland approximately 250 feet southwest of W.R. Grace Research Lab Road and Guilford Road intersection.	Palustrine Emergent and Open Water (Pond)
Columbia	16	Stream approximately 600 feet north of Pindell School Road and MD Route 32 intersection.	Riverine Streambed
Columbia	17	Wetland and stream approximately 600 feet north of Pindell School Road and MD Route 32 intersection.	Palustrine Scrub-Shrub and Riverine Streambed
Columbia	18	Stream just west of Pindell School Road approximately 800 feet south of MD Route 32.	Riverine Streambed
Columbia	19	Stream just west of Cedar Lane Bridge over Middle Patuxent River.	Riverine Streambed and Palustrine Emergent

Unconsolidated Bottom
- o Subclasses - Broad-leaved Deciduous, Cobble/Gravel, Sand, Mud
- o Water Regime - Temporary and Seasonal Saturated
- o Water Chemistry - Fresh

The predominant vegetation found in these wetland types is briefly described below and a more complete list of plant species is given in Appendix B. Predominant vegetative associations are:

- o Palustrine Forested - Characterized by woody vegetation, including red maple (Acer rubrum), pin oak (Quercus palustris), spicebush (Lindera benzoin), and various species of Polygonum.

- o Palustrine Scrub-Shrub - Dominated by wooded vegetation less than 6 meters tall, including true shrubs, young trees, and environmentally small or stunted trees; typical dominants are elderberry (Sambucus canadensis), blackwillow (Salix nigra), and young trees such as red maple.

- o Riverine Streambed - Includes all parts of channels that are not included in any other classes; typical vegetation includes pioneering annuals such as the Polygonums.

Wetlands within the area are generally of high quality and provide the following functions:

- o Passive recreation and natural habitat value
- o Habitat for aquatic wildlife or fisheries
- o Sediment trapping (short-term)
- o Groundwater discharge
- o Nutrient retention (short-term)
- o Food chain support (nutrient export)
- o Active recreation
- o Flood desynchronization
- o Nutrient retention/removal (long-term)
- o Sediment trapping (long-term)
- o Groundwater recharge.

The functions of the individual wetlands are shown in Table 5. These wetlands are shown on the Alternates Mapping.

d. Wildlife

Mammals

The diverse habitat of the area, particularly the abundance of edge habitat, provides suitable environment for numerous mammals. Small game species such as rabbits, squirrels, and raccoons are probably quite abundant. Some evidence of these species was noted during the wetlands survey of the area. Tracks of whitetail deer were also noted in abundance during this survey as well as browsing areas, particularly within the wetlands where jewelweed seems to be a preferred browse. Many small rodents such as mice, shrews, and voles are also

TABLE 5

Wetland Values

Wetland #	Passive Recreation	Wildlife Habitat	Short-term Sediment Trapping	Groundwater Discharge	Short-term Nutrient Retention	Food Chain Support	Active Recreation	Flood Desynchronization	Long-term Nutrient Retention	Long-term Sediment Trapping	Groundwater Recharge		Overall Value of Wetland
1	●									●			Low
2	●				●				●	●			Medium
3	●						●			●	●		Medium
4	●	●			●		●		●	●	●		High
5	●	●		○	●	●	●		●	●			High
6	●				●					●	●		Medium
7	●	●			●		●		●	●	●		High
8	●												Low
9	●	●		○	●	●	●						High
10	●			○	●	●							Medium
11	●			○	●		●			●	●		Medium
12	●			○	●		●			●	●		Medium
13	●				●					●	●	●	Medium
14	●			○	●	●			●				Medium
15	●	●		○	●	●	●	●		●	●		High
16	●			○		●							Medium
17	●				●					●	●		Medium
18	●			○	●				●				Medium
19	●	●					●	●					High

likely to be abundant within the woodlands and agricultural areas. No endangered species are known to exist in the study area.

Birds

Again, the diversity of habitat types within the area provides suitable cover and food opportunities for numerous species of songbirds as well as some raptors. Upland game bird species found within the area are quail and doves. The edge habitat is especially suitable for maintaining a diverse bird population because it provides the advantages of two or more habitat types. No known endangered species occur within the project area.

Reptiles and Amphibians

Representatives of this group of fauna which can be expected to occur within the project area include snakes, turtles, lizards, salamanders, frogs, and toads. The wetland areas in and around the tributary streams and the Middle Patuxent River provide the most suitable habitat for herptiles. These areas provide suitable cover and a plentiful supply of water necessary for the survival of most of these species as well as the habitat required for reproduction by the amphibian species.

e. Threatened, Endangered, or Rare Species

Coordination with U.S. Fish and Wildlife Service and the Maryland Forest, Park, and Wildlife Service indicates that no known federally listed threatened or endangered species have been reported in the project area. The Maryland Forest, Park and Wildlife Service Heritage Program reported that records exist within the general project area for the following rare plant species: whorled mountain-mint (Pycnanthemum verticillatum), water-plantain spearwort (Ranunculus ambigens), smalls ragwort (Senecio anonymus), and woodland agrimony (Agrimonia striata). None of these species was observed during the field reconnaissance and these species are not state-listed.

C. EXISTING AIR QUALITY

The MD Route 32 project is within the Metropolitan Baltimore Intrastate Air Quality Control Region. While only a portion of the region does not meet the primary standards for carbon monoxide (CO), the entire region is subject to transportation control measures such as the Vehicle Emissions Inspections Program.

A detailed microscale air quality analysis has been performed to determine the CO impact for the proposed project, which is described in further detail in Section IV.

D. EXISTING NOISE CONDITIONS

Fifteen noise sensitive areas (NSAs) have been identified in the MD Route 32 study area. Descriptions of the noise sensitive areas are provided in Table 6. In addition, the locations of the noise sensitive areas are shown on Figure 24. A copy of the Technical Analysis Report is available at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

TABLE 6

Noise Sensitive Areas

Noise Sensitive Area	Description
1	East side of Cedar Lane north of the Patuxent River.
2	Residence, in northwest quadrant of Pindell School Road and proposed MD Route 32 interchange.
3	Residence, southwest side of the South Service Road near Pindell School Road.
4	Residence, south side of existing MD Route 32 west of Swing Court.
5	Historic site, north side of proposed MD Route 32 at Station 609+.
6	Residence, southeast side of existing MD Route 32 west of Swing Court.
7	Clarksville Middle School at Trotter Road and existing MD Route 32.
8	Residence, northeast quadrant of the Trotter Road and proposed MD Route 32 interchange.
9	Residence, southwest quadrant of the Trotter Road and proposed MD Route 32 interchange.
10	Historic site, north side of existing MD Route 32 west of Trotter Road.
11	Residence, north of existing MD Route 32 west of Trotter Road.
12	Edge of right-of-way, along north side of Station 538.
13	Residence, south side of Wake Forest Road.
14	Residence, north side at existing MD Route 32 east of Thompson Drive.
15	St. Louis School, west side of existing MD Route 32 south of Ten Oaks Road.

Highway traffic noise is usually measured on the "A" weighted decibel scale "dBA," which is the scale that has a frequency range closest to that of the human ear. In order to give a sense of perspective, a quiet rural night would register about 25 dBA, a quiet suburban night would register about 60 dBA, and a very noisy urban daytime about 80 dBA. Under typical field conditions, noise level changes of 2-3 dBA can barely be detected, but a 5-dBA change is readily noticeable. A 10-dBA increase is judged by most people as a doubling of sound loudness. (This information is presented in the "Fundamentals and Abatement of Highway Traffic Noise" by Bolt, Beranek and Marman, Inc., for FHWA, 1980.)

The Federal Highway Administration has established, through FHPM 7-7-3, noise abatement criteria for various land uses. These criteria, along with the associated acting category, are shown in Table 7.

The noise levels in this analysis are expressed in terms of the L_{eq} noise level, which is the energy-averaged noise level for a given time period. All ambient and predicted noise levels in this report are L_{eq} exterior noise levels unless otherwise noted.

In an acoustical analysis, measurement of ambient noise levels is intended to establish the basis for impact analysis. The ambient noise levels, as recorded, represent a generalized view of present noise levels. Variations in total traffic volume, truck traffic volumes, speed, etc. may cause fluctuations in ambient noise levels of several decibels. However, for the purpose of impact assessment, these fluctuations are usually not sufficient to significantly affect the assessment.

It was determined that for most of the noise sensitive areas, the most typical noise conditions occur during the non-rush hour period (9:00 a.m. - 4:00 p.m.). During this time, the highest noise levels are experienced for the greatest length of time.

An on-site monitoring program was conducted in November of 1987. Measurements were made for 20-minute intervals at each of the 15 NSAs. Ambient noise levels ranged from 46 dBA to 69 dBA for these sites.

The results of the ambient monitoring are discussed in more detail in Section IV.

E. CULTURAL RESOURCES

1. Historic Sites

An historic sites reconnaissance of the project area was executed in 1975 by the Maryland Historical Trust. Three sites within the Howard County portion currently being considered were identified as historic. These sites are:

- HO 158 River Hill/Owings Residence
- HO 164 Wellings Stone House
- HO 165 Vogel House

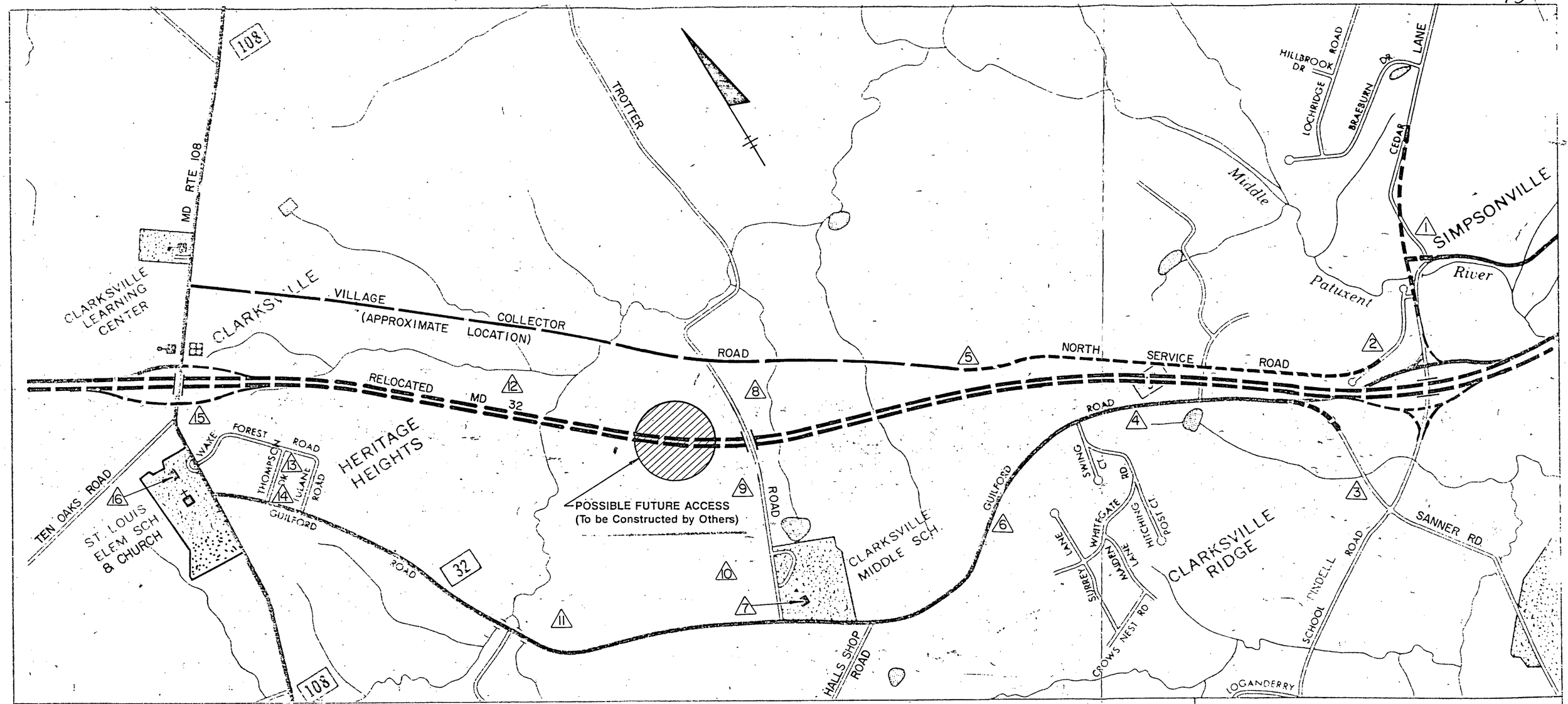
The first two sites were identified as possibly meeting the criteria for listing in the National Register of Historic Places (See Figure 21). The State

TABLE 7

Noise Abatement Criteria

Activity Category	L_{eq} (h)	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Reference: 23 CFR, Part 772



MARYLAND ROUTE 32
FROM MD. 108 TO PINDELL SCHOOL ROAD

AIR AND NOISE SENSITIVE RECEPTORS

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

RECEPTORS LOCATION - ⚠	DATE: SCALE: 1"=1000'	FIGURE 24

Historic Preservation Officer, in his November 1987 letter (included in the Comments and Coordination Section) concurs with these levels of significance:

> River Hill/Owings Residence (HO 158) is the only known original building which remains on the once extensive estate owned and farmed by the Owings. It is a very large, well-preserved, two-part stone house which probably dates to the early nineteenth century. The Owings family is significant in the locality for its ownership of the Warfield-Owings Mill, later called Simpsonville, located in the Town of Owingsville, which was re-named for the Simpsons who resided in the community in the late nineteenth century.
>
> Wellings Stone House (HO 164) is significant as a large, early nineteenth century stone house, which retains considerable integrity. It is the only intact original building which remains of the extensive estate that the Honorable John Dorsey deeded to his daughter.

An additional reconnaissance was undertaken in 1987, and two additional historic structures were identified. These are HO 268 (Hatfield Residence) and HO 210 (Walter Scott Farmhouse). These are not thought to meet the criteria for National Register listing. The Simpsonville Mill ruin, although still partially extant, is more appropriately considered as an archeological site (18 HO 080).

2. Archeological Sites

A Phase I Archeological Study of the study area was conducted. Two historic archeological sites were identified as potentially eligible for listing in the National Register of Historic Places.

Site 18 HO 149 is a nineteenth century house site with an associated trash dump. Site 18 HO 080, the Simpsonville Stone Ruins, is a complex of nineteenth and possibly eighteenth century ruins, including a mill, houses, a bridge, and a dam. 18 HO 149 and 18 HO 080 are both considered potentially eligible for listing in the National Register of Historic Places.

IV

Environmental Consequences

IV. ENVIRONMENTAL CONSEQUENCES

A. SOCIAL, ECONOMIC, AND LAND USE

1. Social Impacts

a. Residential Relocations

The preliminary relocation and right-of-way reports are summarized below and are available for review at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

No displacements will occur under the No-Build Alternate.

Alternate B will require the acquisition of one owner-occupied residence, a two-story frame dwelling on Trotter Road.

The family will be provided decent, safe, and sanitary replacement housing within its financial means. Relocation of the family is expected to occur in a timely, satisfactory, and humane manner without undue hardship to those affected from the date of initiation of negotiations.

The relocation will be completed in accordance with the provisions of the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970. The relocation assistance study for this document is available for review in the District Office of the Office of Real Estate. A summary of the relocation assistance program in the State of Maryland is provided in the Appendix to this document.

Based upon housing availability trends in the project area, as well as the available Greater Baltimore Multiple Listing Services, sufficient affordable replacement housing is available in the Howard County marketplace to replace the housing to be acquired. Housing may not be available within the statutory limits of the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970. If so, "housing as a last resort" will be used to provide decent, safe, and sanitary replacement housing for those affected by this project.

One rented home, including several farm structures located at the intersection of MD Route 32/Pindell School Road, is owned by the State Highway Administration. This home is not included in the relocation estimates, and the occupants are not eligible for relocation assistance. This property was acquired under the previous construction contract and relocation assistance was paid at that time as stated in the original FEIS, report number FHWA-MD-EIS-72-07-(F).

b. Effects on Minorities, Handicapped, Elderly Persons

There are no known handicapped or minority group members affected by this proposed project.

c. Summary of Equal Opportunity Program of Maryland State Highway Administration

It is the policy of the Maryland State Highway Administration to ensure compliance with the provisions of Title VI of the Civil Rights Act of 1964, and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age, religion, physical or mental handicap in all State Highway Administration program projects funded in whole or in part by the Federal Highway Administration. The State Highway Administration will not discriminate in highway planning, highway design, highway construction, the acquisition of right-of-way, or the provision of relocation advisory assistance.

This policy has been incorporated into all levels of the highway planning process in order that proper consideration may be given to the social, economic, and environmental effects of all highway projects. Alleged discriminatory actions should be addressed to the Equal Opportunity Section of the Maryland State Highway Administration for investigation.

d. Access to Community Facilities and Services

Under the No-Build Alternate, traffic volumes and congestion will continue to increase along existing MD Route 32 and MD Route 108 as local residential, as well as commercial and industrial through-traffic, continue to increase concurrently with ongoing suburbanization of the area. Access to local facilities and services will become increasingly unsafe for residents. The No-Build Alternate could also impede the response time of emergency vehicles as traffic volumes increase.

Alternate B, the selected alternate, would parallel existing MD Route 32 from Cedar Lane to MD Route 108 in Clarksville. Motorists will have the option of using either service roads or the new highway in traveling to and from community facilities and services within and about the study area. The volume of traffic using existing MD Route 32 will be greatly reduced, making that road far safer for residents and local traffic destined for Clarksville, Columbia, or other areas.

Access to local schools, particularly Clarksville Middle School and Atholton High School will be considerably altered by Alternate B, which proposes to cul-de-sac Trotter Road to both sides of the relocated MD Route 32. School buses may encounter additional routing and resultant expense due to the cul-de-sac of Trotter Road. School buses servicing the northern portion of Trotter Road will need to make a U-turn at the cul-de-sac in order to access MD Route 108 and MD Route 32. Students now walking along Trotter Road, north of proposed MD Route 32, en route to Clarksville Middle School will be prohibited by relocated Md Route 32. There may be some additional busing of school students required. (See Page VII-123.)

e. Disruption of Neighborhoods and Communities

Alternate B, which proposes to cul-de-sac Trotter Road, will bisect the neighborhood along Trotter Road and possibly affect its cohesion. Also, the proposed alignment could be close to new subdivisions planned for the study area.

The proposed Village Collector, shown on Figure 24, (following Page III-15) is part of the Howard Research and Development New Town development and is shown for reference only.

Neighborhoods along existing MD Route 32 should find that the proposed project will alleviate traffic volumes and delays because through traffic will be diverted to relocated MD Route 32. It will also separate a large volume of truck traffic from existing MD Route 32; this truck traffic poses unsafe conditions due to the numerous residential driveways accessing directly onto existing MD Route 32.

f. Effects on Parks and Public Recreation

The Build Alternate will not adversely affect any public park or recreational area. Approximately 1.0 acre of property will be required from the Middle Patuxent Environmental Area. See page IV-27, Section 4(f) Evaluation, for more detail concerning this impact.

2. Economic Impacts

a. Business Displacements and Relocations

No business displacements or relocations will be required by Alternate B.

b. Effects on Regional Business Activity

The completion of this segment of relocated MD Route 32 (Patuxent Freeway) is part of a series of projects designed to extend MD Route 32 as a controlled access highway from Interstate Route 70 near Cooksville in Howard County to tie into MD Route 3 (proposed Interstate Route 97) leading into the City of Annapolis in Anne Arundel County. Its purpose is to provide a safe, fast, and expedient route between the eastern shore and western Maryland which bypasses the more densely populated areas of Baltimore and Washington, D.C. It also provides a more direct link between the Columbia and Annapolis market areas.

Industrial development in Howard County is primarily concentrated along the entire eastern edge of the county between Interstate Route 95 and the Anne Arundel County border. The improvements to the Interstate Route 70/U.S. Route 40 corridor have also created new economic development opportunities along the northern edge of the county. The improved transportation system on MD Route 32 will enhance the county's economic base. The access created by this roadway will expedite the transportation of goods and services from the Port of Baltimore to airport facilities, markets in western Maryland, and to resale markets in general.

Under the Build Alternate, commercial traffic will have a more direct access to and from major highways and to surrounding industrial and employment areas.

The Howard County General Plan addresses the short-, medium-, and long-range trends for future development. Highway improvements are an integral part of these plans. The county's plan shows the approximate corridor of relocated MD Route 32 as a needed transportation facility to accommodate existing and planned development.

Selection of the No-Build Alternate will mean that the segment of MD Route 32 between Pindell School Road and MD Route 108 will not accommodate commercial and industrial through traffic as well as commuter traffic from the planned new town development.

The segment of MD Route 32 between MD Route 108 and Interstate 70 has been upgraded to a two-lane highway with a design speed of 70 miles per hour with full control of access. This segment is adequate to service commerical, industrial and commuter traffic through the design year of 2015. Traffic volume predictions do not warrant any further upgrading of that segment in the near future.

Vehicles utilizing the existing portions of MD Route 32 destined for Interstate Route 70 or Annapolis will be subjected to speed reductions and congestion along the existing local roadway of MD Route 32, thereby creating costly delays and unsafe driving conditions due to the inconsistent typical section.

c. Effects on Local Business Activity

Relocated MD Route 32 will separate through-traffic from local traffic, thereby improving the mobility of local customers, merchants, and employees.

With Columbia, the U.S. Route 1 Corridor, W.R. Grace Research Company, and Johns Hopkins Applied Physics Laboratory in Howard County and the Fort Meade National Security Agency complex in Anne Arundel County as the major employment centers, relocated MD Route 32 will be heavily used by persons traveling to and from their areas of employment. These trips will be quicker, safer, and more economical.

Access to the W.R. Grace property will be provided by a north service road connecting the W.R. Grace property with Cedar Lane.

The proposed relocation of MD Route 32 will better accommodate existing and proposed industrial development. It will also relieve traffic congestion and conflicts within the town of Clarksville and businesses along MD Route 32, allowing improved access to businesses and services in that area. In turn, this relief will improve travel time and traffic service.

Studies of bypasses around small towns show that when through-traffic is diverted away from a town's central business district, businesses within this area frequently experience gains in retail sales. Commercial development in

Clarksville is geared to the needs of the local community. Only a very small percentage of potential customers will be lost with the grade separation since an interchange is proposed at MD Route 32 and MD Route 108.

The No-Build Alternate will not be consistent with planned transportation improvements or economic development within the study area. Traffic congestion and unsafe conditions will continue to increase. Since the county has designated the study area and the eastern portion of the county for intensive commerical and residential development, the lack of adequate transportation will hamper economic growth.

d. Effects on Tax Base

This project will accommodate the efficient expansion of proposed development in the study corridor, which in turn will have a positive effect on the county's tax base.

As the area develops, it is likely that the property values and tax assessments will rise as the community experiences a rural to suburban change in character.

3. Land Use and Land Use Planning

Growth in the study area is consistent with the Howard County General Plan (1982) and the Regional Planning Council's General Development Plan (1986). The county supports and encourages growth along the proposed relocated MD Route 32 corridor and recognizes the completion of relocated MD Route 32 as an integral element of these plans. Thus, Alternate B is consistent with future land use plans for the area.

The proposed highway improvement will help to accommodate the planned regional and local industrial and residential growth and relieve the existing and anticipated congestion on the local transportation system as development proceeds.

B. NATURAL ENVIRONMENTAL EFFECTS

1. Effects on Geology, Topography, and Soils

Because portions of this project will undoubtedly be associated with areas of steep slopes, state of the art erosion and sediment control structures will be used to reduce or mitigate adverse effects of erosion/sedimentation. Steep slopes comprised of Glenelg or Manor soils will be especially susceptible to erosion. Care will be taken in poorly drained soils such as are sometimes found with the Baile and Glenville series. These areas may have a high water table, which may produce muddy conditions during construction. In general, effects on the geology, topography, and soils of the study area will be minor.

According to the Soil Conservation Service, 28.5 acres of prime farmland soils and 73.1 acres of farmland of statewide importance will be impacted by Alternate B.

2. Effects on Water Resources

a. Surface Water

The Middle Patuxent River and several unnamed drainage tributaries as well as a farm pond comprise the surface water resources in the study area. These waters are designated Class I by the Maryland Department of Natural Resources, Water Resources Administration. Hydraulic structures will be required at all eight stream crossings. The Cricket Creek crossing will probably be by box culvert and the Pindell School Road/Cedar Lane crossing of the Middle Patuxent River will most likely be by bridge. However, final type and size of these hydraulic structures will be determined during the design phase of the project. Bottomless culverts will be considered during final design. (See response to U.S. Fish and Wildlife Service letter, pg VII-103.)

Only minor impacts are expected to occur as a result of this activity. Short-term impacts will be in the form of slight, temporary increases in turbidity and sedimentation resulting from the disturbance of bed materials and adjacent upland areas during the actual construction phase. Following completion of the project, no long-term impacts are anticipated. All culverts can be depressed to allow the establishment of natural stream bottoms.

Final design for the proposed improvements will include plans for grading, erosion and sediment control, and stormwater management in accordance with State and Federal laws and regulations. Review and approval of these plans by the Maryland Department of Natural Resources, Water Resources Administration, and the Department of the Environment will be required.

Long-term impacts on surface waters will result from the increase in impervious surface which will produce an increase in roadway runoff. This impact will be reduced by compliance with the Department of the Environment's Stormwater Management Regulations. These regulations require stormwater management practices in the following order of preference:

- o On-site infiltration
- o Flow attenuation by open vegetation swales and natural depressions
- o Stormwater retention structures
- o Stormwater detention structures.

These measures have been demonstrated to significantly reduce pollutant loads and control runoff, and any slight increases in either of these parameters that may occur will be localized.

b. Groundwater

The study area has a high potential for groundwater removal and artificial recharge. This high potential is due to the crystalline basement aquifers relatively close to the surface where compaction or subsidence will occur due to the withdrawal of groundwater. The only limiting factor in use and in artificial recharge is the varying capacity of the fractured rocks and the unknown capacity to hold water.

3. Water Quality

Factors which influence the quantity and quality of highway runoff are traffic volume and pattern, maintenance, and rainfall intensity. Typical pollutants include:

- o Very fine dust and dirt;
- o Toxic materials (heavy metal, pesticides) such as lead, zinc, and copper, and nickel and chromium in smaller amounts; and
- o Salt and sand.

No water quality data exist for the present surface waters and runoff in the study area, but a groundwater monitoring station exists near Farside in Howard County. This monitoring station is about five miles from the project area. Water quality data from the water year 1981 are listed below.

Parameters	Measurement
pH (standard Units)	7.1
Temperature (^{o}C)	14.0
Hardness	130mg/1 as $CaCO_3$
Turbidity	0.50 NTU
Calcium, dissolved	31 mg/1 as Ca
Sodium, dissolved	4.6 mg/1 as Na
Alkalinity (Lab)	120 mg/1 as $CaCO_3$
Sulfate, dissolved	1.9 mg/1 as SO_4
Iron, dissolved	20 ug/1 as Fe
Manganese, dissolved	2 ug/1 as Mn
Cadmium, total recoverable	1 ug/1 as Cd
Chromium, total recoverable	2 ug/1 as Cr

It should be noted that the mineral content of water varies from aquifer to aquifer and from place to place within an aquifer. It is common to find the presence of nearly all elements in groundwater samples.

A pH greater than 7 is considered alkaline water (hard water) which is likely to be corrosive and may form deposits if the groundwater contains large amounts of sulfate, bicarbonate, and chloride radicals. Gases such as hydrogen sulfide, carbon dioxide, methane, and oxygen may cause damage to man-made structures by both corrosion and cavitation. The trace metals occurrence is due to water contact with the underlying metamorphic rocks. The aquifers in the study area are subject to potential contamination due to their proximity to the surface. This potential for contamination may be minimized by incorporating an infiltration design for 24-hour storms along the facility. Allowing surface water to infiltrate into the groundwater system can help compensate for the lack of infiltration caused by road pavements.

The majority of the homes in the study area are supplied by a public water supply (WSSC). A few home owners, however, own spring-fed wells since groundwater seepage occurs in the area. Therefore, few homes in the area have private wells. SHA will test all private wells before and after construction for quality and quantity. If the project affects any well, SHA will compensate the owner or replace the well.

Generally, the larger the impervious area, the higher the percentage of pollutants from highway runoff that become concentrated in the streams and rivers.

4. Floodplains

There are no designated or proposed regulatory floodways involved on this project. However, a worst-case scenario will effect 2.77 acres of floodplains at Cricket Creek and 0.75 acre at Middle Patuxent River. Construction of the associated bridge over the Middle Patuxent River at Pindell School Road/Cedar Lane will require minor encroachment of the 100-year floodplain of the Middle Patuxent River. This encroachment will probably be less than one acre. Construction of a box culvert over Cricket Creek will also require minor encroachment of the 100-year floodplain; this encroachment will be less than .5 acre. Final determination of bridge length, culvert sizes and required fill material will be made during the design phase of the project.

In accordance with the requirements of Executive Order 11998, any encroachment must be evaluated to determine its significance. A significant encroachment would involve one of the following:

- o A significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or for providing a community's only evacuation route;
- o A significant risk; or
- o A significant adverse impact on natural and beneficial floodplain values.

The use of standard hydraulic design techniques for all waterway openings that limit upstream flood level increases and approximate existing downstream flow rates will be utilized where feasible.

Use of state of the art sediment and erosion control techniques and stormwater management controls will ensure that the encroachment will not result in risks or impacts to the beneficial floodplain values or provide direct or indirect support to further development within the floodplain. Preliminary analysis indicates that no significant impacts are expected to occur as a result of any proposed Build Alternates. In accordance with FHPM 6-7-3-2, a floodplain finding is not required.

5. Ecology

a. Terrestrial Habitat

Approximately 29 acres of wooded habitat will be required for construction of the proposed route under Alternate B. Alternate A also impacts approximately 29 acres of woodland, while Alternate C would impact about 22 acres of woodland. Except for the wetland acreage required, the balance of terrestrial habitat is either old field or under cultivation. Coordination with the State Forester regarding forest area impact and possible mitigation recommendations has been initiated and is ongoing in accordance with the state reforestation law.

b. Aquatic Habitat

Wetlands

In accordance with Executive Order 11990, the wetlands were studied to quantify impacts due to the proposed construction. Construction of the proposed route will require placement of fill in non-tidal wetland areas. Alternate A impacts approximately 2.98 acres of wetlands and Alternate C impacts approximately 2.92 acres of wetlands. Alternate B impacts 2.35 acres of wetlands. Alternate B results in a minimization of impacts to wetlands because impacts to more valuable palustrine, forested wetlands are reduced by placing stream crossings in areas where these associated wetland are narrower.

The proposed project will adversely affect the functional value of the wetlands in the following manner:

1) Active/Passive Recreation: Introduction of the proposed roadway into a previously undeveloped area will significantly limit hunting activities in the vicinity of the roadway/bridge. It will also significantly alter the aesthetic qualities of the area.

2) Flood Storage/Desynchronization: The proposed construction could adversely affect this function by altering existing drainage channels.

3) Habitat for Wildlife/Fisheries: The proposed roadway will constitute a physical barrier between previously connected areas of wetland habitat and cause additional sedimentation and turbidity in the short-term. This sedimentation may temporarily reduce fish populations and spawning activities in the vicinity of the proposed construction along the Middle Patuxent River.

Other functions, include groundwater recharge, groundwater discharge, nutrient retention, sediment trapping, food chain support, and dissipation of erosive forces will be affected proportionally to the amount of wetland area lost.

Mitigation may include replacement on a 1:1 basis for wetlands and will be coordinated with appropriate state and Federal agencies.

Each of the wetland areas is described below.

Wetland 1 is a small palustrine, forested area approximately 400 feet west of MD Route 108 and 200 feet south of existing MD Route 32. Red maple (Acer rubrum) is the dominant overstory species with false nettle (Boehmeria cyclindrica) and jewelweed (Impatiens capensis) ground cover. Passive recreation and long-term nutrient retention are the principal functions provided by this wetland. Approximately 0.05 acre, the entire wetland, will be impacted by Alternate B.

Wetland 2 is a small stream approximately 750 feet north of Wake Forest Road. The banks are vegetated with American beech (Fagus grandifolia), tulip

poplar (Liriodendron tulipifera), and black walnut (Juglans nigra). Functional values of this wetland include passive recreation, groundwater discharge, flood desynchronization, and long-term nutrient retention. This riverine wetland extends beyond the right-of-way of the study area. Alternate B could impact approximately 0.11 acre of this wetland. However, due to the high quality of this intermittent stream, the right-of-way requirements and the length of the structure will be reduced during the design phase of the project in order to minimize impacts to this area. There will be some initial loss of biota and detritus, however, this loss may be offset by wetland replacement and restoration techniques.

Wetland 3 is a small forested stream approximately 800 feet east of Wake Forest Road and Thompson Drive. The forested area is dominated by tulip-poplar, red maple and pin oak (Quercue palustris). This wetland's functional values are passive recreation, food chain support, and long-term nutrient retention and sediment trapping. Alternate B will impact approximately 0.04 acre of this 0.37 acre wetland.

Wetland 4 is a stream approximately 1,200 feet northeast of the Wake Forest Road and Thompson Drive intersection. The banks are vegetated with American sycamore (Platanus occidentalis), black walnut, spicebush (Lindera benzion), and false nettle. This wetland has a high value and its functions include passive recreation, wildlife habitat, groundwater discharge, food chain support, flood desynchronization, and long-term nutrient retention and sediment trapping. This riverine wetland extends beyond the right-of-way of the study area. Alternate B will impact approximately 0.04 acre of this wetland.

Wetland 5 is a palustrine, forested area approximately 1,650 feet east of the Wake Forest Road/Thompson Drive intersection. Dominant overstory species include pin oak, red maple, black willow (Salix nigra), box elder (Acer negundo), and spicebush. Understory vegetation includes arrowwood (Viburnum dentatum), and elderberry (Sambucus canadensis). Groundcover includes skunk cabbage (Symplocarpus foetidus), sensitive fern (Onoclea sensibilis), false nettle, and jewelweed. The functions provided by this high value wetland include passive recreation, habitat for aquatic wildlife or fisheries, short-term sediment trapping, groundwater discharge, short- and long-term sediment trapping, groundwater discharge, short- and long-term nutrient retention, food chain support, dissipation of erosive forces, and flood desynchronization. Wetland 5 is outside of the right-of-way and will not be impacted by Alternate B.

Wetland 6 is a small palustrine, forested area approximately 3,450 feet southeast of the Wake Forest Road/Thompson Drive intersection. Red maple, box elder and black walnut are the dominant overstory species. Understory and groundcover vegetation include spicebush, grape (Vitis sp.), and tall nettle (Urtica procera). This wetland provides passive recreation, groundwater discharge, long-term nutrient retention, and long-term sediment trapping. Wetland 6 is outside of the right-of-way and will not be impacted by Alternate B.

Wetland 7 is a stream approximately 3,200 feet southeast of the Wake Forest Road/Thompson Drive intersection. The forested area along the streambank

is dominated by American sycamore, musclewood (Carpinus caroliniana), tulip-poplar, and black walnut. This high value wetland's values include passive recreation, habitat for aquatic wildlife or fisheries, groundwater discharge, food chain support, flood desynchronization, long-term nutrient retention, and long-term sediment trapping. This riverine wetland extends beyond the right-of-way of the study area. Approximately 0.18 acre will be impacted by Alternate B.

Wetland 8 is a small palustrine, forested area approximately 2.150 feet north of the intersection of Trotter Road and Guilford Road. The dominant overstory species is black willow, with an understory of spicebush and pokeweed (Phytolacca americana), and smartweed (Polygonum sp.) groundcover. This wetland provides passive recreation and dissipation of erosive forces. It is located outside the right-of-way and will not be impacted by Alternate B.

Wetland 9 is a small palustrine, scrub-shrub area approximately 2,250 feet north of the Trotter Road/Guilford Road intersection. Dominant vegetation includes green ash (Fraxinus pennsylvanica), black cherry (Prunus serotina), elderberry (Sambucus canadensis), halberd-leaved tearthumb (Polygonum arifolium), and jewelweed. Functions provided by this high value wetland include passive recreation, habitat for aquatic wildlife or fisheries, short-term sediment trapping, groundwater discharge, short-term nutrient retention, food chain support, and dissipation of erosive forces. Wetland 9 is located outside of the right-of-way and will not be impacted by Alternate B.

Wetland 10 is a palustrine, forested area approximately 3,000 feet north of the intersection of Trotter Road and Guilford Road. Pin oak, black cherry, red maple, tulip-poplar, and black walnut comprise the species in the understory. Groundcover includes sensitive fern, jewelweed, skunk cabbage, and lady's thumb (Polygonum persicaria). This area provides passive recreation, short-term sediment trapping and nutrient retention, groundwater discharge, and dissipation of erosive forces. This riverine wetland extends beyond the right-of-way of the study area. Alternate B will impact approximately 0.05 acre of this wetland.

Wetland 11 is a small, gravel-bed intermittent stream approximately 2,400 feet northeast of the intersection of Trotter Road and Guilford Road. Streambank vegetation includes pin oak, American beech, tulip-poplar, red maple, black walnut, box elder, and spicebush. This area provides passive recreation, short- and long-term sediment trapping, groundwater discharge, food chain support, and long-term nutrient retention. This riverine wetland extends beyond the right-of-way of the study area. Alternate B will impact approximately 0.12 acre of this wetland.

Wetland 12 is an intermittent, mud-bottom stream approximately 2,600 feet northeast of the Trotter Road/Guilford Road intersection. The streambanks are vegetated with musclewood, spicebush, tulip-poplar, dogwood (Cornus sp.), false nettle, lady's thumb, and Virginia creeper (Parthenocissus quinquefolia). The functions of this area include passive recreation, short- and long-term sediment trapping, groundwater discharge, food chain support, and long-term nutrient retention. This riverine wetland extends beyond the right-of-way of the study area. Approximately 0.06 acre of this wetland will be affected by Alternate B.

Wetland 13 is made up of a palustrine scrub-shrub/forested area and a small stream approximately 1,500 feet northwest of the Swing Court/Guilford Road intersection. Overstory species include red maple, tulip-poplar, and black locust (Robinia pseudoacacia). The streambanks are vegetated with black willow and jewelweed. This wetland provides passive recreation, groundwater discharge, long-term nutrient retention and sediment trapping, and groundwater recharge. Alternate B will impact approximately 0.52 acre of this 0.62 acre wetland.

Wetland 14 is a palustrine scrub-shrub area and a stream approximately 500 feet northeast of the intersection of Swing Court and Guilford Road. The scrub-shrub area is vegetated with black willow, black cherry, elderberry, and arrowleaved tearthumb (Polygonum sagittatum), sensitive fern jewelweed, and Joe-Pye-weed (Eupatorium purpureus). The functions provided by this area include passive recreation, short-term sediment trapping and nutrient retention, groundwater discharge, dissipation of erosive forces, and flood desynchronization. Approximately 0.29 acre, the entire wetland, will be impacted by Alternate B.

Wetland 15 is a palustrine emergent/open water area (pond) approximately 250 feet southwest of the W.R. Grace Research Lab Road/Guilford Road intersection. Dominant overstory species are willow oak (Quercus phellos) and black willow. Groundcover consists of poleweed, umbrella sedge (Cyperus strigosus), smartweed (Polygonum sp.), common cattail (Typha latifolia), sensitive fern, and rush (Juncus sp.). This high value wetland provides many functions, including passive and active recreation, habitat for aquatic wildlife or fisheries, short-term sediment trapping and nutrient retention, groundwater discharge, food chain support, dissipation of erosive forces, and long-term sediment trapping and nutrient retention. Alternate B will not impact this wetland.

Wetland 16 is a small intermittent sand/mud-bottom stream approximately 600 feet north of the Pindell School Road/MD Route 32 intersection. Streambank vegetation includes black willow, staghorn sumac (Rhus typhina), pokeweed, soft rush (Juncus effusus), rice cutgrass (Leersia oryzoides), jewelweed, and milkweed (Asclepias sp.). This area provides passive recreation as well as short-term sediment trapping and nutrient retention. This riverine wetland extends beyond the right-of-way of the study area. Approximately 0.01 acre will be impacted by Alternate B.

Wetland 17 is a palustrine scrub-shrub area and a sand/mud-bottom intermittent stream approximately 600 feet north of the intersection of Pindell School Road and MD Route 32. The scrub-shrub area is dominated by red maple, black willow, sassafras (Sassafras albidum), black locust, jewelweed, soft rush, and cattail. Streambank vegetation includes pokeweed and sumac. Functions provided by this area include passive recreation, groundwater discharge, and long-term nutrient retention and sediment trapping. Alternate B will impact the entire 0.11 acre of this area.

Wetland 18 is an intermittent cobble/gravel-bed stream just west of Pindell School Road, approximately 800 feet south of MD Route 32. Streambank vegetation includes tulip-poplar, red maple, dogwood, green ash, elderberry, black willow, Joe-Pye weed, jewelweed, and arrowhead (Sagittara sp.). This area

provides passive recreation, short-term sediment trapping, groundwater discharge, and flood desynchronization. Alternate B will impact approximately 0.47 acre of this 0.72 acre wetland.

Wetland 19 is the area of the Middle Patuxent River which flows underneath Cedar Lane, as well as a palustrine emergent area. Streambanks are vegetated with American sycamore, green ash, mulberry (Morus sp.), box elder, musclewood, tulip-poplar, black walnut and bitternut hickory (Carya cordiformis). Vegetation in the emergent area includes jewelweed, mud plantain (Bidens sp.), and smartweed. Understory streambank vegetation consists of black willow, spicebush, and tree-of-heaven (Ailanthus altissima). Streambank groundcover includes false nettle, milkweed, Joe-Pye-weed, Jack-in-the-pulpit (Arisaema triphyllum), and sensitive fern. Functions provided by this high value wetland include active and passive recreation, habitat for aquatic wildlife or fisheries, and food chain support. This riverine wetland extends beyond the right-of-way of the study area. Approximately 0.30 acre will be impacted by Alternate B.

Approximate wetland and floodplain impacts by alternate are listed below:

Alternate	Floodplain Encroachment (Acres)	Wetland Impacts (Acres)
A	11.35	2.98
B	3.52	2.35
C	8.17	2.92

A Section 404 Permit will be required from the U.S. Army Corps of Engineers and a Waterway Construction Permit will be required from the Department of Natural Resources for placement of fill within wetland areas. Potential replacement sites have been identified. These sites are located south of Station 530 adjacent to W-3 (see Figure 10) and south of Station 550 adjacent to Cricket Creek (See Figure 11). Both sites have an adequate source of hydrology and both sites will remain relatively secluded providing good habitat potential.

Replacement sites for wetlands will be coordinated with the U.S. Army Corps of Engineers and the Department of Natural Resources and will be selected during the design phase.

As shown above, any shift in alignment to the north or south will result in an increase in wetland impacts. Every effort will be made to further reduce wetland impacts during the detail design of the project. For the capacity and safety reasons stated in the Purpose and Needs Section of this document, the No-Build Alternative is not acceptable.

Wetlands 1, 2, 3, 4, 7, 10, 11, 12, and 19 are located along streams and, as such, are linear in nature. A shift in the alignment would not avoid these wetlands since they are perpendicular to the alignment. The Selected Alternate could not be shifted northward to avoid Wetland 14 without displacing

the existing W.R. Grace Company buildings and requiring greater acquisition from the Middle Patuxent Environmental Area. A southward shift to avoid Wetland 14 would displace existing homes on Guilford Road. Any alignment shift northward or southward to avoid Wetland 13 would result in an additional residential displacement. Impacts to Wetlands 17 and 18 are necessitated by the improvements to Cedar Lane and Pindell School Road at the interchange. The location of the interchange is designed to coincide with the existing cross roads. Shifting the location of the cross roads to reduce wetland impacts involves greater amounts of earthwork, with greater potential for sediment deposits in the river.

Based on the above considerations, it has been determined that there is no practical 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.

c. Wildlife

Increased road kills may be expected from the introduction of additional road area and the attendant increase in traffic volume. Also, a loss of animal population proportional to the loss of habitat can be expected. This loss of habitat should not be significant due to the abundance of similar habitat types throughout the study area.

d. Threatened, Endangered, or Rare Species

Coordination with the Maryland Department of Natural Resources, Forest, Park, and Wildlife Service, and the U.S. Fish and Wildlife Service indicates that there are no known populations of state-listed or Federally-listed threatened or endangered plant or animal species in the study area.

C. AIR QUALITY IMPACTS

1. Analysis Objectives, Metholodogy, and Results

The objective of the air quality is to compare the carbon monoxide (CO) concentrations estimated to result from traffic configurations and volumes of each alternate with the State and National Ambient Air Quality Standards (S/NAAQS). the NAAQS and SAAQS are identical for CO: 35 ppm (parts per million) for the maximum 1-hour period and 9 ppm for the maximum consecutive 8-hour period.

A microscale CO pollution diffusion analysis was conducted using the third generation California Line Source Dispersion Model, CALINE 3. This microscale analysis consisted of projections of 1-hour and 8-hour CO concentrations at sensitive receptor sites under worst-case meteorological conditions for the No-Build and the Build Alternate for the design year (2015) and the estimated year of completion (1995).

a. Analysis Inputs

A summary of analysis inputs is given below. More detailed information concerning these inputs is contained in the MD Route 32 Air Quality Analysis, which is available for review at the Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

Background CO Concentrations

In order to calculate the total concentration of CO which occurs at a particular receptor site during worst-case meteorological conditions, the background CO concentrations are considered in addition to the levels directly attributable to the facility under consideration. The background concentrations resulting from area-wide emissions from both mobile and stationary sources were derived from the application of rollback methodology to on-site monitoring conducted at Fort George G. Meade:

	CO, ppm	
	1-hour	8-hour
1995	3.6	2.0
2015	3.5	1.9

Traffic Data, Emission Factors, and Speeds

The appropriate traffic data was utilized as supplied by the Bureau of Highway Statistics (April, August, and September 1987) of the Maryland State Highway Administration.

The composite emission factors used in the analysis were derived from the Environmental Protection Agency (EPA) Mobile Source Emission Factors, and were calculated using the EPA MOBILE 3 computer program. An ambient air temperature of 20° F was assumed in calculating the emission factors for the 1-hour analysis and 35°F for the 8-hour analysis in order to approximate worst-case results for each analysis case. Credit for a vehicle inspection maintenance (I/M) emission control program beginning in 1984 was included in the emission factor calculations.

Average vehicle operating speeds used in calculating emission factors were based on the capacity of each roadway link considered, the applicable speed limit, and external influences on speed through the link from immediately adjacent links. Average operating speeds ranged from 15 mph to 55 mph, depending upon the roadway and alternate under consideration.

Meteorological Data

Worst-case meteorological conditions of 1 meter/second for wind speed and Atmospheric Stability Class F were assumed for the 1-hour calculations. For the 8-hour analysis, a combination of 1 meter/second and Class F stability class and 2 meters/second and Class D stability class was used as appropriate.

The wind directions utilized as part of the analysis were rotated to maximize CO concentrations at each receptor location. Wind directions varied

for each receptor and were selected through a systematic scan of CO concentrations associated with different wind angles.

b. Sensitive Receptors

Site selection of sensitive receptors was made on the basis of proximity to the roadway, type of adjacent land use, and changes in traffic patterns on the roadway network. Fifteen receptor sites were chosen for this analysis, consisting of twelve residences, a school, a ballfield, and one edge-of-right-of-way site. The receptor site locations were verified during study area visits by the analysis team. The receptor sites are listed in Table 8 and shown on Figure 24.

TABLE 8

Air Quality Sensitive Receptors

Site No.	Description/Location
1	Residence, 3 1/2-story frame, Cedar Lane
2	Residence, 2-story brick, Guilford Road
3	Residence, split-level brick, Sanner Road
4	Residence, 1-story brick, Guilford Road
5	Residence, 2 1/2-story stone (PNRE), Guilford Road
6	Residence, 1 1/2-story brick, Guilford Road
7	Clarksville Middle School - ballfield, Guilford Rd. at Trotter Rd
8	Residence, frame/brick, Trotter Road
9	Residence, 2-story frame, Trotter Road
10	Residence, 3-story stone (PNRE), Guilford Road
11	Residence, 2-story brick, Guilford Road
12	Edge-of-Right-of-Way (Station 538+)
13	Residence, 1-story frame, Wake Forest Drive
14	Residence, frame and stone, Guilford Road
15	St. Louis School, MD Route 108 at Guilford Road

PNRE = Possibly National Register Eligible

c. Results of Microscale Analysis

The results of the calculations of CO concentrations at each of the sensitive receptor sites for the No-Build and Build Alternates are shown in Table 9. The values shown consist of predicted CO concentrations attributable to traffic on various roadway links plus projected background levels. A comparison of the values in Table 9 with the S/NAAQS shows that no violations will occur for the No-Build or Build Alternates in 1995 or 2015 for the 1-hour and 8-hour concentrations of CO.

In general, the No-Build Alternate results in the highest CO concentrations in 1995 and 2015 for most receptors. The concentrations are well below the S/NAAQS for the Build Alternate.

In conclusion, the No-Build Alternate and Build Alternate will not result in violations of the 1-hour or 8-hour S/NAAQS in 1995 or 2015.

2. Construction Impacts

The construction phase of the proposed project has the potential of impacting the ambient air quality through such means as fugitive dust from grading operations and materials handling. The State Highway Administration has addressed this possibility by establishing Standard Specifications for Construction and Materials, which species procedures to be followed by contractors involved in State work.

The Maryland Air Management Administration (AMA) was consulted to determine the adequacy of the Specifications in terms of satisfying the requirements of the Regulations Governing the Control of Air Pollution in the State of Maryland. The Maryland Air Management Administration found that the specifications are consistent with the requirements of these regulations. Therefore, during the construction period, all appropriate measures (Code of Maryland Regulations 10.18.06.03D) will be taken to minimize the impact on the air quality of the area.

3. Conformity with Regional Air Quality Planning

The project is in an air quality nonattainment area which has transportation control measures in the State Implementation Plan (SIP). This project conforms with the SIP since it originates from a conforming transportation improvement program.

4. Agency Coordination

Copies of the technical Air Quality Analysis have been circulated to the U.S. Environmental Protection Agency and the Maryland Air Management Administration for review and comment.

D. NOISE IMPACTS

The evaluation was completed in accordance with the State Highway Administration's Type I noise program. The Type I program provides evaluation of noise mitigation for new construction or reconstruction highway projects. The activity category utilized for the project analysis is Category B, which includes the sensitive land use activities throughout the corridor, i.e., residences, schools, parks, etc.

The factors which will be considered when determining whether mitigation will be required and whether the mitigation will be considered reasonable and feasible will be:

- Whether Federal Highway Administration Noise Abatement Criteria are approached or exceeded - 67 dBA for residential areas;

TABLE 9

CO Concentrations at Each Site (ppm)*
Includes Background
1995

Receptor	No-Build		Build Without Trotter Interchange	
	1-hour	8-hour	1-hour	8-hour
1	6.5	3.0	4.6	2.3
2	5.0	2.4	4.4	2.2
3	5.8	2.7	5.2	2.5
4	7.1	3.0	4.4	2.3
5	4.5	2.2	4.1	2.2
6	6.7	2.9	4.1	2.1
7	4.8	2.3	3.8	2.0
8	4.2	2.1	4.1	2.1
9	4.1	2.2	4.1	2.1
10	4.7	2.2	3.9	2.0
11	5.7	2.6	3.9	2.1
12	4.0	2.1	5.0	2.3
13	5.0	2.4	4.5	2.1
14	9.9	3.8	4.5	2.3
15	8.9	3.5	5.2	2.4

The State/National Ambient Air Quality Standard (S/NAAQS) for CO is:

1-hour = 35 ppm
8-hour = 9 ppm

*Including background concentrations

- o Whether a substantial (10-dBA) noise increase over ambient levels would occur;
- o Whether a substantial noise increase would result from the highway project - minimum of 5-dBA increase - of Build over No-Build levels in the design year of the project;
- o Whether a feasible method is available to reduce the noise;
- o Whether the mitigation is acceptable to affected property owners;
- o Whether the noise mitigation is cost effective for those receptors that are impacted--upper limit of approximately $40,000 per residence;
- o Whether the impacted receptors were build before the road.

An effective barrier should, in general, extend in both directions to four times the distance between receiver and roadway (source). In addition, an effective barrier should provide a 7-10 dBA reduction in the noise level, as a preliminary design goal. For the purpose of comparison, a total cost of $27 per square foot is assumed to estimate total barrier cost. This cost figure is based upon current cost experienced by Maryland State Highway Administration, and includes the cost of panels, footings, drainage, landscaping, and overhead.

The projected noise level along with the abatement summary are shown in Table 10.

Noise Abatement Analysis

1. No-Build Alternate

Under the No-Build Alternate, noise sensitive areas 4 and 6 will exceed the noise abatement criteria of 67 dBA, L_{eq}. Noise sensitive area 7 will have projected No-Build noise levels lower than current ambient levels. This could be attributed to fluctuations in traffic volumes or truck percentages that may have occurred during the monitoring period.

Noise mitigation is not recommended for this alternate.

2. Build Alternate

A total of eleven NSAs are included as part of the Build Alternate. Three noise sensitive areas will have projected 2015 noise levels that equal or exceed the noise abatement criteria of 67 dBA. In addition, NSA 2 will have a projected noise level 11 dBA above the ambient level.

The following is a discussion regarding the feasibility of abatement for these four areas:

NSA 2

The projected 2015 noise level for this noise sensitive area is 11 dBA over the ambient level. A noise barrier placed along the North Service Road, 640 feet in length by 14 feet in height at a cost of $241,920, would reduce projected noise levels by 4-5 dBA. At a cost-per-residence of $241,920, this will not be a reasonable mitigation measure.

NSA 4

This noise sensitive area will have a projected 2015 noise level 3 dBA above the abatement criteria of 67 dBA. A barrier at this location will not be physically feasible because of barrier segmentation for driveway access from Guilford Road. This segmentation of a barrier produces gaps or breaks in the wall and degrades the reduction potential and effectiveness. A barrier placed on top of the fill (R-O-W line) in this area will not be physically effective, as this NSA is too far from the proposed roadway to receive a substantial reduction. In addition, the major source of noise for this site would be Guilford Road for both the Build and No-Build Alternate, and would degrade the reduction potential of a barrier placed between proposed MD Route 32 and the existing roadway.

NSA 9

Noise sensitive area 9 has a projected 2015 noise level of 67 dBA. This residence, which is located in the southwest quadrant of proposed MD Route 32/Trotter Road, will be impacted by traffic on Trotter Road. Natural attenuation from MD Route 32 is achieved by a cut slope created by the proposed grade. Abatement along Trotter Road will not be physically feasible because the driveways in this area directly access Trotter Road. As mentioned for NSA 4, barrier segmentation would have to occur, which would degrade the reduction potential and effectiveness.

NSA 12

This NSA is an edge-of-right-of-way location. Residential development has not occurred at this time; therefore, abatement feasibility has not been considered. The area is planned for development in the future. The developer, Howard Research and Development, does not have site development approval.

E. CULTURAL RESOURCES

1. Historic Sites

The State Historic Preservation Officer in his November 10, 1987, letter (in the Comments and Coordination Section) identifies the Owings House/River Hill (HO 158) and the Wellings Stone House (HO 164) as being possibly eligible for the National Register. Because the SHA and FHWA do not object to the basis by which this finding was made, the two historic sites are considered eligible for the National Register for purposes of Section 106 coordination. Both sites are located in the vicinity of relocated MD Route 32 and Trotter Road. The Owings House would be approximately 400 feet north of the northern edge-of-right-of-way of Alternate A and Alternate B and 600 feet north of Alternate C. Because of heavy intervening vegetation between the dwelling and the alternates, it would not be affected. Noise would increase 8 decibels to 63 dBA.

The Wellings Stone House would be located approximately 700 feet south of the southernmost right-of-way line for Alternate C and approximately 1,200 feet south of Alternate A. Alternate B would be located in between. Because of extensive intervening vegetation and a large, open parking area for recreational

TABLE 10

Project Noiee Levele

NSA	Deacription	# of Homee w/Greeter than 5dBA Reduction end Greeter then 67 dBa	Ambient L_{EQ}	Deeign Year 2015 L_{EQ} No-Build	Build	Increeae Over Ambient	Build/ No-Build Chenge	Berrier Length (Ft.)	Average Height (Ft.)	Coet ($Mil)	Coet Per Reeidence
1	Residential	0	62	NA	57	-5	NA	-	-	-	-
2	Residential	0	49	NA	*60	11	NA	640	14	.24	241,920
3	Reaidential	0	56	61	NA	NA	NA	-	-	-	-
4	Residential	0	69	*70	*70	1	0	-	-	-	-
5	Residentiel	0	55	NA	63	8	NA	-	-	-	-
6	Residentiel	0	61	*70	NA	NA	NA	-	-	-	-
7	Reaidentiel	0	56	53	54	-2	1	-	-	-	-
8	Residential	0	52	NA	57	5	NA	-	-	-	-
9	Residentiel	0	57	NA	*67	10	NA	-	-	-	-
10	Residentiel	0	47	49	53	6	4	-	-	-	-
11	Residentiel	0	53	59	NA	NA	NA	-	-	-	-
12	R-O-W	0	46	NA	*72	26	NA	-	-	-	-
13	Reeidential	0	54	NA	54	0	NA	-	-	-	-
14	Reeidentiel	0	62	68	NA	NA	NA	-	-	-	-
15	School	0	63	64	65	2	1	-	-	-	-

*Exceeda noiae abetement criteria of 67 dBA or increeeee of 10 dBA or more ebove embient.

vehicles located between the nucleus farm buildings and the alternates, the site would not be affected. Noise levels are projected to be 53 dBA, well below the Noise Abatement Criteria.

On July 29, 1988, the State Historic Preservation Officer concurred with the finding of no affect upon National Register eligible historic site by Alternate B, the selected alternate. All requirements of 36 CFR 800 have been met.

2. Archeological Sites

Two sites, 18 HO 149 and 18 HO 080, will be impacted by the Selected Alternate. Another site, 18 HO 148, will not be affected by the project. Phase II archeological studies will be undertaken on sites 18 HO 149 and 18 HO 080 to determine site extent and eligibility for the National Register of Historic Places, as well as to make recommendations for Phase III mitigation, if necessary. All work will be closely coordinated with the State Historic Preservation Officer.

F. RELATIONSHIPS BETWEEN SHORT-TERM EFFECTS AND LONG-TERM PRODUCTIVITY AND ENHANCEMENT

The selected alternate would allow traffic to move more efficiently through the study area. The proposed improvements should make the project area more attractive for economic development, thereby increasing employment opportunities in the study area.

Long-term environmental effects include the elimination of active agricultural lands and woodlands, and the acquisition of floodplain and wetland acreage. Noise levels would also increase in some areas.

Construction impacts which would have a short-term effect on the project area include erosion, siltation, and stream turbidity. Dust and noise associated with highway construction will also result in temporary impacts. Every effort will be made by the State Highway Administration to minimize effects to the environment.

G. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed project represents the irreversible and irretrievable commitment of woodlands and agricultural land for the highway right-of-way along with floodplain acreage and wildlife habitat. The land required for the project can be considered as permanently committed to a transportation corridor.

H. ENERGY

Traffic congestion will be relieved with the construction of Alternate B thus improving travel time. Also, less congested conditions will provide for more efficient engine operation.

Through traffic will not be subjected to the existing steep grades and sharp curves further adding to fuel efficiency.

The Build Alternate would create secondary energy consumption during construction which would not be required by the No-Build Alternate. This includes energy used for construction equipment, manufacturing construction materials, and delivery.

I. SECTION 4(f) STATEMENT

1. Introduction

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 public park or recreation area, or wildlife refuge, or from any significant historic site 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.

This 4(f) Statement has been prepared to describe the property within the project area that is owned by the Howard County Department of Recreation and Parks, which affords the property Section 4(f) protection.

2. Description of the Proposed Action

The project involves the construction of relocated MD Route 32 from MD Route 108 to Pindell School Road. Within this segment are two proposed interchanges; one at existing MD Route 108, and one at existing Pindell School Road/Cedar Lane. Also included is construction of two service roads; one connecting existing MD Route 32 to relocated Sanner Road/Pindell School Road on the south, the other on the north connecting Cedar Lane to the W.R. Grace entrance and the Riverhill Game Farm entrance.

Relocated MD Route 32 and the service roads construction, along with the MD Route 108 improvements, will be built to current State and Federal highway standards. Improvements to Trotter Road and Pindell School Road will be to County standards. A box culvert will be constructed where relocated MD Route 32 passes over Cricket Creek. A bridge structure will be constructed where relocated Pindell School Road/Cedar Lane passes over the Middle Patuxent River.

Only relocated Cedar Lane will impact the Middle Patuxent Environmental Area.

3. Description of the 4(f) Resources

The Middle Patuxent River bisects Howard County, Maryland, which lies directly in the rapidly urbanizing Washington-Baltimore corridor. The environmental area is located within the western portion of the new town of Columbia (see Figure 21). Columbia and Howard Counties are in the Piedmont Plateau physiographic province, an old upland with a rolling topography strongly dissected by small streams and drainages. The portion of the river valley designated The Middle Patuxent Environmental Area lies along the segment of the Middle Patuxent River between MD Route 32 and MD Route 108. This section of the river, at its point of exit from the study area at MD Route 32, drains a total watershed area of approximately 30,000 acres. The area has outstanding natural

qualities including an extraordinarily diverse and interesting vegetative cover, and a correspondingly diverse fauna including several species of wildlife deserving of special recognition. However, none of these species were located in the project vicinity.

The Middle Patuxent Environmental area represents the largest open space area in Howard County. The Howard County Department of Recreation and Parks manages 1,238 acres under active and passive recreational usage. This area has outstanding natural and scenic values representative of the natural heritage of Maryland that warrant protection and management.

The Management and Development Study completed by the Howard County Department of Recreation and Parks in 1981 recommends a preliminary development concept which includes a Nature Center approximately two miles north of the Middle Patuxent River/Cedar Lane bridge (see Figure 25). In addition, a primary trail is proposed to link with the riverfront trail which continues south along the river.

A Maryland Environmental Trust easement is located along Trotter Road just north of the study area. The easement granted by Mr. Due affords wildlife protection and limits development. This property is not part of the Patuxent River Park and our project will have no effect on this property. (See Maryland Environmental Trust letter in Correspondence Section, pg. VII-127.)

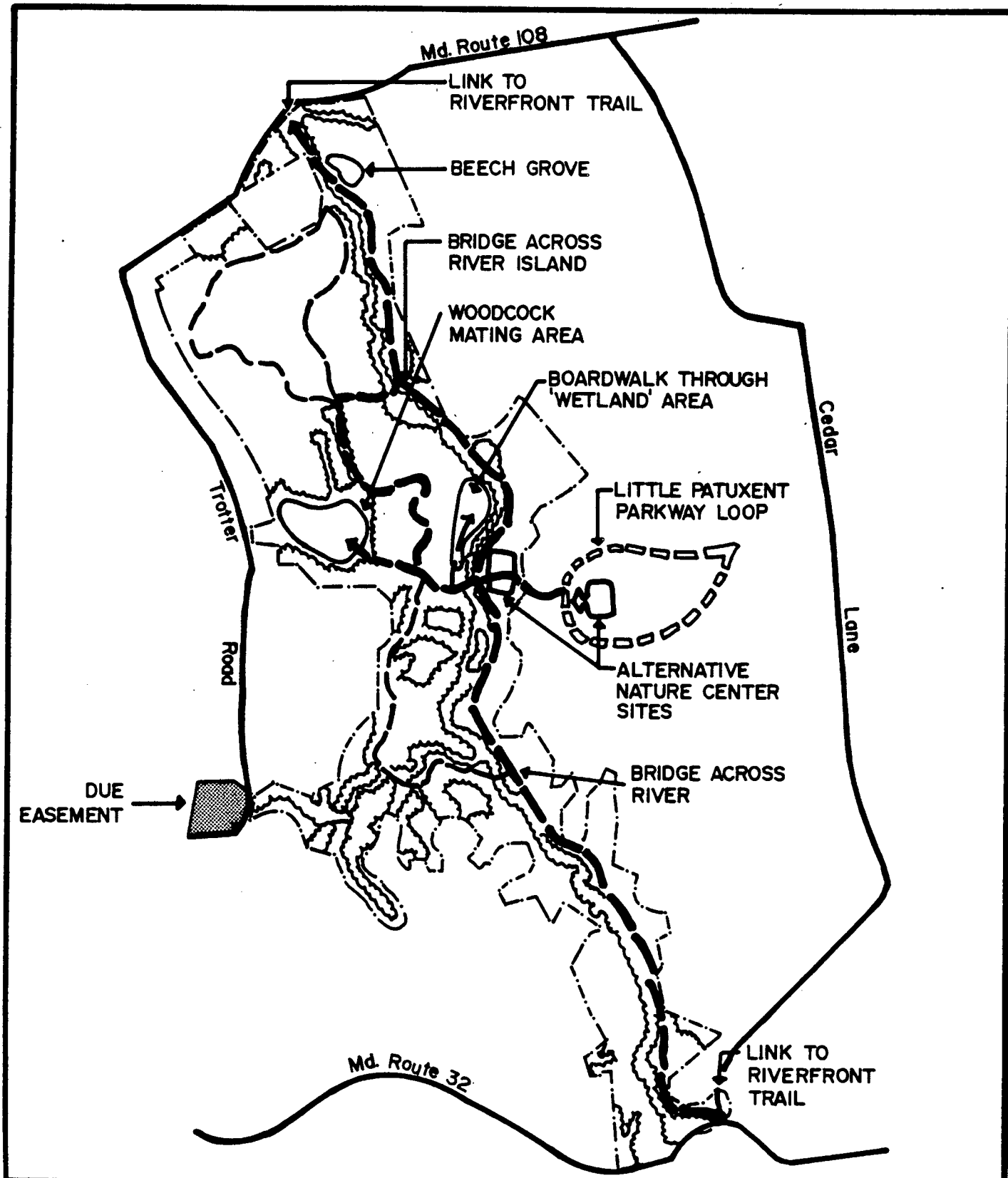
The Nature Center is a joint venture between the Howard County Department of Education and the Department of Recreation and Parks.

The primary trail will be multi-purpose trail available for hiking, horseback riding, and bicyclists. The proposed structure across the Middle Patuxent River will accommodate the planned trail under the structure while the present structure does not.

4. Impacts of Alternates

Alternate B, relocated MD Route 32 mainline, will not have an impact upon the Middle Patuxent Environmental Area. However, an interchange is required at MD Route 32/Cedar Lane to safely accommodate the projected volume of traffic crossing at this existing intersection. Howard County is reconstructing Cedar Lane from the Middle Patuxent River north to MD Route 108 as a four-lane urban highway. The construction of the required interchange of MD Route 32/Cedar Lane requires the realignment of the Cedar Lane bridge over the Middle Patuxent River in order to maintain a consistent typical section and design speed from the county project to the interchange. The approaches to the existing Middle Patuxent River bridge on both the north and south sides are substandard in both horizontal and vertical geometrics. Also, the existing bridge is in substandard condition. Therefore, it has been determined that the existing bridge and approaches must be replaced.

The Simpsonville Stone Ruins, located within the Middle Patuxent Environmental Area, is not considered a primary part of the environmental value of the area and is not planned for further research or restoration by Howard County. However, both the Howard County Department of Recreation and Parks and



Maryland Route 32
From Maryland Route 108 to Pindell School Road

MIDDLE PATUXENT ENVIRONMENTAL AREA

PRELIMINARY CONCEPT I

NOT TO SCALE

FIGURE 25

the Maryland State Highway Administration recognize the potential research and educational value of the ruins. (See page III-18). This site is expected to be important primarily for the information which can be extracted by data recovery. It has minimal value for preservation in place.

The existing bridge over the Middle Patuxent River is approximately 131 feet long and has a clearance of approximately seven foot above the mean water level. The proposed structure will be approximately the same length, but will have a clearance of approximately 14 feet above the mean water level, which is sufficient for a horse and rider. The proposed structure's size and length will be decided during the Final Design Phase of the project and will accommodate the proposed primary trail.

The existing bridge will be replaced on the upstream (west) side in order to minimize wetland and floodplain impacts. Also, this location and elevation will correct the existing unsafe vertical and horizontal curves.

The proposed relocated Cedar Lane bridge will not require any business or residential relocations. The structure could impact 0.30 acre of non-tidal wetland area. Also, the proposed alignment will impact the Simpsonville Stone Ruins (see page IV-20).

Based upon Alternate B (Figure 17), the alignment will require approximately 42,000 square feet (0.98 acre) of land from the Middle Patuxent Environmental Area.

5. Avoidance Alternates and Their Impacts

Because the Middle Patuxent Environmental Area stretches from existing MD Route 32/Cedar Lane (see Figure 25) to MD Route 108, relocating Cedar Lane further to the west would not avoid park property and would have a greater impact upon the Simpsonville Stone Ruins and upon the 100-year floodplain.

The only alternative to the use of park property would be to relocate Cedar Lane to the east. This alternative would require two reverse curves, one at each tie-in point, and the acquisition of three homes. Also, this alternative would require a skewed bridge across a much wider floodplain area, thus requiring an 80-foot longer bridge with .30 acre greater wetland impacts than Alternate B.

This alternative would require construction across terrain with slopes greater than 25 percent, resulting in radical earth work creating a greater potential for sediment deposits in this river. With the longer bridge and a minimum of two additional residential displacements, this alternative would cost approximately 1 million dollars more than the proposed Alternate B.

Howard County is constructing Cedar Lane as a four lane urban highway. Due to the high traffic volumes, inconsistent typical section (ie four lanes into two lanes) and substandard geometrics, the No-Build Alternate cannot be considered as a reasonable or prudent alternative.

6. Mitigation

Federal Land and Water Conservation funds were not used for the acquisition of the 4(f) property. The property to the impacted was acquired with State of Maryland Program Open Space funds. Property is available contiguous to the existing Environmental Area of equal size and recreational value which will be considered for replacement purposes.

Permits will be required from the U.S. Army Crops of Engineers, the Maryland Department of Natural Resources and the Maryland Department of the Environment. All conditions of all permits will be strictly adhered to. Any wetland requiring replacement will be replaced on a 1:1 ratio.

7. Coordination

Coordination has been conducted with the Maryland Department of State Planning and other appropriate agencies (see Section VI). Ongoing coordination will continue throughout planning and design.

V

Distribution List

V. DISTRIBUTION LIST

Federal Agencies

Department of Agriculture
State Conservantionist
Soil Conservation Service
Room 522
4321 Hartwick Road
College Park, Maryland 20704

Mr. Bruce Blanchard, Director
Office of Environmental Project
Review, Room 4239
U.S. Department of the Interior
18th and C. Streets, N.W.
Washington, D.C. 20242

U.S. Environmental Protection
Agency Region III
Jeffrey Alper, Chief (3ES41)
NEPA Compliance Section
841 Chestnut Street
Philadelphia, Pennsylvania 19107

Regional Director
National Marine Fisheries Service
Federal Building
14 Elm Street
Gloucester, Massachusetts 01930

Ms. Margaret A. Krengel
Regional Environmental Officer
Department of Housing and Urban
Development
Liberty Square Building
105 South 7th Street
Philadelphia, Pennsylvania 19106-3392

Ms. Joyce M. Wood, Director
Office of Ecology and Conservation
National Oceanic and Atmospheric
Administration
U.S. Department of Commerce
Room 6222 (PP/EC)
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

Commander
U.S. Army Corps of Engineers
Baltimore District
Box 1715
Baltimore, Maryland 21201
Attn: NABOP-F
Mr. Larry Eastman
Ms. Abbie Hopkins

Division of NEPA Affairs
Department of Energy
Room 4G 064
1000 Independence Avenue, S.W.
Washington, D.C. 20230

Office of Economic Opportunity
Director
1200 19th Street, N.W.
Washington, D.C. 20506

Mr. Paul Giodano
Regional Director
Federal Emergency Management Agency
Liberty Square Building
105 South 7th Street
Philadelpia, Pennsylvania 19106
Attn: Mr. Walter Pierson

State Agencies

Ms. Kathleen Fay
State Depository Distribution Center
Enoch Pratt Liberty
400 Cathedral Street
Baltimore, Maryland 21201

Mr. Donald E. MacLanchlan
Assistant Secretary
Maryland Forest, Park and Wildlife
Service
Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401

Mr. Stan Wong
Water Resources Administration
Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401

Alfred P. Gwynn
Executive Director
Regional Planning Council
2225 N. Charles Street
Baltimore, Maryland 21218

Chesapeake Bay Critical Area Commission
Tawes State Office Building
Annapolis, MD 21401

Maryland Department of Natural Resources
Tidewater Administration
Coastal Resources Division
Tawes State Office Building C-3
Annapolis, Maryland 21401
ATTN: Director, Coastal Zone Management Program

Ms. Jo Ann Watson
Maryland Department of the Environment
Division of Standards and Certification
2nd Floor
201 West Preston Street
Baltimore, Maryland 21201

Maryland Department of Natural Resources
Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

Howard County

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County Administrator
3430 Courthouse Drive
Ellicott City, Maryland 21043

Uri P. Avin, AICP
Director, Office of Planning and Zoning
3430 Courthouse Drive
Ellicott City, Maryland 21043

James Irvin
Director of Public Works
3430 Courthouse Drive
Ellicott City, Maryland 21043

Charles I. Ecker
Deputy Superintendent
Howard County Public School System
10910 Route 108
Ellicott City, Maryland 21043-6198

Elected Officals

The Honorable Elizabeth Bobo
County Executive
3430 Courthouse Drive
Ellicott City, Maryland 21043

The Honorable Ruth Keeton,
Chairperson
Howard County Council
3430 Courthouse Drive
Ellicott City, Maryland 21043

The Honorable Edward J. Kasemeyer
12400 Clarksville Pike
Clarksville, Maryland 21029

The Honorable Robert L. Flanagan
12400 Clarksville Pike
Clarksville, Maryland 21029

The Honorable Robert H. Kittleman
12400 Clarksville Pike
Clarksville, Maryland 21029

Citizens

Mr. Ronald J. Altmann
6281 Trotter Road
Clarksville, Maryland 21029

Mr. John W. Taylor
6528 Prestwick Drive
Highland, Maryland 20777

VI

Public Hearing Comments

VI. COMMENTS AND COORDINATION

A. COORDINATION

Coordination efforts with Howard County, elected officials, the public, and appropriate review agencies have been discussed throughout this document, and representative correspondence is included in this section. Continued efforts will be made to coordinate plans for the proposed project with the appropriate individuals and agencies. A combined Location/Design Public Hearing was held on March 29, 1988.

Coordination with concerned agencies and officials has included a field meeting with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and the Maryland Department of Natural Resources on August 25, 1987. The project was discussed at the Interagency Review meeting held at SHA on October 21, 1987, and on January 20, 1988.

A meeting was held with the Howard County Departments of Public Works and Recreation and Parks on October 27, 1987, to discuss the potential 4(f) impact.

A meeting was held on November 23, 1987, with elected officials, Howard County Planning, and Howard Research and Development Corporation to discuss all aspects of the project.

B. COMMENTS

A combined Location/Design Hearing for this project was held on March 29, 1988. Mr. Wayne Clingan, District Engineer, State Highway Administration, presided. Representatives of the State Highway Administration's Project Development Division described the project process and the alternates under consideration and provided 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 "Combined Location/Design Hearing" brochure, which summarizes 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 16 speakers, along with written statements. Copies of the transcripts are available for review at the Maryland State Highway Administration.

A summary of the comments made at the Public Hearing and the response thereto follow:

1. Mr. Carl Balser - representing Howard County Administration

   Comments: Howard County favors the construction of Alternate B with Options 2 and 3. Howard County recommends that MD Route 32/Pindell School Road interchange be modified to provide a loop ramp in the southwest quadrant for

traffic headed towards eastbound MD Route 32. The County also recommends continued study of a Clarksville bypass and an interchange to provide direct access to the Village of River Hill. Howard County recommends that SHA investigate Park-and-Ride lot locations throughout the project area.

Response: Alternate B, Option 1 was selected for design and construction. The MD Route 32/Pindell School Road interchange was not modified as requested by Howard County. A bypass of Clarksville and an interchange to provide access to the Village of River Hill are not included as part of the MD Route 32 project. SHA will continue to investigate Park-and-Ride lot locations as this project progresses to final design.

2. Ronald Altmann, President, Trotter Road Citizens Association

Comment: Mr. Altmann recommended that the SHA construct cul-de-sacs on Trotter Road and construct MD Route 32 below grade as a depressed highway through the Trotter Road area. In addition, Mr. Altmann supported Option 2 for the provision of access to W.R. Grace

Response: The selected alternate provides for cul-de-sacs on Trotter Road as shown with Alternate B. Service Road Option 1 was selected to provide access to W.R. Grace. MD Route 32 will be depressed through the Trotter Road area.

3. Ms. Marcina J. Cain

Comment: Asked how long the project was going to take to construct.

Response: The construction of MD Route 32 will begin in 1992. It will take 2 to 2 1/2 years before the roadway is open to traffic.

4. Mr. Gary Grantham

Comment: Opposed to Service Road Option 2.

Response: Service Road Option 1 was selected for construction.

5. Ms. Pat Davis - Representing Clarksville Business Community

Comment: Recommends the construction of a Clarksville bypass instead of the diamond interchange as proposed.

Response: The selected alternate includes the provision for the MD Route 32/MD Route 108 interchange as presented at the Public Hearing.

A bypass would require a separate planning study.

6. Mr. Chris Feaga - representing the Archdiocese of Baltimore and the St. Louis Church.

Comment: Mr. Feaga opposes the widening of MD Route 108 and recommends the construction of a Clarksville bypass.

Response: Alternate B, which was selected, will widen MD Route 108 to 5 lanes through the MD Route 32/MD Route 108 interchange area.

A bypass would require a separate planning study.

7. Mr. Robert E. Weiss - representing the St. Louis Church.

   Comment: Mr. Weiss recommends that more studies be conducted on the proposal for a Clarksville bypass.

   Response: Alternate B was selected with the MD Route 32/MD Route 108 interchange.

8. Mr. Alton Scavo - representing Rouse Company.

   Comment: Mr. Scavo supports the construction of Alternate B with Option 1 and 3. Mr. Scavo took serious exception to the possible future location of an interchange between Trotter Road and MD Route 108.

   Response: Alternate B and Option 1 were selected for construction. An interchange between MD Route 108 and Trotter Road is not included in the selected alternate.

9. Mr. Patrick Marlatt - representing the Fifth District Volunteer Fire Department of Clarksville.

   Comment: Mr. Marlatt supports the construction of Alternate B and Option 3. Mr. Marlatt is also concerned with access to and from the fire house if a bypass of Clarksville is studied.

   Response: Alternate B was selected for construction. A bypass is not being considered as part of this project. A bypass would require a separate study.

10. Dr. Philip Spaulding

    Comment: Dr. Spaulding is in favor of a Clarksville bypass. Should the interchange be constructed between MD Route 32 and MD Route 108, he is concerned about access to his business.

    Response: Alternate B was selected for construction including the MD Route 32/MD Route 108 interchange. The 5-lane section through Clarksville will provide a left turn lane in the center for access to the businesses along MD Route 108.

11. Mr. Bruce Eberle

    Comment: Mr. Eberle recommends that alignment modifications be made to Guilford Road before the SHA transfers this road to Howard County. Mr. Eberle also recommends further engineering and environmental studies for an interchange between MD Route 108 and Trotter Road.

Response: The interchange between MD Route 108 and Trotter Road was not selected for construction. Discussions between Howard County and SHA will occur on improvements to Guilford Road prior to transfer.

12. Mr. Ronald Nervitt

Comment: Mr. Nervitt supports Alternate B and Option 3. Mr. Nervitt suggests that Alternate B be constructed as low as possible to reduce noise. He also suggests that Howard County and the SHA limit growth until MD Route 32 is constructed.

Response: Alternate B was selected for construction. The alignment of Alternate B has been depressed in areas to reduce noise. Restricting growth, however, would be the responsibility of Howard County.

13. Ms. Eva Peszewska

Comment: Ms. Peszewska supports the construction of Alternate B with cul-de-sacs on Trotter Road. In addition, she requested that MD Route 32 be depressed through Trotter Road and other areas where possible. Ms. Peszewska supports the consideration of the Clarksville Bypass and the possible interchange between MD Route 108 and Trotter Road. She also requested that the SHA reconsider the construction of the MD Route 32/MD Route 108 interchange initially instead of constructing an at-grade intersection.

Response: Alternate B was selected for construction with cul-de-sac to be constructed on Trotter Road. The alignment will be depressed through the Trotter Road area. Initially an at-grade intersection will be constructed connecting MD Route 32 with MD Route 108. A bypass would require a separate study and is not being considered as part of this study.

14. Mr. Hugh Cole

Comment: Mr. Cole is concerned that a median barrier would be constructed on MD Route 108 in front of his property. Mr Cole supports a bypass of Clarksville.

Response: No barriers are proposed for MD Route 108. See Figure 19. There will be a center left turn lane.

15. Mr. Graham Seward

Comment: Mr. Seward supports Alternate B, Option 1. Option 2 would cause MD Route 32 to be elevated.

Response: Alternate B and Option 1 were selected for construction.

16. Mr. Al Geiss

Comment: Mr. Geiss is concerned with the traffic volumes on Trotter Road and supports the construction of cul-de-sacs.

Response: The construction of cul-de-sacs on Trotter Road is included with Alternate B.

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EXHIBIT 1

OFFICE OF COUNTY EXECUTIVE

ELIZABETH BOBO
COUNTY EXECUTIVE

GEORGE HOWARD BUILDING
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MARYLAND 21043
(301) 992-2011

Statement of the Howard County Administration

to be Entered into the Formal Record of

the March 29, 1988, Maryland State Highway Administration

Location/Design Public Hearing

concerning

Relocated MD 32 from MD 108 to Pindell School Road

Good evening. My name is Carl Balser and I am with the Howard County Office of Planning and Zoning. I am pleased to be here tonight speaking on behalf of the Howard County Administration.

The relocation of MD 32 between MD 108 and Pindell School Road and other improvements associated with this project are of vital importance to Howard County. These improvements are necessary to alleviate increasing traffic congestion in the Clarksville area, reduce current hazardous traffic conditions on MD 32, MD 108, and Cedar Lane, and provide an improved east-west travel corridor to serve the rapidly growing travel demand between Carroll County and Anne Arundel County.

This project has been reviewed by the appropriate County agencies. As a result of this review, we wish to go on record, at this time, with a brief synopsis of the position of the County Administration regarding several key issues associated with this project.

o Alignment

The Administration favors the Alternate B alignment for the relocation and construction of MD 32 as a four lane divided highway with full access controls as it appears tonight on the State's wall displays.

o MD 32/Pindell School Road/Cedar Lane

The Administration favors construction of an interchange at this location. However, the interchange design shown in the hearing brochure will not safely and adequately meet the access requirements of existing and proposed land uses including W.R. Grace and the Village of River Hill. In particular, the distance between the interchange ramps and the North Service Road is inadequate to provide for safe merging and weaving movements. We are also concerned that the design does not provide adequate vehicle stacking capacity for the heavy southbound Cedar Lane to eastbound MD 32 movement.

We believe that to correct these deficiencies the diamond interchange indicated in the State's brochure should be modified to include a loop ramp in the southwest quadrant in order to better serve southbound to eastbound movements and to generally improve traffic operations in the interchange area. We also believe that the State Highway Administration should consider redesigning the northern interchange ramps to tie directly into the North Service Road. Alternatively, the State should consider eliminating the North

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Service Road connection to Cedar Lane in favor of providing all service road access via the relocated Guilford Road connection to Pindell School Road. This option provides better intersection spacing and safer traffic operations. Attached to our written testimony is an illustration of these concepts.

o North Service Road

Of the options presented, the County Administration favors the State Highway Administration's Option 2 to provide a service road underpass of MD 32 to connect with Guilford Road. We believe that this will provide better access and circulation for the properties located north of relocated MD 32 and will function most efficiently with the Cedar Lane interchange options suggested above.

o Trotter Road

The Administration supports construction of a bridge to carry Trotter Road traffic over Relocated MD 32. We believe it is necessary to maintain the continuity of this roadway as a means of providing for local circulation and access to residences, the Clarksville Middle School, and the proposed new elementary school. Furthermore, we believe it is necessary to provide adequate roadway connections between the two major areas of River Hill.

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In making this statement, the Administration recognizes that a portion of the community residing along Trotter Road desires to have this road cul-de-saced as a means of preventing through traffic. We believe it may be feasible to cul-de-sac Trotter Road north of the State Highway Administration right of way in order to reduce traffic volumes in this vicinity. As the MD 32 project progresses, we will be working closely with the community and with the State Highway Adminsitration to determine if other strategies exist for mitigating adverse impacts along Trotter Road.

o River Hill Interchange

The Administration believes there should be a continuing evaluation of whether there is a need for a future roadway connection between MD 32 and the proposed Village of River Hill.

o MD 32/MD 108

The County Administration believes that the State Highway Administration should conduct further studies to determine the feasibility of a MD 108 western bypass of the Clarksville area as an alternative to the proposed MD 32/MD 108 interchange. Under this alternative approach, an interchange would be constructed where MD 32 crosses the MD 108 bypass. We believe that this approach provides for future traffic demand in this vicinity while avoiding potentially severe detrimental impacts to existing properties and land uses

within the Clarksville area. This option is also consistent with the recommendations of the prior State Highway Administration study of the MD 108 Corridor conducted in the mid to late 1970's. Clearly, the State's planning of MD 108 should be coordinated and integrated with the planning of MD 32 in the Clarksville area.

The Administration recently met with the existing business community located along MD 108 in the area of the interchange. This group expressed a clear and strong consensus that the State Highway Administration pursue the bypass option. It is the Administration's intent to meet further with the broader Clarksville community to assess other issues associated with this option. The Administration will also work to ensure that appropriate access is provided between the Village of River Hill and the proposed bypass. If there is anyone who wishes to be informed about upcoming meetings regarding these issues please speak to me at the close of this hearing.

o Park and Ride Facilities

No park and ride facilities have been identified in the State's brochure or wall displays. The Administration believes that provision of park and ride lots in both the Clarksville and Cedar Lane vicinities should be made an integral part of this project in order to reduce the high volume of single occupant through trips. These facilities should be planned and designed for use by pedestrians, motorists and transit patrons and should provide a full complement of information kiosks, shelters, lighting and telephones.

We wish to thank the State Highway Administration for conducting tonight's public hearing. On behalf of the County Administration, we feel confident that in the months ahead we will continue to work together to resolve these few remaining issues. We also wish to urge that the State Highway Administration move forward as quickly as possible to construct the initial two lanes of MD 32 as a means of reducing existing hazards and congestion.

Thank You.

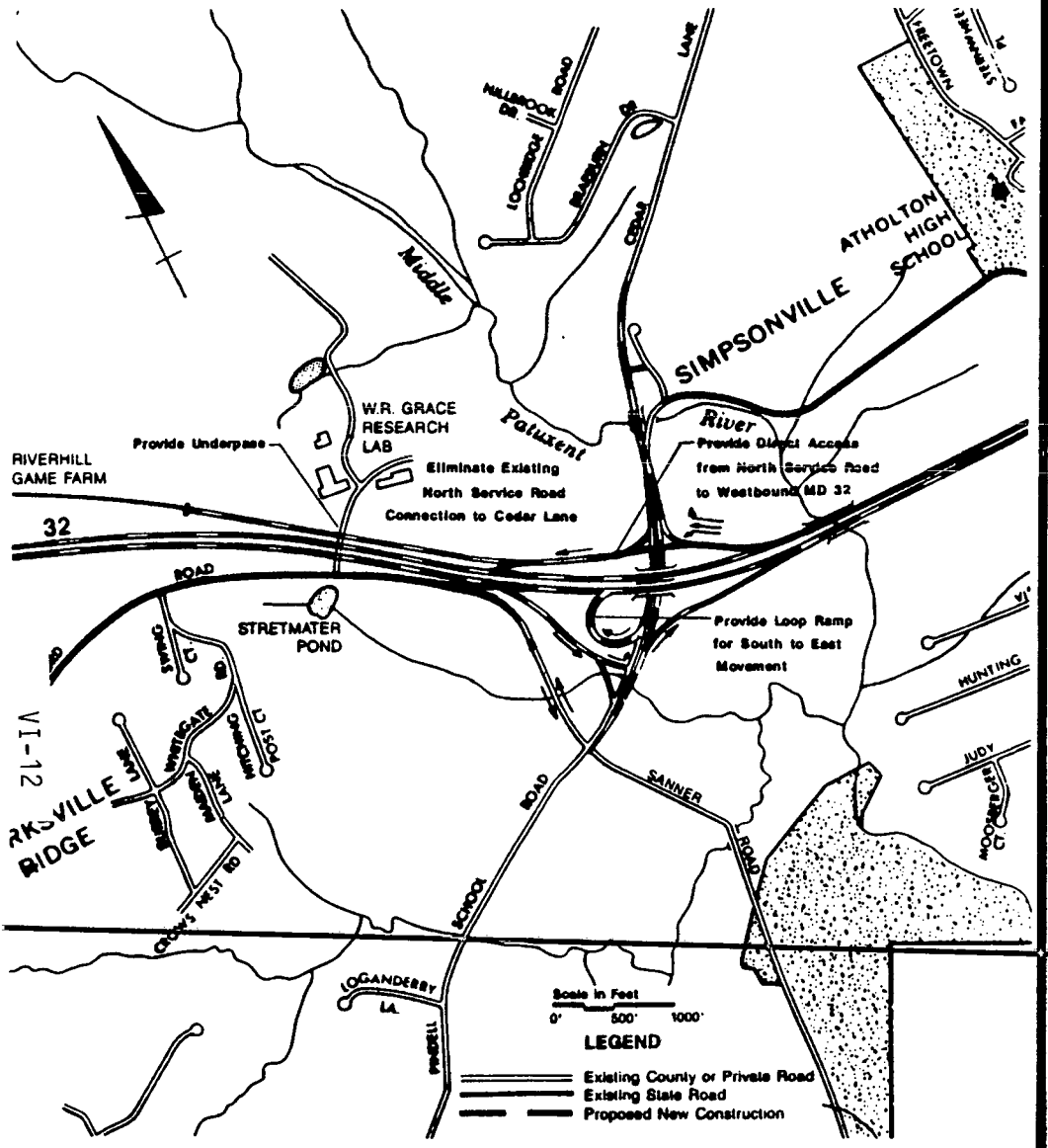
CSB/eg

cc: Files: TR2(f);TR2(vv); TC88

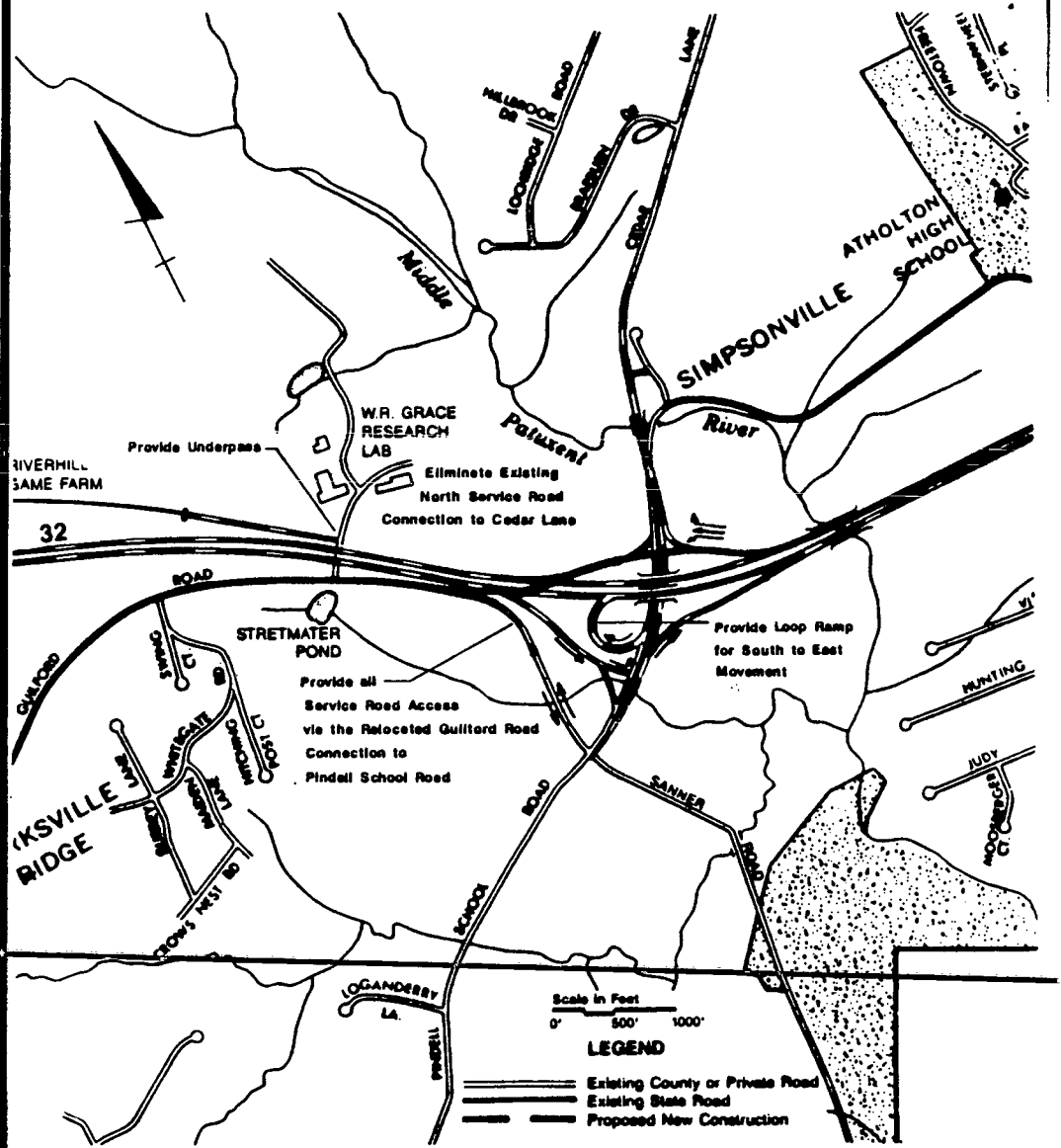
4387B

Response to Office of County Executive:

Alternate B, Option 1 was selected for design and construction. The MD Route 32/Pindell School Road interchange was not modified as requested by Howard County. A bypass of Clarksville and an interchange to provide access to the Village of River Hill are not included as part of the MD Route 32 project. SHA will continue to investigate Park-and-Ride lot locations as this project progresses to final design.



CONCEPT 1



CONCEPT 2

MD 32 / PINDELL SCHOOL RD. / CEDAR LANE

ATTACHMENT TO HOWARD COUNTY ADMINISTRATION TESTIMONY 3/29/88

ERA® COLUMBIA REAL ESTATE, LTD.

TO: State Highway Administration

FROM: Clarksville Business Community

On Tuesday, March 22nd, 1988, the Clarksville Business Community met with the Howard County Executive, other county administrators and the Office of Planning and Zoning to review the proposed plans for the Rt. 108 and Rt. 32 corridor. After a review and discussion, the Clarksville Business Community unanimously agreed upon the following alternative to the State's proposal of an interchange.

The Business Community feels that a bypass around the center of Clarksville would be more suitable as shown on a sketch plan from the county. Bypass A or B to be most desirable with the State providing good accessibility to the existing business community along the Rt. 108 corridor. The bypass would alleviate the need for the State to widen Rt. 108 into a 4 or 5 lane fiasco which, of course, is one of our major concerns since the proposal as it now stands calls for the taking of the business owner's properties, some of who would suffer greatly. I might add that widening Rt. 108 at this time and putting yield signs on the right turns at Rt. 108 and Rt. 32 would only increase the safety hazard since motorists wouldn't even have to stop when turning.

If the State chooses to continue with the interchange as planned then we have the following suggestion;

1. Instead of directing the widening of Rt. 108 eastward, we recommend the widening to occur on the west side of the roadway, along the firehouse side and on down including the River Hill Community. That area is less developed and we see no problem with HRD having to redesign their entrance to the community.

In summary please take into consideration these very important comments;

We strongly feel that we as business owners have developed a unique character to our community and wish not to have it altered by the interchange.

We have many types of businesses including two churches. We need to understand that the St. Louis Church is perhaps one of the biggest focal points because of all the activities it provides. The access to the church is already hazardous. Drive by the area at certain times during the day and you will instantly become aware of the safety hazards, both for vehicles and pedestrians.

ERA® COLUMBIA REAL ESTATE, LTD.

Many business owners would suffer greatly because of lack of parking and some perhaps would even be forced to go out of business.

While many of us do depend on the traffic for our livelihoods and would like to continue to have this activity along our properties, we are not prepared for the drastic changes proposed, thus having to give up everything we have worked hard to establish so that progress can go on to alleviate the hardship for motorists.

We beg your indulgence to consider our comments when you make your final decision.

Respectfully Yours,

Patricia A. Davis for the
Clarksville Business Community

Jean Sexton - Pizza Oven
Richard Schratz - Village Liq. of Clarksville
Gail Propst - Adele's Hair Gallery
Frances D. Holland - Notions & Potions of Clarksville, MD
Irene Miles - Monarch Realty Inc
Laurence C. Porter - THE AUTO SHOP
Jean Elliott - Sandy Spring Bank
[illegible] - The Citizens National Bank
Rosemary Zepp, Zepp Plumbing + Htg. Inc.
Hugh R Kendall - Kendall Hdwe

6389 TEN OAKS RD. · CLARKSVILLE, MD 21029 · 531-5115 · 596-9300

ERA® COLUMBIA REAL ESTATE, LTD.

Additional Signatures

Jimmie Kaufman — RAYMO CAR INC. 12411 RT. 108 Clarksville Md. 21029 ph-531-6116

Rev Anthony L. Sauerwein — St Louis Church, Clarksville Md 531-6

Jannet Lanham Heer — Sisters Boutique Gallery

Frieda Lanham Roberts — Ten Oaks Rd. Clarksville. Md. 21044

Edgar M. Zepp — 2099 P&H Inc Clarksville Md.

Response to ERA Columbia Real Estate, Ltd.:

The selected alternate includes the provision for the MD Route 32/MD Route 108 interchange as presented at the Public Hearing.

A bypass would require a separate planning study.

6389 TEN OAKS RD. · CLARKSVILLE, MD 21029 · 531-5115 · 596-9300

VII

Correspondence

A. Written Comments Received Subsequent to the Location/Design Public Hearing, March 29, 1988, and Responses

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME James H. Robinson DATE 3/30/88

PLEASE PRINT

ADDRESS 6692 Cedar Lane

CITY/TOWN Columbia STATE MD ZIP CODE 21044

I/We wish to comment or inquire about the following aspects of this project:

My property will be affected by the proposed project with a right of way of significant width being required from my land just east of the new bridge over the Middle Patuxent. Because of the nearness of construction to my rather old (100years more or less) home I am interested in the specific work which will be required in this area. Both rock excavation and blasting as well as the elevation of the new road in this area (my only means of access and egress) is of concern. I would be grateful for the earliest possible notification of the details of construction. I assume that preliminary drawings which indicate the alignment including elevation information were prepared to determine right of way requirements. If possible, i would like to see these. I can be reached at 301-531-6653.

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

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Maryland Department of Transportation
State Highway Administration

1908 - 1988
SHA
80 YEARS of SERVICE

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 20, 1988

RE: Contract No. HO 292-202-770
MD 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. James H. Robinson
6692 Cedar Lane
Columbia, Maryland 21044

Dear Mr. Robinson:

Thank you for your recent letter about the MD 32 project.

I telephoned your wife today and look forward to meeting with you in the near future to discuss your concerns. Please contact me at your convenience to discuss setting a meeting date.

Thank you for your interest in this project.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas Simmons
Project Manager

LHE:DS:ds

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT DIV.

APR 12 3 30 PM '88

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Robert Maiatesi DATE 4-5-88

PLEASE PRINT

ADDRESS 7330 Guilford Rd.

CITY/TOWN Clarksville STATE MD ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

For the record, I wish to state that I am in favor of the State Highway's Alternate B, Option #1, since it will accomplish what the dual lane, limited access highway (new relocated Md. Rt. 32) is designed to do; that is keep the ever increasing traffic away from the service road. If the existing service road is allowed to accept all the traffic from W.R. Grace as in Option #2, and the service road is allowed to accept Trotter Road traffic and the new Village of Columbia, the traffic nightmares will continue not only for us who live on this road, but for all who use it. A small inconvenience for the Trotter Road & W.R. Grace traffic of making them use the interchange at Pindell School Road will be the better option by far. After all, that's what we're building here; a limited access highway & that's one of the drawbacks of such a highway & that people can't get on it anywhere, but must use the interchanges. Please consider these comments in your present considerations. Thankyou

☒ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

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Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 18, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. Robert Maiolatesi
7330 Guilford Road
Clarksville, Maryland 21029

Dear Mr. Maiolatesi:

Thank you for your recent letter concerning the MD 32 project.

Your support of Option 1 for providing access to the W. R. Grace property will be considered by members of the project planning team prior to reaching a decision on the proposed alignment for MD 32.

Thank you for your interest in this project. Should you have additional questions or comments, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas H. Simmons
Project Manager

LHE:DHS:eh

My telephone number is (301) 333-1190

PROJECT DEVELOPMENT DIVISION
APR 11 8 24 AM '88

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME MR + MRS. Edward MacGates DATE 4/4/88

PLEASE PRINT ADDRESS 7340 Guilford Rd

CITY/TOWN Clarksville STATE Md ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

We are strongly opposed to Alternate B - Option 2 because all of W.R. Grace's traffic will funnel right in front of our driveway making it even more difficult for us to enter and exit than it already is now. Option 1 allows for a smooth, orderly flow of traffic into and out of W.R. Grace without coming close to any residences. Furthermore, W.R. Grace traffic consists of big trucks (Chemical, dump, etc) in addition to an endless stream of cars that come and go at all hours of the day and night.

In addition, if a bridge is built across new Rt. 32 at Trotter road it will allow all of the new River Hill Village of Columbia traffic to empty directly onto Guilford Road (South service road) causing an unacceptably high volume of traffic to pass through to the next Rt. 32 interchange at Cedar Lane.

Edward MacGates
Virginia MacGates

☒ Please add my/our name(s) to the Mailing List.* Added to list 5/10/88

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

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1908 - 1988

SHA

80 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 18, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. and Mrs. Edward Maiolatesi
7340 Guilford Road
Clarksville, Maryland 21029

Dear Mr. and Mrs. Maiolatesi:

Thank you for your recent letter concerning the MD 32 project.

Your support of Option 1 for providing access to the W. R. Grace property, as well as your preference for not constructing a bridge to carry Trotter Road over MD 32, will be considered by members of the project planning team prior to reaching a decision on these issues.

Thank you for your interest in this project. Should you have additional questions or comments, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: [signature]
Douglas H. Simmons
Project Manager

LHE:DHS:eh

My telephone number is (301) 333-1190

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME LAWRENCE KROGER DATE 3/30/88

PLEASE PRINT

ADDRESS 6892 REDBERRY ROAD

CITY/TOWN CLARKSVILLE STATE MD ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

① PROGRAM FUNDING - CONSTRUCTION OF MD 32 SHOULD BEGIN NOW (SPRING 88) NOT IN 1992. WE HAVE ENDURED 3 YEARS OF IMPACT FROM INCREASED TRAFFIC ON NEW 32 AND THE ABRUPT TERMINATION OF THAT IMPROVEMENT AT PINDEL SCHOOL ROAD. TO WAIT FOUR MORE YEARS FOR INIATIATION, AND THEN HOW MANY DELAYS TILL COMPLETION AND USE? WE NEED FUNDING NOW AND WORK TO BEGIN ASAP.

② TO ALLOW DEVELOPERS TO BUILD AND POPULATE THE TROTTER ROAD AREA WITHOUT FIRM COMMITMENT TO INSTALL THE REQUIRED MD 32 INTERCHANGE IS SHEER MALFEASANCE. STATE HIGHWAY SHOULD BRING INFLUENCE TO BEAR ON COUNTY OFFICIALS TO DEMAND BUILDERS CONTRIBUTE TO ROAD IMPROVEMENT BEFORE ALLOWING DEVELOPMENT TO PROCEED WITHOUT ADEQUATE ROAD SYSTEM.

③ OTHERWISE - I CONSIDER THE DESIGN GOOD.

☒ Please add my/our name(s) to the Mailing List.*

Lawrence Kroger

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

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Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 18, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. Lawrence Kroger
6832 Redberry Road
Clarksville, Maryland 21029

Dear Mr. Kroger:

Thank you for your recent letter supporting the construction of the MD 32 project.

Your suggestions for expediting the project schedule as well as requiring developers to construct an interchange within the Trotter Road area will be discussed by the project planning team.

Thank you for your interest in this project. Should you have additional questions or comments, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas H. Simmons
Project Manager

LHE:DHS:eh

My telephone number is (301) 333-1190

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Jerry P. Tiede and Pamela M. Tiede DATE April 4, 1988

PLEASE PRINT

ADDRESS 6760 Sanner Road

CITY/TOWN Clarksville STATE Maryland ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

Having lived at our present address for 8yrs. & enduring the former intersection of 32 & Pindell School Rd. and the current blind intersection of Sanner Rd. and Pindell School Rd., it is inconceivable to us that the Highway Dept. would even consider dumping WR. Grace and APL traffic into the same intersection again. We are strongly opposed to anything but a separate service road for WR. Grace traffic; which would split the heavy traffic to opposite sides of the 32 intersection. These facts combined with the additional cost of an underpass for WR. Grace, plus the necessary purchasing of additional property make it unbelievable that there could be any other choice. We lost a portion of our previous property for the new 32, then we lost a portion of our present property to the new 32 and we nearly lost 2 members of our family due to a serious accident at the current intersection of 32 & Pindell Sch./Cedar La. On top of all this you intend to create another blind suicidal intersection. We can only believe that the same genious that designed the Pindell Sch./32 intersection must have also come up with the single service road plan. The cut off of our road has stopped school bus service to our driveway for our children. We have to pick up cans, bottles, underwear, needles and assorted garbage and at times plow our own road. Cul-de-sacs belong in Columbia. We can put up with these things but we can't put up with a totally idiotic traffic/road design. The way things are designed our driveway will be in the middle of the curve and with the increased traffic from WR. Grace it will be that much more of a hazard if we can get out of our drive at all.

☒ Please add my/our name(s) to the Mailing List.* - Continued on separate paper -

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

State Highway Administration
Office of Planning and
Preliminary Engineering

Box 717
Baltimore, Md. 21203

We are certain that the State Highway Administration has good intentions but it is crystal clear that looking at a piece of paper and the real life situation are 2 entirely different matters.

We would appreciate being kept informed of any developments in this situation. It is essential that this project be expedited.

We had to put up with the initial construction of Route 32 and it would be nice if we didn't have to spend the next 10 to 15 years in the midst of road construction.

Jerry P. Tiede and Pamela M. Tiede
6760 Sanner Road Clarksville, Md 21029

1908 - 1988
50 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 18, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. and Mrs. Jerry P. Tiede
6760 Sanner Road
Clarksville, Maryland 21029

Dear Mr. and Mrs. Tiede:

Thank you for your recent letter offering your suggestions for improving the MD 32 project.

Your support of Option 1 for providing access to the W. R. Grace property will be discussed by the project planning team prior to reaching a decision on the proposed MD 32 alignment.

Improvements to the Sanner Road/Pindell School Road interchange will be included as a part of this project. These improvements will increase the sight distance and improve the safety of this intersection.

Thank you for your interest in this project. Should you have additional questions or suggestions, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas H. Simmons
Project Manager

LHE:DHS:eh

My telephone number is (301) 333-1190

Teletypewrite VII-13 ed Hearing or Speech
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PROJECT
DEVELOPMENT
DIVISION

ERA® COLUMBIA REAL ESTATE, LTD.

March 7, 1988

Mr. Douglas Simmons
Project Manager
Project Development Division
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Dear Mr. Simmons,

Per our telephone conversation on Wednesday, April 6th, 1988, I'd like to state in writing my concerns and recommendations for the State Highway's proposed redesign in the vicinity of Route 32, Cedar Lane and Mill Road.

I beg the State's indulgence to consider seriously the Howard County's proposal of a redesign to facilitate the southbound traffic off Cedar Lane and an underpass at the vicinity of W.R. Grace.

We, the property owners along Mill Road, have had nothing but adverse conditions ever since the new Route 32 corridor at Cedar Lane and Pindell School Rd. was constructed. No thought was ever given to the conditions that would occur for those having to use a service road such as Mill Road, for instance, the steep grading of the egress, ingress connector which I am sure is well out of the norm with the allowable grade standards. Within the past 2 months and after several years of problems, with the help of one of our council members, we have finally been successful in getting "no parking" signs and two lights installed.

We would at this time like to suggest to bring the traffic off Cedar Lane to the south and use the land across the highway from our service road which the State owns to service the W.R. Grace facility by constructing an underpass at the Grace facility.

By constructing an underpass and using the State property, we as owners would be relieved of much aggravation. I believe a comment was made that we would be only affected at certain hours which is not altogether correct. There are always big trucks and other vehicles going into Grace at all hours. An underpass would be more expensive to construct but on the other hand I believe no properties would have to be bought and the residents in Clarksville Ridge would not be affected.

ERA® COLUMBIA REAL ESTATE, LTD.

So, effectively, go south with the traffic and construct an underpass!

By the way, if I can help relieve some of the expense of the underpass, I'd be more than happy to purchase some of the land on my side including the Mill Road area close to our home.

Sincerely,

Patricia A. Davis

6389 TEN OAKS RD. · CLARKSVILLE MD 21029 · 531-5115 · 596-9300

1908 - 1988
80 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 17, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Ms. Patricia A. Davis
c/o ERA Columbia Real Estate, Ltd.
6389 Ten Oaks Road
Clarksville, Maryland 21029

Dear Ms. Davis:

Thank you for your recent letter about the MD 32 project. Your preference for providing access to W. R. Grace by constructing an underpass connecting Guilford Road with the W. R. Grace entrance will be discussed by members of the project planning team prior to reaching a decision on the MD 32 alignment.

Thank you for your interest in this project. Should you have any additional questions or comments, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas H. Simmons
Project Manager

LHE:DHS:eh

My telephone number is (301) 333-1190

Teletypewrit VII-17 red Hearing or Speech
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14P

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Gwen Peters DATE 3/29/88

PLEASE PRINT ADDRESS 6746 Cedar Lane

CITY/TOWN Columbia STATE md ZIP CODE 21044

I/We wish to comment or inquire about the following aspects of this project:

As can be seen from the unanticipated high volume of traffic on new 32 and Cedar Lane, this is an important, needed project. As a resident directly affected by the increased traffic flow, I am well aware that it does exist and needs addressing quickly.

Fisty Mill Rd is a totally unacceptable outlet for the W.R. Grace traffic. Both its steepness and narrowness make it too hazardous for all the traffic. I also agree completely with the County that a ramp as part of the interchange would be wise to handle So Cedar Lane to east 32 heavy volume.

And even though it does not directly affect me, it seems shortsighted not to do a Charlesville bypass rather than patch the existing ~~32~~ business accesses.

When roads are cut off, I think more attention should be paid to providing walkways and bike paths around these new roads. The increased amount of biking needs to be addressed by better access paths.

Please build better ramps than now exist at Shaker Dr + Broken Land.

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 1, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
Maryland Roue 108 to
Pindell School Road
PDMS No. 132059

Ms. Gwen Peters
6740 Cedar Lane
Columbia, Maryland 21044

Dear Ms. Peters:

Thank you for your recent letter supporting the construction of the Maryland Route 32 project.

Your comments concerning a bypass of Clarksville and the provision of access to the W. R. Grace property will be discussed by the project planning team before a decision is reached on the proposed alignment.

Should you have any further questions or comments, please contact me or Mr. Douglas Simmons, the Project Manager. Mr. Simmons's telephone number is (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas Simmons
Project Manager

LHE:DS:ds

My telephone number is (301) 333-1190

142

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT DIV.
APR 15 11 37 PM '88

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Martin G Madden DATE 4/6/1988

PLEASE PRINT ADDRESS 11524 Crows Nest Rd

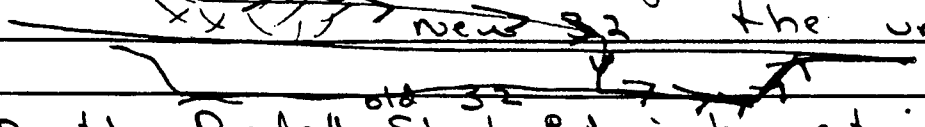
CITY/TOWN Clarksville STATE Md ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

I am writing to voice my strong support for the option 1 service road to service WR Grace + Riverhill.

All projections for futher growth show the great majority of it occuring north of Rt 32. Option 1 is the logical means of servicing this growth.

It greatly concerns me that should Option 2 be built, it will become the conduit for the new construction planned for the new Columbia villiage. Until + if the interchange at Trotter Road is built it is logical to assume that this traffic from Riverhill village will flow east through the underpass to reach the Pindell School Rd intersection. This would only create a new bottleneck on Old 32 once again as well as adversely affect the tranquillity along 32, especially the wildlife around Stott water's pond. Please keep Option 1.



☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 22, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
Maryland Route 108 to
Pindell School Road
PDMS No. 132059

Mr. Martin G. Madden
11524 Crows Nest Road
Clarksville, Maryland 21029

Dear Mr. Madden:

Thank you for your recent letter outlining your support for Option 1 of the Maryland Route 32 project. Your comments will be reviewed and discussed by members of the project planning team before a decision is reached concerning the proposed alignment for this project.

Thank you for your interest in this project. Should you have any future questions or comments, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas Simmons
Project Manager

LHE:DS:ds

My telephone number is (301) 333-1109

Teletypewritten Hearing or Speech
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PROJECT DEVELOPMENT DIVISION
APR 12 3 33 PM '88

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME KEITH B. RISSER DATE 3/21/88

PLEASE PRINT

ADDRESS 6326 WINDHAM WAY

CITY/TOWN COLUMBIA STATE MD ZIP CODE 21045

I/We wish to comment or inquire about the following aspects of this project:

I own a parcel of land on CORINA COURT, which accesses directly on CEDAR LANE but does not show on your maps, even though it falls within the path of improvements.

I'd like your comment as to why it is omitted and what your plans may be for the future of CORINA COURT.

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

145

1908 - 1988
SHA
80 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 18, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. Keith Risser
6326 Windharp Way
Columbia, Maryland 21045

Dear Mr. Risser:

Thank you for your recent letter requesting information about the MD 32 project.

Corina Court is located to the north of the project limits and; therefore, was not on the display. The improvements to Cedar Lane which are included in this project end approximately 800 feet south of Corina Court. However, Cedar Lane is to be widened by Howard County. Should you have any questions concerning the proposed county project, please contact Ms. Elizabeth Calia of the Howard County Department of Public Works at (301) 992-2014.

Thank you for your interest in this project. Should you have any future questions, please feel free to contact me.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas H. Simmons
Project Manager

LHE:DHS:eh
cc: Ms. Elizabeth Calia

My telephone number is (301) 333-1190

PROJECT DEVELOPMENT DIVISION
APR 7 10 32 AM '88

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME THEODORE A. GELLETLY DATE APR 2, 1988

PLEASE PRINT

ADDRESS 14670 VIBURNUM DRIVE

CITY/TOWN DAYTON STATE MD ZIP CODE 21036

I/We wish to comment or inquire about the following aspects of this project:

THE SPEAKERS ON 3-29-88 BROUGHT UP SOME VERY GOOD POINTS. HOWEVER, NONE OF THESE POINTS IS SO IMPORTANT THAT ANY SHOULD CAUSE DELAY TO THE START OF THIS PROJECT. THE GENERAL PUBLIC WILL BE BEST SERVED BY A SPEEDY COMPLETION OF RT. 32. PLEASE DO NOT ALLOW LOCAL BATTLES ABOUT CROSSROADS OR INTERCHANGES TO SPOIL THE MOMENTUM OF THIS PROJECT.

Theodore A. Gelletly

Kay M. Gelletly

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

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Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 19, 1988

RE: Contract No. HO 292-202-770
MD 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. and Mrs. Theodore A. Gelletly
14670 Viburnum Drive
Dayton, Maryland 21036

Dear Mr. and Mrs. Gelletly:

Thank you for your recent letter supporting the construction of the MD 32 project.

It is our goal to begin construction during 1992. Although several issues are currently being considered, it is not anticipated that these issues would influence the construction schedule.

Thank you for your interest in this project. Should you have any further questions or comments, please feel free to contact me at (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas Simmons
Project Manager

LHE:DS:ds

148

PROJECT
DEVELOPMENT
DIVISION
MAR 23 3 43 PM '88

HOWARD COUNTY BICYCLE CLUB

James M. Tordella
Governmental Representative
10353 Maypole Way
Columbia, MD 21044

19 March 1988

State Highway Administration
Office of Planning & P.E.
P.O. Box 717
Baltimore, MD 21044

Dear Sirs:

We are a 45 member bicycle club of Howard County residents. We believe that contract No. HO 292-202-770, location/design and hearing, on MD. Rt 32 from MD 108 to Pindell School Road affects us directly.

We are in favor of Alternate B, Trotter Road -- Option 3. Cutting off Trotter Road would be bad for us and for the county. Trotter Road must go through. Bicyclist use Trotter Road very frequently; it is one of our most beautiful. It is most convenient to Columbia, where many of our members live. We wish to continue to bicycle through it. Without Trotter Road, we are forced onto MD 108, clearly a much less desirable bicycling environment.

We believe that the quality of life of Howard County is clearly compromised by expressways cutting off local roads. When driving locally or bicycling locally, we do not wish to contend with through-county traffic. We do not wish MD 32 traffic jams to affect our lives every rush hour.

We are in favor of Option 1 service roads. We do not think it is worth the extravigant cost of, and see no benefits to an underpass to W.R. Grace. With either option, some traffic will have to go around the long way. Option 1 is less disruptive to those houses along Guilford Road also.

We want our local roads preserved -- for bicycling, for direct access, and for quality of life. We do NOT want our county sliced up in a cheap sacrifice to the throughway god.

Very truly yours,

James M. Tordella
Howard County Bicycle Club
Governmental Representative

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

March 29, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
Maryland Route 108 to
Pindell School Road
PDMS No. 132059

Mr. James M. Tordella
10353 Maypole Way
Columbia, Maryland 21044

Dear Mr. Tordella:

Thank you for your recent letter supporting the Maryland Route 32 project. Your preference for Option 1 and Option 3 will be discussed by the project planning team before a decision is reached on the proposed alignment.

Should you have any further questions or comments, please contact me or the Project Manager, Douglas Simmons. Mr. Simmons' telephone number is (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas H. Simmons
Project Manager

LHE:DS:ds

GK 150
3/23

PROJECT DEVELOPMENT DIVISION
MAR 15 2 48 PM '88

vol-62

March 2, 1988

Mr. Neil J. Pedersen,
Director, Office of Planning and Preliminary Engineering,
State Highway Administration,
Post Office Box 717,
Baltimore, Maryland 21203-0717

Dear Mr. Pedersen:

I am vitally concerned with Maryland Route 32 and want to go on record supporting the construction of the segement from Route 108 to Pindell School Road as soon as possible. This written statement is sent since I may not be able to attend the meeting on March 29th.

We ought to learn from our past experiences. So I recommend that the road be built for four lanes with expansion to eight lanes at a later date. This means all bridges should accomodate the wider road.

It is recommended that the interchange at Route 108 be made a full cloverleaf now.

Route 32 is a major thoroughfare and as anyone can see if you travel it morning and evening during rush hour. Route 32 area is where people want to live and be convenient to employment centers.

We normally build too small and then pay many times more to expand later. A case in point is Route 29 through Columbia which should have been built for 6 or 8 lanes in the beginning in 1960's.

Lets plan ahead and save $'s for the future.

Very truly yours,

Rudolph Nothdurft

Rudolph Nothdurft
13136 Williamfield Drive,
Ellicott City, Maryland 21043

RECEIVED
#387
MAR 14 1988
DIRECTOR
PLANNING & PRELIMINARY ENGINEERING

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

151

March 29, 1988

Mr. Rudolph Nothdurft
13136 Williamfield Drive
Ellicott City, Maryland 21043

Dear Mr. Nothdurft:

Thank you for your recent letter supporting the relocation of Maryland Route 32 from Maryland Route 108 to Pindell School Road.

Maryland Route 32 will be designed to accommodate the traffic volumes which have been forecasted for the year 2015. These forecasts include the additional traffic which will be generated by future development throughout the region.

A brochure is attached, which further discusses this project.

Should you have any further questions or suggestions, please contact me.

Very truly yours,

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds
Attachment
cc: Mr. L. H. Ege, Jr.

My telephone number is (301) 333-1110

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707 North Calvert St., Baltimore, Maryland 21203-0717

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road

March 31, 1988

Paul & Nancy Parlette
6434 Trotter Rd.
Clarksville, MD 21029

Dear Sir/Madam:

My husband and I recommend that Trotter Rd. be cut in two, leaving cul-di-sacs for the residents and that a collector Rd./through Rd. be incorporated into HRD's plan for River Hill at or west of the Circle (future access) indicated on your drawings Alt. B, Option 1.

Our reasoning is as follows:
As far as we know your goal as SHA is to provide for the needs of the citizens in a way that will meet the greatest number of needs while inconveniencing the least number of citizens. We feel that the above recommendation does this.

1. Those of us on Trotter Rd. enjoy it as a residential (at one time rural) area; we are starting our family and want to keep the neighborhood from being "upgraded" because of increase in traffic.

2. If you build a bridge over Trotter half of our front yard becomes a right of way. We do not want to loose half of our front yard and if it was done, we believe that and the increased noise would greatly decrease the value of our home and would want some just compensation.

3. We ask ourselves, why does the county and HRD want the bridge on Trotter Rd? Is it just for the convenience of Trotter residents? We don't think so! Rather it is because they know that there will be a GREAT increase in traffic and that they want Trotter to be a "collector Rd" or a road for "local circulation". There goes our residential neighborhood!! We don't want our Rd. to become like Guilford Rd. is now. If the county and HRD want a through Rd so badly let them build it into their plans. If they do this then it will meet all needs - it will allow us our right to keep our area residential and semi-quiet and take care of the needs for a through way between the two 32 intersections.

Thank you for considering these alternatives.

Nancy & Paul Parlette

Nancy & Paul Parlette

☒ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 6, 1988

RE: Contract No. HO 292-202-770
Maryland Route 32
Maryland Route 108 to
Pindell School Rod
PDMS No. 132059

Mr. & Mrs. Paul Parlette
6434 Trotter Road
Clarksville, Maryland 21029

Dear Mr. & Mrs. Parlette:

Thank you for your recent letter recommending that cul-de-sacs be constructed separating Trotter Road from the proposed alignment of Maryland Route 32.

Your comments will be evaluated by the project planning team before a decision is reached on the Trotter Road issue.

Should you have any further questions or comments, please contact me or Mr. Douglas Simmons, the Project Manager. Mr. Simmons' telephone number is (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas H. Simmons
Project Manager

LHE:DS:ds

My telephone number is (301) 333-1190

154

March 25, 1988

Neil J. Pedersen
Director, Office of Planning &
Preliminary Engineering
State Highway Administration
P.O. Box 717
Baltimore, MD 21203-0717

Dear Mr. Pedersen:

We are writing to express our concerns over the pending construction of Maryland Route 32 in the vicinity of Trotter Road in Howard County. We are aware of the several options which are being considered and have already expressed our position; i.e., in favor of the construction of cul-de-sacs on Trotter Road north and south of the alignment for Route 32, which will be presented by the Trotter Road Citizens Association at the Location/Design Public Hearing on March 29.

Regardless of which option is settled upon for the Trotter Road/new Route 32 confluence, we are seriously concerned about the noise pollution which will result from the proximity of the new Route 32 location to our residence. If the roadbed for new Route 32 follows the current topography, the noise from traffic will have an adverse impact on us and on our immediate neighbors. Therefore, we urge you to lower the roadbed for Route 32 in the region of Trotter Road and to take whatever other precautions as may be necessary to minimize the noise impact to us and our neighbors.

We are also concerned about the safety implications of new Route 32. Will you please assure that the new highway is fenced on either side to preclude crossing of the highway by schoolchildren?

Your attention to these matters will be greatly appreciated.

David Connolly
Elizabeth Connolly
6311 Trotter Road
Clarksville, MD 21029

Sincerely,
Michael J. Baluck
Christine A. Baluck

Michael J. Baluck
Christine A. Baluck
6302 Trotter Road
Clarksville, MD 21029

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 13, 1988

Mr. & Mrs. Michael J. Baluck
6302 Trotter Road
Clarksville, Maryland 21029

Dear Mr. and Mrs. Baluck:

Thank you for your recent letter about the Maryland Route 32 project which outlined your support for the construction of cul-de-sacs on Trotter Road north and south of the proposed Maryland Route 32 alignment.

The project planning team will discuss depressing Maryland Route 32 through the Trotter Road area before a decision is reached on the proposed alignment. However, the elevation of the alignment through the Trotter Road area will also be dependent upon which option is selected for providing access to the W. R. Grace and Riverhill Game Farm properties.

Maryland Route 32 will be fenced on both sides to prevent access by both pedestrians and vehicles.

Should you have any further questions or comments concerning this project, please feel free to contact me.

Very truly yours,

Neil J Pedersen

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:db

cc: Mr. Louis H. Ege, Jr.

My telephone number is (301) 333-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro - 565-0 o - 1-800-492-5062 Statewide Toll Free
707 North Calvert e, Maryland 21203-0717

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 13, 1988

Mr. and Mrs. David Connolly
5311 Trotter Road
Clarksville, Maryland 21029

Dear Mr. and Mrs. Connolly:

Thank you for your recent letter about the Maryland Route 32 project which outlined your support for the construction of cul-de-sacs on Trotter Road north and south of the proposed Maryland Route 32 alignment.

The project planning team will discuss depressing Maryland Route 32 through the Trotter Road area before a decision is reached on the proposed alignment. However, the elevation of the alignment through the Trotter Road area will also be dependent upon which option is selected for providing access to the W. R. Grace and Riverhill Game Farm properties.

Maryland Route 32 will be fenced on both sides to prevent access by both pedestrians and vehicles.

Should you have any further questions or comments concerning this project, please feel free to contact me.

Very truly yours,

Neil J Pedersen

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:db

cc: Mr. Louis H. Ege, Jr.

#418

LAW OFFICES
GALLAGHER, EVELIUS & JONES
PARK CHARLES
218 NORTH CHARLES STREET
BALTIMORE, MD. 21201

TELEPHONE (301) 727-7702
TELECOPIER (301) 837-3079

JOHN C. EVELIUS
C. EDWARD JONES
RICHARD O. BERNDT
THOMAS N. BIDDISON, JR.
MICHAEL J. TRAVIESO
ROBERT R. KERN, JR.
SAUL E. GILSTEIN
THOMAS B. LEWIS
BONNIE A. TRAVIESO
STEPHEN A. GOLDBERG
LINDA H. JONES
CHRISTOPHER J. FRITZ
STEVEN I. FRAHM
NITA L. SCHULTZ
EILEEN J. WEINER
MICHAEL W. SKOJEC
KATHRYN KELLEY HOSKINS
MARK P. KEENER
KEVIN J. DAVIDSON
EILEEN M. LUNGA
G. CHRISTOPHER COSBY

March 18, 1988

Mr. Neil J. Pedersen, Director
Office of Planning & Preliminary
Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

RE: Relocated Maryland Route 32
From Maryland Route 108 to
Pindell School Road
Contract No. HO292-202-770

Dear Mr. Pedersen:

As you know from past correspondence, our office represents the Roman Catholic Archdiocese of Baltimore and the St. Louis Catholic Church of Clarksville. In connection with the Combined Location/Design Public Hearing on the above captioned project, we have no objections to the proposed Alternate B. We do, however, wish to express again our opposition to any widening of Route 108. We believe any widening will ultimately lead to the taking of a portion of our property between the church/school buildings and the existing Route 108. As stated in the past, we are opposed to any actions which could even remotely result in a taking of any part of the St. Louis property.

Also, we have a concern about the safety of our parishioners and the community if Route 108 is in part (the interchange of Routes 32 and 108) widened to 5 lanes and then reduced to 4 or 3 lanes which was proposed at one time.

I know these concerns have been raised in the past; however, we feel it important that we restate them whenever there is an opportunity. Hopefully, the issues we raise will not go unheard.

For your information, the St. Louis parish is in the process of conducting a capital campaign to construct additional facilities on its site. We have relied on prior representations that there is no plan by the State to take any part of the St. Louis Clarksville property. Unless we hear otherwise from you, we will assume that the representations made in the past are still true and accurate.

Your cooperation and assistance are greatly appreciated.

Very truly yours,

Robert R. Kern, Jr.

RRK,JR/ew
100-58
cc: Mr. Wayne Clingan
Mr. Douglas Simmons
Reverend Thomas J. Donellan
Reverend Michael J. Spillane
Richard O. Berndt, Esquire
Mr. Louis F. Baird
Reverend Anthony Sauerwein

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

March 31, 1988

Mr. Robert R. Kern, Jr.
Gallagher, Evelius & Jones
Park Charles
218 North Charles Street
Baltimore, Maryland 21201

Dear Mr. Kern:

Thank you for your recent letter stating the opposition of the St. Louis Catholic Church of Clarksville in regard to the proposed widening of Maryland Route 108.

The Maryland Route 32 project will not require the acquisition of any right-of-way from the St. Louis Church property.

Your opposition to the proposed widening of Maryland Route 108 will be discussed by the project planning team along with comments which we will receive at and subsequent to the Public Hearing before a decision is reached on the proposed alignment.

Should you have any further questions, please feel free to contact me.

Very truly yours,

Neil J. Pedersen/dhe

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds
cc: Mr. Louis H. Ege, Jr.

My telephone number is (301) 333-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro - 565-04 VII-37 ro - 1-800-492-5062 Statewide Toll Free
707 North Calvert St., Baltimore, Maryland 21203-0717

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PROJECT DEVELOPMENT DIVISION

APR 11 4 21 PM '88

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Albert and Cynthia Kupres DATE April 3, 1988

PLEASE PRINT

ADDRESS 7208 RT 32

CITY/TOWN Clarksville STATE Md ZIP CODE 21029

I/We wish to comment or inquire about the following aspects of this project:

1. We are in favor of the service road to W R Grace / Riverbird Game Farm being located as shown in Option 1. Option 1 has the following advantages:
   - reduces potential traffic problems at relocated Guilford Rd / Scanner road interchange, especially when the W R Grace and Johns Hopkins Lab traffic is at peak.
   - reduces W R Grace traffic using westbound Guilford Rd to to RT 108 interchange (to avoid the Cedar Lane backup).
   - eliminates a need for a RT 32 bridge over the W R Grace underpass (Option 2). Eliminating this bridge would:
     - be less expensive to build and maintain
     - reduce noise to Guilford Rd residences (which is a problem already identified in this area).
     - reduce impact to Stratmeter Pond.

2. We request that you consider building mounds on the south side of relocated Rd 32 in the Stratmeter Pond area to reduce traffic noise in this area. (This will benefit the entire Clarksville Ridge community.)

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

1908 - 1988
SHA
80 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 19, 1988

RE: Contract No. HO 292-202-770
MD 32
MD 108 to Pindell School Road
PDMS No. 132059

Mr. and Mrs. Albert Kupres
7208 Route 32
Clarksville, Maryland 21029

Dear Mr. and Mrs. Kupres:

Thank you for your recent letter about the MD 32 project.

Your preference of Option 1 for providing access to the W. R. Grace and Riverhill Game Farm properties, as well as your suggestion for constructing earthern berms will be discussed by the project planning team before a decision is reached on the proposed alignment.

Thank you for your interest in this project. Should you have any additional questions or suggestions, please feel free to contact me at (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Douglas H. Simmons
Douglas Simmons
Project Manager

LHE:DS:ds

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT DIV.
APR 12 3 30 PM '88

Contract No. HO 292-202-770
Combined Location/Design Public Hearing
Maryland Route 32
Maryland Route 108 to Pindell School Road
Tuesday, March 29, 1988 - 7:30 p.m.

NAME Mrs R E Woodall DATE 4-8-88

PLEASE PRINT

ADDRESS 7551 Mill Rd.

CITY/TOWN Columbia STATE Md ZIP CODE 21044

I/~~We~~ wish to comment or inquire about the following aspects of this project:

I hope the access road for the new Rte 32 will be Option 2. The state already owns the property between Mill Rd and new 32 and I am worried I have to buy so much land. We have had problems since they made the cul de sac for us and that would put all that UR Grace traffic on our service road. Hope you will consider Option 2.

Thank you,
Mrs Robert E Woodall

☐ Please add my/our name(s) to the Mailing List.*

☐ Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

1908 - 1988
80 YEARS of SERVICE

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

May 19, 1988

RE: Contract No. HO 292-202-770
MD 32
MD 108 to Pindell School Road
PDMS No. 132059

Mrs. R. E. Woodall
7551 Mill Road
Columbia, Maryland 21044

Dear Mrs. Woodall:

Thank you for your recent letter about the MD 32 project. Your preference of Option 2 will be considered by the project planning team before a decision is reached on the issue of providing access to the W. R. Grace and Riverhill Game Farm properties.

Thank you for your interest in this project. Should you have any future questions or suggestions, please feel free to contact me at (301) 333-1190.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: _____
Douglas H. Simmons
Project Manager

LHE:DS:ds

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THE ROUSE COMPANY

April 12, 1988

Mr. Douglas Simmons
Project Manager
Project Development Division
State Highway Administration
Room 313
707 N. Calvert Street
Baltimore, Maryland 21202

Re: Relocated Maryland Route 32
From Maryland 108 to Pindell
School Road

Dear Mr. Simmons:

We offer the following comments concerning the information presented at the March 29, 1988 Public Hearing on the referenced project.

As stated in Mr. Scavo's comments at the public hearing, The Howard Research and Development Corporation supports Alternate 'B' with service roads - Option 1 and Trotter Road - Option 3. This alternate and options appear to be the ones that are consistent with the Howard County General Plan. This document is the basis for planning of roadways in Howard County. As such, the planning of developments like the Columbia New Town, as well as the orderly growth of other areas of Howard County, depend on the design and construction of the facilities shown on the General Plan.

The "Possible Future Access" to be constructed "by others" shown in the Trotter Road vicinity is not consistent with any SHA plans shown previously or the Howard County General Plan. We question this access since neither the SHA or Howard County review agencies have, to our knowledge, justified its need. We want to know why this nebulous information is shown on the documents for a public hearing. Mr. Scavo presented a summary of approximately 23 years of history and the evolution on the Trotter Road interchange from its inclusion on the 1965 Columbia Preliminary Development Plan to its removal by the SHA after the 1973 public hearings up to the zoning case for the River Hill Village in 1986 (a summary of this history is attached). The SHA and Howard County agencies review of these various activities did not determine the need for any access along Maryland Route 32 in the Trotter Road vicinity. We believe that based on the lengthy reviews of all of these actions that this access must be fully justified or completely removed from consideration. We also believe that if the justification does exist, then it should be the SHA's or Howard County's responsibility for construction since nothing has changed in HRD's proposed development. We request that any information concerning this issue be made available to ourselves and Howard County.

10275 Little Patuxent Parkway Columbia, Maryland 21044-3456

We question the traffic information that is available in the Supplemental Draft Environmental Impact Statement. None of the traffic figures are consistent with that developed by either Howard County or HRD. There is no level of service information shown for the Service Road 1 and 2 Options. We request this information. We believe that the Howard County comments concerning the Cedar Lane interchange area should be evaluated. Any consideration of these service road options must recognize that Howard County's General Plan shows that the service road is a minor collector from Trotter Road to W. R. Grace Company's access and a major collector from W. R. Grace Company's access to Cedar Lane. These roadway classifications recognize the development planned in the area and should be constructed to the Howard County standards so that upon the construction of the HRD portion of this road, the connection is compatible with the SHA construction. The design criteria for these roadways must be recognized by the SHA construction (i.e., the curvature for Option 2). The typical sections shown are not consistent with Howard County's typical sections for either the service roads or Trotter Road.

In addition to these issues, the need for utility connections under the New Maryland Route 32 alignment should be recognized and planned in both the initial and ultimate construction. The future sewer connections for the drainage areas south of New Maryland Route 32 should be constructed by the SHA.

It was stated that the construction of the initial two lanes of New Maryland Route 32 would provide direct access to W. R. Grace Company. We assume that direct access would also be provided for the HRD land adjacent to the new road. The timing of this initial construction and the limits of the construction need to be clarified. Such questions as whether the new bridge at the Little Patuxent River is part of this initial construction and whether the interchange at Cedar Lane is built with this construction need to be understood.

Howard County's proposal for review and evaluation of the "Clarksville By-Pass" needs to address the ability of either the SHA or Howard County to provide marketable and direct access to the HRD land adjacent to existing Maryland Route 108. We believe that the "by-pass" option removes this from our land.

We look forward to obtaining the answers to the questions raised in this letter and wish to meet to resolve any questions that need discussion prior to the determination by the SHA of the final options on this roadway.

Please contact me with any questions.

Very truly yours,

Joseph H. Necker, Jr.
Director of Engineering

JHN:dl
Encl.
cc: Mr. James Irvin, Howard County
Mr. Uri Avin, Howard County
Mr. Pederson, Howard County

SUMMARY OF EVENTS OF MARYLAND ROUTE 32 INTERCHANGE

1965 - Columbia Preliminary Development Plan approved. Plan includes interchange and LPP extension.

1966 - Howard County General Plan. Interchange and LPP extension is included.

1973 -SHA public hearing for the new Route 32 corridor. Strong opposition from community groups requesting the removal of the interchange. After consideration of public testimony, State removed interchange from plans.

December 1976 - Revised Preliminary Development Plan for Columbia is approved. Plan removes Little Patuxent extension and re-configures land use in the area (removed 350 acres of employment).

August 1977 - Howard County Council takes action through Resolution 67 to remove interchange and Little Patuxent extension from the general plan of highways.

1983 - State south alternate plans for Route 32. Trotter Road interchange is not shown. Trotter underpass and North service road is included.

March 1986 - Public hearing on proposed revision to Preliminary Development Plan for Columbia. State Highway Administration is asked to comment on Howard Research and Development Corporation's proposed revisions to the PDP. State's response to Howard County is as follows: "In general, is not in conflict with current State plans." The HRD plans includes the North Service Road with Trotter Road underpass consistent with the then State plans.

June 1986 - Letter from Neil Pedersen to HRd re: proposed PDP revision "the proposed zoning changes are of a minimal level and should not be enough cause to effect any changes in any SHA program."

1986 - Howard County's Zoning Board approval of preliminary development plan for Columbia. No negative comments from the Office of Planning and Zoning or Public Works regarding circulation within the area. No reference to the necessity of the Trotter Road interchange or the 108 Bypass. The Zoning Board shows particular interest in wanting to know the precise circulation patterns for the Riverhill Village so that no excess traffic will use Trotter Road or existing Route 32.

1987 - State delegation calls a meeting (HRD, State Highway Administration, Howard County staff) re: discussions as to the need for a Trotter Road/32 interchange as has been brought to their attention by the State Highway Administration. Delegation has been contacted by the local community groups and they remain solidly opposed to any such renewal of the interchange plans. HRD

remains consistent with their position that the interchange is not needed. Howard County staff, although stating some concern about the general circulation, states no strong opposition that the interchange is not required. SHA concludes that if no one feels that the interchange is needed that they will drop it from all further plans and discussions.

March 1988 - State Highway Administration advertises location design public hearings for the section of Route 32 from Pindell School Road to Maryland Route 108. The State's publication states the Trotter Road interchange is not one of the alternatives being considered. However, in the graphic material the interchange is identified as "possible future access (to be constructed by others)". Special note: the 1988 supplemental draft of the Environmental Impact Statement (prepared by the State) concludes citizens of Trotter Road have voiced opposition of the interchange and therefore interchange is no longer proposed at this location.

March 25, 1988 - Washington Post article indicates that the State Highway Administration was considering including the Trotter Road interchange envisions Howard County and/or HRD take responsibility for the interchange.

Response to the Rouse Company:

1. Alternate B and Option 1 were selected for design and construction. SHA is not requesting location approval for an interchange between Pindell School Road and MD Route 108. A comprehensive traffic study is being completed for southern Howard County, including the MD Route 32 project area, and will be coordinated with the Howard County Office of Planning and Zoning. Coordination for the planning and construction of utility and sewer connections under MD Route 32 will occur during final design.

B. Written agency comments received subsequent to the circulation of Draft Supplemental Environmental Impact Statment, February 19, 1988, and responses.

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United States Department of the Interior

OFFICE OF ENVIRONMENTAL PROJECT REVIEW
WASHINGTON, D.C. 20240

L7619(FNP-762)
ER 88/163

MARYLAND
DA
ADA
D-A
D-B
P&R
FM
MCS
ALL
ES

MAY 16 1988

Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda - Suite 220
711 West 40th Street
Baltimore, Maryland 21211

Dear Mr. Elinsky:

This is in response to the request for the Department of the Interior's comments on the draft environmental/Section 4(f) statement for SR-32 (Pindell School Road to SR-108), Howard County, Maryland.

SECTION 4(f) STATEMENT COMMENTS

We concur that there is no feasible and prudent alternative to the proposed use of land within the Middle Patuxent Environmental Area for the planned roadway improvements. We are also in agreement with selection of the recommended plan and concur that the mitigation measures proposed are adequate.

ENVIRONMENTAL STATEMENT COMMENTS

The draft environmental statement (DES) includes a discussion of known mineral resources in the project area. Although, as stated in the DES, there is no mining activity in progress within the study area, the possibility of future mining activity should be addressed. Subsequent versions of the document should include a discussion of possible adverse impacts on potential future mining in the area. If no adverse impacts are anticipated, a statement to that effect should be included in the final statement. 1

FISH AND WILDLIFE COORDINATION ACT COMMENTS

The U. S. Fish and Wildlife Service (FWS) has reviewed the subject statement and finds it generally adequate. Where streams are to be culverted, the FWS recommends bottomless arches. The table on page IV-16 indicates 2.35 acres of wetlands will be 2

impacted for alternate B. However the text preceding this table indicates that a total of 2.62 acres of wetlands will be affected by this alternative. This difference should be explained. Wetland losses should be mitigated by improving/expanding wetlands or creating new wetlands within the right-of-way.

SUMMARY COMMENTS

The Department of the Interior has no objection to Section 4(f) approval of this project.

Please contact the Field Supervisor, U. S. Fish and Wildlife Service, 1825 Virginia Street, Annapolis, Maryland 21401 (tele: 301/269-5448), for technical assistance regarding fish and wildlife resources and wetland mitigation plans.

Thank you for the opportunity to provide these comments.

Sincerely,

Lillian K. Stone
for

Bruce Blanchard, Director

cc: Mr. Louis H. Ege, Jr., Deputy Director
Project Development Division
State Highway Administration
707 North Calvert Street
Room 310
Baltimore, Maryland 21203-0717

Response to United States Department of Interior:

1. There is no potential for mining activities now or in the future in the study area.

2. As stated on page IV-10, the anticipated impact upon wetland areas by this project will have a combined total of 2.35 acres.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF CHARTING AND GEODETIC SERVICES
ROCKVILLE, MARYLAND 20852

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MAR 30

MEMORANDUM FOR: David Cottingham
Ecology and Environmental Conservation Office
Office of the Chief Scientist

FROM: for Rear Admiral Wesley V. Hull, NOAA
Director, Charting and Geodetic Services

SUBJECT: DEIS 8803.03 - MD 32 from Pindell School to MD Route 108, Maryland

The subject statement has been reviewed within the areas of Charting and Geodetic Services' (C&GS) responsibility and expertise and in terms of the impact of the proposed actions on C&GS activities and projects.

Geodetic control survey monuments are located in the proposed project area. Specifically, vertical geodetic control station, R109 (MDSRC), is located directly in the path of the proposed project. There are no horizontal contol monuments in the proposed project location. 1

If there are any planned activities which will disturb or destroy these monuments, C&GS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. C&GS recommends that funding for this project include the cost of any relocation required for C&GS monuments. For further information about these monuments, please contact the National Geodetic Information Branch, N/CG17, Rockwall Bldg., Room 20, National Geodetic Survey, NOAA, Rockville, Maryland 20852, telephone (301) 443-8631.

Attachment
Vertical Control Station Description

cc:
N/CG17 - Spencer

Mr. Ralph Poust
Field Operations
Bureau of Plats and Surveys
Maryland Department of Transportation
707 North Calvert Street,
Baltimore, Maryland 21202

SEQN--830 PG--0497

US DEPARTMENT DF CDMMERCE - NDAA
NDS - NATIONAL GEDDETIC SURVEY
ROCKVILLE MD 20852 - JUN 1982

VERTICAL CDNTROL DATA
NATIDNAL GEODETIC VERTICAL DATUM 1929
ADJUSTED BY--CGS YEAR--1966
SDURCE--L20859

QUAD--N3907630O LINE--132
STATE--MO OIAGRAM--NJ 18-1
CDUNTY--HOWARD

BENCH MARK
DESIGNATIDN--R 109 MDSRC

DRDER--2ND MONUMENTATION QUALITY--C APPROX LAT 39-11-09N
ESTABLISHED BY--MDSRC YEAR--1966 POSITION--LDN 076-54-02W

H - ELEVATION ABDVE NGVD 1929 (NDRMAL ORTHDMETRIC HEIGHT)	MDDELED BDUGUER ANDMALY	SIGMA	MODELED SURFACE GRAVITY	NORMAL GRAVITY (1967 FORMULA)	NDRMAL GEOPOTENTIAL NUMBER (GPU=KILOGALMETER)
114.502 METERS (375.662 FEET)	14.3 MGALS	1.8	980.088 GALS	980.097 GALS	112.222 GPUS

********** B E N C H M A R K D E S C R I P T I D N **********
DESIGNATIDN--R 109 MDSRC STATE--MO COUNTY--HOWARD QUAD--N390763 XRN--JV1359
********** MONUMENT BY--MOSRC ********** YR--1966 COP--UNK MARK TYPE--BENCH MARK DISK **********
STAMPING--R 109 1965 USC AND GS
SETTING--CONCRETE PDST
LOCATED--1.6 MI WEST FRDM THE CITY DR TDWN DF--SIMPSONVILLE
****

ABOUT 1.65 MILES ALDNG STATE HIGHWAY 32 FROM THE INTERSECTION OF U.S. HIGHWAY 29 AT SIMPSONVILLE, 34.0 FT. SDUTH DF HIGHWAY, 62.0 FT. WEST DF SIDE RDAD LEADING SDUTH (PINDELL SCHDDL RDAD), 50.0 FT. EAST DF MILEAGE MARKER NUMBER 92, 2.0 FT. NORTH OF A METAL WITNESS POST. SET IN A CONCRETE POST PROJECTING 4 INCHES.

SEQN--831

US DEPARTMENT OF COMMERCE - NOAA
NOS - NATIONAL GEODETIC SURVEY
ROCKVILLE MD 20852 - JUN 1982

VERTICAL CONTROL OATA
NATIONAL GEODETIC VERTICAL OATUM 1929
AOJUSTED BY--CGS YEAR--1966
SOURCE--L20859

QUAO--N3907630O LINE--132
STATE--MO OIAGRAM--NJ 18-1
COUNTY--HDWARD

BENCH MARK
DESIGNATION--S 109 MOSRC

ORDER--2ND MONUMENTATION QUALITY--C APPROX LAT 39-11-29N
ESTABLISHEO BY--MOSRC YEAR--1966 POSITION--LON 076-55-29W

H - ELEVATION ABDVE NGVD 1929 (NORMAL ORTHOMETRIC HEIGHT)	MDDELED BDUGUER ANDMALY	SIGMA	MDOELEO SURFACE GRAVITY	NDRMAL GRAVITY (1967 FORMULA)	NORMAL GEOPDTENTIAL NUMBER (GPU=KILOGALMETER)
140.072 METERS (459.553 FEET)	15.8 MGALS	1.0	980.085 GALS	980.097 GALS	137.282 GPUS

********** B E N C H M A R K D E S C R I P T I D N **********
OESIGNATION--S 109 MOSRC STATE--MO COUNTY--HDWARD QUAO--N390763 XRN--JV1360
********** MDNUMENT BY--MOSRC ********** YR--1966 CDP--UNK MARK TYPE--BENCH MARK DISK **********
STAMPING--S 109 1965 USC AND GS
SETTING--CDNCRETE PDST
LDCATED--1.4 MI EAST FROM THE CITY OR TOWN OF--CLARKSVILLE
****

ABOUT 1.4 MILES ALDNG STATE HIGHWAY 32 FROM THE INTERSECTIDN OF STATE HIGHWAY 108 AT CLARKSVILLE TD SIOE RDAD LEAOING NDRTH (TROTTER RDAD) THENCE 0.2 MILE ALONG TROTTER ROAD TD STATIDN, 18.0 FT. WEST OF THE CENTERLINE OF TROTTER ROAD, 3 FT. NORTH DF POLE NUMBER 5, 1.8 FT. EAST DF A METAL WITNESS PDST. SET IN A CONCRETE PDST PROJECTING 4 INCHES.

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Response to United States Department of Commerce:

1. Care will be taken during construction to avoid impact to Geoditic control survey monuments. If survey monuments must be moved, relocation will be at SHA expense. A minimum of 90 days notice will be given to C&GS if relocation is required.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

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MAY 2 6 1988

Mr. Louis H. Ege, Jr., Deputy Director
Project Development Division (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Re: Maryland Rt. 32 from Pindell School Rd to Maryland Rt. 108 (88-03-488)

Dear Mr. Ege:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Supplemental Draft Environmental Impact Statement/4f Evaluation for the above referenced project. We have rated the project EC-2 on EPA's rating scale, a copy of which is enclosed for your information. The following comments were prepared for your consideration in the Final Environmental Impact Statement (FEIS).

Consideration of Alternatives:

The various figures presented in the EIS are confusing to a reviewer who is unfamiliar with the study area. For example, surface waters, the boundaries of W. R. Grace Company, Riverhill Game Farm and the Middle Patuxent Environmental Area should be identified on all of the figures, especially Figure 3, in order to give the reader a general understanding of the project and its implications. Another initial source of confusion regards the western terminus of the North Service Road. On Figures 3 - 8 and 29, the Village Collector Road and the North Service Road appear to run into one another, in the middle of wooded/cultivated open space. 1

Figure 4 shows the Village Collector Road, the North Service Road and the Northern portion of Trotter Road with an average daily traffic (ADT) of 0 in 1995. This is not consistent with the other ADT values on Figure 4 and should be explained. 2

Furthermore, the text should discuss the advantages/ disadvantages of Option 2 (Service Roads with underpass) and Option 3 (bridge at Trotter Road). 3

Surface Water:

The proposed project requires eight stream crossings, each of which should be identified in the FEIS. In addition, the FEIS should give a general description of the aquatic life in each stream. EPA recommends the construction of bridges, rather than culverts, in order to reduce impacts to surface water and aquatic life. Where bridges are not feasible, culverts should be countersunk and have provisions for low flow. In-stream work should be minimized and time of year restrictions followed, as necessary. 4

The Middle Patuxent is a scenic river. Therefore, any structure crossing the river should be designed so as not to detract from its beauty.

Groundwater:

There is a groundwater monitoring station near Farside, about five miles from the project area (p. IV-8). The FEIS should identify the location of this monitoring station and confirm that it is downgradient from the study area. In addition, EPA suggests installing monitoring wells in closer proximity to the study area, as they would be more likely to intercept contamination originating in the area. Secondary development resulting from the project also has the potential to adversely impact groundwater, which makes it all the more important to monitor groundwater from the study area. 5

The aquifers in the study area are close to the surface and are susceptible to contamination (p. III-9). As a result, measures to protect the groundwater, such as substituting sand for road salt in the winter, should be considered.

Wetlands:

The selected alternative will have the least impact on wetlands. Please be aware that it is EPA's policy that all impacted wetlands be replaced on at least a 1:1 basis. Replacement should be in kind and on site, if possible. The Final EIS should include a discussion of potential mitigation sites. 6

The total acreage of Wetland 1 should be given, in order to ascertain the relative impact the project will have on this area.

Floodplains:

Impacts to floodplains should be coordinated with the Federal Emergency Management Agency (FEMA). 7

Farmland:

Table 1, page S-5, shows that Alternate B will impact 2.32 acres of prime farmland. Yet page IV-7 states, "According to the Soil Conservation Service, 28.5 acres of prime farmland soils and 73.1 acres of farmland of statewide importance will be impacted by Alternate B." It appears that there was a problem concerning the review of data for the Farmland Conversion Impact Rating (p. VI-14, letter from SCS). Nevertheless, this discrepancy in potential impacts to farmland should be explained. 8

Furthermore, farmland is a diminishing natural resource that deserves greater attention in the EIS. A section should be devoted to agricultural impacts, and assurances given that impacts to these areas were minimized.

Hazardous Waste:

Please be aware that the W. R. Grace Washington Research Center, 7379 Route 32, is on EPA's CERCLIS list as a potential hazardous waste site (Dumpsite number MD-117). A Preliminary Assessment was completed for the site in November 1987. Although the site is not currently on the National Priority List (NPL), it is an existing waste generator which treats, stores or disposes of waste and is regulated under the Resource Conservation and Recovery Act (RCRA). 9

The FEIS must evaluate the potential impact of this project on the W. R. Grace Research Center's potential hazardous waste site. Excavation near the site may pose a threat to construction workers, area residents and/or the environment. Contaminants that have migrated from the site in groundwater and soil should be included in the evaluation. Mitigation measures should also be developed for any potential adverse environmental impacts resulting from the project.

Air Quality:

EPA reviewed the Draft Air Quality Analysis for the project. Our comments were sent to the State Highway Administration on March 22, 1988.

Noise:

The EIS should state whether there would be a difference in noise levels at noise sensitive areas 8 or 9, if Option 3 (bridge Trotter Road) is selected. 10

The feasibility of noise mitigation at noise sensitive area 12 was not considered because development has not yet occurred (p. IV-26). If development is currently proposed for the area, however, this should be stated in the EIS and noise mitigation measures should be discussed.

Cultural Resources:

Archeological sites should be included on Figure 26. It would also be helpful to include the proposed alignment on this figure. 11

Thank you for allowing EPA the opportunity to review this document. Should you have any questions, or if we can be of further assistance, please contact Lynn Rothman at 215/597-7336.

Sincerely,

Jeffrey M. Alper, Chief
NEPA Compliance Section

Enclosure

SUMMARY OF RATING DEFINITIONS
AND FOLLOW-UP ACTION*

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alterna tive or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably avail able to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Response to United States Environmental Protection Agency:

1. W.R. Grace Co. Riverhill Game Farm and Middle Patuxent Environmental Area are shown on Figure 21. The western terminus of the North Service Road is as shown on Figure 14. Howard County proposes a future Village Collector Road to service future development. The county will be responsible for connecting the two roadways.

2. Option 3 was not selected for design. Figure 4 was deleted as it no longer applies.

3. Option 2 was strongly opposed by the Trotter Road Community Association. The low traffic volumes do not warrant the expenditure for a bridge at this time. In light of strong opposition, there is no reason to pursue Option 2 at this time.

   Option 3 would cost approximately 1.5 million dollars more with no significant improvement in traffic service. Therefore, Option 3 has no advantage.

4. Cricket Creek is shown on Figure 11 and the Middle Patuxent River is shown on Figure 17. All other streams are intermittent and shown on the alternates mapping as riverine wetlands. Aquatic Habitat is discussed on page III-10.

   The type, size and location of structures will be determined during the design phase of the project based upon hydrologic and aquatic need. Aesthetic treatment of the Middle Patuxent River bridge will be coordinated with review agencies during the design of the project.

5. As stated on page IV-8, Farside is not in the study area and would not produce monitoring information relevant to the study area. However, SHA will test all residential wells within the project area for quantity and quality prior to, and after, construction. If degradation is detected, the well will be replaced or appropriate compensation paid.

6. Potential wetland replacement sties are identified on Page IV-16. W-1 is a drainage ditch with total wetland acreage of .1 acre.

7. There are no significant impacts anticipated to floodplains, however, as the project is designed, coordination will be maintained with all review agencies.

8. The information for prime farmland soils and farmland of statewide importance is correct, however, only 2.32 acres of the impacted area is actively farmed.

   SHA agrees that farmland is a valuable and diminishing resource; however, the area impacted by the SHA project is zoned for intensive development. Development is within the perview of the local governments (such as Howard County).

9. The W.R. Grace Center's controlled storage site is building number 15. This site is 1,240 feet from the SHA project area. W.R. Grace did detect contamination in one of their on site wells. According to W.R. Grace officials, the problem was quickly rectified. All surrounding residential wells have been tested and no contamination detected. The SHA project in the area of W.R. Grace will generally be at-grade, however, SHA will conduct soil tests prior to construction. If any contaminated soils are to be disturbed, they will be removed to an approved disposal site under EPA guidelines.

10. Option 3 was not selected. SHA's noise abatement policy does not consider abatement to be reasonable for development that occurs after the highway project is developed. In such cases where development occurs after highway development, noise abatement would be the responsibility of the developers.

11. The 1980 amendments to the National Historic Preservation Act permit withholding the location of sensitive resources from public disclosure. SHA does not show the location of archeological sites on environmental document maps in order to discourage scavaging and other illegal excavation of archeological resources.

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Federal Emergency Management Agency

Region III
Liberty Square Building (Second Floor)
105 South Seventh Street
Philadelphia, PA 19106

March 16, 1988

Mr. Louis H. Ege, Jr.,
Deputy Director
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

RE: Howard County, MD.
Cont. No. HO 292-202-770

Dear Mr. Ege:

In response to the Supplemental Draft EIS for the referenced project, the Howard County flood plain maps dated March 15, 1977 have been updated. I recommend that the revised Flood Insurance Study and maps dated December 4, 1986 by used to identify flood plains as this project design proceeds.

If you have any questions concerning this letter or any other flood plain management issue, please feel free to contact me at (215) 931-5758.

Sincerely,

Martin J. Frengs

Martin J. Frengs, P.E.
Natural and Technological
Hazards Division

Response to Federal Emergency Management Agency:

SHA has obtained the Flood Insurance Study and maps dated December 4, 1986. These maps will be used during the design of the project.

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Maryland Department of Natural Resources

Forest, Park and Wildlife Service
Tawes State Office Building
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Donald E. MacLauchlan
Director

April 12, 1988

Mr. Louis H. Ege Jr., Deputy Director
Project Development Division
State Highway Administration
707 North Calvert St.
Baltimore, MD. 21202

Subject: Draft EIS for Relocated MD. Rt. 32 From Md. Rt. 108 to Pindell School Rd., Howard Co. Contract #HO 292-202-770

Dear Mr. Ege,

We are concerned that this draft document does not address potential impacts to the rare plant records within this planning area brought to your attention in my letter of Oct. 1, 1987 (Attached). The document's statement that, "there are no known populations of State-listed or Federally listed Threatened or endangered plant species in the study area"; fails to address potential impacts to those species. While these species are not listed in the Regs as Endangered or Threatened in Maryland, they are listed by the Forest Park and Wildlife Service as rare species. All those species in my letter of Oct 1, 1987 are candidates for state listing and impacts to them should be addressed in the final E.I.S.

Specific accountability and mitigation needs to be included in the final E.I.S. that will address the loss of 29 acres of woodland and 2.35 acres of wetlands. Page IV-11 states mitigation "may" include. "Shall" is more appropriate in this and all similar situations. These losses are cumulative.

Sincerely,

James Burtis, Jr.
Assistant Director

cc: J. McKnight
C. Brunori

JB:rr

Telephone: _____
DNR TTY for Deaf: 301-974-3683

Maryland Department of Natural Resources

Forest, Park and Wildlife Service
Tawes State Office Building
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Donald E. MacLauchlan
Director

PROJECT DEVELOPMENT DIVISION
OCT 6 9 36 AM '87

October 1, 1987

Louis H. Ege, Jr.
Deputy Director
Md Department of Transportation
707 North Calvert Street
Baltimore, MD 21203

RE: Contract No. HO 292-202-770
Md Rt. 32 from Md. Rt. 108
to Pindell School Road
PDMS No. 132059

Dear Mr. Ege:

Our Heritage Program has reviewed the above referenced project and reports that there are no known State listed rare, threatened or endangered species in the planning area. The project area does contain a number of records for the following rare species:

NAME	Common-name	Rank
Pycnanthemum verticillatum	Whorled Mountain-mint	State-rare
Ranunculus ambigens	Water-plantain Spearwort	Highly State-rare
Senecio anonymus	Smalls Ragwort	State-rare
Agrimonia striata	Woodland Agrimony	Highly State-rare

While none of these species are State-listed, their presence should be documented and considered in this planning study. In addition, their presence is indicative of unique habitats which may support protected species.

Sincerely,

James Burtis, Jr.
Assistant Director

JB:emp
cc: Therres
Boone

Telephone: _____
DNR TTY for Deaf: 301-974-3683

Response to Maryland Department of Natural Resources:

A field reconnaissance was conducted by SHA's Natural Environmental consultant. During the reconnaissance, none of the listed species of DNR's letter dated October 1, 1987 was observed. This statement was made on Page III-17.

Maryland Department of Natural Resources

Water Resources Administration
Tawes State Office Building
Annapolis, Maryland 21401
Telephone: (301) 974-2265

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

James W. Dunmyer
Director

April 14, 1988

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Re: WRA File No. 88-WC-0160
MD Route 32 from Pindell School Road to MD Route 108
Supplemental Draft Environmental Impact Statement
SHA Contract No. HO-292-202-770

Dear Mr. Ege:

Your supplemental draft environmental impact statement for the above referenced project has been reviewed and enclosed are copies of comments from the Non-Tidal Wetlands Division of the Water Resources Administration, the Fisheries Division of the Tidewater Administration and Land Planning Services of the Capital Programs Administration.

From our review we found that the eight proposed stream crossings were not identified and described in the draft report.

For clarification on any of the comments, please contact the appropriate agency.

Very truly yours,

Michele A. Huffman

Michele A. Huffman
Project Engineer
Waterway Permits Division

MAH:das

Enclosures

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Maryland Department of Natural Resources

Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Michael J. Nelson
Assistant Secretary
for Capital Programs

April 6, 1988

MEMORANDUM

TO: Michele A. Hoffman, Waterway Permits Div.,WRA

FROM: Gene Cheers, G.F.C. Land Planning Serv., CPA

SUBJ: Supplemental Draft Environmental Impact Statement
MD 32 from Pindell School Road to Maryland 108,
Howard County, SHA Contract No. 88-WC-0160
and 88-WC-0161

Capital Programs Administration has reviewed the subject E.I.S. The project does not impact any D.N.R. owned lands. However, the project may impact lands purchased with Program Open Space funds acquired by Howard County for the Middle Patuxent Environmental Area.

I have attached a copy of a memorandum from Chip Price of Program Open Space who has initiated inquiry with Howard County regarding this matter.

GFC:mcs
Attachment
cc: Chip Price
Butch Norden

Telephone: _____

Maryland Department of Natural Resources

Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Michael J. Nelson
Assistant Secretary
for Capital Programs

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APR 0 [illegible]

March 29, 1988

MEMORANDUM

TO: Gene Cheers

FROM: Chip Price

I have reviewed the Supplemental Draft Environmental Impact Statement for Relocated Maryland Route 32 to determine its effect on Program Open Space. It appears that the Relocation will impact a portion of the Middle Patuxent Environmental Area. The acquisition of this Area was partially funded by Program Open Space. I have written to the Director of Howard County Recreation and Parks requesting that their Department alert me if Program Open Space assisted land is involved. Any conversion of Program Open Space assisted land will be subject to standard Program Open Space local land conversion procedures including the substitution of land of equal or greater acreage and recreational value for the land converted.

CP:gvj

Telephone: (301) 974-2231

Response to Maryland Department of Natural Resources; Water Resources Administration:

Cricket Creek is shown on Figure 11 and the Middle Patuxent River is shown on Figure 17. All other streams are intermittent and shown on the alternates mapping as riverine wetlands.

See Maryland State Planning for other agency comments and responses.

MARYLAND
DEPARTMENT OF STATE PLANNING
301 W. PRESTON STREET
BALTIMORE, MARYLAND 21201-2365

WILLIAM DONALD SCHAEFER
GOVERNOR

CONSTANCE LIEDER
SECRETARY

April 27, 1988

Mr. Neil Pedersen
Director, Office of Planning
and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21203-0717

SUBJECT: REVIEW AND RECOMMENDATION

State Application Identifier: MD880314-0191

Applicant: MDOT - State Highway Admin.

Description: Supplemental DEIS/4(f) Evaluation - Md. Rte. 32 from Pindell School Rd. to Md. Rte. 108

Location: Howard County

Approving Authority: DOT

Recommendation: Endorsement Subject to Comments

Dear Mr. Pederson:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 16.02.03, the State Clearinghouse has coordinated the intergovernmental review of the referenced subject. As a result of the review, it has been determined that the subject is generally consistent with Maryland's plans, programs and objectives as of this date. The State process recommendation is endorsement subject to the following:

- Section 106 review requirements; and
- Request for information concerning the source of the hydrology for wetlands affected by Alt. B; and
- Concerns regarding stormwater ponds, aquatic resources, woodlands, wetlands and sediment problems.

All directly affected State and local public officials were provided notice of the subject. Review comments were required from the following local jurisdictions and regional and State agencies:

Howard County, Regional Planning Council, Department of Public Safety and Correctional Services, Department of Housing and Community Development including the Maryland Historical Trust, Department of the Environment, Department of Health and Mental Hygiene, Department of Natural Resources including the Coastal Zone Division, Department of Education and the Department of State Planning.

TELEPHONE: 301-225-4490
TTY for Deaf: 301-383-7555
OFFICE OF STATE CLEARINGHOUSE

The following specific comments are provided for your consideration:

In accordance with 16 U.S.C. 1456, Section 307(c)(1) and (2), the Department of Natural Resources' Tidewater Administration has determined that the subject is not located within the coastal zone. The Department also submitted comments (copy attached) relative to stormwater ponds; wetland impacts, sediment problems, impacts to aquatic resources and woodlands.

Department of Environment requested additional information on the source of the hydrology for the wetlands to be affected by Alternative B.

The State Historic Preservation Officer has determined that the subject may affect archeological or historic resources listed in, or possibly eligible for the National Register of Historic Places. Section 106 of the National Historic Preservation Act and the federal Advisory Council on Historic Preservation's regulations (36 CFR Part 800) require that the Advisory Council be given the opportunity to comment when a federal undertaking will affect resources listed in or eligible for the National Register. The Trust indicated that the Section 106 review will need to be completed.

Department of Public Safety and Correctional Services noted that the relocation of Md. Rte. 32 would have a positive impact on the average daily traffic volume in the future plus be a benefit to law enforcement and improve the safety of the motorists utilizing this roadway.

Regional Planning Council noted that the project has been included in the Regional Transportation Improvement and was endorsed by the Transportation Steering Committee.

In response to the review request, this letter with attachments constitutes the State process recommendation. The applicant is required to include a copy of this letter with attachments and a statement of consideration given to the comments and recommendation with the application that is submitted to the approving authority. A copy of this statement should also be submitted to the State Clearinghouse. Additionally, you are required to place the State Application Identification (SAI) Number on the application.

The State Clearinghouse must be kept informed if the recommendation cannot be accommodated by the federal approving authority. The Clearinghouse recommendation is valid for a period of three years from the date of this letter. If the approving authority has not made a decision regarding the subject within that time period, information should be submitted to the Clearinghouse requesting a review update.

We appreciate your attention to the intergovernmental review process and look forward to continued cooperation.

Sincerely,

Guy W. Hager
Director, Maryland State Clearinghouse
for Intergovernmental Assistance

GWH:SB:scl

Attachments

cc: Bruce Gilmore - DNR
Sheiala Moskow - DHCD
Mac Voelcker - MDE
Daryl Rawlings - RPC
Betsy Barnard - DHMH
John O'Neill - DPSCS
Skipp Sanders - MSDE
Roland English - DSP

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Regional Planning Council
2225 North Charles Street Baltimore, Maryland 21218-5767 (301) 554-5600
George F. Harrison, Jr., *Chairman* Alfred P. Gwynn, *Executive Director*

March 24, 1988

Mr. Guy Hager, Director
Maryland State Clearinghouse for
Intergovernmental Assistance
Department of State Planning
301 West Preston Street
Baltimore, Maryland 21201

Re: SID #: MD880314-0191
DEIS/4(f) Evaluation-
MD Rt. 32 to MD Rt. 108

Dear Mr. Hager:

On Wednesday, March 23, 1988, I spoke with Sam Baker concerning this project. We had received it early in March for internal review. Enclosed is a copy of our comments to Neil J. Pedersen of MDOT. The project had been included in the Regional Transportation Improvement Program for 1988-1990 and endorsed by the Transportation Steering Committee and RPC in June, 1987.

Howard County will be holding a hearing on this item on Tuesday, March 29 and will send their comments directly to you following the hearing.

If you have any other questions or concerns, please call me.

Sincerely,

Daryl L. Rawlings
Coordinator
Metropolitan Clearinghouse

Enclosure

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Regional Planning Council
2225 North Charles Street Baltimore, Maryland 21218-5767 (301) 554-5600
George F. Harrison, Jr., *Chairman* Alfred P. Gwynn, *Executive Director*

March 24, 1988

Mr. Guy Hager, Director
Maryland State Clearinghouse for
Intergovernmental Assistance
Department of State Planning
301 West Preston Street
Baltimore, Maryland 21201

Re: SID #: MD880314-0191
DEIS/4(f) Evaluation-
MD Rt. 32 to MD Rt. 108

Dear Mr. Hager:

On Wednesday, March 23, 1988, I spoke with Sam Baker concerning this project. We had received it early in March for internal review. Enclosed is a copy of our comments to Neil J. Pedersen of MDOT. The project had been included in the Regional Transportation Improvement Program for 1988-1990 and endorsed by the Transportation Steering Committee and RPC in June, 1987.

Howard County will be holding a hearing on this item on Tuesday, March 29 and will send their comments directly to you following the hearing.

If you have any other questions or concerns, please call me.

Sincerely,

Daryl L. Rawlings
Coordinator
Metropolitan Clearinghouse

Enclosure

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Date: ~~March 17, 1988~~ April 6, 1988

Director
Maryland State Clearinghouse
for Intergovernmental Assistance
301 West Preston Street
Baltimore, Maryland 21201-2365

DEPT. OF STATE PLANNING
RECEIVED
APR -7 1988

SUBJECT: REVIEW COMMENT AND RECOMMENDATION

State Application Identifier: MD880314-0191

Applicant: MDOT -State Highway Admin.

Description: Supplemental DEIS/4(f) Evaluation - Md. Rte. 32 From Pindell School Rd. to Md. Rte. 108

Responses must be returned to the State Clearinghouse on or before April 13, 1988.

Based on a review of the notification information provided, we have determined that:

Check One:

_____ 1) It is consistent with our plans, programs, and objectives. For those agencies which are responsible for making determinations under the following federal consistency requirements, please check the appropriate response:

Federal II N/A BL/MHT It has been determined that the subject has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met for the subject.

_____ It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the subject in accordance with 16 USC 1456, Section 307(c)(1) and (2).

_____ 2) It is generally consistent with our plans, programs, and objectives, but the qualifying comment below is submitted for consideration.

_____ 3) It raises problems concerning compatibility with our plans, programs, or objectives, or it may duplicate existing program activities, as indicated in the comment below. If a meeting with the applicant is requested, please check here _____.

_____ 4) Additional information is required to complete the review. The information needed is identified below. If an extension of the review period is requested, please check here _____.

_____ 5) It does not require our comments.

COMMENTS: Maryland Historical Trust is coordinating with State Highway Administration on this project - SHA still needs to complete Section 196 Review. 1

(Additional comments may be placed on the back or on separate sheets of paper)

Signature: _____

Sheiala R. Moskow
DCA/Housing and Community Dev.
45 Calvert Street
Annapolis, Maryland 21401-1907

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Date: March 17, 1988

Director
Maryland State Clearinghouse
for Intergovernmental Assistance
301 West Preston Street
Baltimore, Maryland 21201-2365

OFFICE OF STATE PLANNING
RECEIVED
APR -7 1988

SUBJECT: REVIEW COMMENT AND RECOMMENDATION

State Application Identifier: MD880314-0191

Applicant: MDOT -State Highway Admin.

Description: Supplemental DEIS/4(f) Evaluation - Md. Rte. 32 From Pindell School Rd. to Md. Rte. 108

Responses must be returned to the State Clearinghouse on or before April 13, 1988.

Based on a review of the notification information provided, we have determined that:

Check One:

1) It is consistent with our plans, programs, and objectives. For those agencies which are responsible for making determinations under the following federal consistency requirements, please check the appropriate response:

   _____ It has been determined that the subject has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met for the subject.

   _____ It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the subject in accordance with 16 USC 1456, Section 307(c)(1) and (2).

_____ 2) It is generally consistent with our plans, programs, and objectives, but the qualifying comment below is submitted for consideration.

_____ 3) It raises problems concerning compatibility with our plans, programs, or objectives, or it may duplicate existing program activities, as indicated in the comment below. If a meeting with the applicant is requested, please check here _____.

_____ 4) Additional information is required to complete the review. The information needed is identified below. If an extension of the review period is requested, please check here _____.

_____ 5) It does not require our comments.

COMMENTS: _____

(Additional comments may be placed on the back or on separate sheets of paper)

Signature: [signature]

Name: John J. O'Neill

Organization: Department of Public Safety and Correctional Services

Address: 6776 Reisterstown Road - Suite 3[illegible]
Baltimore, MD 21215

MARYLAND STATE POLICE

TO Mr. J. J. O'Neill, Dept. Public Safety Corr. Serv. DATE March 29, 1988

FROM Colonel E. Tippett, Superintendent RE: State Planning MD880314-0191
Howard County

XX For your information	___ Take charge of
XX As requested	___ For additional information
___ Approve and return	___ For comment/recommendation
___ Note and return	___ Give me facts so I can answer
___ See me	___ Prepare reply for my signature

A review of the relocation of Maryland Route 32 reveals no adverse impact on vehicular traffic. It would only seem to have a positive impact on average daily traffic volume in the future, be of a benefit to law enforcement, and improve the safety of the motorists that will use the new Maryland 32.

ET:dlc

Form 17

Director
Maryland State Clearinghouse
for Intergovernmental Assistance
301 West Preston Street
Baltimore, MD 21201-2365

Date: 20

RECEIVED
APR 22 1988

SUBJECT: REVIEW COMMENT AND RECOMMENDATION

State Application Identifier: MD880314-0191
Applicant: MDOT - State Highway Admin.
Description: Supplemental DEIS/4(f) Evaluation - Md Rte 32 from Pindell School Rd. To Md. Rte 108.

Responses must be returned to the State Clearinghouse on or before 4/13/88.

Based on a review of the notification information provided, we have determined that:

Check One:

_____ 1) It is consistent with our plans, programs, and objectives. For those agencies which are responsible for making determinations under the following federal consistency requirements, please check the appropriate response:

_____ It has been determined that the subject has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met for the subject.

_____ It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the subject in accordance with 16 USC 1456, Section 307(c)(1) and (2).

_____ 2) It is generally consistent with our plans, programs, and objectives, but the qualifying comment below is submitted for consideration.

_____ 3) It raises problems concerning compatibility with our plans, programs, or objectives, or it may duplicate existing program activities, as indicated in the comment below. If a meeting with the applicant is requested, please check here _____.

_____ 4) Additional information is required to complete the review. The information needed is identified below. If an extension of the review period is requested, please check here _____.

_____ 5) It does not require our comments.

COMMENTS: Please provide additional information on the scope of the hydrology for the wetlands to be affected by Alternative "B", the most sensitive of the proposed alignments 2

(Additional comments may be placed on the back or on separate sheets of paper)

Signature: L. Merrill (Acting)

Name: _____

Organization: _____

Date: March 17, 1988

Director
Maryland State Clearinghouse
for Intergovernmental Assistance
301 West Preston Street
Baltimore, Maryland 21201-2365

SUBJECT: REVIEW COMMENT AND RECOMMENDATION

State Application Identifier: MD880314-0191

Applicant: MDOT -State Highway Admin.

Description: Supplemental DEIS/4(f) Evaluation - Md. Rte. 32 From Pindell School Rd. to Md. Rte. 108

Responses must be returned to the State Clearinghouse on or before April 13, 1988.

Based on a review of the notification information provided, we have determined that:

Check One:

_____ 1) It is consistent with our plans, programs, and objectives. For those agencies which are responsible for making determinations under the following federal consistency requirements, please check the appropriate response:

_____ It has been determined that the subject has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met for the subject.

_____ It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the subject in accordance with 16 USC 1456, Section 307(c)(1) and (2).

__X__ 2) It is generally consistent with our plans, programs, and objectives, but the qualifying comment below is submitted for consideration.

_____ 3) It raises problems concerning compatibility with our plans, programs, or objectives, or it may duplicate existing program activities, as indicated in the comment below. If a meeting with the applicant is requested, please check here _____.

_____ 4) Additional information is required to complete the review. The information needed is identified below. If an extension of the review period is requested, please check here _____.

_____ 5) It does not require our comments.

COMMENTS: See Attached

(Additional comments may be placed on the back or on separate sheets of paper)

Signature: V Tauber

Name: V. Tauber 4/12/88

Organization: DNR/Water Resources Administration

Address: Annapolis, Md. 21401

Response to Maryland Department of State Planning:

1. The project will have no effect on standing historic structures (see letter dated July 29, 1988 and May 15, 1987).

   Detailed archeological investigations are underway to determine if affected sites are eligible for the National Register of Historic Places.

2. Detail hydrological and hydraulic studies will be performed during the design of the project. This information will be furnished with permit applications. Alternate B has the least impact upon floodplain and other environmental resources.

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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

March 31, 1988

MEMORANDUM

TO: Michele A. Huffman
Waterway Permits Division

FROM: Denise H. Clearwater DC
Non-Tidal Wetlands Division

SUBJ: Md. 32 from Pindell School Road to Md. 108, Howard Co.
WRA File Nos. 88-WC-0160 & 88-WC-0161

1.	Fig. 12 & 15	Stormwater ponds should be located out of wetlands if possible.	1
2.	Fig. 14 & 15	The site for possible future access should be shifted to the west to reduce wetland impacts.	2
3.	p. IV-30	The Department should have the option to request mitigation at a greater than 1:1 ratio if appropriate.	3

DHC:mw

cc: Charles A. Wheeler

Response Maryland Water Resources Administration:

1. Stormwater management ponds will not be located in wetland areas if possible.

2. There is no site for future access. The circle upon the mapping is to inform the public that the planned development indicates an interchange could be necessary in the future. If such an interchange is constructed, it will be the responsibility of the county and/or developers.

3. The Federal Highway Administration does not permit wetland replacement at a ratio greater than 1:1.

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Maryland Department of Natural Resources

Tidewater Administration
Tawes State Office Building
580 Taylor Avenue
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

March 24, 1988

Memorandum

To: Michele A. Huffman
Waterway Permits Division

From: W. P. Jensen, Director
Fisheries Division

Subject: Fisheries Division's comments on the Supplemental Draft Environmental Impact Statement Maryland Route 32 from Pindell School Road to Maryland Route 108: Howard County SHA Contract No. HO-292-202-770: Middle Patuxent River drainage.

The following comments on the subject Supplemental Draft Environmental Impact Statement were prepared by Jeff Mosley and represent this Division's views.

In general, the Supplemental DEIS does not adequately describe the impacts to aquatic and wetland, wildlife resources; in many instances, impacts throughout the watershed are grossly minimized altogether. 1

From an aquatic resource viewpoint, the most immediate environmental impact from the proposed construction will be increased sediment loading in Cricket Creek, Middle Patuxent River and its tributaries. Maryland DNR Fisheries Division has survey records of the Middle Patuxent River drainages supporting 18 species of fin-fish (Carter, 1986).

The Supplemental DEIS does address the sediment problem, but considers it a minor and temporary impact occurring only during active construction phases of work. 2

The potential long-term adverse impacts are not sufficiently explored. A review of the extensive literature and field surveys would have more adequately highlighted the real, cumulative long-term effects. The most serious long-term environmental impact on aquatic resources from the proposed highway construction will be acceleration of the conversion of climax woodland, prime farmland, non-tidal wetlands, and old-field wildlife habitats to residential and commercial uses from highway expansion. 3

Telephone: _____

Comparing Figure III - 27 with III - 28 shows a severe conversion of wooded/cultivated open space to mixed residential/industrial development throughout the Middle Patuxent River watershed. This is no doubt facilitated from the proposed new highway construction. These land-use changes in terms of reduced evapotranspiration, reduced infiltration, accelerated runoff, increased sediment loading, decreased groundwater (wells) and a general degrading of water quality need to be more adequately discussed in an environmental public document. 4

Page specific comments are as follows:

Page S-4: SHA will be required to obtain permit approval from DNR Tidewater Administration's Costal Zone Management Program. 5

Page S-5: Fisheries Division considers floodplains as wetland unless the SHA can demonstrate a lack of hydrophytes and hydric soils. 6

Page S-10-D-29: Fisheries Division's first preference is the No-Build Alternate. Fisheries Division was not given the opportunity to thoroughly analyze all alternates in the field. Furthermore, all alternates were not reviewed at the SHA Quarterly Interagency Meetings. According to the National Environmental Policy Act (1978) 1501.7, "There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." 7

Page S-11, No. 38.: Even though this proposed project is in accord with the Howard County Master Plan, the proposed project cumulative impacts is inconsistent with the Patuxent River Policy Plan (1984). 8

Page III-6-1.a: The EAF Form has No. 5 marked no, but the AFFected Environment text states, as much as 20% slopes occur in the vicinity of streams. Which statement is correct? 9

Page III-7 (Table 3): Fisheries Division is concerned if any of the study area soils are hydric soils and where they exist. Fisheries recommends the inclusion of a soils map of the study corridor. 10

Page III-8-2 (a): Fisheries Division is concerned with the inadequate information on Surface Water. The Supplemental DEIS has no physical or chemical documentation of the 8 stream crossings. Fisheries Division recommends that the FEIS contain the following documentation (can be a Table): 11

1. Stream name
2. Location
3. Order
4. MDE Class
5. D.O.
6. Temperature
7. Conductivity
8. Discharge Volume
9. Width (ft.)
10. Depth (in.)
11. Fauna
12. Flora
13. Color
14. Odor

Page III-10-3 (b): Fisheries Division recommends a listing or field survey be conducted to determine what fish and macroinvertebrates exist in the study area. 12

Page III-10-3 (b): Fisheries Division rejects the rationale "Smaller tributary streams probably provide minimal aquatic habitat because their flow is less reliable during dry conditions." 13

According to (Carter, 1986), the intermittent, ephemeral, and low order perennial streams are the locus, along with their floodplains, for the beginning steps of the process. It is in these areas that large particles begin to be reduced and transformed by the organisms specialized to perform these functions. Other reaches of stream-and-river continum do not have the abilities for the most part to carry out the initial stages of processing. Biota farther downstream are generally adapted to conditions in the river that are more typical of larger streams, e.g. slower flows, more sunlight and in-stream photosynthetic production, finer organic food particles, more silty bottoms. It is not that CPOM processors do not occur at all in larger-order streams, but that on the one hand they do not occur as abundantly, and on the other, there is less in the way of CPOM to support them. The small headwater areas have adapted and evolved to be the most efficient at the initial steps of recycling.

This capacity is efficiently located, since the small headwater streams are those which penetrate into the watershed in the greatest degree. The large fraction of stream miles which is made up of ephemeral, intermittent and low order streams make available to higher order streams the terrestrial primary production of a vast area of land which would not otherwise be available to the larger rivers. Leopold, et al (1964) estimate that in the northeastern United States the drainage density of streams (length of stream per square unit area of land) ranges between 1 and 2.5 kilometers per square kilometer. Hynes estimates that about 1.0 square kilometer of land maintains about 1.4 linear kilometers of headwater stream.

Page III-12 (Table 4): Fisheries Division recommends each wetland site document:

1. Location
2. Hydric soil type or inclusions
3. Hydrophytes
4. Hydrology source

If this information is not available, Table 5 is of no value to Fisheries Division's Environmental Review Program.

Page III-17-Birds: Fisheries Division is concerned with the inadequate documentation of the value of riparian habitats to avian population within the project area.

Page IV-6-B: Fisheries Division recommends as priority practices, first limited tree cutting and shrub grubbing, (2) retaining streams/floodplains in natural state, and then infiltration of stormwater sheetflow. Fisheries does not view erosion and sedimentation degradation a minor effect in watersheds.

Page IV-7-2 (a): Fisheries Division strongly recommends bridges at the Middle Patuxent River crossing at Pindell School Road/Cedar Lane and the Cricket Creek crossing. Moreover, Fisheries would appreciate early coordination in the design planning phase of all hydraulic structures on this project. 14

Page IV-7 C 2: Fisheries has the following statement:

With the application of available erosion control technology, significant impacts to surface water and erosion control plans, if adequately maintained, will cause little damage to aquatic resources. Unfortunately, flawless implementation is not usually the case (I-97 Sec. A and E). Although erosion and sediment control techniques have significantly reduced the magnitude of sediment runoff, it has been estimated by the MDE Stormwater Management Section that about 70% effectiveness is the maximum that can be achieved. In addition to this, if control plans are not regularly maintained, their effectiveness will be even further reduced. 15

A more realistic evaluation of the potential damage to aquatic resources from sedimentation must be developed and implemented in the final FEIS.

Page IV-9-3: Fisheries acknowledged the SHA statement: "Generally, the larger the impervious area, the higher the percentage of pollutants from highway runoff that become concentrated in the streams and rivers." Fisheries Division is concerned what specific measures will be employed to minimize this process! An additional 40 acres of disturbance will increase runoff curve numbers and stormwater flows. 16

Page IV-10-5 (a): Fisheries is concerned with the inadequate Terrestrial Habitat section. SHA states in the AFFected Environment section (III-10-3-(a)) "This edge habitat is typically very beneficial for small game animals and birds, as are the areas of regrowth on the abandoned agricultural lands." No mention is made of potential impacts to amphibians, reptiles, birds or mammals in these "destroyed" habitats. The loss of 40 acres of varied habitats will contribute significantly to forest/floodplain fragmentation of the remaining habitat areas.

Fragmentation increases the likelihood of local extirpation of terrestrial populations and reduces the chances for re-establishment.

Woodlands are complex ecosystems where seedlings work through insect tunnels. The roots stimulate fungi changes that release chemicals that help young plants to grow. The fungi also fruit (truffles) that feed small mammals, thus a complex food web is established. Terrestrial habitat is not just woodland acreage numbers. The final FEIS should investigate and highlight these phenomenon.

Page IV-11-15: The State Highway Administration has presented a good treatment of "EFFects on Wetlands" in this Supplemental DEIS. However, Fisheries Division has the following comments: (ROW = Right-of-Way)

1. Fisheries Division will recommend denial of any stormwater management ponds/basins in wetlands, floodplains or headwaters (Figures 12, 13, 15, 16) and the Middle Patuxent River Environmental Area. According to MD Department of the Environment "Section 401 Water Quality Certification Stormwater Management Assessment Guidelines (1987)" C., "The conversion of a naturally occurring aquatic system to a pollutant removal facility is not acceptable", and Retention (B) "Wet ponds shall be constructed in upland areas adjacent to naturally occurring wetlands and waterways"; Detention (5) "If the detention pond is located in a naturally occurring aquatic system (waterway and wetland), construction in the wetland shall be limited to the placement of a berm and discharge structure" unless the waterway is Class III or IV Waters. 17
2. At FEIS revision, W1 and W2 ROW/slope reduction (Bridge W-2).
3. At FEIS revision, W4 ROW reduction and selective cutting and grubbing.
4. At FEIS revision, SHA should bridge Cricket Creek and reduce ROW.
5. At FEIS revision, reduce ROW and minimize cutting and grubbing (grading). A bridge is first preference at W-10 and W-11.
6. At FEIS revision, W-12 ROW/slope reductions and limited clearing.
7. At FEIS revision, W-13 ROW/slope reduction or retaining wall (avoidance).
8. At FEIS revision, W-14 ROW/slope reductions.
9. At FEIS revision, W-16, 17, and 18 reduce ROW/slope or construct retaining walls.
10. At FEIS revision, W-19 should be bridged entirely. If the 100-year floodplain is not bridged, Fisheries Division will recommend denial of all permits required.

Fisheries Division strongly recommends these comments and revisions be considered in accordance with:

Executive Order 11990, U.S. EPA Q(b) (1) Guidelines, Section 401 Water Quality Certification Stormwater Management Assessment Guidelines, U.S. Fish and Wildlife Service NEPA Review and the U.S. Army Corps of Engineers. 17

Page IV-16-C: This paragraph exacerbates Fisheries Division and ecological review in general. The Appendices' Section does not include a fin-fish species list or even a "laundry list" of the fauna expected within the study area.

Page IV-16: Fisheries Division recommends no instream construction activities between March 1 and June 15 inclusive.

Page IV-16-d: Fisheries Division recommends spring (1988) surveys for : Woodland Agrimony, Smalls Ragwort, Water-Plantain Spearwort and Whorled Mountain-mint because the DNR has revised regulations (1987) concerning State threatened and endangered species, or habitats in need of conservation (Patuxent River Environmental Area). These species inhabit riparian woodland habitats. 18

LITERATURE CITED

Carter, W.R. III, pers. comm. 2/17/88. MD Dept. of Natural Resources, Tidewater Administration, Fisheries Division, Environmental Review and Habitat Protection. Annapolis, MD 21401.

Hynes, H.B.N. 1970. The Ecology of Running Waters. University of Toronto Press

Leopold, Aldo. 1949. A Sand County Almanac. Oxford University Press, Oxford, England. 226 pp.

MD Dept. of State Planning. 1984. Patuxent River Policy Plan: A Land Management Strategy. Baltimore, MD

MD Dept. of the Environment, 1987. "Section 401 Water Quality Certification Stormwater Management Guidelines." Baltimore, MD

US Dept. of Agriculture, Soil Conservation Service, 1961. Soil Survey. Howard County, MD

US Council on Environmental Quality, Executive Office of the President, 1978. Regulations of National Environmental Policy Act (NEPA). US Government Printing Office. Washington, DC

WPJ/JM/me

cc Bob Zepp - U.S.F.W.S.
Denise Clearwater - D-4
Ms. Cynthia D. Simpson - SHA

Response to Tidewater Administration:

1. The project will have minimal adverse impacts upon the watershed. SHA cannot describe impacts which will not occur.

2. This statement is correct.

3. This statement is supposition at best. As stated on Page I-2, the project is for the safety of existing through traffic. The document refers to planned development which will further exasperate the existing unsafe conditions if this project is not constructed.

4. Howard County has approved the high level of development in the Columbia area without this highway improvement; therefore, assumptions made by the DNR writer are incorrect.

5. See Cover letter by the Department of State Planning as the DNR writer's statement is incorrect.

6. A wetland field review was held on August 25, 1987. The U.S. Army Corps of Engineers representative agreed with SHA's wetland delineations. See Appendix A for details.

7. Mr. Ken Yutman represented the Maryland Department of Natural Resources at the August 25, 1987 field review. The writers comment is dated March 24, 1988. SHA considers seven months more than ample time for Fisheries Division to make field trips, gather data and analyze the data. Also, Fisheries Division has been aware of the project since the early 1970's. See page I-1 for details.

8. The suggested cumulative impacts is speculation on the DNR's writer's part.

9. As stated, the project which is approximately 4 miles long, will be constructed on terrain with slopes ranging from 0 to 10%. There are slopes greater than 20% in the vicinity of streams. SHA does not prefer the 4(f) avoidance alternative which would require construction within terrain having steep slopes because of the greater cost. See page IV-30 for details.

10. SHA values Fisheries recommendations, however FHWA and other review agencies are opposed to containing extraneous information within environmental documents.

11. Fisheries Division has developed data on Cricket Creek and the Middle Patuxent River. The other 6 stream crossings are intermittent (meaning they contain water only when it rains hard).

12. See responses 10 and 11.

13. Crossings of drainage swales and/or intermittent streams will be sized such that the hydrology will be unaffected.

14. Fisheries Division's comments will be noted and considered during the design of the project.

15. SHA will obtain the necessary permits and will inform the contractors to comply with them.

16. Runoff will be treated for quantity and quality through stormwater management techniques prescribed by the Department of the Environment.

17. Structures will be sized in accordance with accepted hydrolic practice. Stormwater management ponds will be located and constructed within the parameters of the required permits.

18. The noted species are not federally listed nor are they within the project area.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
DIVISION OF ECOLOGICAL SERVICES
1825 VIRGINIA STREET
ANNAPOLIS, MARYLAND 21401

September 3, 1987

Ms. Cynthia D. Simpson
Chief, Environmental Management
Maryland Department of Transportation
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

Dear Ms. Simpson:

This responds to your recent requests for information on the presence of Federally listed endangered or threatened species within the following project areas:

PDMS No.	Project	County
132059	MD Rt. 32 relocation	Howard
032119	MD Rt. 43 ext'n from I-95 to Rt. 150	Baltimore
042035	MD Rt. 4/260 interchange improvements	Calvert
251036	I-95 widening	Baltimore and Harford

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species are known to exist in the project impact areas. Therefore, no Biological Assessment or further Section 7 Consultation is required with the Fish and Wildlife Service (FWS). Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to endangered species under our jurisdiction. It does not address other FWS concerns under the Fish and Wildlife Coordination Act or other legislation.

Thank you for your interest in endangered species. If you have any questions or need further assistance, please contact Judy Jacobs of our Endangered Species staff at (301) 269-5448.

Sincerely yours,

G. A. Mor

for Glenn Kinser
Supervisor
Annapolis Field Office

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
DIVISION OF ECOLOGICAL SERVICES
1825 VIRGINIA STREET
ANNAPOLIS, MARYLAND 21401

September 9, 1987

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
Maryland State Highway Administration
707 North Calvert Street
Baltimore, MD 21203-0717

Re: Route 32, from Route 108 to Pindel School Road, Howard County, MD; Contract#: H0292-202-770

Dear Mr. Ege:

The Service participated in the August 25, 1987, field review of the subject project. Due to time constraints, we reviewed only five of the nineteen sites identified by your consultants. We are planning to field review the remaining sites in the near future. We were informed during the field review that SHA is presently determining whether to pursue preparation of a supplemental environmental impact statement. We would encourage such action due to the antiquity of the existing environmental document. We would urge you, however, to endeavor to present a thorough environmental analysis of this segment of the Route 32 project as well as a discussion of the entire Route 32 project.

We understand that SHA is investigating an alternative located just west and east of existing Trotter Road and south of the preferred alternative (Alternative 3). Since we did not field review any of the site specific crossings associated with this alternative, we suggest that at an upcoming quarterly meeting you provide aerial photography that has the wetland areas delineated and both build alternative alignments shown. Recent, color-infrared, late winter/early spring photography is most useful in determining the presence of forested wetlands, the type of wetland primarily impacted by this project. In addition, we suggest preparation of a wetland table identical to the one provided for the Alternative 3 field review.

At this time we would like to apprise you of several of our concerns as a result of the recent field review.

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Loss of forested habitat:

Much of the existing corridor on this contract is presently rural agricultural land and forested wetlands, floodplains, and/or uplands. We are very concerned with fragmentation of the present forested system by the proposed roadway construction and the development that is ultimately tied to this transportation system. In order to effectively deal with the adverse ecological effects of forest fragmentation, as well as other environmentally damaging impacts resulting from this proposal, we suggest that you invite a representative from the Howard County Planning and Zoning Office to attend a meeting on this project with SHA and interested State and Federal environmental review agencies. Ideally, this should occur prior to completion of the supplemental environmental document so that pertinent information is available for inclusion in the document. We believe that SHA must assume responsibility for road construction impacts and implement feasible measures to avoid, minimize and compensate for those impacts. However, we also believe that secondary impacts associated with new roadway construction, such as development, must also be addressed. Prior experience has led us to believe that local government input with respect to secondary impacts is a viable means of pursuing solutions to these secondary impacts. 1

Stream relocation at Site 2:

Present design plans show that an entire stream is proposed for relocation. The stream is relatively unblemished from sedimentation effects. It is a meandering, staircase-bedrock stream canopied with a diverse assemblage of vegetation. Numerous small organic debris dams line the stream, providing steady, yet tempered flow of organic matter to downstream reaches. Such dams are important in the trophic structure of aquatic communities (Bilby and Likens 1980). Due to the stream's geologic formation, its relatively undisturbed quality, and its contribution of organic matter to the Middle Patuxent River, we strongly recommend that you investigate design modifications to avoid or significantly reduce the amount of stream relocation. We do not believe that replication of the stream is possible. Any attempt to do so will involve a significant input of time, effort and money with an unsuccessful result. It appears that the most feasible means of eliminating the relocation altogether, or at least seventy-five percent of it, is to narrow the limit of disturbance to half of what is now proposed and bridging the streams and adjacent floodplain. We also suggest that you investigate shifting the alignment north or south, although impacts to another stream or existing community are possible. However, we request that you explore all design modifications and present your findings at a quarterly meeting. 2

Our comments are provided at this time in order to alert you to the need for additional information and coordination prior to preparation of the supplemental environmental document. We are willing to provide any comments to you in order to facilitate the design and construction of an environmentally sound project.

We would appreciate a response regarding our requests for information and additional coordination on this segment of the Route 32 project at your earliest convenience.

Sincerely,

Supervisor
Annapolis Field Office

Reference

Bilby, R. E. and G. E. Likens. 1980. Importance of organic debris dams in the structure and function of stream ecosystems. Ecology 61(5):1107-1113.

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Response to United States Department of The Interior.

Note: These concerns were fully addressed at the interagency meeting held on October 21, 1987 and January 20, 1988. The responses were as follows:

1. There is development planned by Howard Research and Development Corporation. The proposed development includes their own roadway system and will occur without the SHA project. Our project is to replace existing substandard roadway which is an existing transportation problem unrelated to proposed development. Howard County personnel have been actively involved in this project. Members from Howard County Planning and Zoning were involved in the Scoping Meeting (6-27-85); Team Review for Alternates (4-10-86); Team Selection Meeting (4-27-88); and Team Recommendations to SHA (7-21-88).

2. The concept shown in this document (and to the D.O.I. at the field review) is not a design plan but a concept to assess "worst case" environmental impacts. When the project is advanced to the design phase, every effort will be made to reduce or eliminate impacts to the referenced intermittent stream, as well as all other potential environmental impacts. It should be noted that the initial construction of the Md. 32/Md. 108 intersection will be at grade. When the full interchange, including ramps, is constructed, measures will be incorporated to direct the runoff into the existing stream system to ensure that the nutrients will continue to be carried into the riverine system.

C. Correspondence not requiring responses

Howard County MARYLAND

DEPARTMENT OF RECREATION AND PARKS

Elizabeth Bobo, County Executive
William M. Mitchell, Director

August 22, 1988

Ms. Cynthia Simpson, Chief
Environmental Management
State Highway Administration
707 North Calvert Street
Baltimore, MD 21203-0717

RE: Contract No. HO 292-202-770
Relocated Rt. 32

Dear Ms. Simpson:

This letter is in response to an inquiry by Wes Glass regarding the funds used to acquire the Middle Patuxent Natural Environmental Area.

Please be advised, this site is funded by State of Maryland, Program Open Space Funds and is subject to the conversion regulations of that Program.

There are no Federal Land and Water Conservation Funds in the Middle Patuxent project.

Enclosed is a Comprehensive Sketch Plan for the Middle Patuxent Area, to assist you with the boundary identification of the park. Although this is not a final approved plan, we do not anticipate any additional changes to the boundary.

Any measures you can take to reduce the impact of the road to the park, and the surrounding environment, will be appreciated.

Sincerely,

William M. Mitchell
Director

WMM/KMA,JR./db

cc: Wes Glass

enclosure

3300 North Ridge Road, Suite 170 • Ellicott City, Maryland 21043 • (301) 992-2480 • TDD 992-2323

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Memorandum

U.S. Department of Transportation
Office of the Secretary of Transportation

Subject: Draft Environmental Impact Statement
Relocated Maryland Route 32
Pindell School Road to MD 108, Howard County
FHWA-MD-EIS-87-07-DS

Date: APR 26 1988

From: Eugene L. Lehr
Chief, Environmental Division

Reply to Attn. of:

To: Eugene W. Cleckley
Chief, Environmental Operations
Division, HEV-11

We appreciate the opportunity to review the subject DEIS. We have no comments.

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State of Maryland

PROJECT DEVELOPMENT
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DEPARTMENT OF THE ENVIRONMENT

201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201
AREA CODE 301 • 225-

William Donald Schaefer
Governor

Secretary

March 10, 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
Project Development Division
707 North Calvert Street, Room 310
Baltimore, Maryland 21202

RE: Relocated Maryland Route 32
from Maryland Rotue 108 to
Pindell School Road
PDMS No. 132059
Contract No. HO 292-202-770

Dear Ms. Simpson:

I have reviewed the air impact analysis performed for the proposed relocation of Maryland Route 32 between Maryland Route 108 to Pindell School Road and concur with its conclusions.

Given the expected increase in traffic predicted for the region, the Department believes that the build alternatives will yield the best air quality for the area.

The proposed project is consistent with the transportation control portion of the State Implementation Plan for the Metropolitan Baltimore Intrastate Air Quality Control Region. Furthermore, adherence with the provisions of COMAR 10.18.06.03D will ensure that the impact from the construction phase of this project will be minimal.

Thank you for the opportunity to review this analysis.

Sincerely,

Mario Jorquera

Mario E. Jorquera, Chief
Division of Air Quality Planning and
Data Systems
Air Management Administration

MEJ:abs

MARYLAND HISTORICAL TRUST

William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

June 17, 1988

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
State Highway Administration
Maryland Department of Transportation
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Phase I Archeological Reconnaissance
Maryland Route 32 from Maryland Route 108 to Pendell School Road
Contract No. H292-202-770
P.D.M.S. No. 132059
Howard County, Maryland

Dear Mr. Ege:

Thank you for sending us a copy of the executive summary of the Phase I archeological reconnaissance conducted of the above-referenced project. The survey identified three archeological sites, 18HO80, 18HO148 and 18HO149. Two of these sites, 18HO80 and 18HO149 would be affected by construction of any of the three alternate routes. Site 18HO148 would be affected by construction of the southernmost alternate, designated alternate 4. In order for this office to complete its review of the project and concur with the presented recommendations, we require more detailed information concerning the Phase I survey methodology and results. Below we have outlined those issues which warrant clarification:

1) A map depicting the boundaries of 18HO80,, described on page 1 as the Simpsonville town site and on page 6 as the Simpsonville Stone Ruins, is provided in Figure 2. The executive summary recommends that the routes of Cedar Lane and Guilford Avenue be redesigned to avoid the site boundaries as shown on Figure 2 and, if this is not possible, that additional archeological work be performed to determine the National Register eligibility of 18HO80.

On the basis of the information offered in the executive summary, we are unable to make recommendations concerning avoidance and/or mitigation at site 18HO80 at this time. Given the limited extent of subsurface testing (5 shovel tests) and the limited background research conducted, we do not consider that the boundaries of Site 18HO80 have been adequately defined. We note that the Maryland Structures Inventory lists an historic structure within the project area and outside the boundaries shown on Figure 2 diagonally across the intersection of Route 32 and Cedar Lane, HO525, the Hatfield residence (See attached map and inventory form). According to the inventory form, the field stone foundation of this structure may date to the mid 18th century when the building was associated with the grist mill in the vicinity. While this office has determined that the historic structure HO525 is not eligible for inclusion on the National Register, the historic archeological resources dating from the mid 18th century associated with this structure are potentially eligible for the National Register on the basis of the information which they may contain concerning the historic settlement of Simpsonville.

In addition, the 1860 Martenet map of Howard County shows numerous structures located on both sides of what is now Route 32 (See attached map). This office recommends additional Phase I testing of Area 17. The level of work should be sufficient to locate and identify the additional historic sites predicted to exist on the basis of cartographic evidence and to provide a preliminary assessment of their eligibility for inclusion on the National Register. Additional background research is also recommended to provide an assessment of the area's potential to contain archeological resources dating to the 18th and early 19th centuries.

2) South and east of Area 17, an historic structure listed on the Maryland State Inventory, HO165, the Owings-Myerly House or the Vogel House, is located within the project area. (See attached map and form) This structure appears on the 1860 Martenet as the May H. A. Owings residence and on the 1878 Hopkins as the John J. Myerly residence. While this office has determined that the historic structure itself is not eligible for the National Register, the archeological resources associated with the property are potentially eligible under both criteria B and D. According to the inventory form, the land is associated with the Owings family, a family prominent in Howard County history. The older portion of the house is believed to have been built prior to 1850. We recommend that phase 1 testing be conducted in the vicinity of the Vogel House to locate and identify the predicted subsurface cultural levels and features, determine the site's boundaries, stratigraphy, evidence of disturbance and information potential.

3) Areas 8 and 9 were not tested because access was denied. Please clarify why these areas and other hilltops were initially selected for testing, if as indicated on pages 3 and 4, their elevation and distance from the Middle Patuxent River is typical of locations with a low potential for significant prehistoric resources. Further, we note that area 8 is located in the vicinity of an historic structure listed on the Maryland inventory, HO164, Clifton/Wellings Stone House. This historic structure is located on a tract of land potented in 1712 called "White Wine and Claret." The house itself is believed to have been built c. 1818 and has been determined to be eligible for the National Register. Given the structure's proximity to the proposed right of way, it is possible that archeological resources dating to the 18th and early 19th century use and occupation of the property are located within the project area. For the above reasons, this office recommends that a Phase I survey be conducted of both areas 8 and 9 in conjunction with additional background research to evaluate the potential for 18th and early 19th archeological resources associated with the historic tract "White Wine and Claret."

4) Another historic structure listed on the Maryland Inventory and determined to be eligible for the National Register and located in close proximity to the project area is HO158, River Hill Farm. This structure appears on the 1860 Martenet as the residence of Mary H. W. Owings and on the 1878 Hopkins as the residence of Richard B. Owings. The property was part of a 500 acre tract called Four Brothers Portion. The main body of the house dates before 1840. The inventory form mentions a well, smokehouse and tenant house associated with the farm. Since the historic access road to the farm lies within the project area, we recommend that a phase 1 survey be conducted of the project area south of HO158 in conjunction with site specific background research to investigate the potential for historic archeological resources associated with the 19th century use and occupation of the property.

5) We recommend that the 1860 Martenet Map and 1878 Hopkins Atlas of Howard County be studied with greater care to locate areas with high potential for the presence of historic archeological resources. Also, it should be noted that this section of Howard County has been occupied since the 18th century and that the later 19th century atlases underrepresent the archeological resources of the 18th and early 19th centuries. Secondary histories of the area and persons knowledgeable in local history, such as Mr. Lee Preston, President of the Upper Patuxent Archeology Group (301-465-7545) and Mr. Ed Shull of the Howard County Department of Recreation and Parks (301) 992-2480 can provide helpful guidance along these lines.

6) Finally, test areas 7, 10, 11, 14, 15, and 16 are described as having 20% visibility or less. Pedestrian survey yielded no cultural material. No subsurface testing was performed. If lack of habitable terrain is considered to indicate a low potential for prehistoric resources, then justification for the initial selection of areas 7 and 10 should be provided. This office strongly questions whether surface examination alone was sufficient survey coverage of these areas. A clearer discussion of the process of selecting areas for testing and of the testing methodology is needed in the executive summary.

Once the additional requested information has been provided, this office will be able to make an informed review of the project with appropriate recommendations. If you have any questions concerning these comments or require further assistance, please do not hesitate to contact Dr. Ethel R. Eaton of my staff at (301) 757-9000.

We look forward to receiving a copy of the final survey report when it is available.

Thank you for your cooperation and assistance.

Sincerely,

Richard B. Hughes

Richard B. Hughes
Chief Administrator
Archeological Programs

RBH/ERE/mmc
enclosures
cc: Ms. Cynthia Simpson
Ms. Rita Suffness
Mr. Tyler Bastian
Mrs. Mary Louise Gramkow
Mr. Ed Shull
Dr. Ira Beckerman
Mr. J. Rodney Little

W-25 229

Maryland Department of Natural Resources

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218
Telephone: (301) 554-5500

PROJECT DEVELOPMENT

JUL 6 12 35 PM '88

Division of Archeology
(301) 554-5530

6 July 1988

Mr. Louis H. Ege, Jr.
Deputy Director
Division of Project Development
State Highway Administration
P.O. Box 717/707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Maryland Route 32 from Maryland Route 108 to Pindell School Road, including the Maryland Route 32/Trotter Road Interchange
Contract No. HO 292-202-770

Dear Mr. Ege:

We have received a copy of the 17 June 1988 letter from Richard Hughes, concerning the executive summary (prepared by Richard Ervin 30 September 1987) from the above-referenced project. In that letter, Mr. Hughes requested clarification on a number of issues.

1a. The primary purpose of a Phase I survey is to identify the presence or absence of archeological resources. In instances when there is sufficient information, we are able to argue for significance or non-significance. Otherwise, Phase II investigations are recommended. Site 18HO80 was argued as being potentially significant. We recommended avoidance. If that was not possible, we recommended a Phase II evaluation of significance. We feel that all of the questions in the first third of Issue 1 would be better addressed if and when a Phase II evaluation would be conducted.

1b. The Hatfield residence (HO268), misidentified as HO525 in the Trust's letter, is 20 m outside of the right-of-way.

1c. Extensive use was made of the 1860 Martenet map, the 1878 Howard County Atlas, the 1885 Martenet map, and the 1926 USGS 15 minute topographic map. Because the submitted document was an executive summary and not a final report, this background research was not included. It will be described in the final report.

2. We agree that Phase I testing should be conducted in the vicinity of standing structures, such as the Vogel house, to determine if there are archeological resources associated with the structure (cf. **Guidelines for Federal Agency Responsibilities, Section 110 of the NHPA**, 53FR4727-4746: Part IV, Subsections **110(a)(1)**,(c)(1)(ii) and **110(a)(2)**,(a)(6)(iii)). We feel that other issues of site boundaries, subsurface deposits, and integrity are better handled through Phase II site evaluation.

3a. Areas 8 and 9 are on hilltops, which generally have a medium probability for prehistoric site occurrence. We agree that both locations should be subjected to Phase I testing.

3b. We agree that Phase I testing for historic resources should be conducted in the vicinity of Ho164.

4. River Hill Farm (18Ho158) is 70 m outside of the project right-of-way. Outbuildings are also outside the project right-of-way. The associated right-of-way south of Ho158 was substantially tested, yielding no important material.

5a. See response 1c.

5b. Mr. Preston was contacted. See response to 1c.

6a. Surface inspection for sites where the ground visibility is less than 100 percent is judged adequate by the supervisory archeologist when the archeologist believes that the chances for identifying material on the surface are greater than by shovel testing. When ground visibility is poorer, the spacing between rows is reduced. We would be willing to work with the Trust and COMA to develop guidelines for surface inspection, provided that such guidelines are not limited to a single measure of percent surface visibility. We feel the issue is complicated, requiring extensive study. We would be eager to provide field tests for an appropriate methodology.

6b. Areas 7 and 10 are on stream valleys, which were assigned a high probability of prehistoric site occurrence prior to fieldwork. However, field survey of these areas showed them to be composed of steep terrain unsuitable for habitation. Areas 7 and 10 were subsequently classified as having low potential.

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MARYLAND HISTORICAL TRUST

PROJECT DEVELOPMENT

AUG

William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

July 29, 1988

Ms. Cynthia Simpson, Chief
Environmental Management
Maryland Department of Transportation
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. HO 292-202-770
Relocated Maryland Route 32 from
Cedar Lane/Pindell School Road to
Maryland Route 108
PDMS No. 132059

Dear Ms. Simpson:

Our office concurs with your opinion that Alternate B will not affect the two NR-eligible properties River Hill (HO158) or the Wellings Stone House (HO164).

Thank you for your cooperation.

Sincerely,

George J. Andreve

George J. Andreve
Project Review and Compliance Administrator
Office of Preservation Services

GJA/AL/lm

cc: Ms. Rita Suffness
Mr. Paul Wettlaufer
Mrs. Mary Louise Gramkow
Mr. Ed Shull

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Regional Planning Council
2225 North Charles Street Baltimore, Maryland 21218-5767 (301) 554-5600
Dennis F. Rasmussen, *Chairman* Alfred P. Gwynn, *Executive Director*

PROJECT DEVELOPMENT
MAR 22 11 29 AM '88

March 21, 1988

Mr. Neil J. Pedersen, Director
Office of Planning and Preliminary
Engineering
Maryland Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21203-0717

Re: Supplemental Draft Environmental Impact Statement, Relocated Maryland Route 32 (Contract #: HO 292-202-770)

Dear Mr. Pedersen:

We have received a copy of your Supplemental Draft Environmental Impact Statement on the Relocated Maryland Route 32 (Contract #: HO 292-202-770). This item was incorporated into the Regional Transportation Improvement Program for 1988-1990 for the Baltimore Region and was approved by the Transportation Steering Committee and the Regional Planning Council in June, 1987. At the present time, our staff does not have any further comments concerning this project.

Thank you for giving the Regional Planning Council an opportunity to review and comment on this project.

Sincerely,

Daryl L. Rawlings
Coordinator
Metropolitan Clearinghouse

Maryland Department of Transportation
State Highway Administration

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

233

PROJECT DEVELOPMENT DIVISION
APR 15 4 33 PM '88

April 14, 1988

M E M O R A N D U M

TO: Mr. Louis H. Ege, Jr.
Deputy Director,
Project Development Division

FROM: Walter Owens, Jr.
Deputy Chief,
Equal Opportunity Section

SUBJECT: Environmental Impact
Contract No. HO-292-202-770

The subject document has been reviewed and found to be in compliance with Title VI of the Civil Rights Act of 1964.

Should you have any questions, please contact me on extension 1513.

WOJ:dmp

My telephone number is (301)_____

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro - 565-0451 D.C. Metro - 1-800-492-5062 Statewide Toll Free
707 North Calvert St., Baltimore, Maryland 21203-0717

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MARYLAND HISTORICAL TRUST

William Donald Schaefer
Governor

J. Randall Evans
Secretary, DECD

May 15, 1987

PROJECT DEVELOPMENT DIVISION
MAY 20 2 08 PM '87

Ms. Cynthia Simpson, Chief
Environmental Management
Maryland Department of Transportation
State Highway Administration
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. HO 292-202-770
Maryland Rounte 32/108 Interchange
Howard County, Maryland
PDMS No. 132059

Dear Ms. Simpson:

Our office concurs with your determination that the above-referenced project, as depicted, will have no effect on the St. Louis Church (HO277).

Your cooperation is appreciated.

Sincerely,

George J. Andreve
Project Review Administrator
Technical Preservation Services

GJA/AHL/mmc
cc: Rita Suffness
Mrs. Mary Louise Gramkow
Mr. Ed Shull

Maryland Historical Trust

June 17, 1986

Mr. Louis H. Ege,Jr., Deputy Director
Project Development Division
State Highway Administration
Maryland Department of Transportation
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. HO 292-202-770
MD Rt. 32 and 108 Interchange
P.D.M.S. No. 132059
Howard County, Maryland

Dear Mr. Ege:

Based upon the results of the Phase I archeological reconnaissance conducted of the project area, we concur that the above-referenced project will have no effect upon significant archeological resources. Therefore, additional archeological investigations are not warranted for this particular project.

Sincerely,

Richard B. Hughes
State Administrator
of Archeology

RBH/BCB/mmc
CC: Ms. Rita Suffness
Mr. Tyler Bastian
Mrs. Mary Louise Gramkow
Mr. Ed Shull

Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 269-2212, 269-2438, 269-2850
Department of Economic and Community Development Admin. S & P TPS

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PROJECT DEVELOPMENT DIVISION

MAR 28 8 19 AM '88

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

MAR 22 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
Project Development Division (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Re: Relocated MD Rt. 32 from MD Rt. 108 to
Pindell School Road (88-03-448)

Dear Ms. Simpson:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Draft Air Quality Analysis for the above referenced project. We are satisfied with the approach for analyzing the air quality impacts of the project and offer no objections to this portion of the environmental study.

Thank you for including EPA in the early coordination of this report. Should you have any questions or if we can be of further assistance, please contact Lynn F. Rothman or Harold A. Frankford at 215/597-7336 or 597-1325 respectively.

Sincerely,

Jeffrey M. Alper, Chief
NEPA Compliance Section

UNITED STATES DEPARTMENT OF COMMERCE
The Chief Scientist
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

April 13, 1988

Mr. Louis H. Ege, Jr.
Deputy Director
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Ege:

This is in reference to your Draft Environmental Impact Statement on the Maryland Route 32 from Pindell School Road to Maryland Route 108, Maryland. Enclosed are comments from the National Oceanic and Atmospheric Administration.

We hope our comments will assist you. Thank you for giving us an opportunity to review the document.

Sincerely,

David Cottingham

David Cottingham
Ecology and Environmental
Conservation Office

Enclosure

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Management Division
Habitat Conservation Branch
Oxford, Maryland 21654

April 13, 1988

Louis H. Ege, Jr.
Project Development Div. (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Ege:

The National Marine Fisheries Service has reviewed the Supplemental Draft Environmental Impact Statement for the proposed relocation of Maryland Route 32 (from Maryland Route 108 to Pindell School Road) in Howard County, Maryland. The project, which will be constructed upstream of the historical limit of anadromous fish migrations in the Little Patuxent River watershed, should not impact resources within our purview. We, therefore, have no comments to offer relative to this proposal.

Sincerely,

Timothy E. Goodger
for Edward W. Christoffers, Ph.D.
Asst. Branch Chief

THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Route 108
Ellicott City, Maryland 21043-6198
(301) 992-0500

March 31, 1988

Mr. Wayne R. Clingan
Highway District Engineer
Maryland State Highway Administration
P. O. Box 308
Frederick, Maryland 21701

Re: Relocated Maryland Route 32

Dear Mr. Clingan:

We have reviewed the Maryland State Highway Administration's proposals concerning Relocated Route 32 from Pindell School Road to Maryland Route 108. The Howard County Department of Education respectfully recommends Option 3 as the preferred option. In support of our position, regarding Option 3, we urge the State Highway Administration to consider the following information:

1. Clarksville Middle School is located at the northeast corner of Trotter Road and Guilford Road. Without direct access to this middle school by means of keeping Trotter Road open to thru traffic, access to this school would be limited.

2. School buses for all grade levels currently utilize Trotter Road. If thru traffic is not maintained, additional school bus routing and scheduling costs will need to be assumed by the Department of Education.

3. Any option selected that includes closing Trotter Road to thru traffic carries with it the factor of having the cul-de-sacs designed and maintained so that large school buses can turn around.

4. An elementary school (Western Elementary) is currently being proposed at the northwest intersection of Trotter Road and Guilford Road (Route 32). If Option 3 were not approved, our student assignment and school bus transportation option relative to this school would be restricted and more costly.

It is important to notice that any school bus route changes made if Trotter Road were closed to thru traffic would likely mean a longer school bus ride for many students. Our objective, for safety reasons, has always been to limit the length of a student's school bus ride.

Mr. Clingan
March 31, 1988
Page 2

In summary, we strongly urge the State Highway Administration to approve Option 3 or a very similar option. We believe that the safety, financial, administrative, and student assignment variable previously mentioned supports our recommendation. Thank you for considering our comments and position and if you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Charles I. Ecker
Deputy Superintendent
Finance and Operations

CIE/eb

cc: Amar Bandel
Sydney Cousin
Bennie Hartmann
M. E. Hickey
Henry Hornung
Robert Lazarewicz
Gene Straub

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United States Department of the Interior

NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION
1100 OHIO DRIVE, S. W.
WASHINGTON, D.C. 20242

L30(NCR-LUCE)

12 FEB 1988

Mr. Louis Ege, Jr.
Deputy Director
Project Development Division
Maryland Department of Transportation
Baltimore, Maryland 21203-0717

Subject: SR-32, Howard County, Maryland

Dear Mr. Ege:

This is in response to the request for comments by the National Capital Region, National Park Service, on the proposed Environmental Impact Statement for the subject project. This article was published in the Federal Register, December 3, 1987.

We are interested in this project if the proposed road improvement may impact upon wetlands, historic sites, or parks. Also the increased run-off from the new road improvement should be addressed and mitigation offered and agreed upon.

We appreciate the opportunity to provide these comments and look forward to receiving a copy of the subject EIS.

Sincerely,

Deputy Ronald O. Wayne

Regional Director, National Capital Region

PROJECT DEVELOPMENT DIVISION
FEB 16 10 28 AM '88

242

U.S. Department of Housing and Urban Development
Philadelphia Regional Office, Region III
Liberty Square Building
105 South Seventh Street
Philadelphia, Pennsylvania 19106-3392

PROJECT DEVELOPMENT DIV.
APR 22 8 00 AM '88

APR 18 1988

Mr. Louis H. Ege, Jr., Deputy Director
Project Development Division (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Ege:

Thank you for providing us with a copy of the Draft EIS/4(f) Evaluation on Maryland Route 32, Contract No. HO 292-202-770. We have no comments on the subject document.

Please revise your master distribution list to show that I am the current Environmental Officer. Our current mailing address is shown above.

Very sincerely yours,

margaret a krengel

Margaret A. Krengel
Regional Environmental Officer

MARYLAND ENVIRONMENTAL TRUST

Environment the Trust . . . Man the Trustee

April 13, 1988

Mr. Louis Ege, Jr., Deputy Director
Project Development Division
State Highway Administration
707 North Calvert Street
Baltimore, Md. 21202

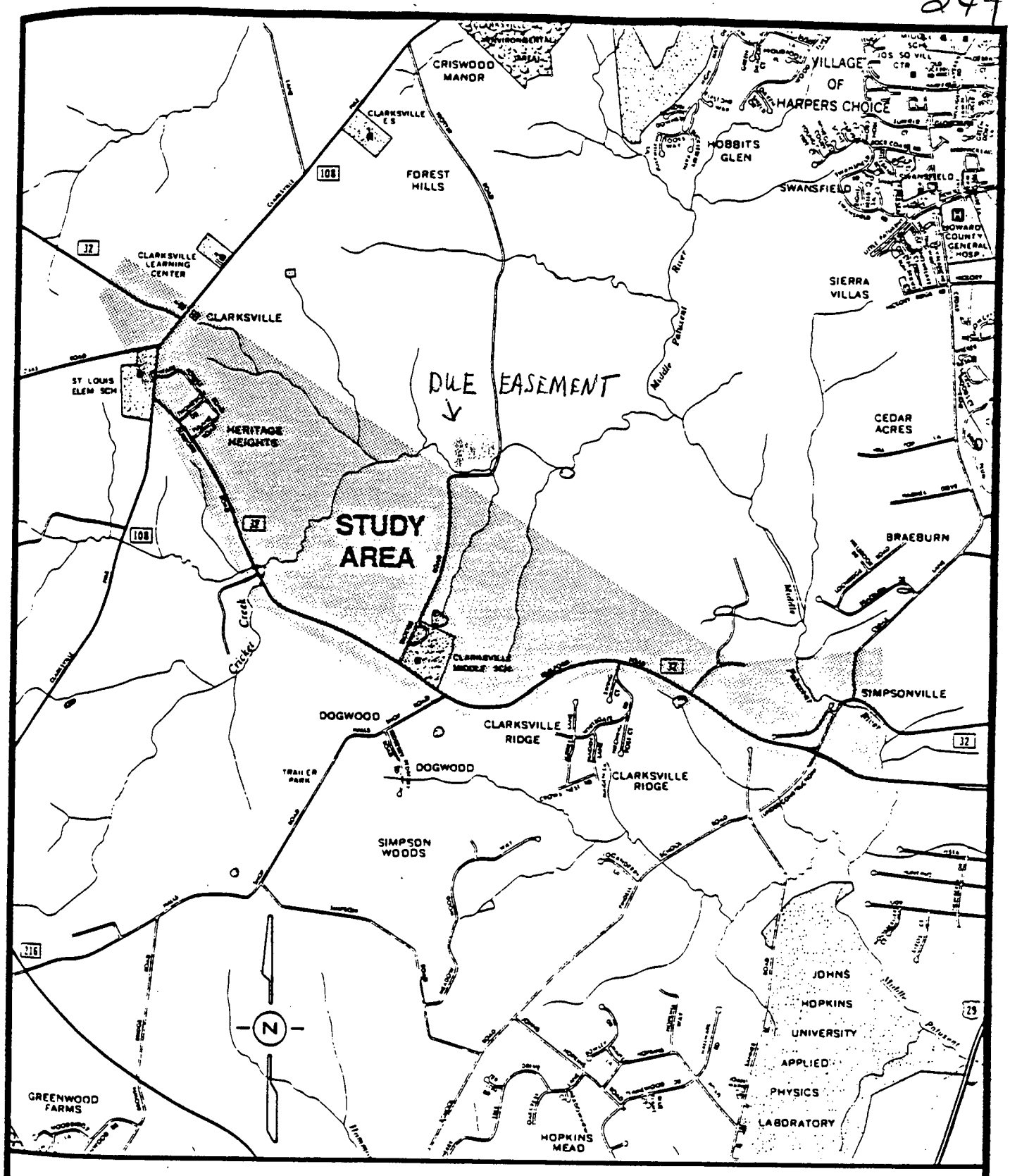
Dear Mr. Ege:

My staff have reviewed the Supplemental Draft Environmental Impact Statement for relocated Maryland Route 32 in Howard County. One of our easements is located along Trotter Road, just north of the study area shown in the public hearing notice (see attached map). The proposed road improvements do not directly affect the easement property.

Please continue to keep us informed on the status of this project.

Sincerely,

H. Grant Dehart
Director



MARYLAND ROUTE 32

From Maryland Route 108 to Pindell School Road

STUDY AREA MAP

Scale in Feet: 0' 2000' 4000'

FIGURE 2

Howard County MARYLAND

DEPARTMENT OF RECREATION AND PARKS

Elizabeth Bobo, County Executive
William M. Mitchell, Director

February 4, 1988

PROJECT DEVELOPMENT DIVISION
FEB 5 2 42 PM '88

State Highway Administration
707 North Calvert Street
Room 314
Baltimore, MD 21202
Attention: Mr. Wes Glass

Dear Mr. Glass:

The Middle Patuxent Environmental Area is a cooperative effort between Howard Research and Development, Inc. and Howard County Department of Recreation and Parks to protect and interpret the pristine quality of the Middle Patuxent River between Maryland Route 108 and Maryland Route 32. The park encompasses approximately 1,000 acres and will include wildlife management projects as well as outdoor education projects and preservation.

The Department of Recreation and Parks recognizes the needs of the State Highway Administration in its encroachments on portions of the park and will make every effort possible to facilitate a mutually beneficial arrangement which will meet both parties needs.

If you have any questions, please do not hesitate to call me at 992-2480.

Sincerely,

William M. Mitchell
Director

WMM/db

3300 North Ridge Road, Suite 170 • Ellicott City, Maryland 21043 • (301) 992-2480 • TDD 992-2323

MARYLAND HISTORICAL TRUST

William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

November 10, 1987

PROJECT DEVELOPMENT DIVISION
Nov 13 9 25 AM '87

Ms. Cynthia Simpson, Chief
Environmental Management
Maryland Department of Transportation
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. HO 292-202-771
Maryland Route 32 (Patuxent Freeway) from Cedar Lane/ Pindell School Road to Maryland Route 108
PDMS No. 132059

Dear Ms. Simpson:

Thank you for your letter of October 13, 1987 concerning the above-referenced project.

Our office concurs with SHA's proposed levels of significance for the following properties:

HO 158 - River Hill - PNRE
HO 164 - Wellings Stone H. - PNRE
HO 165 - Vogel House - MI
HO 210 - Scott Farmhouse - MI
HO 268 - Hatfield House - MI
HO 525 - Simpsonville Mill - Arch. Site

We further concur with the boundaries proposed for River Hill or Wellings Stone House.

Maryland
Department of Housing and Community Development
Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 974-4450, 757-9000
Temporary Address: Arnold Village Professional Center, 1517 Ritchie Highway, Arnold, Maryland 21012

Your cooperation is appreciated.

Sincerely,

Mark R. Edwards

Mark R. Edwards
Deputy Director -
Deputy State Historic
Preservation Officer

MRE/AHL/as

cc: Mrs. Mary Louise Gramkow
Mr. Ed Shull
Ms. Rita Suffness
Mr. Paul Wettlaufer

Maryland Department of Natural Resources

Forest, Park and Wildlife Service
Tawes State Office Building
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Donald E. MacLauchlan
Director

October 1, 1987

Louis H. Ege, Jr.
Deputy Director
Md Department of Transportation
707 North Calvert Street
Baltimore, MD 21203

RE: Contract No. HO 292-202-770
Md Rt. 32 from Md. Rt. 108
to Pindell School Road
PDMS No. 132059

Dear Mr. Ege:

Our Heritage Program has reviewed the above referenced project and reports that there are no known State listed rare, threatened or endangered species in the planning area. The project area does contain a number of records for the following rare species:

NAME	Common-name	Rank
Pycnanthemum verticillatum	Whorled Mountain-mint	State-rare
Ranunculus ambigens	Water-plantain Spearwort	Highly State-rare
Senecio anonymus	Smalls Ragwort	State-rare
Agrimonia striata	Woodland Agrimony	Highly State-rare

While none of these species are State-listed, their presence should be documented and considered in this planning study. In addition, their presence is indicative of unique habitats which may support protected species.

Sincerely,

James Burtis, Jr.
Assistant Director

JB:emp
cc: Therres
Boone

Telephone: _____
DNR TTY for Deaf: 301-974-3683

Maryland Department of Natural Resources

Forest, Park and Wildlife Service
Tawes State Office Building
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Donald E. MacLauchlan
Director

September 16, 1987

Mr. Louis Ege, Jr.
Deputy Director
Md Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, MD 21203-0717

RE: Contract No. HO 292-202-770
Md. Rt. 32 from Md. Rt. 108
to Pindell School Rd.
PDMS No. 132059

Dear Mr. Ege:

We have completed part of our investigation in response to your request regarding the above referenced project. There are no known threatened and endangered species in the proposed Route 32 relocation project in Howard Co.

A current relocation move of our Heritage Program will delay their comments at least for another two weeks. If you have any questions regarding the above please give me a call at 974-3776.

Sincerely,

James Burtis, Jr.
Assistant Director

JB:emp

cc: Boone
Therres

Telephone: _____
DNR TTY for Deaf: 301-974-3683

25D

United States Department of Agriculture

Soil Conservation Service

9025 Chevrolet Dr., Suite J
Ellicott City, MD 21043
(301) 465-3180

December 21, 1987

Ms. Kathy H. Fitzpatrick
Environmental Scientist
Greenhorne & O'Mara, Inc.
9001 Edmonston Road
Greenbelt, MD 20770

Re: FARMLAND CONVERSION IMPACT RATING
Rt. 32, From Pindell School Rd. to Rt. 108

Dear Ms. Fitzpatrick:

This office has reviewed and evaluated the Form AD-1006 which you submitted on the above referenced project which we received on November 6, 1987.

We unfortunately could not directly review the data submitted due to the wording in Howard County's Subdivision and Zoning Regulations. In this case, since the land in question is not already developed, we have had to consider the land as being available for agricultural usage since that use is permitted in all of our classifications.

Our findings are as shown on the attached form which I am returning revised. If I can be of additional help, feel free to call.

Sincerely,

Jack Helm

JACK HELM
District Conservationist

cc: Carl Robinette

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request: October 23, 1987
Name Of Project: Maryland Route 32, MD 108 to Pindell School Rd.	Federal Agency Involved: FHWA/MD State Highway Administration
Proposed Land Use: Rural, New Town, Planned Employment Center	County And State: Howard County, Maryland
PART II *(To be completed by SCS)*	Date Request Received By SCS: 11/6/87

Does the site contain prime, unique, statewide or local important farmland? Yes ☒ No ☐ (If no, the FPPA does not apply – do not complete additional parts of this form).

Acres Irrigated	Average Farm Size
None	117

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount Of Farmland As Defined In FPPA
Corn, Small grain, soybeans, hay	Acres: 86,200 % 54	Acres: 70,600 % 44

Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By SCS
Howard County LESA System	Howard County LESA System	12/21/87

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	127.0	125.7	133.0	
B. Total Acres To Be Converted Indirectly	127.0	125.7	133.0	
C. Total Acres In Site	127.0	125.7	133.0	
PART IV *(To be completed by SCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	30.0	28.5	32.7	
B. Total Acres Statewide And Local Important Farmland	74.4	73.1	77.5	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	.18	.18	.19	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	74.5	74.5	70	
PART V *(To be completed by SCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	60	60	61	
PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points			
1. Area In Nonurban Use	15	12	12	12
2. Perimeter In Nonurban Use	10	5	5	5
3. Percent Of Site Being Farmed	20	0	0	0
4. Protection Provided By State And Local Government	20	0	0	0
5. Distance From Urban Builtup Area	0	0	0	0
6. Distance To Urban Support Services	0	0	0	0
7. Size Of Present Farm Unit Compared To Average	10	1	1	1
8. Creation Of Nonfarmable Farmland	25	0	0	0
9. Availability Of Farm Support Services	5	0	0	0
10. On-Farm Investments	20	5	5	6
11. Effects Of Conversion On Farm Support Services	25	0	0	0
12. Compatibility With Existing Agricultural Use	10	0	0	0
TOTAL SITE ASSESSMENT POINTS	160			
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland *(From Part V)*	100	60	60	61
Total Site Assessment *(From Part VI above or a local site assessment)*	160	23	23	24
TOTAL POINTS *(Total of above 2 lines)*	260	83	83	85

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

Form AD-1006 (10-83)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 - Originator will send copies A, B and C together with maps indicating locations of site(s) to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. This field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

Step 3 - SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) on the proposed project contains prime, unique, statewide or local important farmland.

Step 4 - In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field office will complete Parts II, IV and V of the form.

Step 5 - SCS will return copy A and B of the form to the Federal agency involved in the project. Copy C will be retained for SCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 - The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.

2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160). Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points.

Total points assigned Site A = 180 x 160 = 144 points for Site "A."
Maximum points possible 200

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*

Name Of Project: Maryland Route 32, MD 108 to Pindell School Rd.	Date Of Land Evaluation Request: October 23, 1987
Proposed Land Use: Rural, New Town, Planned Employment Center	Federal Agency Involved: FHWA/MD State Highway Administration
	County And State: Howard County, Maryland

PART II *(To be completed by SCS)*

Date Request Received By SCS: 11/6/87

Does the site contain prime, unique, statewide or local important farmland? Yes ☒ No ☐
(If no, the FPPA does not apply – do not complete additional parts of this form).

Acres Irrigated: None | Average Farm Size: 117

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount Of Farmland As Defined in FPPA
Corn, Small grain, soybeans, hay	Acres: 86,200 % 54	Acres: 70,600 % 44

Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By SCS
Howard County LESA System	Howard County LESA System	12/21/87

PART III *(To be completed by Federal Agency)*

	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	127.0	125.7	133.0	
B. Total Acres To Be Converted Indirectly	127.0	125.7	133.0	
C. Total Acres In Site	127.0	125.7	133.0	

PART IV *(To be completed by SCS)* Land Evaluation Information

A. Total Acres Prime And Unique Farmland	30.0	28.5	32.7	
B. Total Acres Statewide And Local Important Farmland	74.4	73.1	77.5	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	.18	.18	.19	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	74.5	74.5	70	

PART V *(To be completed by SCS)* Land Evaluation Criterion

Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	60	60	61	

PART VI *(To be completed by Federal Agency)*

Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points			
1. Area In Nonurban Use	15	12	12	12
2. Perimeter In Nonurban Use	10	5	5	5
3. Percent Of Site Being Farmed	20	0	0	0
4. Protection Provided By State And Local Government	20	0	0	0
5. Distance From Urban Builtup Area	0	0	0	0
6. Distance To Urban Support Services	0	0	0	0
7. Size Of Present Farm Unit Compared To Average	10	1	1	1
8. Creation Of Nonfarmable Farmland	25	0	0	0
9. Availability Of Farm Support Services	5	0	0	0
10. On-Farm Investments	20	5	5	6
11. Effects Of Conversion On Farm Support Services	25	0	0	0
12. Compatibility With Existing Agricultural Use	10	0	0	0
TOTAL SITE ASSESSMENT POINTS	160			

PART VII *(To be completed by Federal Agency)*

Relative Value Of Farmland *(From Part V)*	100			
Total Site Assessment *(From Part VI above or a local site assessment)*	160	23	23	24
TOTAL POINTS *(Total of above 2 lines)*	260			

Site Selected: / Date Of Selection: Was A Local Site Assessment Used? Yes ☐ No ☐

(See Instructions on reverse side)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 – Originator will send copies A, B and C together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

Step 3 – SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 – In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field offices will complete Parts II, IV and V of the form.

Step 5 – SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.

2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points on a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

Total points assigned Site A = 180 x 160 = 144 points for Site "A."
Maximum points possible 200

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request: October 23, 1987
Name Of Project: Maryland Route 32, MD 108 to Pindell School Rd.	Federal Agency Involved: FHWA/MD State Highway Administration
Proposed Land Use: Rural, New Town, Planned Employment Center	County And State: Howard County, Maryland
PART II *(To be completed by SCS)*	Date Request Received By SCS: 11/6/87

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply – do not complete additional parts of this form).* Yes ☒ No ☐

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Acres Irrigated	Average Farm Size
Corn, Small grain, soybeans, hay	Acres: 86,200 % 54	None	117

Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Amount Of Farmland As Defined in FPPA	Date Land Evaluation Returned By SCS
Howard County LESA System	Howard County LESA System	Acres: 70,600 % 44	12/21/87

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	127.0	125.7	133.0	
B. Total Acres To Be Converted Indirectly	127.0	125.7	133.0	
C. Total Acres In Site	127.0	125.7	133.0	
PART IV *(To be completed by SCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	30.0	28.5	32.7	
B. Total Acres Statewide And Local Important Farmland	74.4	73.1	77.5	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	.18	.18	.19	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	74.5	74.5	70	
PART V *(To be completed by SCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	60	60	61	

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points			
1. Area In Nonurban Use	15	12	12	12
2. Perimeter In Nonurban Use	10	5	5	5
3. Percent Of Site Being Farmed	20	0	0	0
4. Protection Provided By State And Local Government	20	0	0	0
5. Distance From Urban Builtup Area	0	0	0	0
6. Distance To Urban Support Services	0	0	0	0
7. Size Of Present Farm Unit Compared To Average	10	1	1	1
8. Creation Of Nonfarmable Farmland	25	0	0	0
9. Availability Of Farm Support Services	5	0	0	0
10. On-Farm Investments	20	5	5	6
11. Effects Of Conversion On Farm Support Services	25	0	0	0
12. Compatibility With Existing Agricultural Use	10	0	0	0
TOTAL SITE ASSESSMENT POINTS	160			
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland *(From Part V)*	100			
Total Site Assessment *(From Part VI above or a local site assessment)*	160	23	23	24
TOTAL POINTS *(Total of above 2 lines)*	260			

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection

(See Instructions on reverse side)

Form AD-1006 (10-83)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses will initially complete Parts I and III of the form.

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Step 5 – SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.

2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points.

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site "A."}$$

Maryland Department of Natural Resources

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218
Telephone: (301) 554-5500

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Kenneth N. Weaver
Director

Emery T. Cleaves
Deputy Director

Division of Archeology
(301) 554-5530

30 September 1987

Mr. Louis H. Ege, Jr.
Deputy Director
Division of Project Development
State Highway Administration
P.O. Box 717/707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. HO 292-202-770
Maryland Route 32 from Maryland Route 108 to
Pindell School Road including the Maryland
Route 32/Trotter Road interchange

Dear Mr. Ege:

A Phase I archeological reconnaissance was conducted along three proposed alternate alignments of Maryland Route 32, Howard County, Maryland (Figure 1). Also surveyed were proposed alignments of Cedar Lane and Guilford Road north of Route 32. The Route 32 corridor is about 4,570 meters long and between 122 and 850 meters wide, and the Cedar Lane/Guilford Road corridor is 1,036 meters long and 30 meters wide. The survey area crosses the Middle Patuxent River at Simpsonville, then traverses rolling hills between Simpsonville and Clarksville. Several unnamed streams, including a branch of the Middle Patuxent, cut across these hills. The survey was performed between September 8 and 18, 1987, by Richard Ervin and Spencer Geasey of the Maryland Geological Survey, Division of Archeology. Three historic sites are in the right-of-way: the townsite of Simpsonville, 18HO80 (Figure 2), and two nineteenth century house sites, 18HO149 (Figure 3) and 148 (Figure 4). All three sites are potentially eligible to the National Register of Historic Places (NRHP). Sites 18HO80 and 18HO149 would be affected by construction of any of the three alternate routes, and additional archeological work is recommended to determine their eligibility. Site 18HO148 would be affected by construction of the southernmost alternate, designated Alternate 4 on Figure 4. Additional work is recommended to determine National Register eligibility of 18HO148 if this alternate is chosen.

BACKGROUND INFORMATION

Background research was conducted to determine the nature of previously recorded sites and evaluate the potential of discovering additional sites. Site files, records of previous work, historic maps, aerial photographs, topographic maps, and soil maps were examined. A formal predictive model has not been developed for the upper Patuxent drainage, but background research provided clues to potential site locations. Historic maps showed structures at Simpsonville and several other points along the right-of-way. In addition, historic sites were expected on floodplains or terraces along streams and stream confluences, on hilltops or ridges, and along historic roadways or road intersections. Prehistoric sites were expected on floodplains or terraces along streams or stream confluences, near springs, on hilltops or ridges close to sources of water, and near sources of lithic material.

Seventeen test areas were defined on the basis of topography and known archeological site locations within the project area. Nine areas were along rivers or streams, and eight were hilltops or ridgetops (two of the eight hilltop areas could not be surveyed because access was denied by the landowner). Exposed ground surfaces were examined for the presence of cultural material. Shovel test pits measuring 50 cm in diameter were dug where vegetation obscured surface visibility. Soil was screened through 7 mm (1/4") mesh hardware cloth.

RESULTS OF INVESTIGATION

Thirty-five shovel test pits were dug within the right-of-way, and sixteen of these yielded cultural material (Table 1). Each of the test areas is described below.

Area 1 (130 meters long and 50 meters wide) is a stream complex at the west end of the survey area. Two streams run through the survey area to a confluence; a third stream joins at the north boundary of the survey area. The streams contained running water during the survey, but are small and relatively steep. Flat, well-drained land suitable to habitation was found in only two places. A shovel test pit was placed on a small bench, and three shovel test pits were dug in a 12 meter by 18 meter area at the stream confluence. No cultural material was found on the bench. One of the three shovel test pits at the confluence yielded a single quartz flake. The confluence was probably visited only briefly by prehistoric peoples. A small artifact scatter (18HO140) had been found previously on a ridgetop west of the confluence (Boyce 1986). Quartz artifacts were found over a wide area, suggesting intermittent use of the ridgetop as a temporary camp.

Area 2 (130 meters long by 70 meters wide) is a ridgetop overlooking the Area 1 stream confluence. The ridgetop is flat, well-drained (8 meters above the elevation of the streams) and within 50 meters of water. An historic period site, 18HO149, was found on the hilltop (Figures 3 and 6). The site includes two piles of handmade bricks that may represent the collapsed chimney of a domestic dwelling. A dense trash dump (4 by 7 meters in area) containing a large quantity of bottle glass, ceramics, leather items, and metal items is 15 meters southeast of the brick.

Artifacts on the surface are mostly of mid-twentieth century manufacture: bottle finishes indicate manufacture on fully automatic bottle machines (post-1902), and no manganese-bearing glass (pre-1916) was noted.

Seven shovel test pits were dug on the hilltop to determine if prehistoric material was present. An eighth was excavated on a flat area on the east side of the hill. Three quartz flakes were recovered from three shovel test pits (20th century historic material was also recovered from two shovel test pits). Close examination of the ground surface (which had about 10% visibility) revealed no other prehistoric material. The low density scatter of flakes recovered from shovel tests suggests limited prehistoric use of the hilltop.

Area 3(180 meters long by 50 meters wide) borders an intermittent stream. The area within the right-of-way was surveyed on foot and found to have a relatively steep slope. All surface exposures (estimated to be about 33 to 50% visibility) were closely checked, but since no areas suitable for habitation were found, shovel test pits were not excavated.

Area 4 (400 meters long and 100 meters wide) is a ridgetop overlooking the unnamed branch of the Middle Patuxent River and an intermittent stream. The ridgetop stands relatively high in elevation (21 meters or 70 feet) above the unnamed branch and is over 150 meters (500 feet) distant. The ridgetop had been tilled and planted in soybeans; the perimeter of the fields and a cleared path across the ridgetop were examined on foot. One prehistoric artifact was found, a quartz projectile point tip.

Area 5 (125 meters long and 50 meters wide) is a steep stream valley. Surface exposures were closely checked (visibility was estimated at 33%), but no cultural material was found. Shovel test pits were not dug due to the lack of habitable terrain.

Area 6 (366 meters long and 91 meters wide) is the valley of the unnamed branch of the Middle Patuxent River. The east and west banks were surveyed individually. Five shovel test pits were dug on the east bank, where surface visibility was minimal (less than 5% visibility). A vehicle trail on the west bank provided a transect of exposed ground surface across the survey area precluding the need for shovel test pits here. Surface visibility was better on the west bank (estimated at 20 to 25 percent). No cultural material was found in the right-of-way.

Area 7 (300 meters long and 50 meters wide) is a steep stream valley west of Trotter Road. Surface exposures were closely checked (visibility was estimated at 10%), but no cultural material was found. Shovel test pits were not dug due to the lack of habitable terrain.

Areas 8 and 9 are hilltops east of the branch of the Middle Patuxent. Permission for access to the two areas was denied until a corn crop could be harvested, several weeks after fieldwork. Areas and are over 21

meters in elevation above the Middle Patuxent River and 244 meters distant. Little cultural material was found on similarly situated hilltops within the survey area, suggesting that only scattered artifacts would be found if the hilltops could be surveyed. It is recommended that no further attempt be made to survey these areas.

Area 10 is the first stream drainage east of Trotter Road. The area surveyed is 244 meters long and 46 meters wide. The drainage is steep, with little habitable land adjacent to it. Surface exposures (visibility is estimated at 15 to 20%) were closely checked, but no cultural material was found. No shovel test pits were dug.

Area 11 (130 meters long by 70 meters wide) is a flat, gently sloping area covered with a thick growth of secondary succession plants. Surface exposures (visibility was estimated at 5 to 10%) were closely checked, but no cultural material was found.

Area 12 is a spring-fed stream complex of one main and two tributary streams measuring 488 meters long by 50 meters wide. A forest of large oaks, beech, walnut, maples and poplars covers the area. The main stream was walked and surface exposures were closely checked (visibility was estimated at 5%). Six shovel test pits were dug on the floodplain and on hilltops overlooking the stream. Cultural material was limited to two nails in one shovel test pit.

Area 13 is a 244 meters long by 50 meters wide area along a spring-fed stream. Riparian vegetation covers the stream banks, and the surrounding area is in pasture. Seven shovel test pits were dug, and a few artifacts were found scattered over a wide area (see Table 1). A single rhyolite flake indicates limited prehistoric use of the area; historic artifacts may represent coal ash and trash intentionally scattered in fields.

An historic house site (18HO148) was found on a hill overlooking the stream (Figure 4). Handmade bricks and collapsed wood beams and boards indicate the house was a wood frame structure with a brick fireplace. The wood contained machine-cut flat nails generally diagnostic of the period after 1840 and before 1900. Mid-twentieth century artifacts were observed on the surface of an associated trash dump. The earliest known map on which this structure appears is the 1926 USGS 15' Laurel quadrangle, although construction materials suggest a nineteenth century building date.

Area 14 is a 366 meters long by 91 meters wide area on a hilltop and saddle. A pasture covers the area. Surface exposures (visibility was estimated at 15%) were closely checked. No cultural material was found.

Area 15 is a 183 meters long by 125 meters wide area of gently sloping terrain. The area is covered by a mowed grass field. Surface exposures were closely checked (visibility was estimated at 10 to 15%), and no cultural material was found.

Area 16 is a 305 meters long by 125 meters wide hillslope covered by mowed grass. Surface exposures were closely checked (visibility was estimated at 10 to 15%) and no cultural material was found.

Area 17 is a 610 meters long by 30 meters wide area where Cedar Lane crosses the Middle Patuxent River at the historic townsite of Simpsonville (18HO80, see Figure 2). The most prominent feature is the stone-walled mill structure (designated "ruins" on Figure 2). A mill is depicted on the Martenet and Hopkins maps of Howard County, dated 1860 and 1878 respectively. Lee Preston, who has conducted research on 18HO80 over a number of years, reports there was a mill at Simpsonville as early as 1792, although it is unclear whether this represents the present mill ruins or an earlier structure (see also Akerson n.d.).

Eleven other features were recorded in or near the right-of-way. These include three stone structural foundations, two raised terraces, the millrace, a concrete race gate, a diversion race, a depression with stone rubble, bridge abutments, and the site of a store excavated by Lee Preston.

Five shovel test pits were excavated to provide information about artifact assemblages and feature locations. Structural and domestic material was recovered. Diagnostic artifacts were of twentieth century manufacture. Further work will be needed to better determine the nature of individual features, their ages, and their relationships, but is clear that 18HO80 has the potential to provide important information about a nineteenth century town complex.

RECOMMENDATIONS

18HO149 is an historic house site and associated trash dump. Diagnostic artifacts found on the surface are of twentieth century manufacture, although handmade bricks suggest the structure is of nineteenth century construction. The 1878 Hopkins Atlas of Howard County shows a structure (designated as the residence of "Jas. N. Miller") in the area of 18HO149. The site would be affected by each of the proposed alternate construction routes. Further work is recommended to determine the site's National Register eligibility.

18HO148 is also an historic house site and associated trash dump. Handmade bricks and square cut nails suggest a nineteenth century construction date, although twentieth century material was found on the surface of the trash dump. If the southernmost alternate (designated alternate 4 on Figure 4) is chosen, it is recommended that additional work be undertaken to determine the National Register eligibility of 18HO148.

The Simpsonville Stone Ruins, 18HO80, is a complex of historic structure features dating at least as early as the nineteenth century. Records indicate the site was in use in the late eighteenth century, and it is possible that material or features dating to this early period are present. The proposed routes of Cedar Lane and Guilford Avenue would pass directly through the site. Because of the potential significance of the site, it is recommended that the routes of Cedar Lane and Guilford Avenue be redesigned to avoid the site boundaries shown on Figure 2. If this is not possible, additional work is recommended to determine the National Register eligibility of 18HO80.

Sincerely,

Richard Ervin

Richard Ervin
Archeologist

RE:lw

cc: Cynthia Simpson
Joseph Hopkins

TABLE 1

Artifacts Recovered along Maryland Route 32 corridor between Pindell School Road (Simpsonville) and Maryland Route 108 (Clarksville)

AREA 1	STP 26	no cultural material
	STP 27	1 quartz flake
	STP 29	no cultural material
	STP 30	no cultural material
AREA 2	STP 24	2 historic sherds, 1 frag. window glass
18HO149	STP 25	1 quartz flake, 2 bottle glass, 1 whiteware sherd
	STP 31	1 quartz flake
	STP 32	1 quartz artifact
	STP 33	no cultural material
	STP 34	no cultural material
	STP 35	no cultural material
	STP 28	no cultural material
AREA 6	STP 19	no cultural material
	STP 20	no cultural material
	STP 21	no cultural material
	STP 22	no cultural material
	STP 23	no cultural material
AREA 12	STP 13	no cultural material
	STP 14	no cultural material
	STP 15	no cultural material
	STP 16	2 nails
	STP 17	no cultural material
	STP 18	no cultural material
AREA 13	STP 6	1 frag. coal
	STP 7	6 fragments coal, 1 cinder
	STP 8	1 rhyolite flake
	STP 9	1 small (5 mm diameter) brick fragment (not collected)
	STP 10	1 small brick fragment, not collected; 1 bottle glass fragment
	STP 11	1 nail
	STP 12	no cultural material
AREA 17	Feature 3,	whole bottle: "REGISTERED/FRED BAUERNSCHMIDT/
18HO80	STP 1	AMERICAN/TRADE...MARK/BREWERY/BALTO, MD/THIS BOTTLE NEVER SOLD
		18 bottle glass fragments, 14 window glass fragments, 1 whiteware ceramic spout, 15 nails, 1 mortar fragment
	Feature 5,	8 large brick fragments, 1 large mortar fragment,
	STP 2	33 nails, 18 bottle glass fragments, 2 window glass fragments, 1 lamp chimney glass fragment, 2 earthenware sherds, 2 bone fragments
	Feature 6,	20 mortar fragments, shoe pieces (leather,
	STP 3	cobblers nails, eyelets), 9 bottle glass frag., 9 window glass fragments, 1 lamp chimney glass fragment, 1 whiteware fragment, 7 nails, 3 metal can fragments, 5 bone fragments (1 cut, 4 burned), 1 ferrous metal disc, 1 plastic watch face

STP 4	13 nails, 9 bottle glass fragments, 11 window glass fragments, 2 lamp chimney glass fragments, 2 brick fragments, 2 whiteware frag.
STP 5	13 nail fragments, 3 bottle glass fragments, 2 window glass fragments, 1 glass button fragment, 1 whiteware sherd, 1 plastic fragment

Bibliography

Akerson, Louise

n.d. The Simpsonville Stone Ruins. Manuscript on file, Maryland Geological Survey, Division of Archeology.

Boyce, Hettie L.

1986 Archeological Reconnaissance of the Proposed Alternatives for the Maryland Route 32 and 108 Interchange at Clarksville, Howard County, Maryland. Maryland Geological Survey, Division of Archeology File Report 202.

Hopkins, G.M.

1878 Atlas of Howard County, Maryland, 1878. Originally compiled by G.M. Hopkins. Ellicott City: Howard County Bicentennial Commission, Reprinted 1975.

Martenet, Simon J.

1860 Martenet's Map of Howard County, Maryland. Ellicott's Mills: John Schofield. On file, Maryland Geological Survey, Division of Archeology.

United States Geological Survey

1926 Laurel, Maryland 15' Quadrangle. Department of the Interior, United States Geological Survey. On file, Maryland Geological Survey, Division of Archeology.

VIII

List of Preparers

VIII. LIST OF PREPARERS

This Supplemental Final Environmental Impact Statement was prepared by the Maryland Department of Transportation, State Highway Administration, in consultation with the Federal Highway Administration. The following personnel were instrumental in the preparation of this document.

State Highway Administration

Bureau of Project Planning:

Mr. Louis H. Ege, Jr. — Deputy Director, Office of Planning and Preliminary Engineering

Ms. Cynthia D. Simpson — Chief, Environmental Management, Office of Planning and Preliminary Engineering

Mr. Douglas Simmons — Project Manager

Mr. Wes Glass — Environmental Manager

Consultants:

Mr. Allen Webster — Greenhorne & O'Mara, Inc.

Ms. Cathy Fairbairn — Greenhorne & O'Mara, Inc.

Principal Reviewers from Federal Highway Administration Division Office:

Mr. Paul Wettlaufer — Environmental Protection Specialist

Mr. Mohan Pillay — Area Engineer

Mr. Bruce Turner — Environmental Protection Specialist

Mr. David Gamble — Project Development Engineer

IX

Appendices

APPENDIX A

GREENHORNE & O'MARA, INC.

MD 32 WETLANDS FIELD REVIEW
(MD 108 TO PINDELL SCHOOL ROAD)

The purpose of this field review was to establish Corps and the other agencies' concurrence with the wetland boundaries delineated by Greenhorne & O'Mara and to record any comments voiced during the field review.

On August 25, 1987, the following people met at 10:00 a.m. at the firehouse parking lot in Clarksville, Maryland, for a field review of the segment of MD Route 32 that extends from MD Route 108 to Pindell School Road. Those in attendance were:

Name	Title/Representing	Phone No.
Mohammad Hoshemi	State Highway Administration	333-3208
Stephen Buckley	State Highway Administration	333-1275
John Leslie	State Highway Administration	333-1278
Ken Yetman	Dept. Natural Resources-Fisheries	974-3061
Joseph Hopkins	SHA Environmental Management	333-1183
Wes Glass	SHA Environmental Management	333-1185
Abbie Hopkins	U.S. Army Corps of Engineers	962-4252
Peter Knight	U.S. Fish & Wildlife Service	269-5448
Diane Eckles	U.S. Fish & Wildlife Service	269-5448
Allen Webster	Greenhorne & O'Mara, Inc.	220-2601
Cathy Fairbairn	Greenhorne & O'Mara, Inc.	982-2800
Cathy Zapel	Greenhorne & O'Mara, Inc.	982-2800

Prior to this field review, Greenhorne & O'Mara, Inc. (G&O) wetland scientists, at the request of the State Highway Administration (SHA), delineated and mapped the wetlands directly impacted by the Maryland (MD) 32 project using stereoscopic interpretation of low-altitude black and white aerial photograhy. This method identifies smaller wetlands that may have been overlooked by simply walking the proposed route. These areas were subsequently verified in the field and classified according to the Cowardin System (1979). NWI maps, SCS soil surveys, and FEMA flood insurance maps were also consulted prior to the field reconnaissance.

The Environmental Manager for the project, Wes Glass, asked everyone to introduce themselves and then he proceeded to give a brief history of the MD 32 project. He explained that this portion of MD 32 was one segment of many along the roadway corridor which stretches from the Howard County line to Annapolis. The first environmental document, an Environmental Impact Statement (EIS), on the MD 32 project was written in 1977 and covered the area from the Howard County line westward to MD 108. The second document encompassed the area from the Howard County line to MD Route 3. In 1987, the Baltimore-Annapolis Transportation Corridor Study (BATCS) included most of the MD 32 roadway into Annapolis. Location approval was granted in August 1987. The project is currently in the engineering design study stage. The project has a tentative advertisement date of March 1991. It may be moved up to 1989, but this is not for certain.

To comply with the various environmental regulations, the Bureau of Environmental Management at SHA is planning to prepare a Supplemental EIS. Various roadway alternates are proposed, but the preferred one is Alternate 3. According to SHA, Alternate 1 has the most environmental impacts.

Following the brief project history, Cathy Fairbairn introduced Cathy Zapel and explained the methodology Greenhorne & O'Mara utilized to delineate the wetlands on this project. At each site in the field, soil samples were tested for the presence of hydric soils. In addition, hydrology and vegetation were identified to determine the boundaries of the wetlands. The wetlands were flagged and classified, and a summary table and accompanying map prepared that depicted each wetland site.

Cathy Fairbairn and Cathy Zapel proceeded to pass out copies of maps with the wetlands delineated on them and tables summarizing the wetland types and acreages impacted by the Alternate 3 right-of-way.

The group walked to the first wetland site, which is a disturbed area, a roadway cut, that exhibited wetland characteristics in the lowest spot in the cut. Diane Eckles and Peter Knight of the Fish & Wildlife Service thought the area around the flags should be increased slightly. Diane Eckles would like to have this area redefined slightly. Abbie Hopkins of the U.S. Army Corps of Engineers had no problem with the wetland boundaries as delineated.

Wetland areas 2 through 4, 7, and 19 were visited. The attendees (including the agencies) concurred with the wetland boundary delineations. The following comments were made at these wetland sites.

On wetland site 2, the stream will have to be relocated if Alternate 3 is selected. Diane Eckles asked if the bedrock streambed could be recreated. Cathy Zapel, a geologist, pointed out that the depth to bedrock would vary but it might be possible to excavate a new channel to bedrock, since the bedrock in this area is relatively close to the surface.

On wetland site 3, the U.S. Fish and Wildlife Service asked whether this area would be culverted. A discussion ensued. The Fish & Wildlife Service made it clear that culverts are not preferred in most cases. Wes Glass pointed out that economics play a major role in highway design and wetland impacts.

On wetland site 19, the agencies concurred with the wetland boundaries, but requested that another classification, PEM2J, be added to the table as mud plaintain, beggar ticks, and jewelweed formed conspicuous emergent "islands" in the stream and along the banks. This site is adjacent to the bridge over the Middle Patuxent River. The agencies discussed a bridge crossing here. No one seemed to disagree. This site is adjacent to an old mill ruins and a large stone wall that may have once been part of a dam.

At wetland site 7, a discussion was initiated whether to place a bridge or a culvert at this site.

The only other significant review comment was made by Diane Eckles, who requested that a comparison of wetland acreages impacted along all the alternates be spelled out in the supplemental EIS, and information to this effect be presented at the next interagency quarterly review meeting.

APPENDIX B

Species List

Common Name	Scientific Name
Red Maple	Acer rubrum
Silver Maple	Acer saccharinum
Black Locust	Robinia pseudoacacia
Black Cherry	Prunus serotina
American Beech	Fagus grandifolia
Tulip Poplar	Liriodendron tulipifera
Black Walnut	Juglans nigra
Pin Oak	Quercus palustris
American Sycamore	Platanus occidentalis
Box Elder	Acer negundo
Ironwood	Carpinus caroliniana
Black Willow	Salix nigra
Black Gum	Nyssa sylvatica
Persimmon	Diospyros virginiana
Willow Oak	Quercus phellos
Green Ash	Fraxinus pennsylvanica
Bitternut Hickory	Carya cordiformis
Tree-of-Heaven	Ailanthus altissima
Staghorn Sumac	Rhus typhina
Flowering Dogwood	Cornus florida
Spicebush	Lindera benzoin
Sassafras	Sassafras albidum
Common Elderberry	Sambucus canadensis
Grape	Vitis sp.
Greenbrier	Smilax sp.
Choke Cherry	Prunus virginiana
Arrow-wood	Viburnum dentatum
Poison Ivy	Toxicodendron radicans
Jewelweed	Impatiens capensis
False Nettle	Boehmeria cylindrica
Stinging Nettle	Urtica dioica
Tall Nettle	Urtica pilea
Jack-in-the-pulpit	Arisaema triphyllum
Sensitive Fern	Onoclea sensibilis
New York Fern	Thelypteris noveboracensis
Christmas Fern	Polystichum acrostichoides
Skunk Cabbage	Sympolcarpus foetidus
Agrimony	Agrimonia rostellata
Virginia Creeper	Parthenocissus quinquefolia
Lady's Thumb Smartweed	Polygonum persicaria
Halberd-leaved Tearthumb	Polygonum arifolium
Arrow-leaved Tearthumb	Polygonum sagittatum
Japanese Honeysuckle	Lonicera japonica
Pokeweed	Phytolacca americana

Appendix Continued

Species List

Common Name	Scientific Name
Purple-leaved Willow Weed	Epilobium coloratum
Umbrella Sedge	Cyperus strigosus
Rice Cutgrass	Leersia oryzoides
Common Cattail	Typha latifolia
Soft Rush	Juncus effusus
Queen Anne's Lace	Daucus carota
Joe-pye-weed	Eupatoriadelphus maculatus
Dodder	Cuscuta gronovii
Arrowhead	Sagittaria latifolia
Dwarf Scouring-rush	Equisetum scirpoides

APPENDIX C

Attachment for Environmental
Impact Documents
Revised: February 1, 1988
Bureau of Relocation Assistance

"SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE STATE HIGHWAY ADMINISTRATION OF MARYLAND"

All State Highway Administration projects must comply with the provisions of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (Public Law 91-646 and amendments as published in CFR Vol. 51, No. 39 on February 27, 1986) and/or the Annotated Code of Maryland, Real Property, Title 12, Subtitle 2, Sections 12-201 thru 12-212. The Maryland Department of Transportation, State Highway Administration, Bureau of Relocation Assistance, administers the Relocation Assistance Program in the State of Maryland.

The provisions of the Federal and State Law require the State Highway Administration to provide payments and services to persons displaced by a public project. The payments that are provided include replacement housing payments and/or moving costs. The maximum limits of the replacement housing payments are $15,000 for owner-occupants and $4,000 for tenant-occupants. Certain payments may also be made for increased mortgage interest costs and/or incidental expenses, provided that the total of all housing benefits does not exceed the above mentioned limits. In order to receive these payments, the displaced person must occupy decent, safe and sanitary replacement housing. In addition to the replacement housing payments described above, there are also moving cost payments to persons, businesses, farms and non-profit organizations. Actual moving costs for residences include actual moving costs up to 50 miles or a schedule moving cost payment, including a dislocation allowance, up to $500.

The moving cost payments to businesses are broken down into several categories, which include actual moving expenses and payments"in lieu of" actual moving expenses. The owner of a displaced business is entitled to receive a payment for actual reasonable moving and related expenses in moving his business, or personal property; actual direct losses of tangible personal property; and actual reasonable expenses for searching for a replacement site.

The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Generally, payments for the actual reasonable expenses are limited to a 50 mile radius. The expenses claimed for actual cost commercial moves must be supported by receipted bills. An inventory of the items to be moved must be prepared in all cases. In self-moves, the State will negotiate an amount for payment, not to exceed the lowest acceptable bid obtained. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business' own vehicles or equipment, wages paid to persons who physically participate in the move, the cost of actual supervision of the move, replacement insurance for the personal property moved, costs of licenses or permits required, and other related expenses.

In addition to the actual moving expenses mentioned above, the displaced business is entitled to receive a payment for the actual direct losses of tangible personal property that the business is entitled to relocate but elects not to move. These payments may only be made after an effort by the owner to sell the personal property involved. The costs of the sale are also reimbursable moving expenses. If the business is to be reestablished, and the personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement cost minus the net proceeds of sale (or trade-in value) or the estimated cost of moving the item. If the business is being discontinued or the item is not to be replaced in the reestablished business, the payment will be the lesser of the difference between the value of the item for continued use in place and the net proceeds of the sale or the estimated cost of moving the item. When personal property is abandoned without an effort by the owner to dispose of the property for sale, unless permitted by the State, the owner will not be entitled to moving expenses, or losses for the item involved.

The owner of a displaced business may be reimbursed for the actual reasonable expenses in searching for a replacement business up to $1,000. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, within the maximum limit.

In lieu of the payments described above, the business may elect to receive a payment equal to the average annual net earnings of the business. Such payment shall not be less than $2,500 nor more than $10,000. In order to be entitled to this payment, the State must determine that the business cannot be relocated without a substantial loss of its existing patronage, the business is not part of a commercial enterprise having at least one other establishment in the same or similar business that is not being acquired, and the business contributes materially to the income of a displaced owner during the two taxable years prior to displacement.

Considerations in the State's determination of loss of existing patronage are the type of business conducted by the displaced business and the nature of the clientele. The relative importance of the present and proposed locations to the displaced business, and the availability of suitable replacement sites are also factors.

In order to determine the amount of the "in lieu of" moving expenses payment, the average annual net earnings of the business is considered to be one-half of the net earnings, before taxes, during the two taxable years immediately preceding the taxable year in which the business is relocated. If the two taxable years are not representative, the State may use another two-year period that would be more representative. Average annual net earnings include any compensation paid by the business to the owner, his spouse, or his dependents during the period. Should a business be in operation less than two years, the owner of the business may still be eligible to receive the"in lieu of" payment. In all cases, the owner of the business must provide information to support its net earnings, such as income tax returns, for the tax years in question.

For displaced farms and non-profit organizations, the actual reasonable moving costs generally up to 50 miles, actual direct losses of tangible personal property, and searching costs are paid. The "in lieu of" actual moving cost payments provide that the State may determine that a displaced farm may be paid from a minimum of $2,500 to a maximum of $10,000, based upon the net income of the farm, provided that the farm has been discontinued or relocated. In some cases, payments "in lieu of" actual moving costs may be made to farm operations that are affected by a partial acquisition. A non-profit organization is eligible to receive "in lieu of" actual moving cost payments, in the amount of $2,500.

A more detailed explanation of the benefits and payments available to displaced persons, businesses, farms, and non-profit organizations is available in Relocation Brochures that will be distributed at the public hearings for this project and will also be given to displaced persons individually in the future along with required preliminary notice of possible displacment.

In the event comparable replacement housing is not available to rehouse persons displaced by public projects or that available replacement housing is beyond their financial means, replacement "housing as a last resort" will be utilized to accomplish the rehousing. Detailed studies must be completed by the State Highway Administration before "housing as a last resort" can be utilized.

The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any persons, or proceed with any construction project, until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons will be satisfactorily relocated to comparable decent, safe, and sanitary housing within their financial means or that such housing is in place and has been made available to the displaced person.