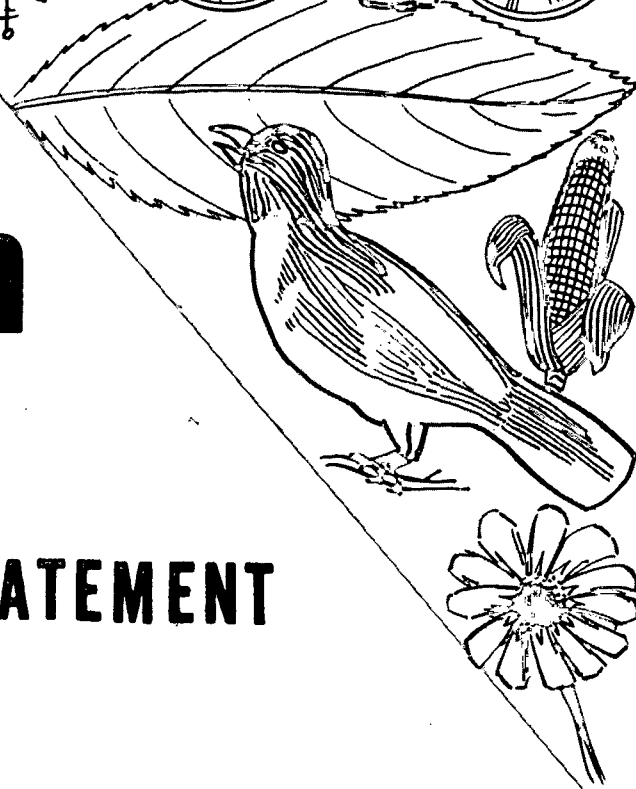
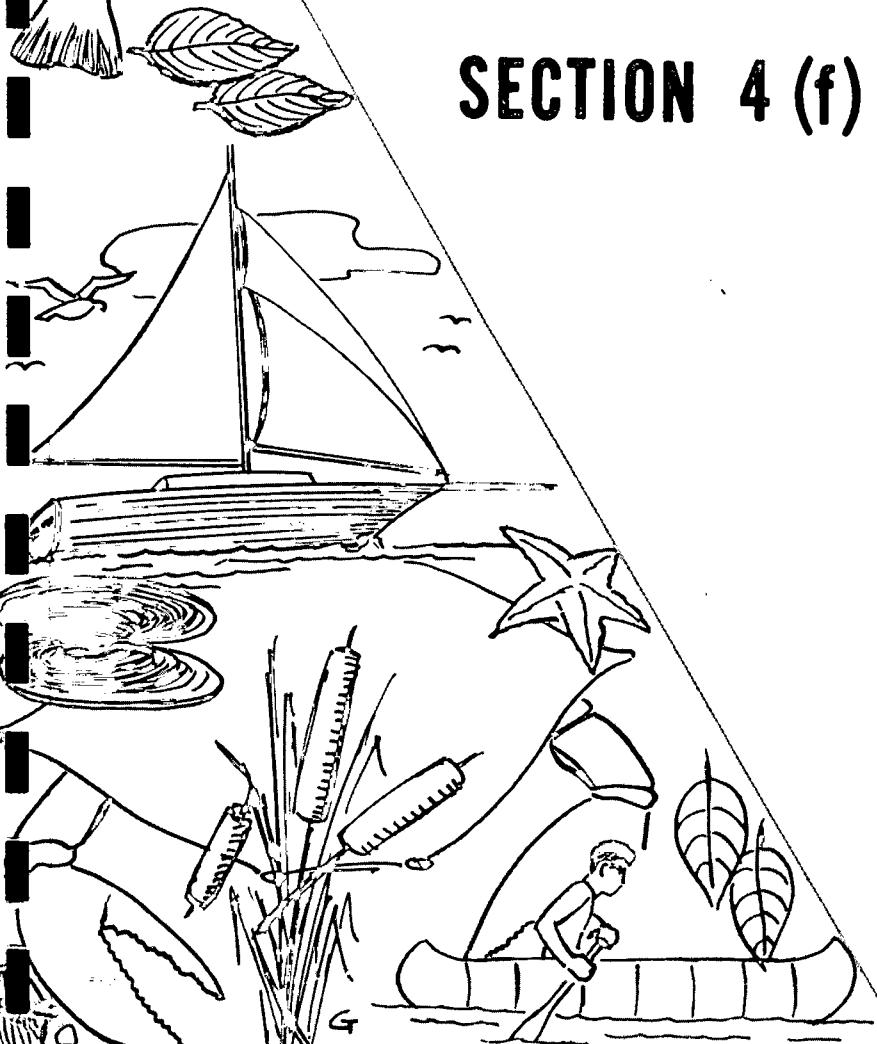


final negative declaration



SECTION 4 (f) STATEMENT



FOR:
CONTRACT No. M 733-101-371
MARYLAND ROUTE 355 (FREDERICK AVENUE)
FROM SOUTH SUMMIT AVENUE
TO CHESTNUT STREET
IN MONTGOMERY COUNTY, MARYLAND

prepared by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

REPORT NUMBER: FHWA-MD-NEG-79-09-F

REGION III
Maryland Route 355 (Frederick Avenue)
From South Summit Avenue
To Chestnut Street
In Montgomery County, Maryland

ADMINISTRATIVE ACTION

FINAL NEGATIVE DECLARATION
SECTION 4(f) STATEMENT

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION
AND
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Submitted pursuant to 42 U.S.C. 4332 (2)(C)
23 U.S.C. 128 (a)
49 U.S.C. 1653 (f), 16 U.S.C. 470 (f)

M. S. Caltrider
State Highway Administrator

4/28/80
Date

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

6/19/80
Date

by: Emil Elinsky
Emil Elinsky
Division Administrator
Federal Highway Administration

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SUMMARY

- 1. Federal Highway Administration
 Administrative Action Negative Declaration
 () Draft (X) Final
 (X) Section 4(f) Statement (see page 95)
- 2. Individuals who can be contacted for additional information

Mr. Eugene T. Camponeschi
 Maryland State Highway Administration
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 Baltimore, Maryland 21201

Phone: (301) 383-4327
 Office Hours: 8:15 a.m. to 4:15 p.m.

Mr. Edward Terry, Jr.
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 The Rotunda - Suite 220
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 Baltimore, Maryland 21211

Phone: (301) 962-4010
 Office Hours: 7:45 a.m. to 4:15 p.m.

- 3. Brief Description of the Proposed Action

The proposed action consists of widening and upgrading of Maryland Route 355 from South Summit Avenue to a point just north of Chestnut Street in Gaithersburg, Maryland. As proposed, this project involves construction of dual 38-foot curbed roadways with seven-foot sidewalks on either side, replacement of the existing bridge over the B&O railroad tracks with a six-lane, three-span bridge, improvements to some side streets, and construction of service roads. The distance between project termini is approximately 0.6 miles.

- 4. Major Alternatives Considered

Three alternates, including the No-Build Alternate were studied during the preliminary stages of project planning. Based upon an analysis of engineering, safety, and environmental factors, and comments from local citizens and city officials, one build alternate, Alternate A Modified, and the No-Build Alternate were studied in the Draft Negative Declaration/4(f) Involvement Document and Alternate A Modified has been selected.

8

5. Summary of Environmental Impacts for the Selected Alternate

In general, the environmental impacts of the proposed action are as follows:

- 11.99 acres of land will be acquired for right-of-way, including 8.25 acres in residential use, 1.58 acres in commercial use, and 2.16 acres of city-owned land.
- Six businesses and a state-owned vehicle maintenance garage will be acquired; however, suitably zoned replacement properties are available within the area.
- Three noise sensitive areas will experience noise levels in excess of Federal Design Noise Levels.
- The project will increase the operating capacity of the roadway, eliminate existing hazardous intersections, and provide for a safer and freer movement of traffic.
- Approximately 0.26 acres of land will be acquired for right-of-way from a district of local historic significance.

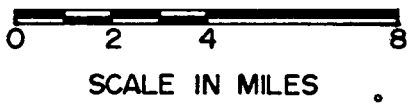
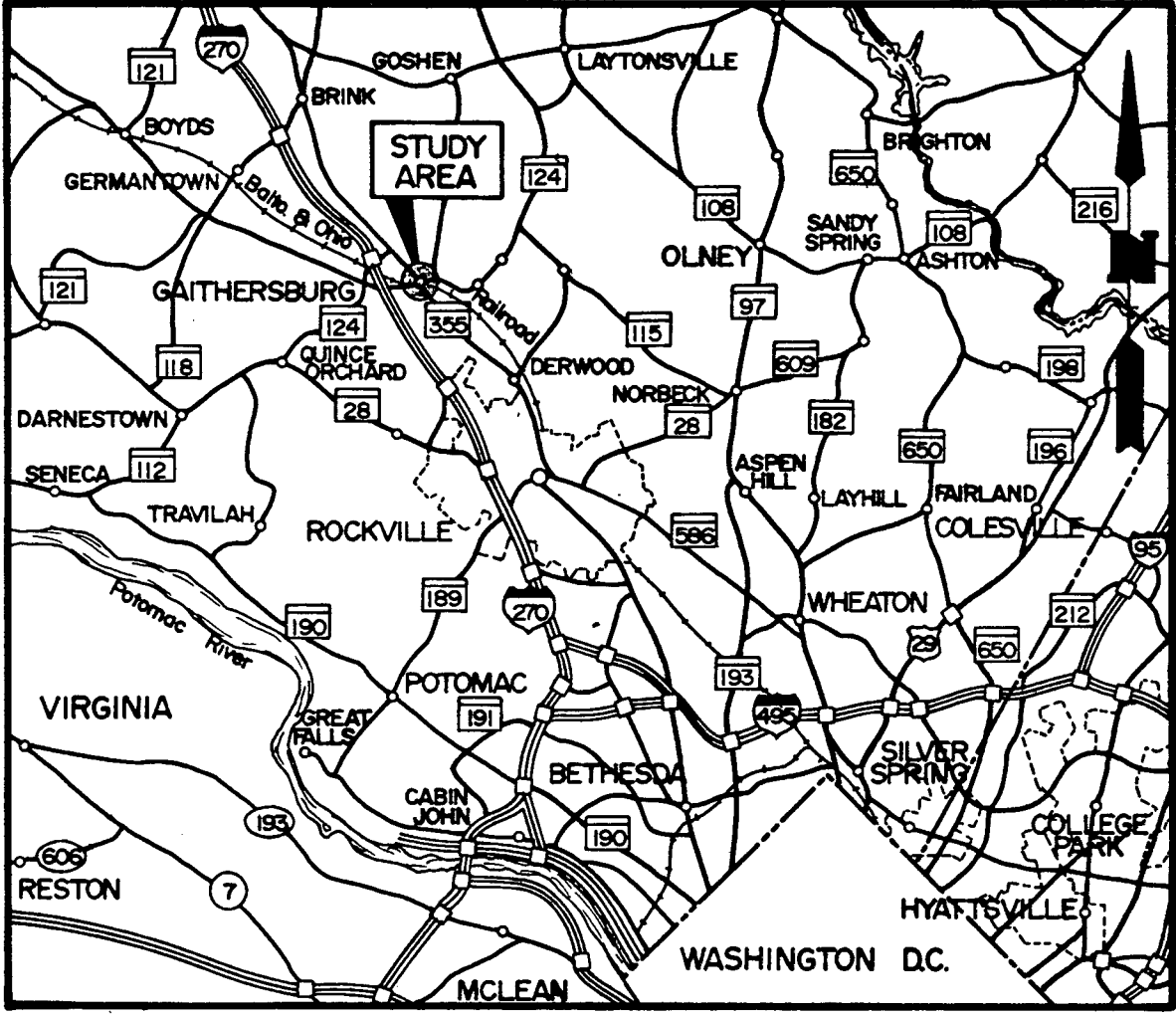
I. LOCATION AND DESCRIPTION OF PROJECT

1. LOCATION OF PROJECT

The proposed action under consideration is the widening and upgrading of Maryland Route 355 (Frederick Avenue) from South Summit Avenue to a point just past Chestnut Street. In addition, the existing grade separation structure over Maryland Route 124 and the B&O Railroad tracks, and the interchange configurations of Maryland Route 355 with Maryland Route 124 would be replaced. The proposed project is located in the City of Gaithersburg in Montgomery County, Maryland, approximately 20 miles northwest of Washington, D.C. A general project location map is shown in Figure 1 on the following page.

It should be noted that during the preliminary engineering and environmental studies, the proposed project's northern study limit was Brookes Avenue. This limit was extended from Brookes Avenue to Chestnut Street to accomodate the change in vertical and horizontal alignment which was necessary to lessen the impacts in the vicinity of East Diamond Avenue and Brookes Avenue. However, since a one mile section of Maryland Route 355 beginning at Brookes Avenue and continuing north is currently under construction, no additional right-of-way will be required for the extension of the proposed project to Chestnut Street. In view of this fact, the northern study limit will continue to be Brookes Avenue for the purposes of this environmental analysis. Since the portion of Maryland Route 355 currently being upgraded between Brookes Avenue and Chestnut Street will be reconstructed under the proposed project in order to link the two projects, the construction costs for the overlap section are included in the total estimated costs for the project under study.

The reconstruction of Maryland Route 355 south of the proposed project between South Summit Avenue and Shady Grove Road is currently advertised for construction bids. The typical section for this portion of Maryland Route 355 is identical to the typical section for the proposed project between South Summit Avenue and Brookes Avenue.



PROJECT LOCATION MAP

REFERENCE: See Figure No. 5, Page No. 23
For Local Streetmap.

FIGURE I

//

The following sections describe the natural and socioeconomic features of the study area.

2. DESCRIPTION OF SURROUNDING TERRAIN AND NATURAL FEATURES

2.1 Climate

Montgomery County lies in a region midway between the frigid climate of the North and the temperate climate of the South. The mid-latitudinal location of Montgomery County, where the general atmospheric flow is from west to east across North America, contributes to the continental type of climate.

Prevailing surface winds are from the west-northwest except during the summer months when they become more southerly. The windiest period is late winter and early spring. Dangerous and damaging storms, such as tornadoes, hurricanes, and blizzards are rare.

The average yearly temperature for the Rockville station is 52.2°F. Generally, the coldest period of the year is late January and early February, while the warmest period is experienced in July. The highest temperature on record in the county is 106°F at Great Falls in July 1936, while the lowest is -21°F in January 1912 at Great Falls.

The average annual precipitation is 40 inches and is fairly evenly distributed throughout the year. The heaviest precipitation can be expected to occur in late spring or early summer, the lightest in February. Thunderstorms occur on an average of 30 days per year, primarily from May to August. The yearly average for snowfall is 34.2 inches with the greatest accumulation in February.

2.2 Geology and Soils

Inventory. The study area is located in the eastern division of the Piedmont physiographic province. The topography of this region consists of low, rolling hills that slope in an easterly direction. Surface elevations in the study area generally range between 400 and 500 feet above sea level. Slopes are moderate.

The principal surficial geologic formation of the study area is the Wissahickon formation of the late Pre-Cambrian age. This formation is composed of oligoclase mica schist containing thin bands of quartz. These bands represent sandy beds that were intercalated between the silty and shaly strata from which the schists developed.

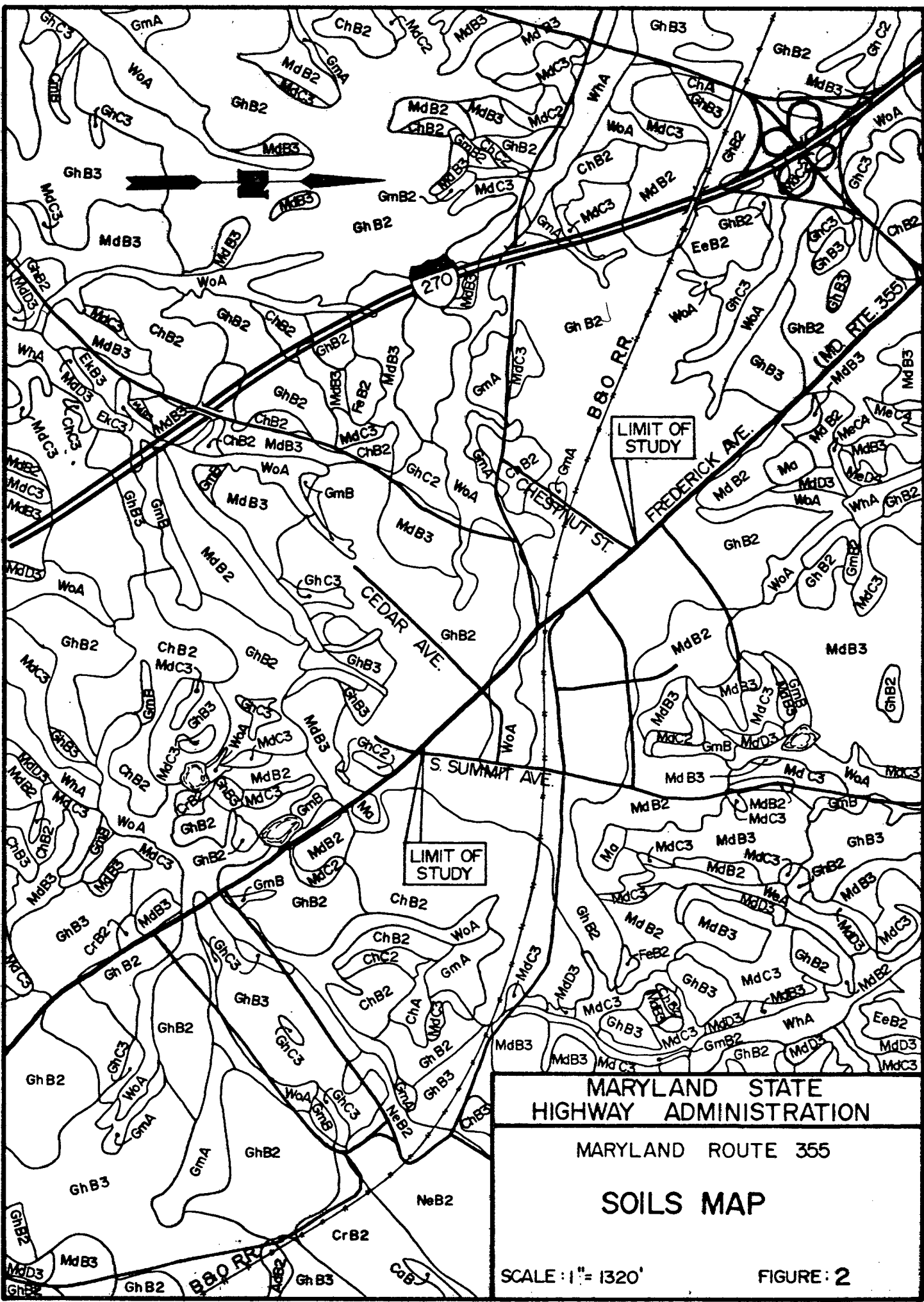
The Wissahickon formation is an important aquifer in Montgomery County. The groundwater occurs primarily in pores and fractures of the crystalline rocks and is recharged almost entirely through precipitation. The average depth of 120 surveyed wells in Montgomery County was 137 feet, and the average yield was 26 gpm.

Gaithersburg is physically subdivided into several major drainage areas which ultimately discharge into either the Great Seneca Creek or Muddy Branch Creek drainage basins. The Seneca basin drains the northern and western portions of the city and Montgomery Village; the Muddy Branch basin drains the southern and eastern sections of the city. The important drainage shed areas in the city have been identified as the Whetstone Game Preserve and Long Draught Districts (tributary to the Great Seneca), and the Muddy Branch District (tributary to the Muddy Branch).

The closest occurrence of surface water to the study area is the Muddy Branch Creek. The headwaters of the Muddy Branch originate near Gaithersburg. The creek is relatively short, about 25 miles in length, and enters the Potomac River about three miles downstream. There are no wetlands in the study area.

The predominant soils of the study area belong the Glenelg-Manor-Chester Association. The soil types within this association include: Glenelg silt loam (GhB₂, GhB₃, GhC₂), Manor silt loam (MdB₂, MdB₃, MdC₂, MdC₃, MdD₃), Chester silt loam (CHB₂), and Elioak silt loam (E1B₂). The two other soil types of minor occurrence in the study area are the Glenville silt loam (GmA, GmB) and the Worsham silt loam (WoA). Location of the soil types is shown in Figure 2 on the following page.*

* Source: U.S. Department of Agriculture, Soil Survey of Montgomery County, Maryland.



MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

SOILS MAP

SCALE: 1" = 1320'

FIGURE: 2

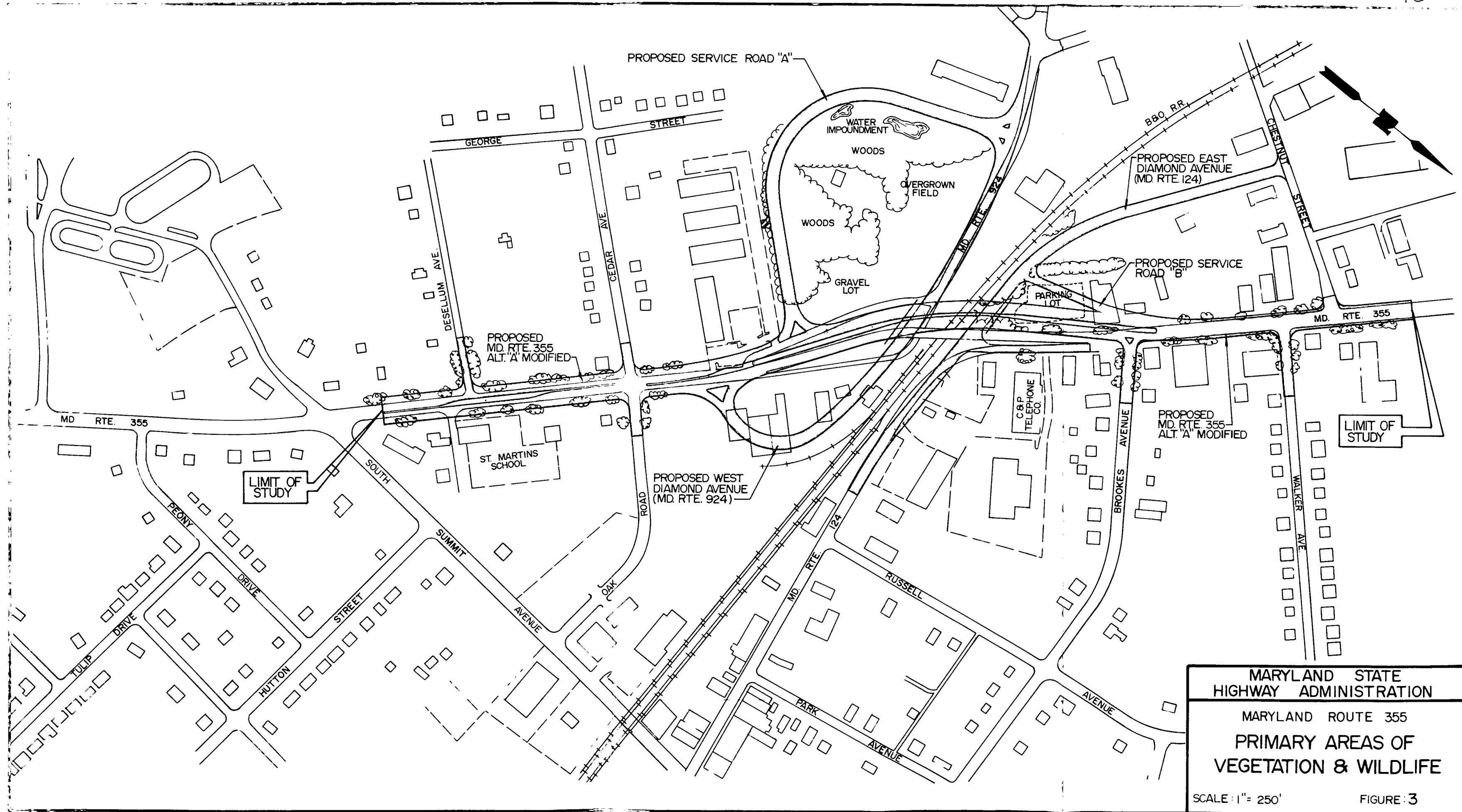
The soils of the Glenelg-Manor-Chester Association are characteristically silty or loamy, well drained, permeable, and micaceous. The Glenelg and Manor soils, which are the most extensive in the county, are moderately deep; the Chester soils, which are also extensive, are the deepest soils in the county. The suitability of these soils for urban uses such as housing, road construction, and recreation is good where slopes are 8 percent or less and moderate for soils with slopes from 8-15 percent.

2.3 Vegetation and Wildlife

A field survey was conducted to identify and record the location of vegetation and wildlife in the study area. Based on that survey, the following areas will be discussed in this analysis (see Figure 3 on page 11):

- Vegetative corridors adjacent to Maryland Route 355 and side streets.
- Various sized groups of vegetation adjacent to proposed service roads A, B, and Diamond Avenue relocated.

The flora communities along Maryland Route 355 and side streets exhibit a limited diversity of plant species. Although much of this landscape lacks the diversity of the natural flora characteristic of the Piedmont region, the quantity and size of the endemic tree flora is large. These include: Quercus sp. (white, scarlet, black oak); Acer sp. (silver and sugar maple, and boxelder); Robinia pseudoacacia (black locust); and Liriodendron (Tulip poplar). Intermixed with the native species is an array of ornamental trees and shrubbery maintained on privately cultivated lawns. Native lower plants and wild grasses such as goldenrod, greenbrier types, pokeweed, poison ivy, and virginia creeper are restricted to the corners of some commercial establishments.



MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355
PRIMARY AREAS OF
VEGETATION & WILDLIFE

SCALE: 1" = 250' FIGURE: 3

Faunal populations found in the area are characteristic of an urban setting. Coexisting with the aforementioned flora community is a limited squirrel population (less than the average one per acre normal carrying capacity), and a probable occurrence of eastern mole (scalopus aquaticus) burrowing in lawns, gardens, and within oak stands. Avian species commonly sighted are starlings (Sturnus vulgaris), rock dove (Columba livia), common crow (Corvus brachyrhynchus), robin (Turdus migratorius), house sparrow (Passer domesticus), and song sparrow (Melospiza melodia).

Flora and fauna at proposed Service Road "A" involve a more complex and diverse series of communities than any of the other surveyed areas. Approximately eight acres in size, this is a natural area of irregular topography. Part of this area exhibits a secondary growth reaching climax levels, young secondary growth, open fields and flood plain. Canopy tree species observed (in addition to those native species mentioned in the previous section) are: white ash (Fraxinus americana), hickory species (Carya sp.), black walnut (Juglans nigra), and tree of heaven (Ailanthus altissima). The understory is represented by flowering dogwood (Cornus florida), witch hazel (Hammamelis virginiana), spicebush (Lindera benzoin), blueberry (Vaccinium sp.), blackberry (Rubus sp.), wild grape (Vitis sp.), and greenbrier types (Smilax sp.).

Frequent terrestrial faunal observations include: red squirrel, raccoon (Procyon lotor) and eastern cottontail (Sylvilagus floridanus). Others likely to occur in the forested and brushy areas and occasionally present in open grassy fields are the white footed mouse (Peromyscus leucopus), eastern chipmunk (Tamias striatus), masked shrew (Sorex cinereus), least shrew (Cryptotis parva), short tail shrew (Blarina brevicauda), and the brown myotis (Myotis lucifugus) which may live in hollow trees or beneath loose bark.

Avian sightings in the upper and lower forest strata include: robin (Turdus migratorius), catbird (Galeoscoptes carolinensis), brown thrasher (Harporhynchus rufus), cardinal (Cardinalis cardinalis), mockingbird (Mimus polyglottos), song sparrow (Melospiza fasciata), and blue jay (Cyanocitta cristata cristata). There appears to be an interrupted stream flow feeding an impoundment area. Considering this, one is likely to find a variety of lower level vertebrates and invertebrates.

The area around proposed Service Road B consists of a limited amount of overstory, understory, and thickets growing in a depression area that fills with water during heavy rains. The remaining space around this vegetation clump has been cleared. The overstory is composed of oak, maple, and ash, while the understory contains blackberry, mulberry, and tree-of-heaven. Other than a few grackles, sparrows, and crows, no wildlife was observed.

The proposed Diamond Avenue relocated (Maryland Route 124) area consists of tall and dense native vegetation, located between the neighboring parking lots and the B&O railroad tracks. Stands of tree-of-heaven border the Maryland Route 355 bridge; species of oak, mulberry, maple, walnut, and ash fill in the rest. Thickets of heavy understory, vines, and an overgrown site of grasses and wild plants attract the following birds in order of greater number observed: starling, common grackle, house sparrow, rock dove, tufted titmouse, and blue jay.

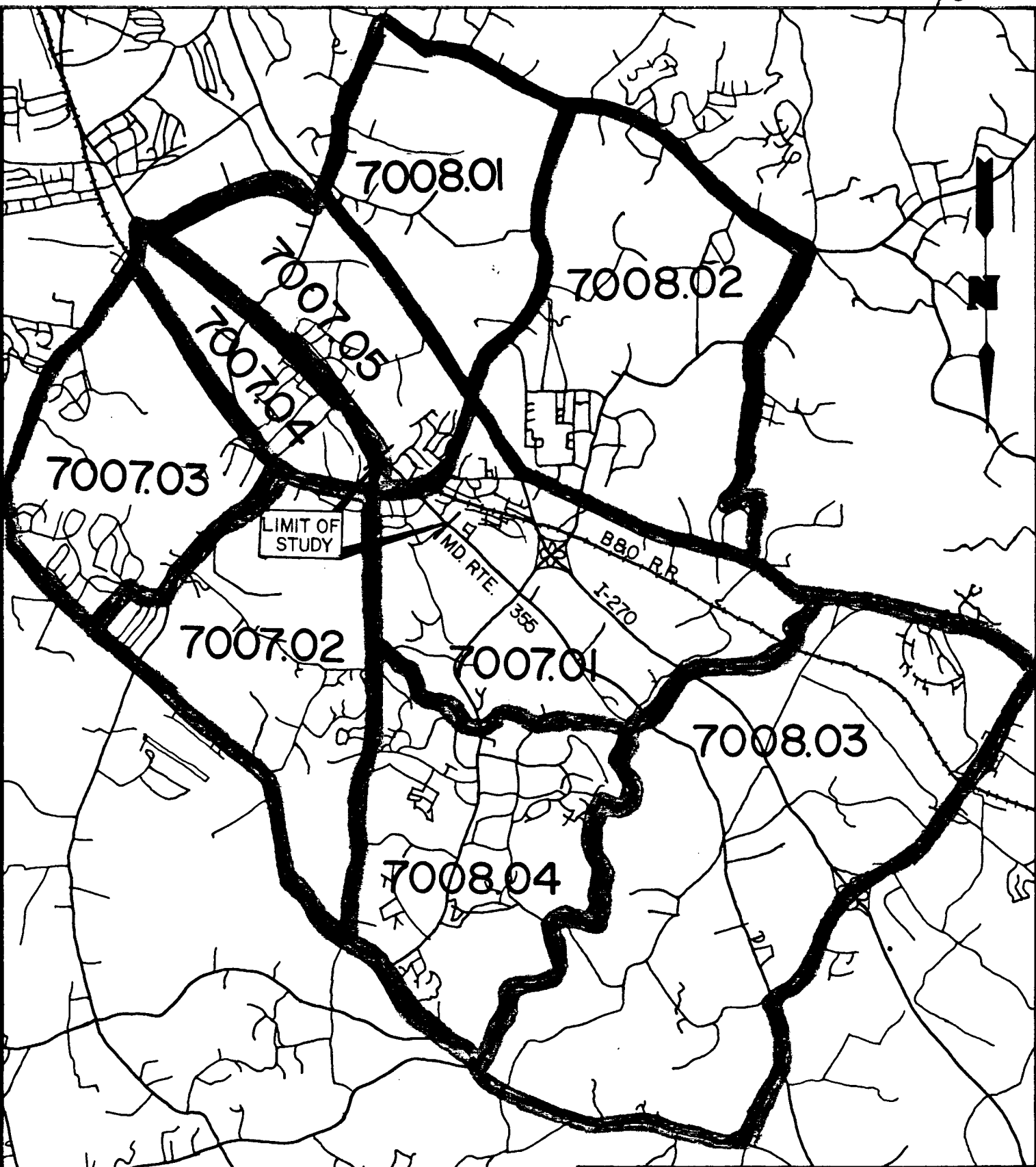
The only mammal frequenting the area is the red squirrel (Tamiasciurus hudsonicus loquax). However, because this plant community is associated with the adjacent habitat across the railroad tracks, one cannot dismiss the possibility of this area being a temporary habitat for species which migrate, fly about, or simply roam around in search of food, crossing boundaries in the process.

There are no known rare or endangered vegetation or wildlife species in the study area.

3. DESCRIPTION OF SURROUNDING NEIGHBORHOODS

3.1 Population

The study area lies within portions of census tracts 7007.01, 7007.02, 7007.04, and 7007.05. These four census tracts form a portion of Election District 9 in Montgomery County. A map of the census tracts and Election District 9 is shown in Figure 4 on the following page.



MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355
ELECTION DISTRICT 9
AND CENSUS TRACTS

SCALE: 1"=5000'

FIGURE: 4

Baseline socioeconomic data for the study area was obtained from the 1970 U.S. Census of Population and Housing compiled by the U.S. Bureau of the Census. Where indicated, updated socioeconomic data was provided by the Montgomery County Planning Board.

In 1970 the population of the four census tracts was 93.3 percent white, 5.9 percent black, and 0.8 percent other minorities. However, there are no minority communities within the study area limits.

An evaluation of year-round housing data indicates that 69.2 percent of the housing is owner occupied, 27.4 percent is renter occupied, and 3.4 percent is vacant.

The median education level of persons in the four census tracts is 12.4 years.

The majority of the employed labor force (92.6 percent) within the four census tracts commute to work by automobile. Only 1.6 percent of all workers use either bus or rail, and the remaining 5.8 percent use other means of transportation.

The study area lies within one of Montgomery County's major growth centers. Population data for the four census tracts, Election District 9, and Montgomery County as a whole is presented in Table 1 on page 18.

As indicated in Table 1, between 1960 and 1970 there was a dramatic population increase of 164.3 percent in Election District 9. This is three times greater than the countywide growth rate of 53.3 percent for the same period. Population estimates for 1978 reflect a continuation of this growth trend. Since 1970, the population of the study area census tracts increased by an estimated 7,912 persons or 118.7 percent.

Coincident with rapid population growth is the construction of new dwelling units in the area. Between 1970 and 1978, an estimated 4,889 new structures were built in the four census tracts, for a 120.9 percent net gain.

Population and housing projections prepared by the Montgomery County Planning Board for the Gaithersburg area indicate that steady growth will continue through the 1980's.

Election District and Census Tract	1960*	1970	1978 (estimated)	% Change 1960-1970	% Change 1970-1978
9 - Gaithersburg	8,760	23,150	40,968	164.3	177.0
7007.01	---	4,316	13,187	---	205.5
7007.02	---	2,425	4,807	---	98.2
7007.04	---	2,881	3,295	---	14.4
7007.05	---	2,719	5,705	---	109.8
Total County	340,928	522,810	593,500	53.3	13.5

* The above census tracts were created after the 1960 census.

SOURCE: 1960, 1970 population from U.S. Bureau of the Census, 1970 Census of Population and Housing, Washington, D.C. SMSA.

1978 population estimate from the Montgomery County Planning Board.

Table 1
CENSUS TRACT, ELECTION DISTRICT,
AND COUNTY POPULATION

28

3.2 Local Economy

The study area community is characterized by residential development surrounding the traditional business district of Gaithersburg. Commercial businesses within this district include a number of local retail stores, a few restaurants, a bank, a lumber yard, a lawn and garden center, and five gas stations. Light industrial businesses include an auto body shop, an iron works shop and a glass works. Although these businesses provide limited employment opportunities, a number of major employers are located in the Gaithersburg vicinity. They include the National Bureau of Standards, IBM, Control Data Corporation, and Fairchild Industries, all situated within the I-270 corridor. A representative list of area firms is presented in Table 2 on the following page.

Census tract data for place of work indicates that 91.5 percent of the employed labor force work within the Washington, D.C., SMSA (Standard Metropolitan Statistical Area) while only 7.3 percent remain in Montgomery County. The Maryland National Capital Park and Planning Commission has estimated however, that between 1970 and 1976 the number of persons both residing and working in Montgomery County increased by approximately 80,000. This can be primarily attributed to the large scale development of up-county areas such as Gaithersburg.

Employment data by occupation shows that 67.5 percent of the labor force are employed in the occupational categories of professional workers, managers, sales, and clerical workers. Twenty-one (21) percent work as craftsmen, operatives, and laborers.

The median income and labor force participation rate for the study area census tracts, Montgomery County, and the Washington, D.C., SMSA are presented in Table 3 on page 21.

Table 2
MAJOR EMPLOYERS IN GAITHERSBURG

Firm	Product	Employment	
		Profes- sional	Total
Airflow Co.	Air conditioning units; Dehumidifiers	3	95
Astro Communication Lab- oratory, Division of Aiken Industries, Inc.	Signal generators, field intensity meters; Communications receivers	60	200
Bechtel Corporation	Engineers/constructors for fossil or nuclear steam power plants & heavy industrial facil- ities	1,050	1,500
Dewberry, Nealon & Davis	Property & topographic surveys, planning & design of subdivisions, highways, etc.; site planning	30	200
Exotech Inc.	Electro-optical instru- mentation; space sensors	50	85
National Geographic Society	A nonprofit organization producing a monthly geographic publication, accurate reference maps, atlases & globes, filmstrips & television shows, also sponsors expeditions & field research projects	NA	NA
Washington Shade & Awning Co.	Custom specialists in decorative window treatment for home & industry	--	60
Watkins-Johnson Co., CEI Division	Radio & electronic equip- ment	55	400
Weinschel Engineering Co., Inc.	Electronic components; engineering & research instruments	32	185
Willard, R.S., Co., Inc.	Industrial packing supplies	--	44

SOURCE: Maryland Department of Economic and Community Development,
Community Economic Inventory, Montgomery County, Maryland.

Table 3
1970 MEDIAN INCOME AND LABOR FORCE PARTICIPATION RATE *

<u>Jurisdiction</u>	<u>Median Income</u>	<u>Labor Force Participation Rate (All persons 16 and over)</u>
7007.01	\$11,526	65.7%
7007.02	\$10,545	66.7%
7007.04	\$14,575	72.4%
7007.05	\$11,103	69.1%
Montgomery County	\$16,710	63.6%
Washington, D.C., SMSA	\$12,933	65.5%

The above data shows that the median income for the study area census tracts and the Washington, D.C., SMSA is lower than the county-wide average, while the census tracts labor force participation rates are higher than for the county or the Washington, D.C., SMSA.

The September 1979 unemployment rate for census tracts 7007.01, 7007.02, 7007.04, and 7007.05 was 2.5 percent, 3.0 percent, 1.7 percent, and 0.6 percent respectively, as compared with a countywide rate of 3.6 percent and a Washington, D.C., SMSA rate of 4.3 percent. The unemployment rate for the 12 month period ending September 1979 is 1.9 percent, 2.9 percent, 1.6 percent, and 0.6 percent respectively for the four census tracts, 3.5 percent for Montgomery County and 4.6 percent for Washington, D.C., SMSA.

* Although updated median income and labor force participation rate figures are not available, the 1970 figures are useful for comparative purposes between the individual tracts, Montgomery County and the Washington, D.C., SMSA.

3.3 Community Facilities

A variety of community facilities and services are available in and around the study area. Their locations are shown in Figure 5 on the following page. Educational institutions include three public schools and one parochial school. They are Gaithersburg Elementary School, Gaithersburg Junior High School, Gaithersburg Senior High School and St. Martin's School. There are eight churches that include: New Covenant Church, First Assembly of God, Gaithersburg Menonite Church, Church of the Nazarene, St. Martin's Catholic Church, Ascension Episcopal Chapel, Grace United Methodist Church, and First Baptist Church of Gaithersburg.

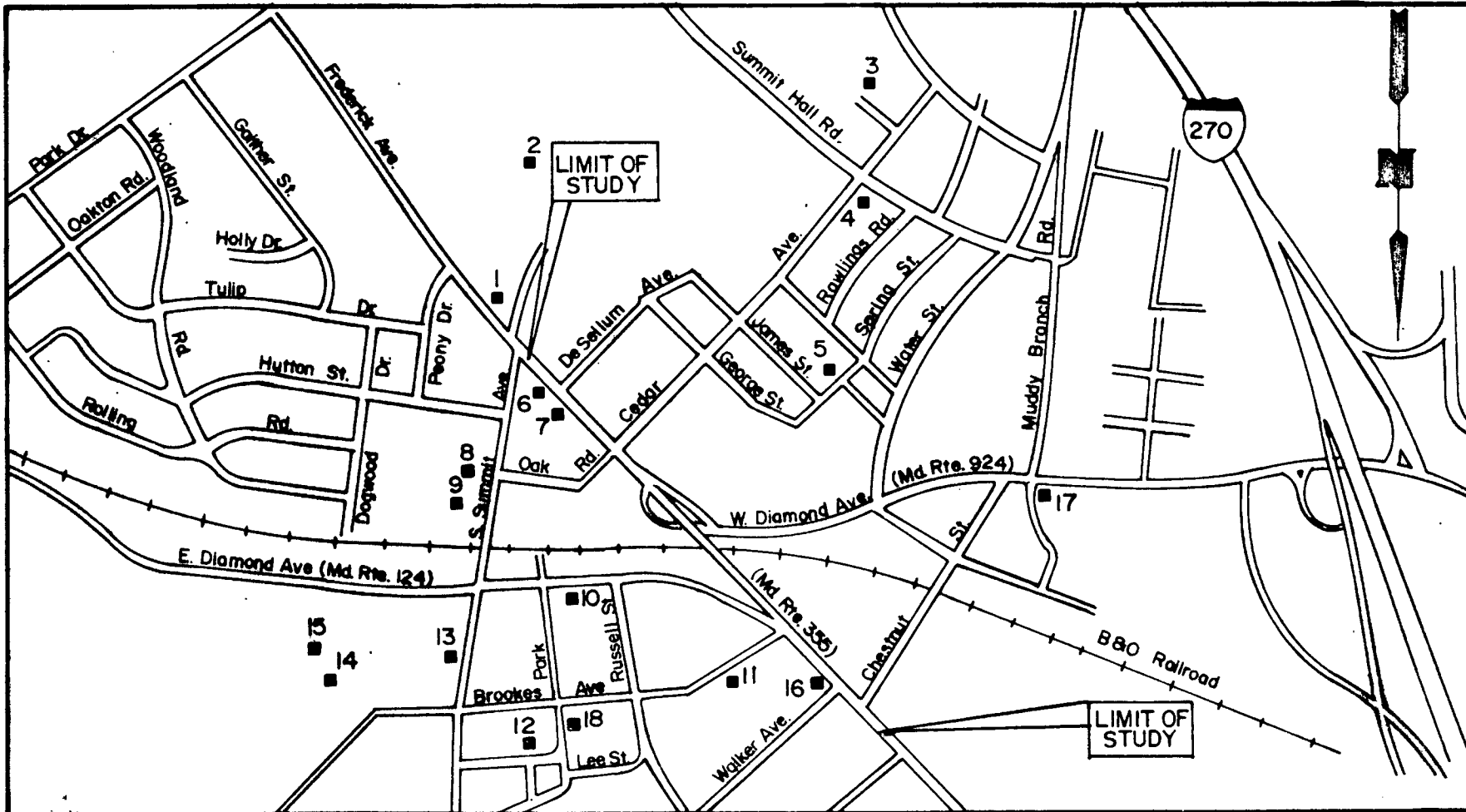
Also located in the study area are Gaithersburg City Hall, a post office, the Gaithersburg Public Library, and the Gaithersburg Volunteer Fire Station. Police protection is provided by the City of Gaithersburg with special assistance from the Montgomery County Police.

There are a number of recreational facilities within the study area. A Civic Center, located on South Summit Avenue, accomodates tennis, basketball, and handball courts, and picnic and play area. Indoor swimming is offered at the Gaithersburg Aquatic Center, located next to Gaithersburg Junior High School. In addition, Gaithersburg Elementary, Junior, and Senior High Schools have numerous recreational facilities open to the public.

Water and sewer facilities for the study area are supplied by the Washington Suburban Sanitary Commission.

There are currently no hospitals in the immediate Gaithersburg vicinity. Area residents use Suburban Hospital in Bethesda, Montgomery General Hospital in Olney, Holy Cross Hospital in Silver Spring, and Sibley Hospital in the District of Columbia.

Additional community facilities and services have been planned to accomodate anticipated population growth in the Gaithersburg area. Thirty-eight(38) elementary schools have been proposed, including 30 park schools. Ten new junior high schools and five new high schools are slated for development to augment the three existing area junior and senior high schools.



KEY

- | | |
|---|--|
| 1. ASCENSION CHAPEL | 11. CHURCH OF THE NAZARENE |
| 2. GAITHERSBURG HIGH SCHOOL | 12. GAITHERSBURG PUBLIC LIBRARY |
| 3. FIRST ASSEMBLY OF GOD CHURCH | 13. GAITHERSBURG ELEMENTARY SCHOOL |
| 4. NEW COVENANT CHURCH | 14. GAITHERSBURG JUNIOR HIGH SCHOOL |
| 5. GAITHERSBURG MENNONITE CHURCH | 15. GAITHERSBURG AQUATIC CENTER |
| 6. ST. MARTIN'S CHURCH | 16. GRACE UNITED METHODIST CHURCH |
| 7. ST. MARTIN'S SCHOOL | 17. FIRST BAPTIST CHURCH OF GAITHERSBURG |
| 8. CIVIC CENTER | 18. PROPOSED LEE ST. PARK |
| 9. U.S. POST OFFICE | |
| 10. GAITHERSBURG VOLUNTEER FIRE STATION | |

**MARYLAND STATE
HIGHWAY ADMINISTRATION**

MARYLAND ROUTE 355

COMMUNITY FACILITIES

SCALE: 1"=1000'

FIGURE 5

25

The Gaithersburg Vicinity Master Plan recognizes the need to expand the capacity of the Brookes Avenue Library to regional level, with the eventual addition of two new libraries. Also, the construction of five new fire stations has been recommended by the County Fire Board. The Master Plan has also proposed new neighborhood and community parks and other open space areas. Additionally, the City of Gaithersburg has developed a Parks, Recreation, and Open Space Master Plan that presents guidelines for the future development of neighborhood recreation facilities. The Lee Street Park is currently undergoing construction in the study area and will include a basketball court, playground equipment, picnic areas, fencing, and landscaping. (See Figure 5 for location)

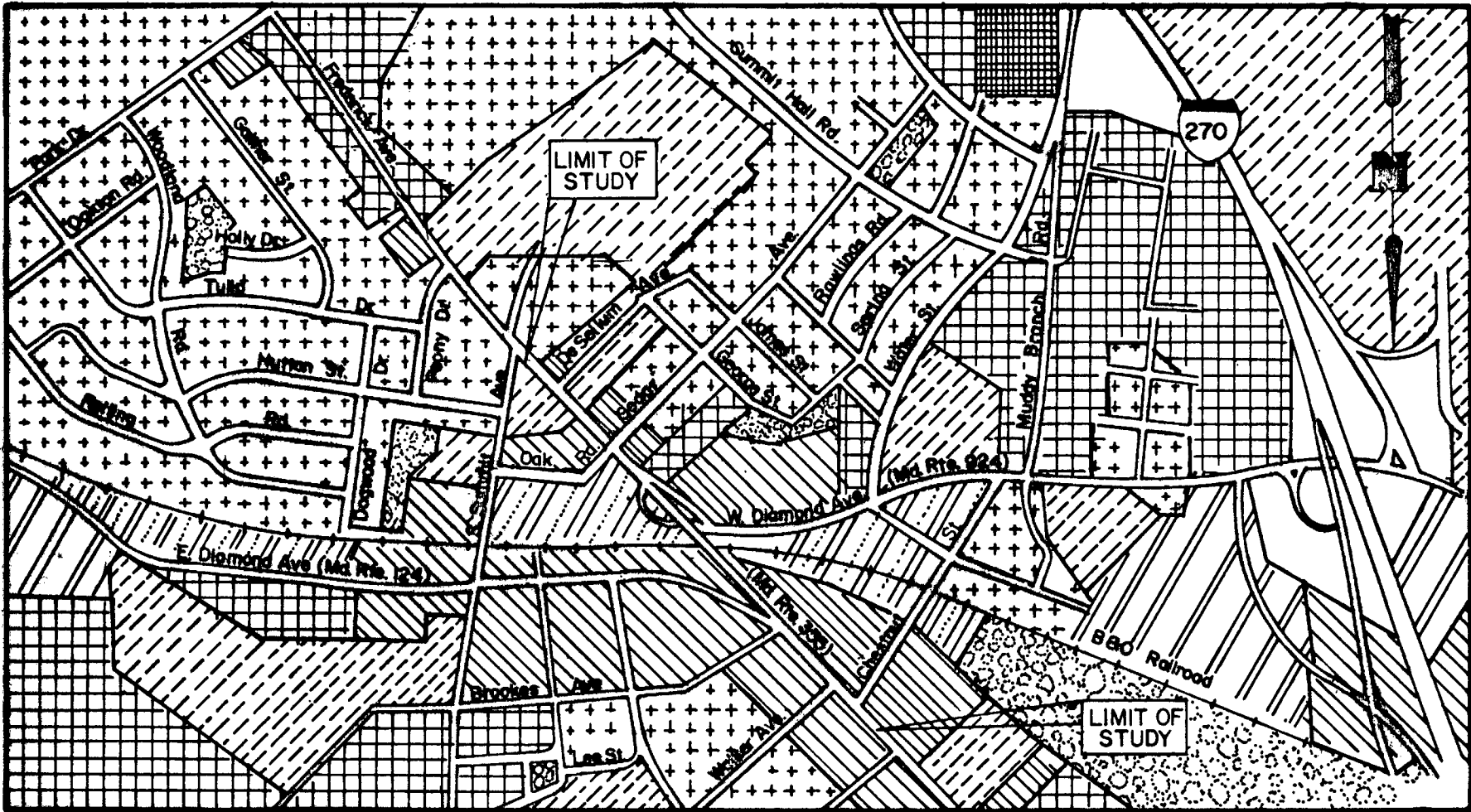
A proposed medical center complex to be located at Shady Grove Road and Great Seneca Highway will provide a variety of hospital and institutional services.

Finally, the Washington Suburban Sanitary Commission through its Ten-Year Water and Sewerage Plan will regulate additional water and sewer services.





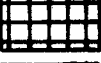


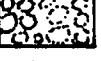

3.4 Land Use

Existing land use within the study area is composed of commercial, industrial, residential, and institutional developments. A land use map for the area is shown on page 27 as Figure 6.* Mixed strip development exists within the roadway corridor of Maryland Route 355 from Summit Avenue to Brookes Avenue (the roadway corridor is considered to extend 500 feet to either side of the existing centerline of Maryland Route 355). Approximately 22 buildings are located along this roadway. There are nine commercial-retail establishments, four residential-offices, five single-family residences, one garden apartment, two churches, and one school. Commercial development predominates along the northern portion of Maryland Route 355, while residential and institutional development exists along the more southerly end.

* Although a small tract of land bordering George Street is keyed as open space and recreation on the city's Land Use Plan, the property is privately owned and is zoned for industrial use.



KEY

- | | | | |
|---|----------------------------|---|----------------------------|
|  | VACANCY-FARM |  | INDUSTRIAL-RESEARCH-OFFICE |
|  | LOW DENSITY RESIDENTIAL |  | INDUSTRIAL-COMMERCIAL |
|  | MEDIUM DENSITY RESIDENTIAL |  | INSTITUTIONAL |
|  | HIGH DENSITY RESIDENTIAL |  | OPEN SPACE & RECREATIONAL |
|  | COMMERCIAL | | |

**MARYLAND STATE
HIGHWAY ADMINISTRATION**

**MARYLAND ROUTE 355
EXISTING
LAND USE PLAN**

27

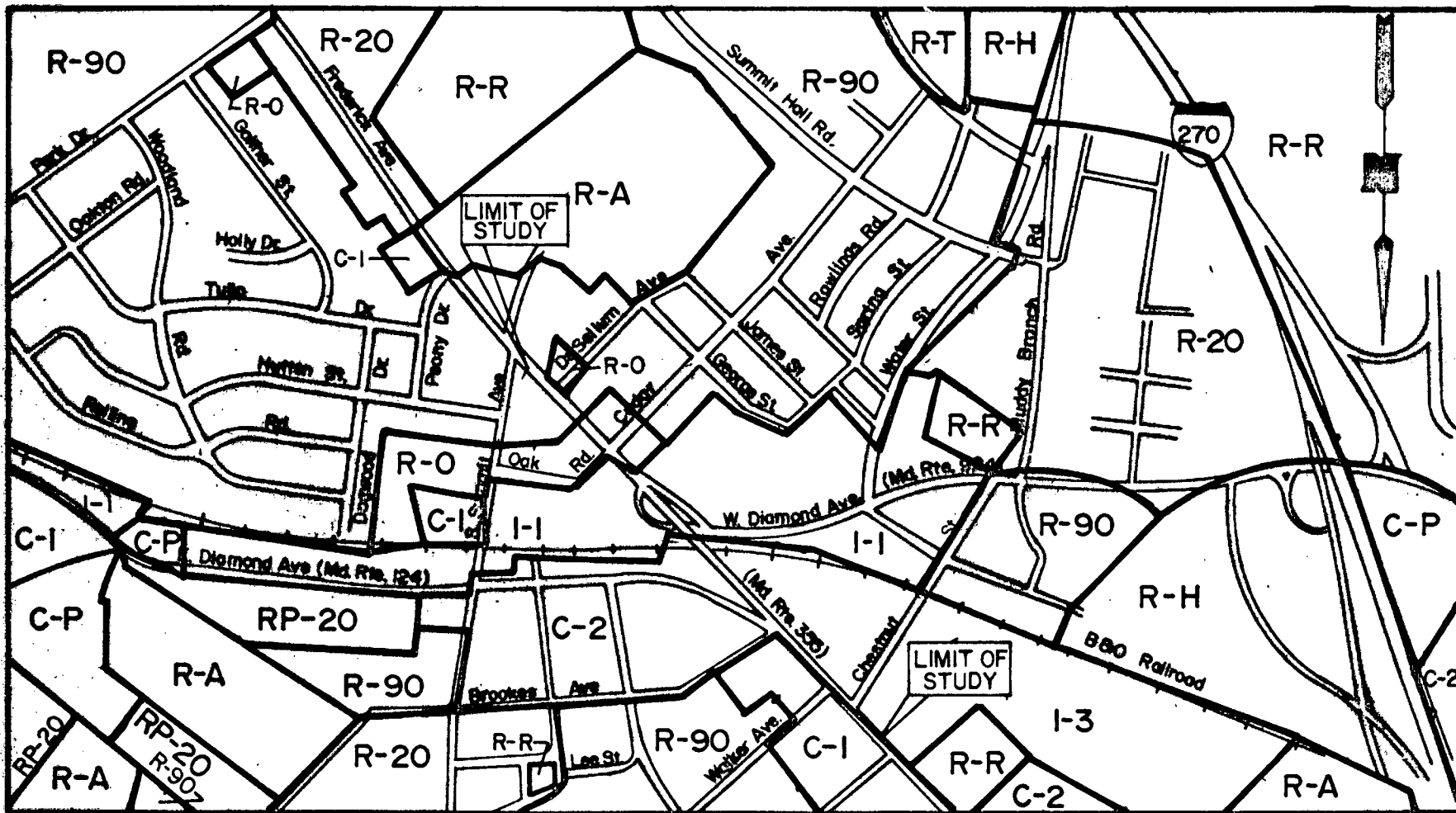
SCALE: 1" = 1000' FIGURE 6

Light industrial and retail businesses located principally along Diamond and Summit Avenues comprise the traditional business districts of Gaithersburg. The city offices of Gaithersburg as well as a railroad station and post office are situated on Summit Avenue. Numerous local retail shops, a few restaurants, and an office of the C&P Telephone Company are located on East Diamond Avenue. The Washington Suburban Sanitary Commission Depot lies at the western end of West Diamond Avenue.

A large portion of the overall study area is comprised of medium density residential and neighborhoods. This development extends south of the Gaithersburg business district and to the eastern and western limits of the study area. Homes are typically of the single family detached variety. A concentration of multi-family housing consisting of garden apartment complexes can be found in the northwest portion of the study area.

Institutional and public land uses within the study area include eight churches, four schools, one library, and one fire station.

Beginning in the early 1960's the Gaithersburg area began to experience rapid development. This intensive growth can be attributed to the extension of Interstate Route 270 to the west of Gaithersburg and the subsequent establishment of major industrial, and research and development firms along this highway. This upward trend in growth was further reinforced when Gaithersburg was designated a corridor city in the 1964 Metropolitan Washington General Plan. Lakeforest, a major retail center, and Montgomery Village, a planned community currently under development, are located north of the study area. These two developments typify the thrust towards intensified land use in the general vicinity of the study area. Outside of the municipal limits of Gaithersburg, significant area growth has occurred in such developments as the National Bureau of Standards, the National Geographic Society, the Town of Washington Grove, and numerous residential subdivisions, country clubs, and private preserves.



KEY

- R-A AGRICULTURAL RESIDENTIAL
- R-R RURAL RESIDENTIAL
- R-90 MEDIUM DENSITY RESIDENTIAL (One family)
- R-T MEDIUM DENSITY RESIDENTIAL (town houses)
- R-20 MEDIUM DENSITY RESIDENTIAL (apartments)
- RP-20 MEDIUM DENSITY PLANNED RESIDENTIAL (apartments)
- R-H PLANNED RESIDENTIAL (apartments)
- R-O PLANNED RESIDENTIAL (offices)
- C-P COMMERCIAL OFFICE PARK

- C-1 LOCAL COMMERCIAL
- C-2 GENERAL COMMERCIAL
- I-1 LIGHT COMMERCIAL
- I-3 INDUSTRIAL AND OFFICE PARK

MARYLAND STATE HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

ZONING PLAN

SCALE: 1" = 1000'

FIGURE 7

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-31-

4. CULTURAL RESOURCES

4.1 Historic Sites

The Maryland Historic Trust has established three historic districts (A, B, and C) within the City of Gaithersburg. District A in its entirety and portions of Districts B and C lie within the study area. The location of these districts in relation to the study area and individual historic sites within the districts are shown in Figure 8 on the following page.

Of the three districts, the Trust has indicated that District A may be eligible for inclusion on the National Register of Historic Places. The B&O Railroad Station and Freight Shed, located in District A, has already been nominated to the Register, but has not been officially accepted to date. Districts B and C are considered to be of local historic significance, although Ascension Chapel and a residence in District B, and Grace United Methodist Church in District C, are also eligible for inclusion on the Register. Also within the study area is an oak tree of local historic significance, the Washington Oak (see Figure 8). Correspondence to this effect from the Maryland Historic Trust is included in Appendix B.

Available information describing the individual sites follows:

Site 1 - Ascension Episcopal Chapel

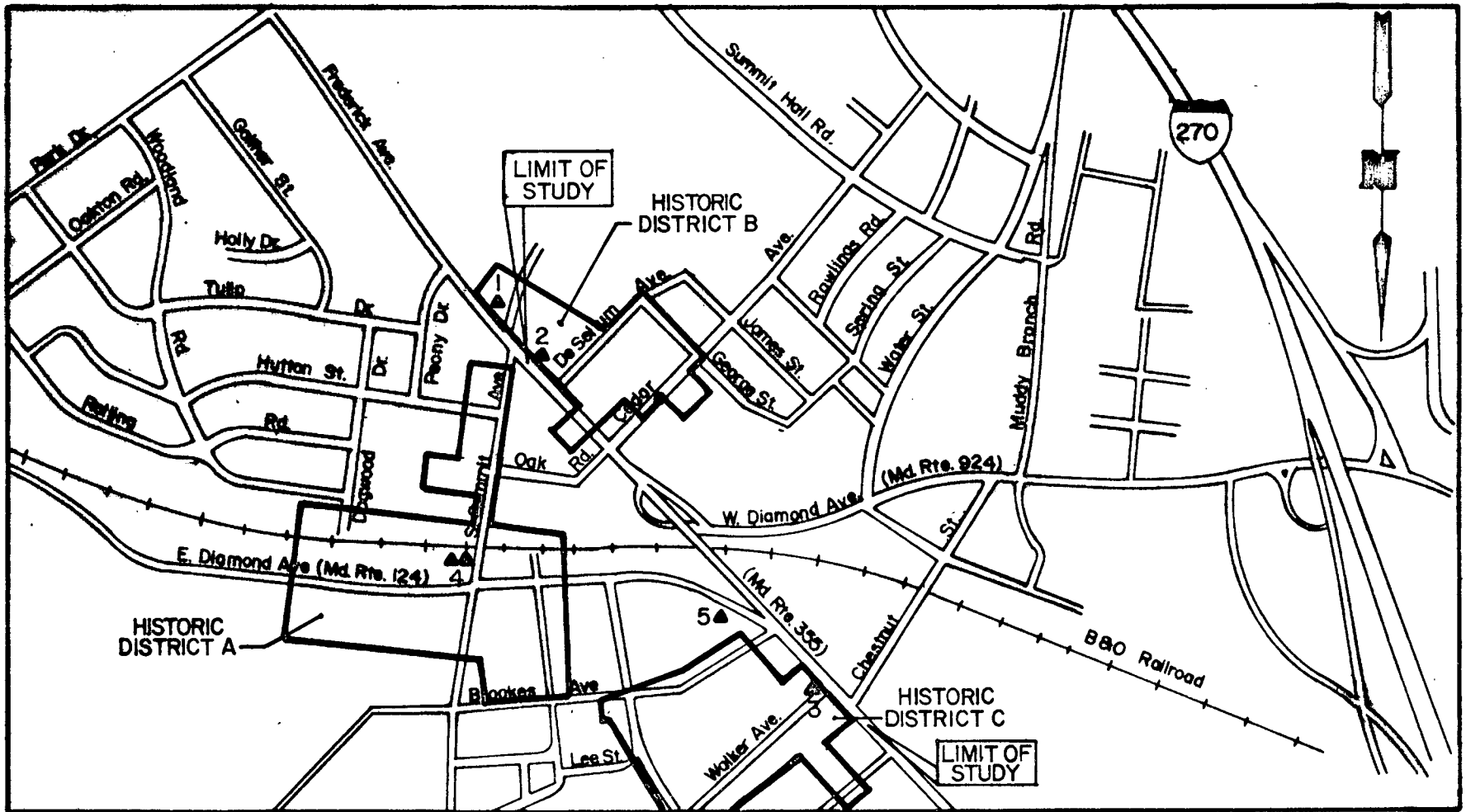
This church is located on the southwest corner of South Summit Avenue and Maryland Route 355. The building dates back to 1882 and is the oldest church building in Gaithersburg. The plain stencilled windows are the original ones from the 1800's. The columns are molds from the National Cathedral in Washington, D.C. The chancel and stained glass window and gold stencilled ceiling pattern in the chancel date back to 1923. This site is considered eligible for inclusion on the National Register of Historic Places.

Site 2 - Thomas Fulk's House

This house, located on the west side of Maryland Route 355, is the second house north of the intersection of Maryland Route 355 and South Summit Avenue. This site is eligible for inclusion on the National Register of Historic Places.

Site 3 - Grace United Methodist Church

This church is located on the southeast corner of Maryland Route 355 and Walker Avenue. It dates back to 1905 and is also eligible for inclusion on the Register.



KEY

- 1. ASCENSION EPISCOPAL CHAPEL
- 2. HOUSE
- 3. GRACE UNITED METHODIST CHURCH
- 4. B & O RAILROAD STATION AND FREIGHT SHED
- 5. HISTORIC OAK TREE

MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

HISTORICAL DISTRICT MAP *W*

SCALE: 1" = 1000'

FIGURE 8

Site 4 - Gaithersburg B&O Railroad Station and Freight Shed

The railroad station and freight shed are located southeast of the intersection of Summit and East Diamond Avenues. It is a one-story brick structure approximately 65 feet by 20 feet with a gable roof. Basically six bays long by one room deep, it consists of the five-bay original station, a one-bay addition used for storage at the east end and several small appendages on the rear. The station was built in 1884 and the last end shed added in 1905. The small additions to the rear contain bathrooms and a storage area and may also date back to 1905-1907.

The freight shed is located approximately 90 feet to the east of the station and is a brick structure with a gable roof. Its facades are divided into six panels with a door in the second and fifth bays in both sides. The railroad station and freight shed have been nominated for inclusion on the National Register, but as of this date had not been officially accepted.

Site 5 - Washington Oak Tree

Located in the heart of Gaithersburg in front of the C&P Telephone Company, the Washington Oak was a resting point for George Washington and Braddock on their way to Fort Duquesne in 1755. A tavern was located close by, which may account for some of the popularity of the tree as a meeting place. The tree is considered to be of local historic significance.

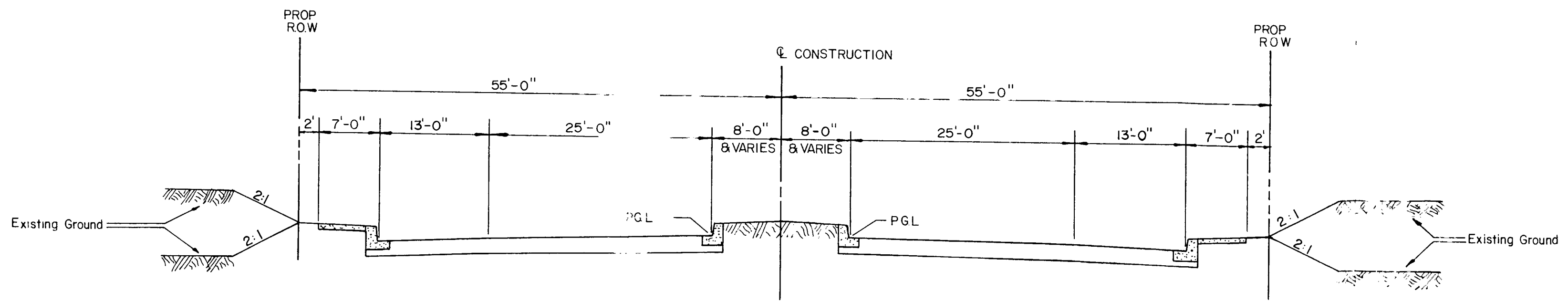
4.2 Archeological Sites

An archeologic reconnaissance survey conducted in the study area failed to reveal the presence of any archeologic remains.

5. DESCRIPTION OF PROJECT

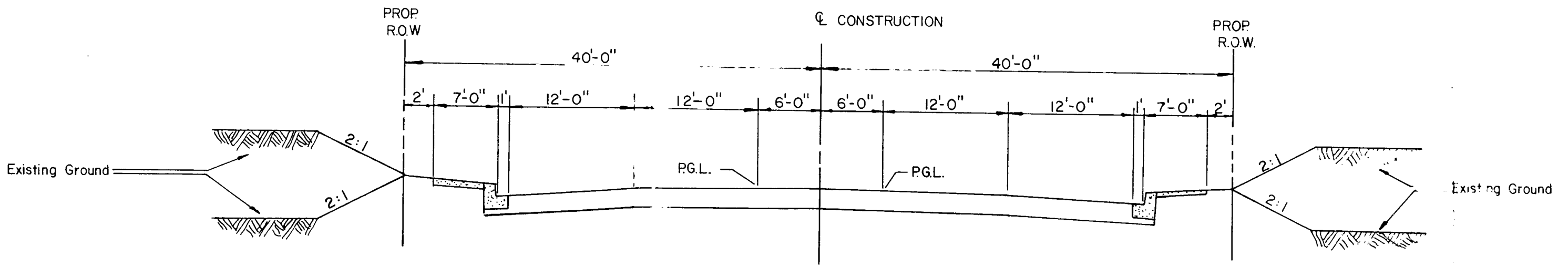
5.1 Condition of the Existing Road

Existing Maryland Route 355 is a 35 foot average width bituminous surface road with concrete curb and gutter and four foot sidewalks at various locations. There is no uniformity in the existing appurtenances. In some locations there are curb, gutter and sidewalk, sidewalk only, or curb only; in the other locations none of these. With the exception of the bridge area, Station 273+00 to Station 287+00, the horizontal alignment is on tangent and the vertical alignment is only sloped enough to provide roadway drainage. The limits of state-owned right-of-way are 30 feet on each side of the roadway's centerline.



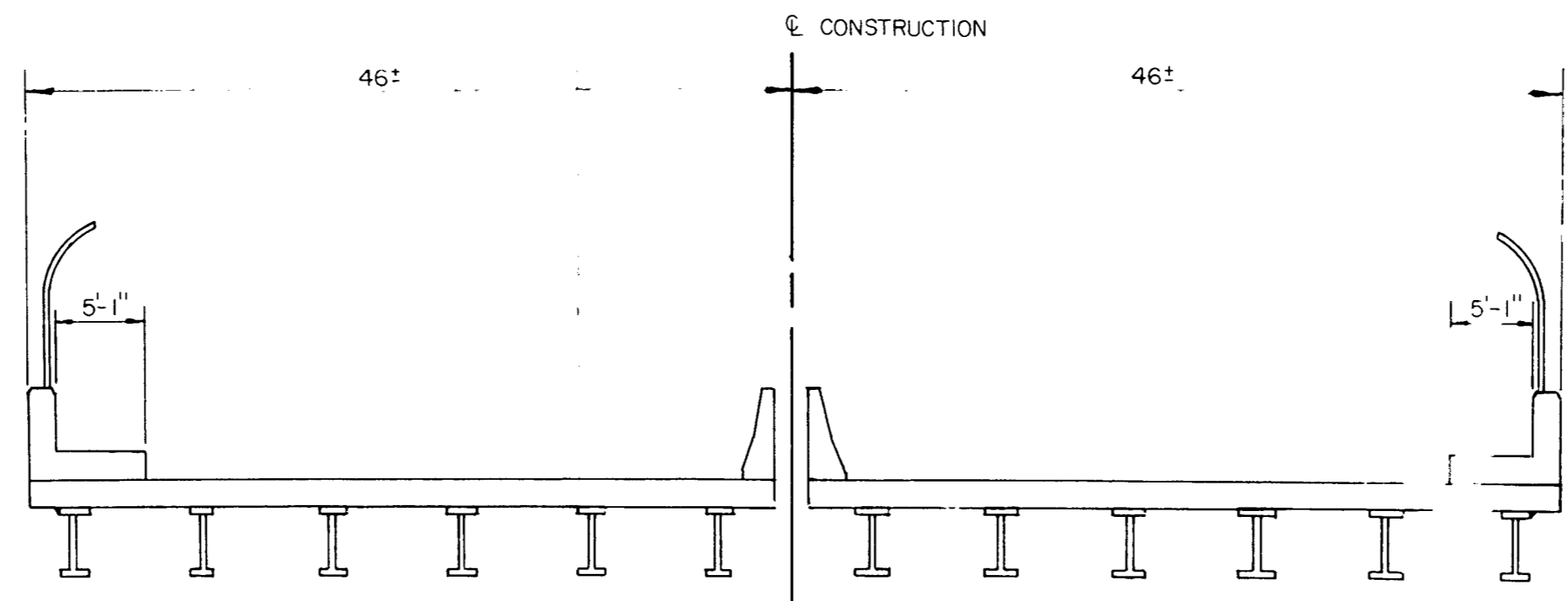
TYPICAL SECTION
ALTERNATE "A" MODIFIED
STA.263+50 TO STA.286+50

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

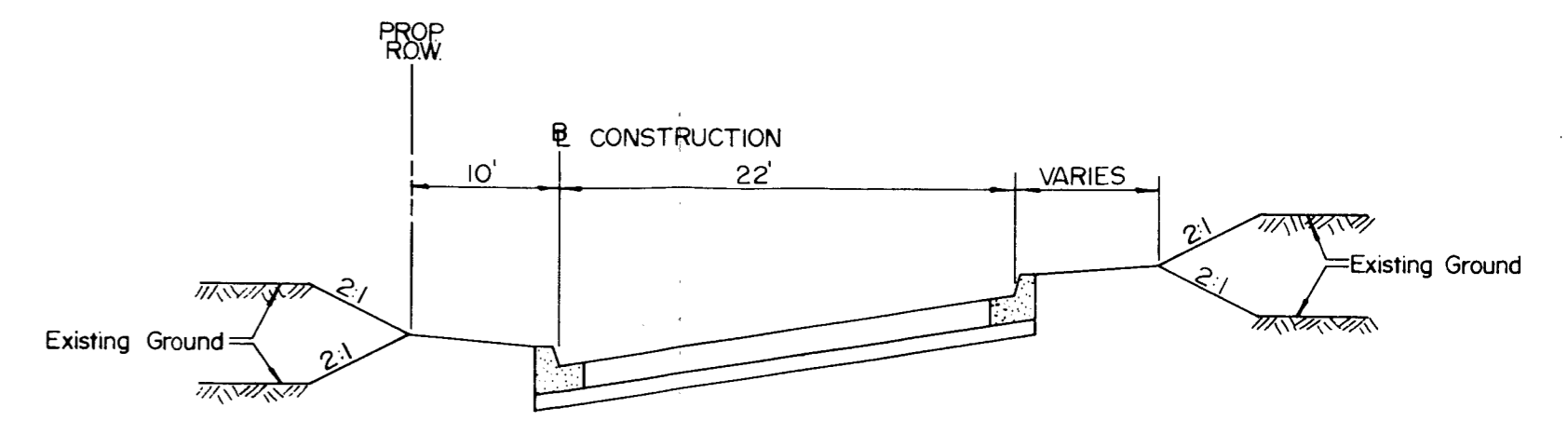


TYPICAL SECTION
ALTERNATE "A" MODIFIED
STA.286+50 TO STA.295+35.51

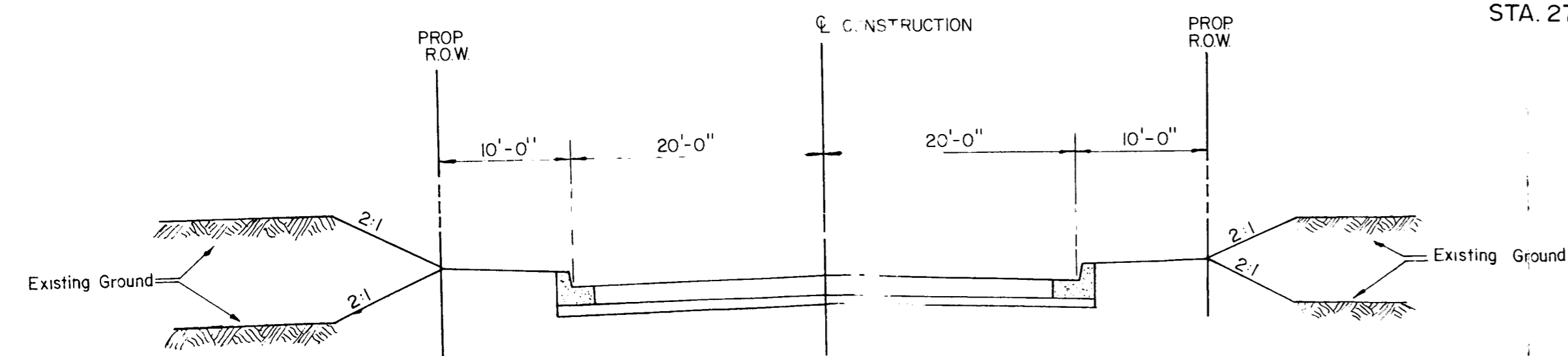
MARYLAND STATE HIGHWAY ADMINISTRATION	
MARYLAND ROUTE 355 ALTERNATE "A" MODIFIED TYPICAL SECTIONS	
SCALE: NOT TO SCALE	FIGURE: 9A



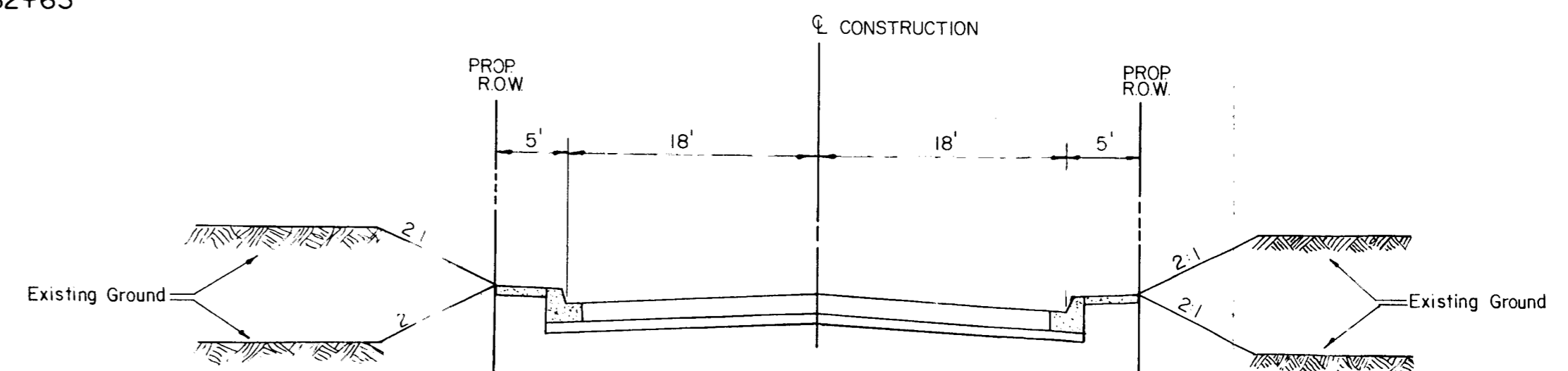
TYPICAL BRIDGE SECTION
ALTERNATE "A" MODIFIED
STA. 279+70 TO STA. 282+63



TYPICAL SECTION
SERVICE ROAD "B"
ALTERNATE "A" MODIFIED



TYPICAL SECTION
SERVICE ROADS "A" &
WEST DIAMOND AVE.
ALTERNATE "A" MODIFIED



TYPICAL SECTION
EAST DIAMOND AVE.
ALTERNATE "A" MODIFIED

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

MARYLAND STATE HIGHWAY ADMINISTRATION	
MARYLAND ROUTE 355 ALTERNATE "A" MODIFIED TYPICAL SECTIONS	
SCALE: NOT TO SCALE	FIGURE 9B

5.3 Traffic Data

Average daily traffic volumes (ADT) on the area roadway network have been forecast for the project completion year 1985 and the design year 2005. These projections are presented for both the No-Build Alternate and Alternate A Modified in schematic form in Figures 10A and 10B on pages 45 and 47. Other pertinent traffic data for the area roadway network is summarized in Table 5 below.

Table 5

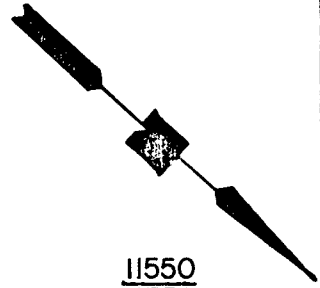
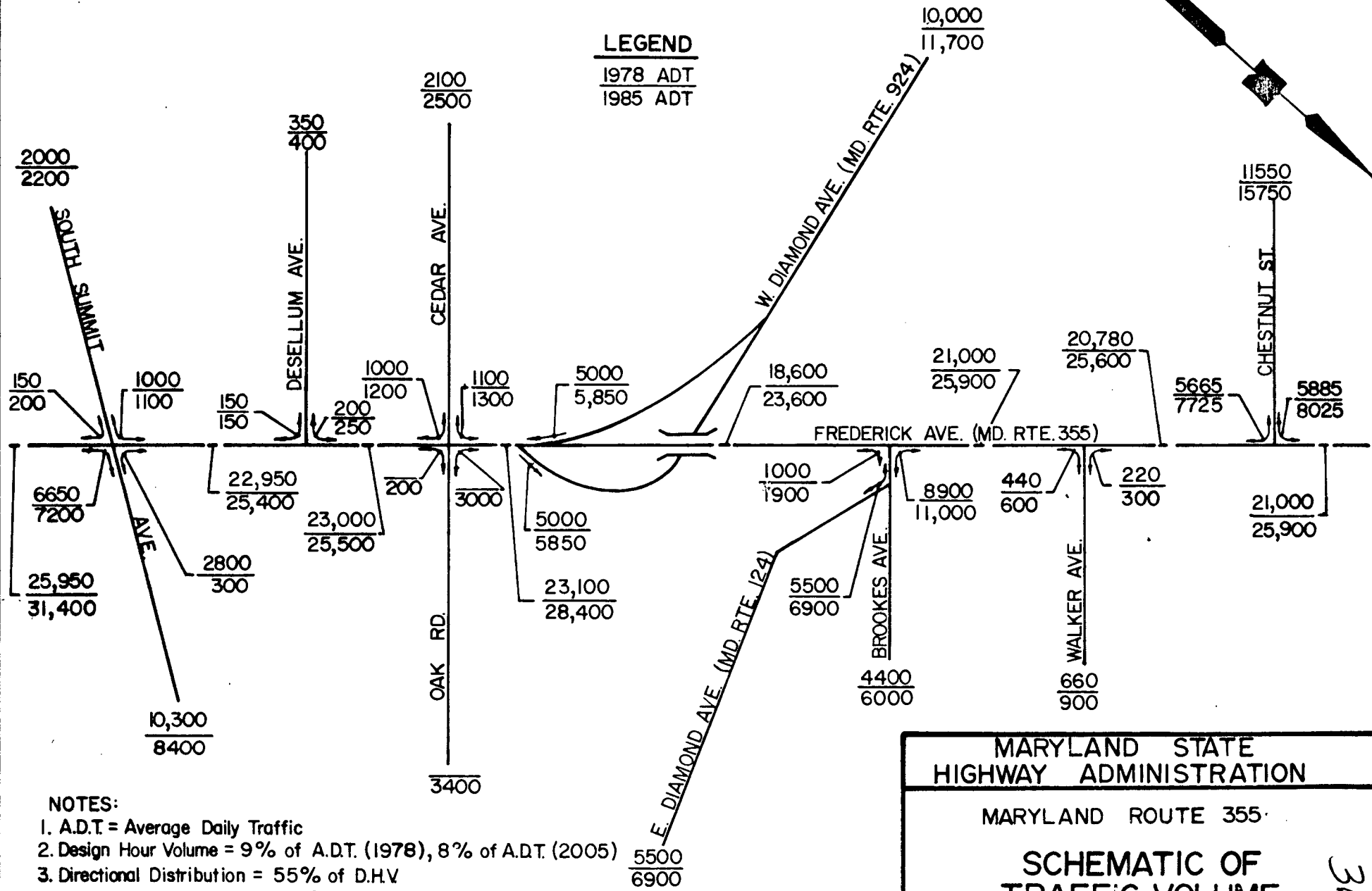
SUMMARY OF PERTINENT TRAFFIC DATA

Minimum Design Year ADT 2005	30,500
Maximum Design Year ADT 2005	41,500
Design Hour Volume (DHV)	8.0%
Directional Distribution (DD)	55%
Truck Traffic (T/ADT)	4.0%
Gasoline Powered	1.64%
Diesel Powered	2.36%
Truck Traffic (T/DHV)	2.00%

6. DESCRIPTION OF PROJECT ALTERNATIVES

During the previous stage of project planning studies, two alternates and the No-Build Alternate were developed and analysed in terms of engineering, safety and environmental considerations. Based upon comments at the Alternates Location Public Meeting and after extensive meetings with city officials in Gaithersburg, Alternate A Modified, was developed. This alternate satisfies the concerns of local citizens, businessmen, and city officials to the greatest extent possible without sacrificing safety or traffic carrying capacity.

LEGEND
 1978 ADT
 1985 ADT



- NOTES:**
1. A.D.T = Average Daily Traffic
 2. Design Hour Volume = 9% of A.D.T. (1978), 8% of A.D.T. (2005)
 3. Directional Distribution = 55% of D.H.V
 4. Average Daily Truck Traffic = 4% of A.D.T.
 5. Design Hour Truck Traffic = 2% of D.H.V.

MARYLAND STATE
 HIGHWAY ADMINISTRATION

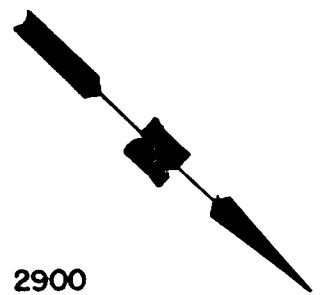
MARYLAND ROUTE 355

**SCHMATIC OF
 TRAFFIC VOLUME
 1978 & 1985 A.D.T.**

SCALE: NO SCALE FIGURE: 10A

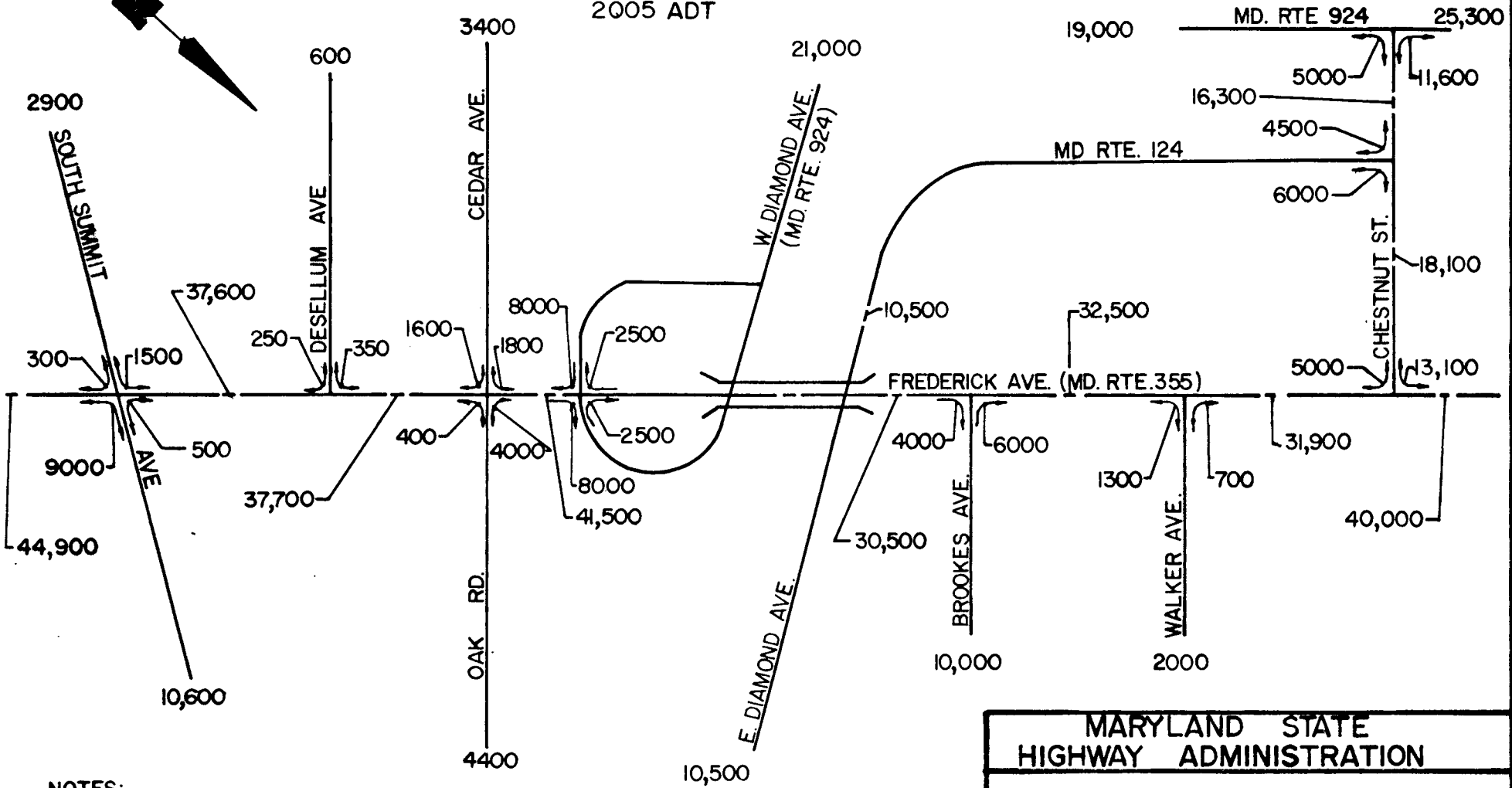
3/10

-47-



LEGEND

2005 ADT



NOTES:

1. A.D.T. = Average Daily Traffic
2. Design Hour Volume = 9% of A.D.T. (1978), 8% of A.D.T. (2005)
3. Directional Distribution = 55% of D.H.V.
4. Average Daily Truck Traffic = 4% of A.D.T.
5. Design Hour Truck Traffic = 2% of D.H.V.

MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

SCHMATIC OF
TRAFFIC VOLUME
2005 A.D.T.

SCALE: NO SCALE

FIGURE: 10B

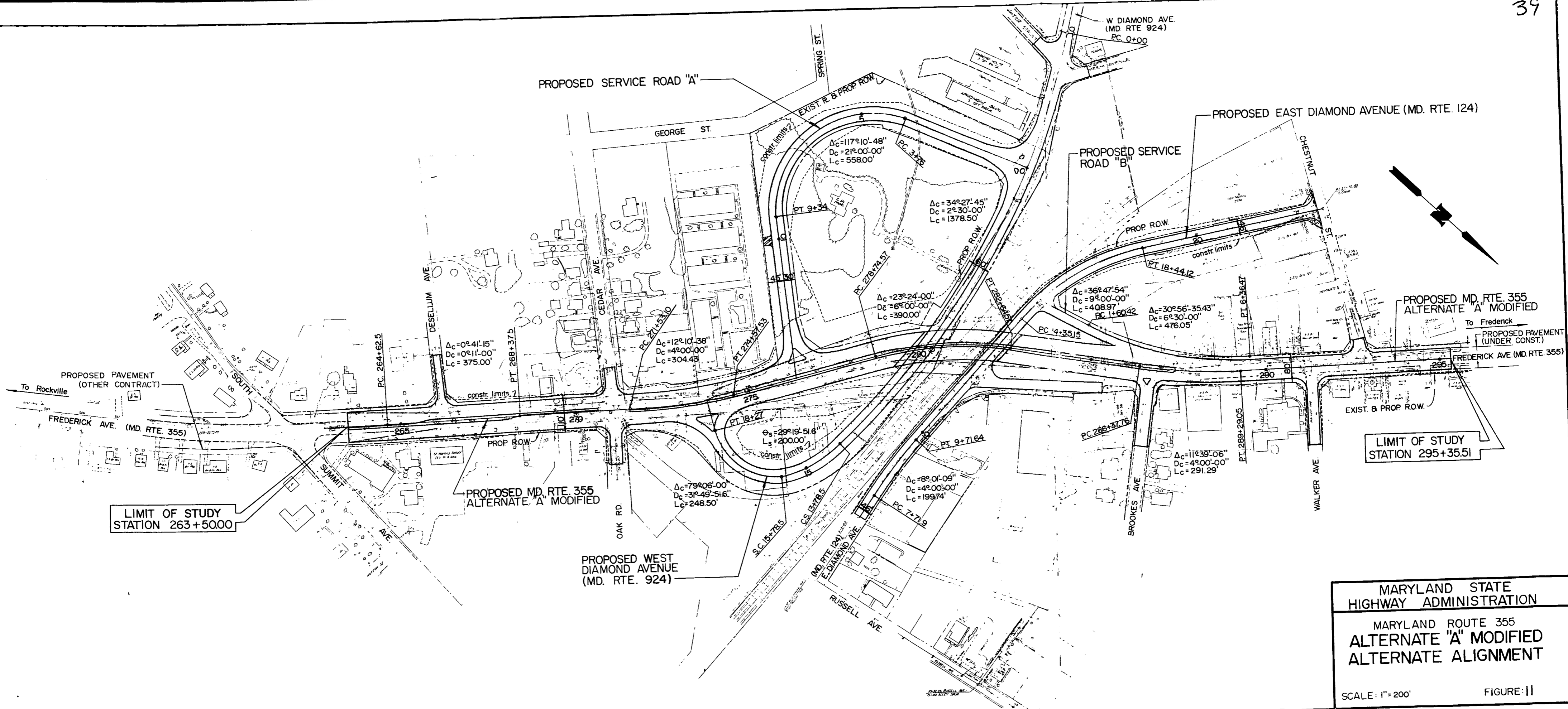
37

6.1 Alternate A Modified (Selected Alternate)

Alternate A Modified begins on the north side of South Summit Avenue and proceeds in a northwesterly direction to a point just past Chestnut Street, for a total length of approximately 0.6 miles. The location of Alternate A Modified is shown in Figure 11 on the following page. This alternate is designed to accomodate a posted speed of 35 mph. A six lane bridge is proposed to replace the existing structure over the B&O railroad tracks.

The horizontal alignment begins on tangent at South Summit Avenue and has a slight curve at DeSillum Avenue. While this curve does not meet the recommended AASHTO standards it was necessary in order to keep from re-locating two homes in the vicinity of Cedar Avenue. AASHTO recommends a minimum length of curve of 500 feet for central angles of 5 degrees, with the minimum length increased 100 feet for each 1-degree decrease in the central angle, to avoid the appearance of a kink in the alignment. The horizontal curve at DeSillum Avenue has a central angle of 0°41'15" and a length of 375'. The degree of curvature is 0°11' and thus superelevation would not be necessary. To avoid the appearance of a kink, this curve should have a length of about 1,000'. In Design of Urban Highways and Arterial Streets, AASHTO qualifies this guideline, along with several others, as having greatest application in the design of high-speed urban arterials, particularly freeways. Since Maryland Route 355 cannot be classified as a high speed arterial in this area and the AASHTO control is more of an appearance guideline rather than an operational one, it is not expected that this curve will adversely affect the operational characteristics of the proposed roadway. After Cedar Avenue, there are two reverse curves which carry the roadway to the south side of the existing bridge. This will allow for the continued operation of the existing bridge during construction of the proposed bridge, thereby minimizing disruption of traffic. The alignment continues on tangent to the project terminus on the northwest side of Chestnut Street.

The vertical alignment is within AASHTO guidelines with a maxmium grade of 6.04 percent and minimum stopping sight distance of 275 feet.



LIMIT OF STUDY
STATION 263+50.00

LIMIT OF STUDY
STATION 295+35.51

MARYLAND STATE
HIGHWAY ADMINISTRATION
MARYLAND ROUTE 355
ALTERNATE "A" MODIFIED
ALTERNATE ALIGNMENT

SCALE: 1" = 200' FIGURE: 11

The typical section for this project between South Summit Avenue and Brookes Avenue is dual 38 foot curbed roadways separated by a raised 16 foot median. Seven foot sidewalks will be provided on both sides. The roadway tapers down to a 62 foot urban street section at Brookes Avenue to match the current construction north of Chestnut Street.

The proposed three span bridge will be built on a 954 foot radius. Minimum clearance above the railroad tracks is 23 feet, and the bridge will span the tracks, East Diamond Avenue (Maryland Route 124), and West Diamond Avenue (Maryland Route 924). A 45 foot width will be left between Maryland Route 924 and the first bridge pier to provide room for future mass transit lanes.* The proposed structure will carry three lanes of traffic in each direction and 5 foot sidewalks on each side. A double faced Jersey barrier will separate the southbound and northbound traffic.

Major improvements to some side streets and new service roads are also included in this project. East Diamond Avenue (Maryland Route 124) currently runs in an east-west direction on the northeast side of Maryland Route 355. It curves sharply just before the existing bridge and runs parallel to Maryland Route 355, creating a very hazardous three-way intersection with Maryland Route 355 and Brookes Avenue. That intersection would be eliminated and Maryland Route 124 would be relocated under the proposed bridge and intersect Chestnut Street about 450 feet from Maryland Route 355. The portion of existing Maryland Route 124 that runs parallel to Maryland Route 355 would remain as an access road for the businesses in that area, but will not intersect either Maryland Route 355 or Brookes Avenue. Left turns will not be allowed either entering or leaving Brookes Avenue. In order to facilitate motorist access to the shopping district in the vicinity of South Summit Avenue and Maryland Route 124, a one-way service road (Service Road B) will be provided from southbound Maryland Route 355 to Maryland Route 124 on the west side of Maryland Route 355. The design of Maryland Route 124 and Service

* It should be noted that Metro is currently scheduled to reach Shady Grove Road in 1983. While the Washington Metropolitan Area Transit Authority has expressed the need and desirability for extending the transit system as far as Germantown, it is currently not included in their projected 100 mile plan.

Road B is to accomodate a speed of 25 mph. The maximum degree of curvature is 9° for Maryland Route 124 and 6.5° for Service Road B. The maximum distance is 350 feet. The maximum grade of Service Road B is 4.34 percent and the minimum stopping sight distance is 200 feet.

Existing Maryland Route 924 (West Diamond Avenue) divides into two one way roads on the southwest side of the existing bridge. One roadway carries traffic entering Maryland Route 355 and it allows both right and left hand turns at the bottom of a severe bridge approach grade. The other roadway goes under the existing bridge and intersects Route 355 about 350 feet northwest of Cedar Avenue. This roadway carries traffic leaving Maryland Route 355 and also allows both right and left hand turns at the bottom of the bridge approach. The proposed reconstruction of Maryland Route 924 would begin at Meem Avenue and basically follow the alignment of existing Maryland Route 924. The entire alignment from Meem Avenue to the proposed bridge is on a 2.5° curve. The alignment continues on this curve under the proposed structure where a spiral curve transitions the alignment to a 180 foot radius and then intersects Maryland Route 355. The proposed Maryland Route 924 will be 40 feet wide and provide two way operation throughout. Only right turns will be allowed at the intersection with Maryland Route 355. To provide for traffic in the opposite direction, it is proposed to construct Service Road A, which leaves Maryland Route 924 about 300 feet east of Meem Avenue and curves sharply to the left before intersecting Maryland Route 355 approximately 500 feet north of Cedar Avenue. This roadway will also be 40 feet wide and provide two-way operation. Access will be provided onto this service road for the residents of the Executive Garden Apartments. Because of the grade differential in this area, a retaining wall is proposed from the entrance to the apartments, along Service Road A and Maryland Route 355 to a point about 150 feet north of Cedar Avenue. This will avoid displacement of the existing apartment complex lot. Design for Maryland Route 924 and Service Road A is to accomodate a posted speed of 25 mph. The maximum degree of curvature is 21° on Service Road A, and 31.83° on Maryland Route 924 at its intersection with Maryland Route 355. The maximum grade on Service Road A is 5.87 percent and the minimum stopping sight distance is 240 feet. The maximum grade on Maryland Route 924 is 1.82 percent and the minimum stopping sight distance is approximately 1,000 feet.

6.2 No-Build Alternate

The No-Build Alternate would not provide for any major construction in the study area beyond normal highway maintenance. This regular maintenance along with some spot safety improvements would be performed within the existing right-of-way. It is important to note, however, that it is unlikely that these procedures would significantly alleviate the high accident rate currently experienced in the study area. In addition, the capacity of this portion of Maryland Route 355 would not be improved and the roadway would become severely bottlenecked at the transition points between the improved and unimproved sections of Maryland Route 355. The only advantages of the No-Build Alternate are that it would be less costly and would not require the relocation of any businesses.

6.3 Eliminated Alternates

As previously mentioned, two detailed study alternates were eliminated after the Alternates Location Public Meeting. They were Alternate A and Alternate B.

The alignment, both vertical and horizontal, of these two alternates was exactly the same. The only difference between the two alternates was in the interchange configuration at Maryland Route 924. Alternate A included a partial T-type interchange with two way ramps. The Alternate B interchange was a partial cloverleaf design. The alignment of Maryland Route 355 passed on the east side of the existing bridge and was more damaging to existing businesses and created several access problems. The relocation of Maryland Route 124 to intersect Chestnut Street, as in Alternate A Modified, was also a part of Alternates A and B.

Major objections of local citizens and city officials to these alternates included the following:

- Access to Maryland Route 355 from the Executive Garden Apartments would be by way of local residential streets.
- Access to Maryland Route 355 for service vehicles from the C&P Telephone Company Regional Office would be through local residential streets.

- An oak tree (the Washington Oak Tree) of local historic significance would have been impacted by requiring extensive trimming and cutting back of the portion facing Maryland Route 355.
- The interchanges with Maryland Route 924 were very damaging to a piece of property which is the future site of the relocated Gaithersburg Lumber Company.

For comparative purposes, a summary of alternates is presented in Table 6 on the following page. The advantages and disadvantages of the previously described alternates is also presented in Table 7 on page 58.

7. ENGINEERING AND COST CONSIDERATIONS OF THE ALTERNATES

The cost of implementing the proposed project is estimated at \$11,928,000. Of this total, right-of-way costs for 11.9 acres of land are estimated at \$3,782,000. Engineering considerations of Alternate A Modified were previously discussed in Sections 5.2 and 5.3 on pages 38 through 43. Horizontal and vertical alignments are presented in Figures 12A and 12B on pages 59 and 61.

The No-Build Alternate, while not having any construction costs would do nothing to alleviate the severe safety hazards and roadway congestion that currently exists on Maryland Route 355.

	ELIMINATED ALTERNATES		PROPOSED ALTERNATES	
	Alternate A	Alternate B	Alternate A Modified (Selected Alt.)	No-Build Alternate
To accomodate posted speed				
Design Speed	40	40	40	30
Length, miles	0.46	0.46	0.6	0.6
Maximum degree of curvature	1.5°	1.5°	6°	3°
Maximum grade, %	6.6%	6.6%	6.04%	7.4%
At-grade intersections	4	4	6*	6
Major structures	1	1	1	1
<u>IMPACT</u>				
Houses displaced	0	0	0	0
Estimated number persons affected	0	0	0	0
Minority group members affected	0	0	0	0
Businesses displaced	8	8	6	0
Minority owned businesses affected	0	0	0	0
Unimproved properties affected	2	2	2	0
Historic sites and districts affected	2	2	1	0
Noise level impact (sites exceeding standards)	3	3	3	1
Air quality impact (sites exceeding standards)	0	0	0	0
Acres of right-of-way required:				
Residential	4.78	5.75	8.25	0
Commercial	1.13	1.13	1.58	0
Other	2.12	2.65	2.16	0
<u>COST (\$1,000)</u>				
Estimated neat construction cost	4,375	5,291	6,171	0
Engineering & administration cost	1,400	1,693	1,975	0
Total estimated construction cost	5,775	6,984	8,146*	0
Estimated right-of-way cost	3,216	3,492	3,782	0
Total estimated project cost	8,991	10,476	11,928*	0

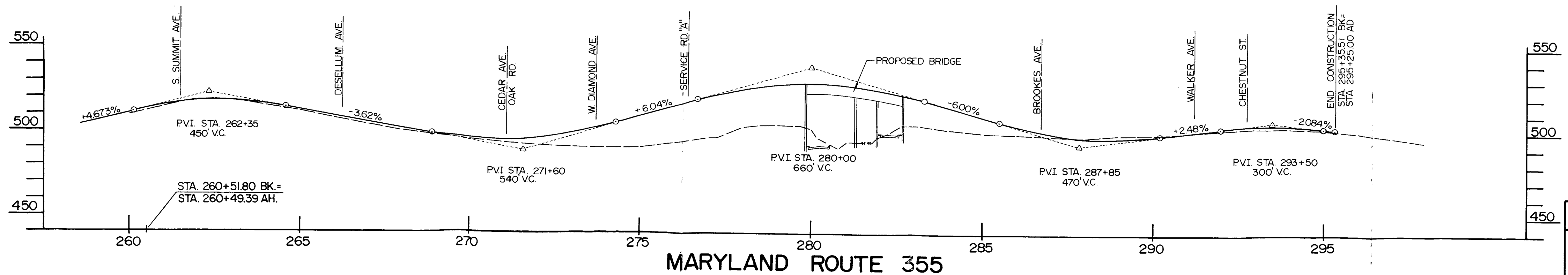
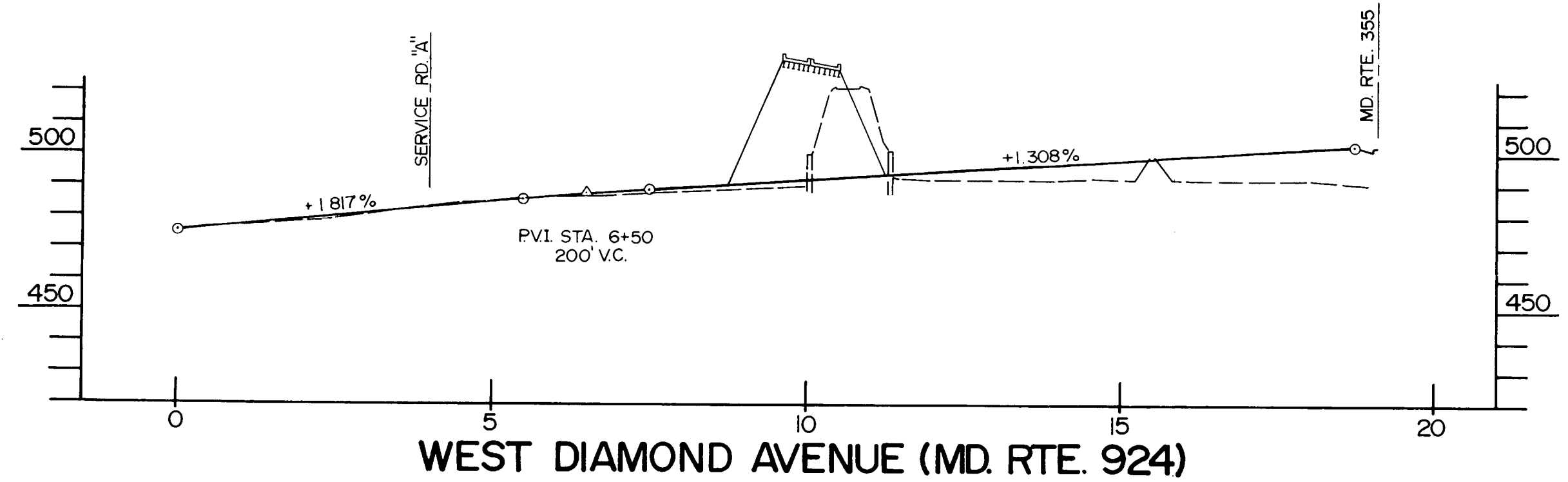
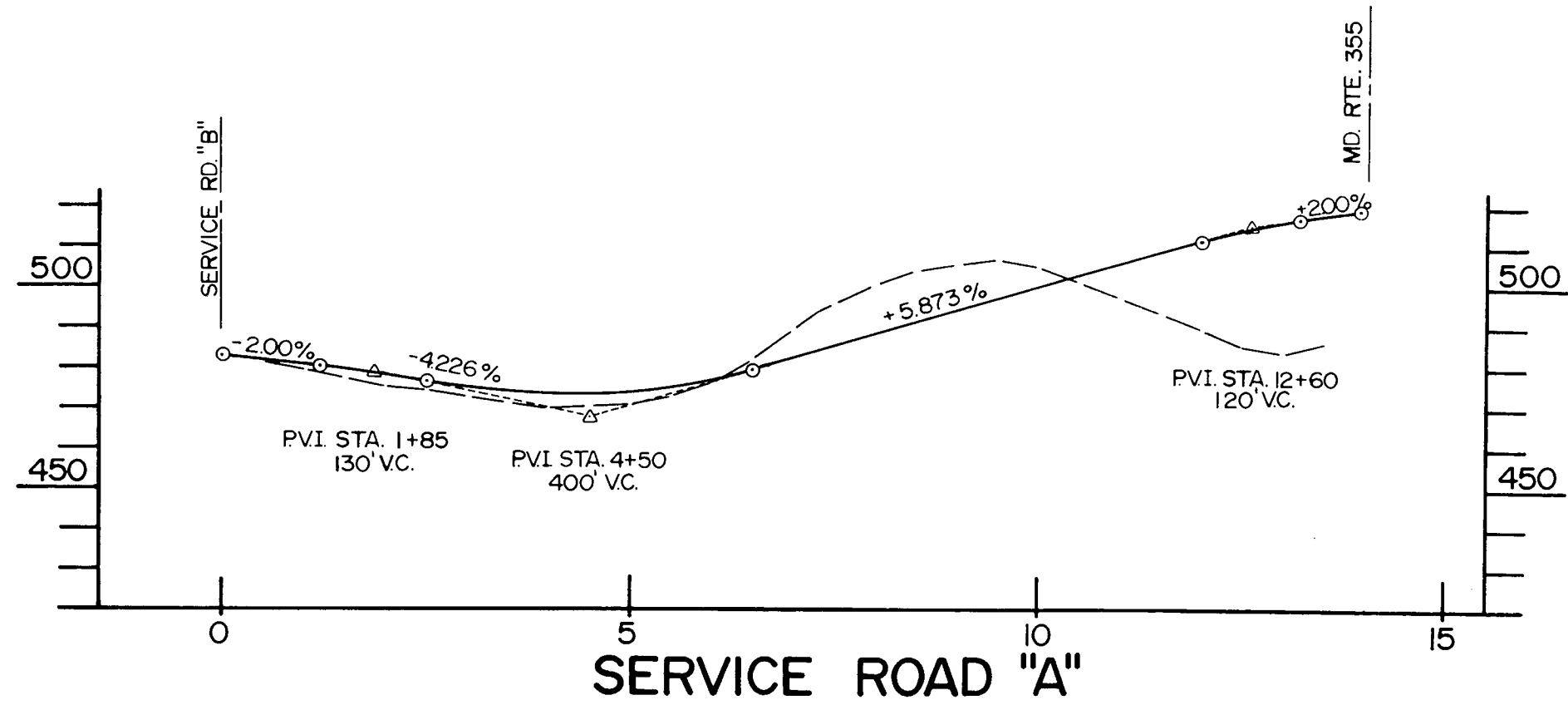
* It should be noted that the two additional at-grade intersections for Alternate A Modified and a portion of the total estimated construction and project costs can be attributed to the extension of the northern project limit to Chestnut Avenue. Figures for Alternates A and B are based on a northern project limit at Brookes Avenue.

SUMMARY OF ALTERNATES
Table 6

44

Table 7
ADVANTAGES AND DISADVANTAGES

ALTERNATE	ADVANTAGES	DISADVANTAGES
Alternate A Modified (Selected Alternate)	<ol style="list-style-type: none"> 1. Does not impact historic oak tree. 2. Does not use residential streets to provide access to C&P Telephone Co. and Executive Garden Apts. 3. Requires fewest relocations of the build alternates. 4. Least damaging to Gaithersburg Lumber Co. property of the build alternates. 5. Consistent with city and county land use plans. 	<ol style="list-style-type: none"> 1. Highest construction cost. 2. Highest total project cost. 3. Most amount of additional ROW required of the build alternates and highest ROW costs.
Alternate A (Elimin.)	<ol style="list-style-type: none"> 1. Least amount of additional ROW and lowest ROW costs required of the build alternates. 2. Lowest construction cost of the build alternates. 3. Lowest total project cost of the build alternates. 4. Consistent with city and county land use plans. 	<ol style="list-style-type: none"> 1. Impacts historic oak tree. 2. Requires more relocations than Alternate A Modified. 3. Is very damaging to Gaithersburg Lumber Co. property. 4. Uses residential streets to provide access to C&P Telephone Co. and Executive Garden Apts.
Alternate B (Elimin.)	<ol style="list-style-type: none"> 1. Provides best interchange at Maryland Route 924 from a safety standpoint. 2. Consistent with city and county land use plans. 	<ol style="list-style-type: none"> 1. Impacts historic oak tree. 2. Requires more relocations than Alternate A Modified. 3. Is very damaging to Gaithersburg Lumber Co. property. 4. Uses residential streets to provide access to C&P Telephone Co. and Executive Garden Apts.
No Build	<ol style="list-style-type: none"> 1. Least costly alternate. 2. No relocations necessary. 	<ol style="list-style-type: none"> 1. Does not have sufficient capacity. 2. Existing high accident rate would continue. 3. Inconsistent with city and county land use plans.



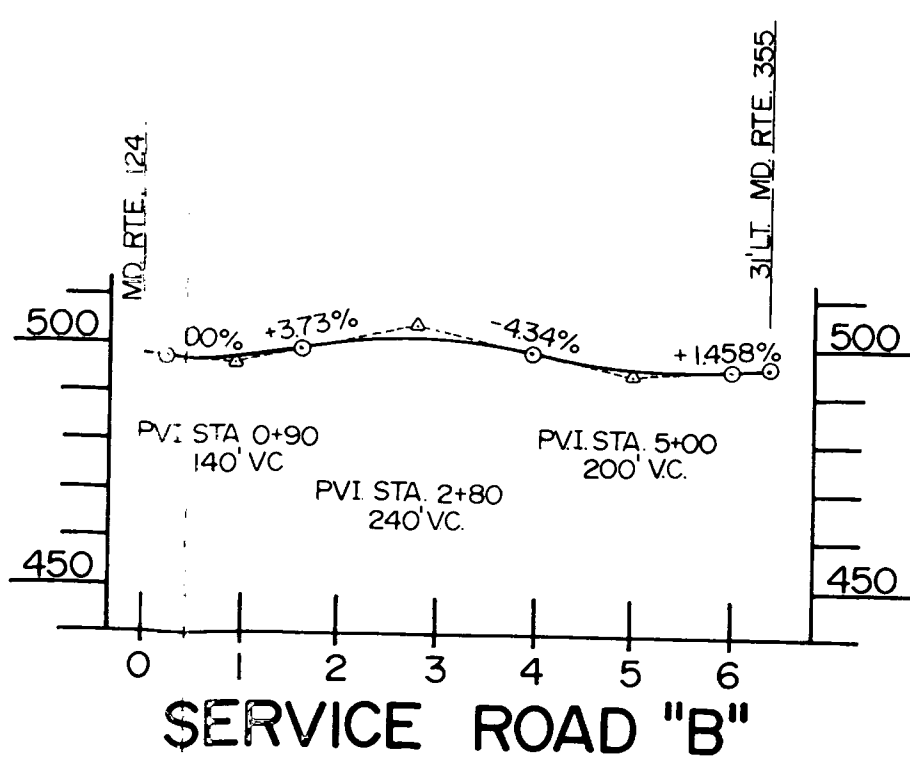
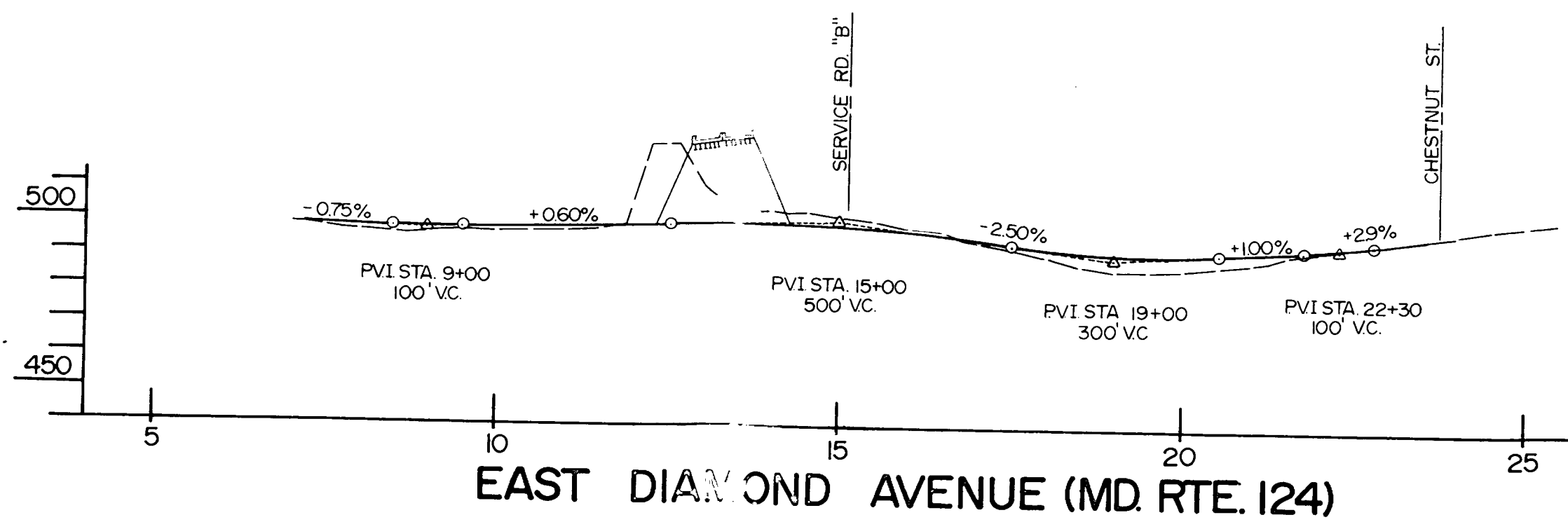
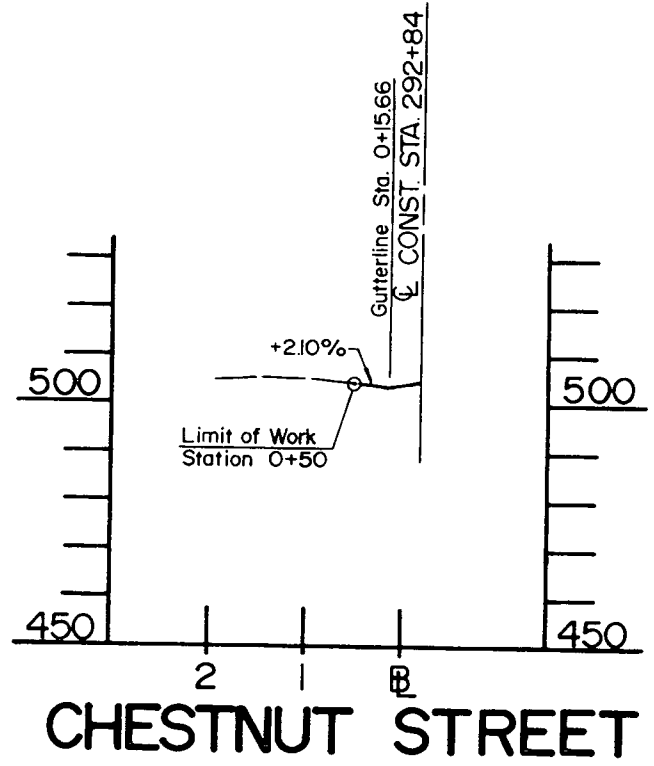
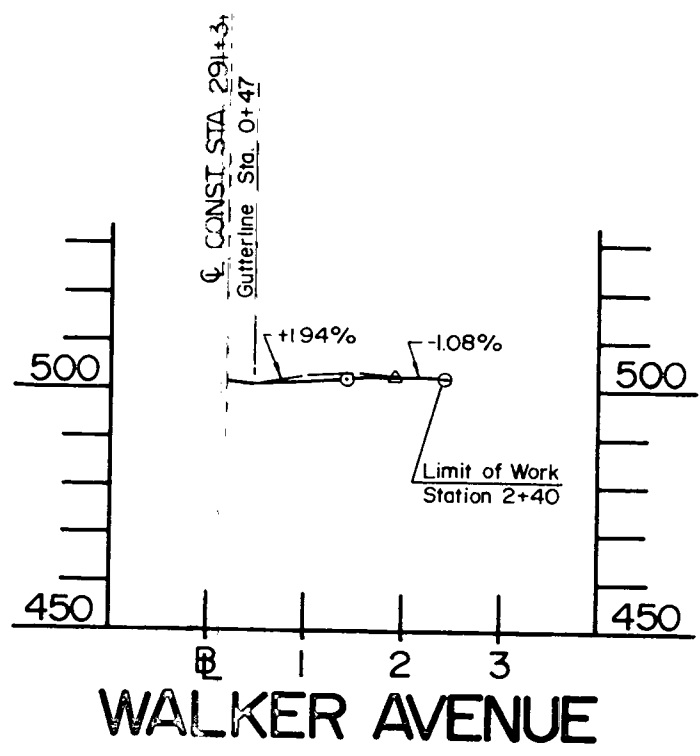
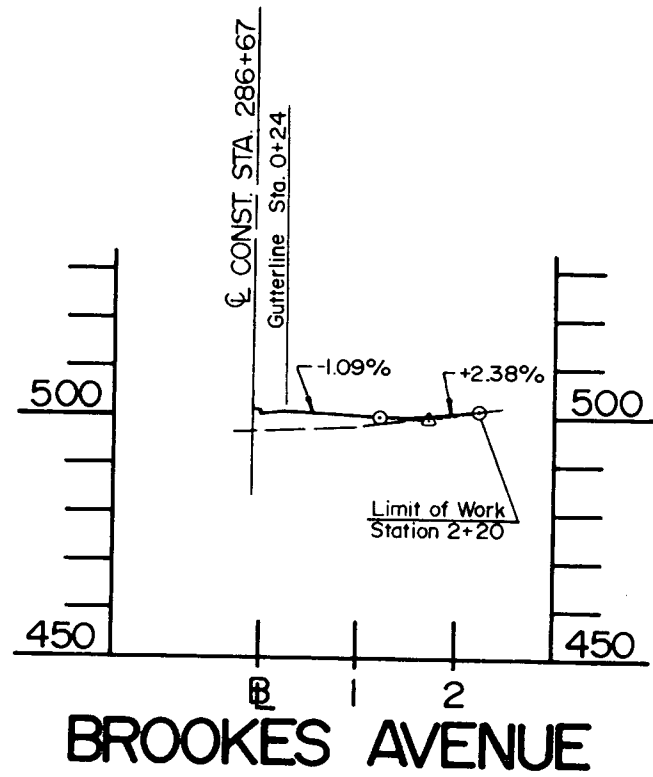
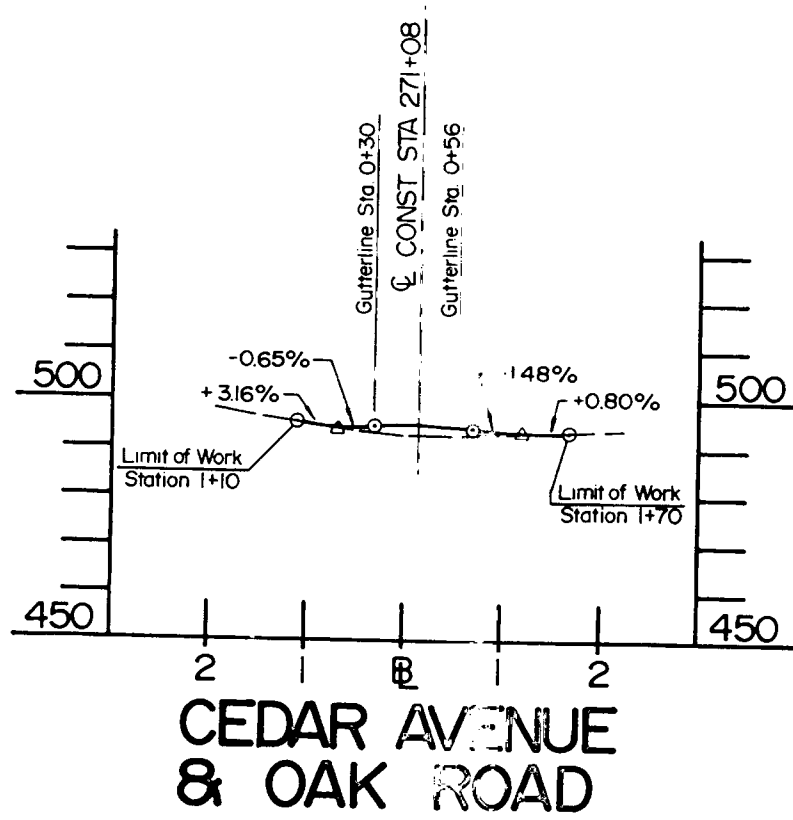
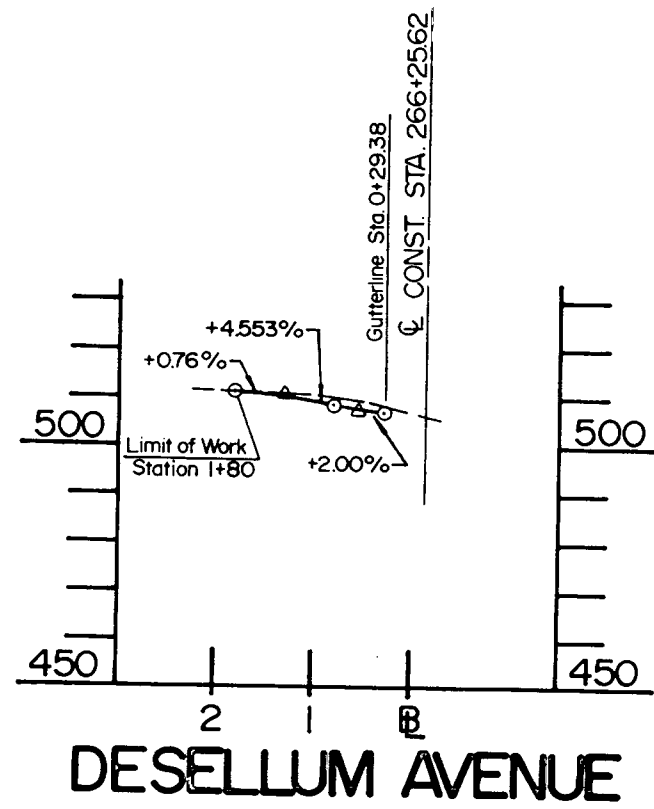
MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

PROFILE MAP FOR
ALTERNATE "A" MODIFIED

SCALE: HORIZ. 1" = 200'
VERT. 1" = 40'

FIGURE: 12A



MARYLAND STATE
HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355

PROFILE MAP FOR
ALTERNATE "A" MODIFIED

SCALE: HORIZ. 1" = 200'
VERT. 1" = 40'

FIGURE 12 B

II. NEED FOR THE PROJECT

1. DEFICIENCIES OF EXISTING FACILITIES

1.1 Condition of the Existing Road

Restrictive features of existing Maryland Route 355 are as follows:

- Several dangerous left turn intersections, the most hazardous being the intersection of Maryland Route 124 and Maryland Route 355.
- Two intersections located at each end of the existing bridge provide poor sight distances and maneuverability.
- Heavy traffic congestion during peak traffic hours.

The existing structure over the B&O railroad tracks is two simple spans with full face abutments. The south span is a 85'-3" thru girder and the north span is a 41'-3 9/16" deck girder. These spans have a 28-foot roadway from curb face to curb face with a sidewalk.

1.2 Safety Record

The following accident statistics have been tabulated for the study area highway network that includes Maryland Route 355 between South Summit and Brookes Avenues; Maryland Route 124 from Maryland Route 355 to Russell Avenue; and Maryland Route 924 from Meem Avenue to Maryland Route 355.

The network of highways comprising the study area experienced 164 reported accidents for the 36-month period between 1975 and 1977. These accidents, when prorated on a vehicle mile exposure basis, resulted in an accident rate of 1,070.32 accidents per 100 million vehicle miles of travel (acc/100MVM). This rate presently exceeds the statewide estimate of 638.10 acc/100MVM for all similar design highways now under State maintenance.

One hundred-fourteen (114) of the 164 reported accidents occurred on Maryland Route 355. The resultant accident rate of 1,062.60 acc/100MVM of travel is also substantially higher than the statewide rate for the same period.

Maryland Route 124 experienced 43 of the total 164, for an accident rate of 2,233.06 acc/100MVM of travel. The seven remaining accidents occurred on Maryland Route 924. The road's accident rate of 263.18 acc/100MVM is lower than the statewide average for all highways of similar design.

Several high-accident intersections (H.A.I.) were identified within the project limits and include: Maryland Route 355 at Maryland Route 124 (1975), Maryland Route 355 at Summit Avenue (1976), and Maryland Route 124 at Chestnut Street (1975). The annual H.A.I. Listing for Maryland represents all those intersections that exceed the 99th percentile of the distribution of accidents per intersection in Prince Georges and Montgomery Counties.

The significant collision types in this area, their relationship to total accidents, and the respective statewide comparisons are as follows:

<u>Collision Type</u>	<u>Study Area Percent</u>	<u>Statewide Percent</u>
Opposite Direction	7.32	5.77
Rear-end	28.66	28.26
Sideswipe, Same Direction (SD)	12.20	10.65
Left Turn	9.15	5.98
Angle	23.17	18.85
Fixed Object	7.93	14.64
Pedestrian	3.05	2.53
Other	8.54	13.32

The opposite-direction collisions noted above occurred at a slightly higher than expected frequency with the greatest concentrations occurring at the intersection of Maryland Route 355 at Brookes Avenue. This can be attributed to vehicles attempting to turn left onto Maryland Route 355 from Maryland Route 124. Additional opposite-direction collisions occurred on the curve of Maryland Route 124 as it approaches Maryland Route 355. Numerous rear-end and sideswipe SD collisions occurred on this same curve, and resulted primarily from the limited sight distance and the

proximity of numerous driveway intersections to this curve. This is especially true in inclement weather since approximately 62 percent of the collisions throughout this area occurred on a wet-pavement surface, while the statewide estimate of wet-surface collisions is approximately 25 percent of the total accidents.

Both left-turn and angle collisions occurred with a statistically significant greater frequency than would normally be expected on routes of similar design. These collisions, which account for almost one-third of the accidents in the study area, tend to be more serious than others due to the nature of the impact. These intersection related accidents are influenced by the numerous intersections in close proximity to each other, the occluded approach and intersection geometrics of Maryland Route 355/Maryland Route 124 at Brookes Avenue, and the turning movements that route traffic via South Summit Avenue to Maryland Route 124. In general, a collision pattern emerges that can be attributed to the existing geometric design and the volume of traffic desiring access to these facilities.

Peak-period studies performed on Maryland Route 355 indicate that the accident rate increased from 1,062.60 acc/100MVM to 1,397.52 acc/MVM from 1975-1977. This increase resulted directly from the increase in the traffic volume during the evening peak period. Peak-period studies are useful to gauge the effect of the anticipated increase in traffic volume on the long-term safety of a facility.

Alternate A Modified, the selected alternate, represents a significant change in design that will alleviate many of the existing problems and allow for a freer and safer movement of traffic. This alternate will permit additional directional movements not currently permitted under the existing design. The hazardous, three-way intersection of Maryland Route 355, Brookes Avenue and East Diamond Avenue would be eliminated by relocating Maryland Route 124 under the proposed bridge and intersecting it with Chestnut Street. Left turns entering or leaving Brookes Avenue would be prohibited. Maryland Route 924 would be reconstructed so that only right turn lanes

would be permitted at the intersection with Maryland Route 355. Access between Maryland Route 924 and Maryland Route 355 would be provided by two service roads.

A continued trend toward higher accidents can be expected under the No-Build Alternate. While spot safety improvements would be made as a part of normal highway maintenance, it is improbable that these improvements would substantially reduce the existing high accident rate.

2. BASIS FOR THE PROPOSED PROJECT

Heavy residential and commercial development in the Gaithersburg area necessitates the upgrading of Maryland Route 355 to meet increasing traffic demands from both a safety and capacity standpoint.

1978 traffic data for Maryland Route 355 indicates that the highway is operating at capacity Level of Service E with an average daily traffic (ADT) volume of 28,400. If the proposed improvements are not made, the roadway is expected to be over capacity at Level of Service F by 1985. If the proposed improvements are made, Maryland Route 355 would operate at a Level of Service C in 2005.

The widening and upgrading of Maryland Route 355 south of South Summit Avenue is currently in the design phase while a contract has already been awarded to reconstruct Maryland Route 355 north of Brookes Avenue. The proposed project may be viewed as the connecting link between these scheduled improvements, and if not implemented, may cause severe bottlenecks at both project termini.

As discussed in the previous section, heavy traffic congestion, poor sight distance and maneuverability at two intersections, and several hazardous left turn intersections have resulted in an extremely high accident rate in the study area highway network. For the 36 month period between 1975 and 1977, the study area accident rate was 432.22 acc/100MVM higher or 67% greater than the state-wide average of 638.10 acc/100MVM. The intersections of Maryland Route 355 and Maryland Route 124 and Maryland Route 355 and Chestnut Street have been identified as high-accident intersections. Without major improvements, an even higher accident rate can be expected to occur.

By increasing the operating capacity of the roadway and eliminating the dangerous intersections, the proposed project will alleviate existing traffic congestion and should contribute to a significant reduction in the accident rate of the study area.

The proposed project appears in the following state documents:

- 1979-1988 Twenty Year Highway Needs Study, Secondary Highway System,
- 1979-1984 Consolidated Transportation Program, Secondary Highway, Line 16.

The proposed project is also included in the Washington Council of Government's Transportation Improvement Plan for 1980-1984.

3. RELATIONSHIP BETWEEN THE PROJECT AND THE TRANSPORTATION SYSTEM OF THE AREA

The establishment of a comprehensive transportation network is given major consideration in the master plans for the Gaithersburg Corridor City. The Master Plan of Highways as adopted by the City of Gaithersburg is composed of three major elements.: state and county roads, the Maryland Route 355 Corridor, and local responsibility roadways.

Maryland Route 355 has been identified as a major north-south traffic route in the corridor city highway network. The general necessity for upgrading the roadway, including the section that is the subject of this study is recognized in this plan. As such, the proposed project is consistent with the adopted master plan for the area.

Existing and proposed highways that run parallel to Maryland Route 355 are as follows:

- I-270 - this north-south highway is the spine of the corridor circulation pattern. Although it is ultimately planned to be an 8-lane divided freeway, growth projections indicate the necessity to augment this highway with parallel arterials to the east and west.
- Eastern Arterial (M-83) - this state highway will serve as a parallel relief to I-270 connecting Germantown and the Capital Beltway at Georgia Avenue. Planning studies are currently being undertaken by SHA with construction not scheduled to begin until the mid 1980's.

- Great Seneca Highway - this county road will serve as a direct connection between Germantown and Rockville. Two lanes of this four-lane highway have been built between Maryland Route 28 and relocated Maryland Route 28.

Major east-west highways important to the functioning of the transportation network include Shady Grove Road, Muddy Branch Road (the existing major east-west connection within the city), Maryland Route 125, and Maryland Route 117 (Clopper Road).

Maryland Route 355 is presently under construction beginning at the north terminus of this project and continuing to Montgomery Village Avenue. Design is completed and construction expected to begin on Maryland Route 355 in the spring of 1980 on that portion from Shady Grove Road to the south terminus of this project. This project would complete the reconstruction of Maryland Route 355 from I-495 through Gaithersburg.

The development of mass transportation, particularly rail rapid transit, is seen as a prime factor in the successful implementation of the corridor city plan. Several basic planning concepts have been incorporated into the design of the Gaithersburg city corridor. These include a core or Central Business District (CBD), a residential matrix, a transportation system, and an urban fringe. The CBD is the commercial and business center of the city. It is characterized by dense development of vertically clustered facilities. In order to keep automobile intrusions to a minimum, the area is oriented toward pedestrian foot traffic. The residential matrix consists of neighborhoods located in bands of decreasing density surrounding the CBD. The transportation system includes provisions for internal and external mass transit systems as well as a major network of highways to link the city into the county and state highway system. Finally, the urban fringe provides for the lowest density housing and industrial parks. At the present time the Washington Metropolitan Area Transit system (METRO) is scheduled to reach Gaithersburg in 1983. One station is currently planned in the vicinity of Shady Grove and Fields Roads.

III. BASIS FOR NEGATIVE DECLARATION

The determination of a negative declaration for the proposed project is based on the finding of no significant social, economic, or environmental impacts resulting from project implementation. Beneficial impacts associated with construction of Alternate A Modified would be primarily local in nature. Such benefits include improved traffic flows on Maryland Route 355, elimination of hazardous roadway conditions, and reduced air pollution levels for local residents. This action is consistent with the Corridor City Master Plan for Gaithersburg and the Master Plan for the Gaithersburg Vicinity. It is also included in the 1979-1984 Maryland Consolidated Transportation Program.

In itself, the proposed project will not disrupt existing communities, result in significant land use changes or appreciably affect the present area growth rate.

Acquisition of 11.99 acres of right-of-way will result in the displacement of 6 businesses and a state-owned maintenance garage. Suitable replacement properties are available within the area study. No minority group or elderly will be affected.

Other than the state-owned maintenance garage, no community facilities will be impacted. Benefits to local residents will include reduced travel times for emergency vehicles.

Vegetation and wildlife impacts are not significant. There are no known rare or endangered species present in the study area.

Projected levels of carbon monoxide at sensitive receptor sites are generally lower for Alternate A Modified than for the No-Build Alternate. There will be no violation of State or National Ambient Air Quality Standards for carbon monoxide in the completion or design years. The project is consistent with the State Implementation Plan.

The maximum increase in noise over ambient levels will be 7 dBA. Based on Federal Highway Administration impact criteria, increases in the range of 6-10 dBA have a minor degree of impact. Three noise sensitive areas will experience L_{10} noise levels of 2.6 to 7.0 dBA in excess of suggested Federal design levels. Since the proposed project is designed for no control of access, noise barriers are not considered to be a feasible abatement measure.

Approximately 0.26 acres of right-of-way will be taken from property within a district of local historic significance. However, mitigative measures such as the planting of trees and shrubbery will be taken to preserve the aesthetic nature of the district.

No floodplains or wetlands will be impacted by the proposed project.

A more detailed assessment of beneficial and adverse impacts is presented in the following chapters of this Negative Declaration.

IV. SOCIAL, ECONOMIC AND ENVIRONMENTAL FACTORS

1. SOCIAL AND ECONOMIC CONSIDERATIONS

1.1 Population

Preliminary right-of-way estimates indicate that Alternate A Modified will require the relocation of six businesses and a government owned maintenance garage. No residences will be acquired, nor will any minority group or elderly be displaced. Based on a survey of local realtors and newspaper advertisements, adequate and appropriately zoned replacement properties are available in the vicinity of the affected businesses and city-owned maintenance garage. The lead time anticipated to complete relocation is 18 to 24 months. All relocations will be accomplished in accordance with the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970. A summary of the relocation assistance program of the Maryland State Highway Administration is presented as Appendix C of this document.

In itself, the proposed project will not disrupt existing communities, appreciably affect the area's growth rate, or alter the commercial character of properties in the vicinity of the impacted businesses. Further, the upgrading of Maryland Route 355 will benefit nearby communities by relieving existing traffic congestion and eliminating hazardous roadway conditions.

1.2 Local Economy

The displaced businesses which include three gas stations, a lumber company, a tropical fish store, and a trash removal company are small business concerns that provide limited employment for study area population. Since suitable replacement properties are available in the area for displaced businesses and the state-owned maintenance shop, the economic impact due to the loss of employment and these commercial businesses will be minimal.

As noted earlier, the Gaithersburg area is currently undergoing extensive development. The extent and timing of economic activity in and around the study area will be primarily influenced by the adopted county and city development policies and programs for Gaithersburg.

Although the proposed project will not in itself appreciably impact or significantly enhance the value of commercial properties in the study area, the upgrading of the Maryland Route 355 corridor is considered to be a significant element in the development plans for Gaithersburg and should facilitate future development of commercial and office space in the study area.

1.3 Community Facilities

The proposed project will require the relocation of a state-owned maintenance vehicle shop. Based on a survey of local realtors and newspaper advertisements, adequate and appropriately zoned replacement properties are available in the area for the garage. No other community facility serving the study area will be adversely affected. Delivery of police, fire, and emergency services will not be disrupted and may be enhanced by improved traffic flows. No public parks or recreation areas will be affected.

1.4 Land Use

Primary land use impacts of the proposed project will be confined to the roadway corridor and will consist of the acquisition of land for right-of-way. Estimates of the acreage requirements by land use type for Alternate A Modified are listed in Table 8 below.

Table 8
LAND USE AFFECTED BY PROJECT

Alternate	Land Use Type By Acre		
	Residential	Commercial	Other*
Alternate A Modified	8.25	1.58	2.16

* Other refers to a state-owned maintenance garage.

As a major north-south traffic carrier, Maryland Route 355 is considered to be a significant factor in the proposed Corridor City highway network. Maryland Route 355 is currently being upgraded north of the study area between Brookes Avenue and Oden'hal Road. Roadway construction south of the study segment from Shady Grove Road to South Summit Avenue is scheduled to begin in the summer or fall of 1980. While the proposed upgrading of Maryland Route 355 between South Summit Avenue and Chestnut Streets will not in itself disrupt existing land use patterns, it will facilitate the implementation of proposed growth in the Gaithersburg area. It should be noted however, that much of the slated commercial development is proposed north of the study area, in the vicinity of Maryland Route 355 and Montgomery Village Avenue.

1.5 Planning and Zoning

The impacts of the proposed project on planning and zoning can be gauged in terms of its consistency or inconsistency with existing state and local program plans and policies.

The proposed project is included in the 1979-1998 Maryland Twenty Year Highway Needs Study and in the Consolidated Transportation Program: 1979-1984. It is also consistent with the Maryland-National Capital Park and Planning Commission's Approved and Adopted Master Plan for the Gaithersburg Vicinity and with the City of Gaithersburg's adopted master plan.

2. NATURAL ENVIRONMENTAL CONSIDERATIONS

2.1 Climate

Implementation of the proposed project will have little or no effect upon the area microclimate.

2.2 Geology and Soils

The removal of ground cover during the construction of Alternate A Modified would result in soil erosion. However, strict adherence to the Maryland State Highway Administration's soil erosion and sedimentation control procedures will minimize any impacts.

2.3 Vegetation and Wildlife

The widening of Maryland Route 355 and side streets will necessitate the partial clearing of the vegetative corridor. This loss will not significantly affect the existing urban wildlife, which has a reduced population and no major diversity. The species that still inhabit the study area have been able to adapt to an urban environment. An initial period of inter- and intra-specific competition for food and shelter may result, however, once species relocate to new areas.

The construction of proposed Service Road A will not have a major impact on the vegetation and wildlife of that area. Since the road will be located along the perimeter of the area, impacts will be minimized. By eliminating access from the southwest, south, and southeast, the area may become an even more secluded biotic community, thus allowing development to take place more freely. Clearing for the new road will provide an "edge habitat," bringing new growth of shrubs, plants, and grasses, all of which are suitable sources of food for wildlife.

Some adverse effects will be experienced during and after construction. The replacement of vegetation by the roadway and the possible disruption of feeder springs will result in a relative reduction in cover, food, and nesting potential. The noise, fumes, oil, etc., associated with roads may detract from the value of the area as a wildlife habitat for small mammals such as squirrels and rabbits.

Impacts of the locations of Proposed Service Road B and Diamond Avenue relocated will be insignificant since both areas lack suitable size, cover and food to support such wildlife. No rare or endangered species will be impacted.

3. AIR QUALITY

Inventory. The study area is located within the National Capital Interstate Region, which is presently an EPA-designated Priority I Region, for carbon monoxide, hydrocarbons, and oxides of nitrogen. The most recent data on levels of carbon monoxide in the study area was collected in 1976 at Montgomery County's Research and Monitoring Lab. The second highest one-hour average concentration of carbon monoxide measured was 34.9 ppm; the second highest eight-hour average

concentration was 14.0 ppm. The one-hour level recorded is 0.1 ppm lower than the one-hour maximum federal standard of 35 ppm, while the eight-hour concentration exceeds by 5 ppm the federal eight-hour maximum of 9 ppm. Data on hydrocarbons and oxides of nitrogen is not available for the Gaithersburg area.

Impacts. In order to determine the impact of the proposed project on ambient air quality, an analysis was conducted to predict the carbon monoxide (CO) concentrations that will occur adjacent to the roadway in the completion year (1985) and the design year (2005). The results of the analysis indicated that no violations of the one-hour or eight-hour State or National Ambient Air Quality Standards for carbon monoxide will occur if the proposed project is implemented.

The following inputs and assumptions were used in making this analysis:

- Peak hour average running speed of 10 mph and off-peak hour average running speed of 30 mph for the No-Build Alternate in 1985 and 2005. A peak hour and off-peak hour average running speed of 30 mph for the Build Alternate in 1985, and a peak hour average speed of 20 mph and an off-peak hour speed of 30 mph in 2005. Traffic volumes utilized are presented in Figures 10A and 10B on pages 45 and 47.
- Emission factors derived from utilizing EPA's Mobile 1 computer program and the following data as input
 - the previously cited running speeds.
 - 35°F temperature.
 - FTP (Federal Test Procedure) driving cycle.
 - National (default) vehicle age distribution for HDV.
- Pollutant concentrations calculated with EPA's HIWAY Line Source Model.
- Worst-case meteorology of 2 m/s wind speed from 12:00 p.m. to 5:00 p.m. with Stability Class D, shifting to 1 m/s and Stability Class F after 5:00 p.m.
- Background carbon monoxide concentrations of 3.7 ppm for a one-hour period and 1.1 ppm for an eight-hour period in 1985; and a one-hour concentration of 3.8 ppm* and an eight-hour concentration of 1.1 ppm in 2005.

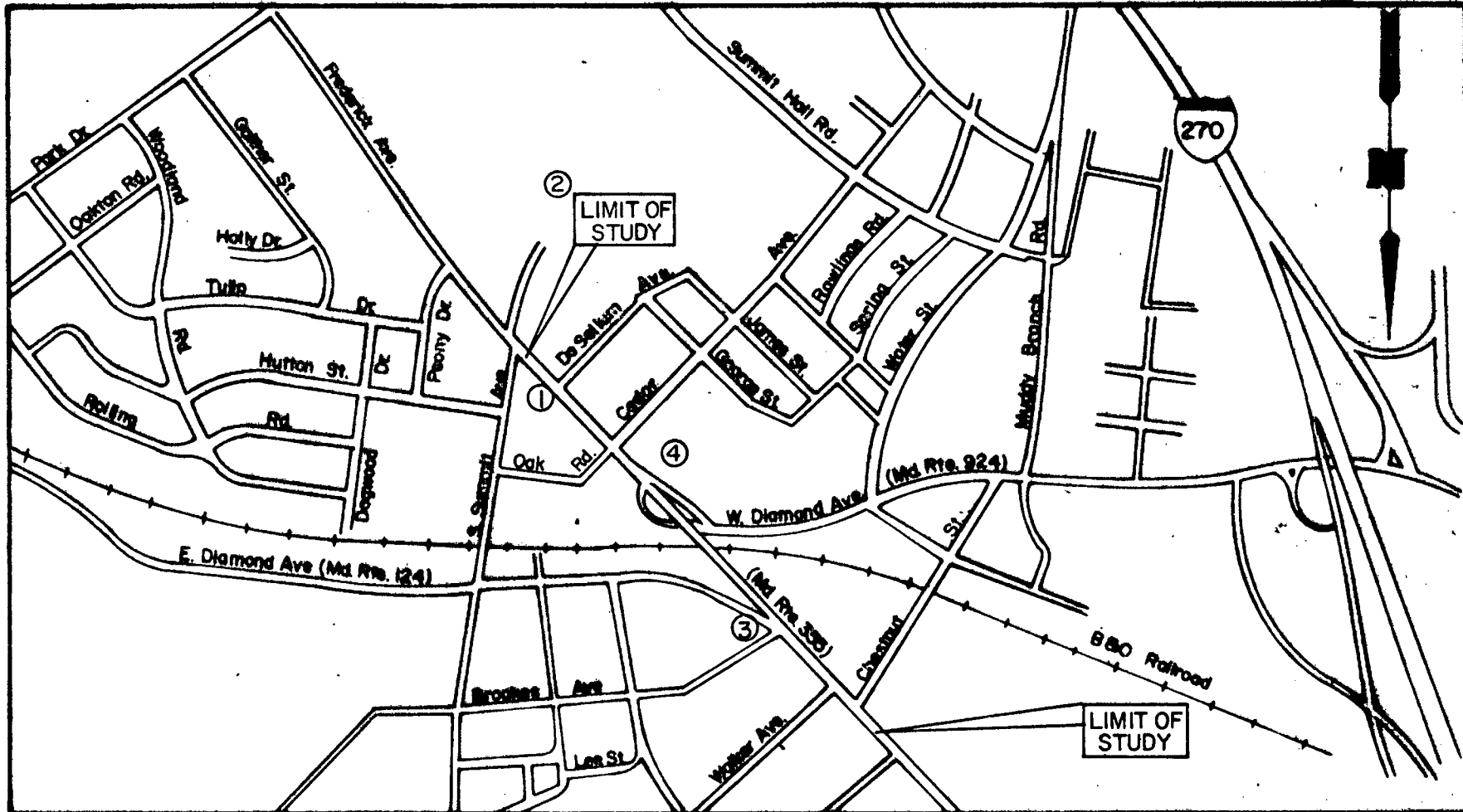
* The 1 hour carbon monoxide concentration in the year 2005 is greater than for 1985 due to the fact that projected regional development is great enough to offset any restrictions resulting from pollution control measure requirements.

- Since Inspection Maintenance (which was established by State legislation after this analysis was conducted) was not assumed for this air quality analysis, the actual impact on the study area air quality should be less than the results indicated in Table 9. I/M will become State law in July 1982.

Four specific and three generic receptor sites were selected on the basis of type of usage and proximity to the roadway. The seven sites are described below and their locations are shown in Figure 13 on page 77.

- Site 1 - A parochial school operated by St. Martin's Catholic Church, at #109 S. Frederick Avenue (Maryland Route 355). It is a two-story brick building; classes are normally held on week days between 8:00 a.m. and 2:00 p.m., however, evening usage of the building occasionally occurs. The facade of the structure is 48 feet from Maryland Route 355.
- Site 2 - Gaithersburg High School, located on South Summit Avenue, a one-story brick building. Maryland Route 355 is approximately 380 feet away from the nearest side of the school.
- Site 3 - Offices of the C&P Telephone Company at #1 East Diamond Avenue (Maryland Route 924), located approximately 80 feet away from the bridge. The building is a two-story brick structure.
- Site 4 - Number 14 S. Frederick Avenue, Executive Gardens Apartment, a set of three-story brick apartment buildings located on West Diamond Avenue. The nearest unit is 85 feet away from Maryland Route 355.
- Site 5 - A generic site; Site 5 is a hypothetical receptor located eight meters (26.2 feet) from the edge of right-of-way (EROW) of Maryland Route 355.
- Site 6 - A generic site; 16 meters (52.5 feet) from the EROW of Maryland Route 355.
- Site 7 - A generic site; 24 meters (78.7 feet) from EROW of Maryland Route 355.

The results of the analysis which are presented in Table 9 on page 79 consist of predicted CO concentrations at each site plus projected background levels. A review of this table show that no violation of either CO air quality standard will occur for the build or no-build alternates. The projected carbon



KEY

- 1. ST. MARTINS SCHOOL
- 2. GAITHERSBURG HIGH SCHOOL
- 3. C.&P TELEPHONE COMPANY OFFICES
- 4. EXECUTIVE GARDEN APARTMENTS

**MARYLAND STATE
HIGHWAY ADMINISTRATION**

**MARYLAND ROUTE 355
AIR QUALITY
RECEPTOR SITES**

SCALE: 1" = 1000'

FIGURE 13

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Table 9
CO CONCENTRATIONS AT EACH SITE

Site	Total CO, mg/m ³	
	No-Build	Selected
I. One-Hour:		
1	10.5/10.6	6.3/7.5
2	6.4/6.5	4.8/5.4
3	4.2/4.3	3.9/4.1
4	11.9/12.0	6.3/8.1
5	19.4/19.5	9.6/12.8
6	16.6/16.7	9.0/11.9
7	11.9/12.0	7.6/9.6
II. Eight-Hour		
1	3.7/3.7	2.1/2.5
2	2.1/2.1	1.5/1.7
3	1.3/1.3	1.2/1.2
4	4.2/4.2	2.1/2.7
5	7.1/7.1	3.3/4.5
6	6.0/6.0	3.1/4.2
7	4.2/4.2	2.5/3.3

Key: 1985/2005 concentrations

The S/NAAQS are: maximum one-hour - 40 mg/m³
maximum eight-hour - 10 mg/m³

monoxide concentrations for Alternate A Modified are for the most part, significantly lower than for the No-Build Alternate. The No-Build Alternate will generally produce higher levels of CO at each receptor because of projected decreased running speeds relative to the Build Alternate.

The maximum CO levels are predicted to occur for the No-Build Alternate in 2005, and are 19.5 mg/m³ (maximum one-hour) and 7.1 mg/m³ (maximum consecutive eight-hour) at the eight meters from the edge of right-of-way generic site. The corresponding 1985 concentrations are almost identical.

The consistency of the proposed project in relation to construction activities was addressed through consultation with the Maryland Bureau of Air Quality and Noise Control. The State Highway Administration has established Specifications for Materials, Highways, Bridges and Incidental Structures which specify procedures to be followed by contractors involved in State-funded work.

The air quality consistency of this project on a regional level is assumed in the following ways:

- A. The National Memorandum of Understanding between U.S. Department of Transportation and Environmental Protection Agency dated June 14, 1978 formally integrates the transportation and air quality planning processes for transportation projects receiving federal aid highway funds. This Agreement recognizes that the "reduction of air pollution is an important national goal, and must be among the highest priorities of the transportation planning process in areas not meeting primary Air Quality Standards". This process provides for extensive input from the public, local and State transportation, and air quality agencies. In addition, the procedures call for the joint administration of the air quality aspects of the urban transportation planning process between U.S. Department of Transportation and Environmental Protection Agency. This includes joint review of the following documents and activities to ensure that air quality considerations are adequately addressed:
 - 1) The Transportation Plan for the urban area,
 - 2) The Transportation Improvement Program which identifies projects for implementation,
 - 3) The State Implementation Plan. Transportation Control Plan for addressing attainment with Air Quality Standards,
 - 4) The review process which "certifies" that adequate transportation and air quality planning is being conducted in the urbanized areas.

- B. Through the urban transportation planning requirement of Title 23, United States Code, Section 134, as implemented by the RPC (or TPB/COG) forum, the same state and local agencies responsible for planning transportation projects in the urbanized area are also responsible--from a transportation control plan perspective--for assuring attainment of Air Quality Standards.
- C. Therefore, Maryland Route 355 is included in the regional transportation plan and Transportation Improvement Program for the urbanized area and is programmed for federal-aid highway funding. Thus it is subjected to this federal review and project development process. Therefore, the regional consistency of this project is addressed prior to undertaking the final project planning studies presented in this environmental document.

Since regional pollutants such as hydrocarbons and oxides of nitrogen, precursors of photochemical oxidants (smog) are addressed through this regional planning process only carbon monoxide emissions, a more localized pollutant, are being addressed quantitatively in this analysis (environmental document).

Copies of the draft air quality analysis were submitted to the U.S. EPA and the Maryland Bureau of Air Quality for review and comment. Correspondence from these two agencies is included in Appendix B of this document.

Based on this analysis of microscale, regional and construction air quality and coordination with the U.S. Environmental Protection Agency and the Maryland Bureau of Air Quality, we find the project consistent with the State Implementation Plan.

4. NOISE LEVELS

Inventory. Four individual noise sensitive sites were identified for this project. The location of each site in relation to Maryland Route 355 is shown in Figure 14 on page 83. Each site is described as follows:

- Site 1 - Number 109 S. Frederick Avenue, St. Martin's School, built in 1925, across from DeSillum Avenue. It is a two-story brick building with windows. Classes are normally held on weekdays between 8:00 a.m. and 2:00 p.m. The facade of the school is 48 feet from Maryland Route 355. The building is not air conditioned, and has an adjoining play area.
- Site 2 - Number 18 Diamond Avenue, Stanley's Barber Shop, a two-story frame combination residence and business located 35 feet from Diamond Avenue on the eastern side of the study area near Russell Avenue. Immediately

behind the Barber Shop is a three-story brick apartment house (thus, predicted noise levels at this site are also representative of the noise level at this multi-family unit in the project corridor). Site 2 is not air conditioned; exterior use is limited to front porch usage and is thus minor.

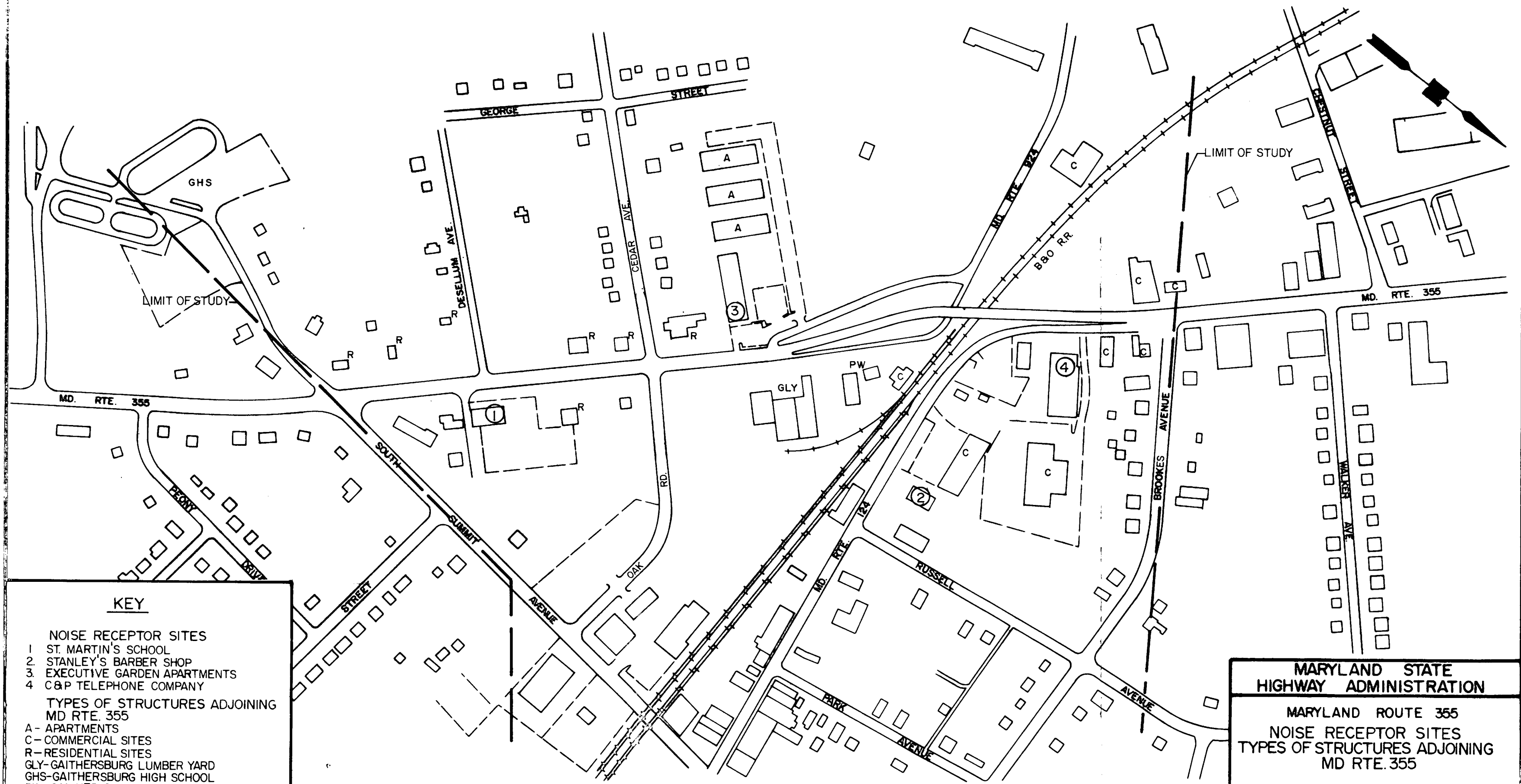
- Site 3 - Number 14 S. Frederick Avenue, Executive Garden Apartments, a set of three-story brick apartment buildings on West Diamond Avenue directly facing Maryland Route 355. The nearest unit is 85 feet from Maryland Route 355. The Gaithersburg Lumber and Supply Company is situated directly across the street. Site 3 is air conditioned, and has a swimming pool located approximately 150 feet from Maryland Route 355.
- Site 4 - Number 1 E. Diamond Avenue, Offices of the Chesapeake and Potomac Telephone Company (where it parallels Maryland Route 355). The building is a brick two-story structure. Due to the building's close proximity to the railroad tracks, employees keep the windows closed year round as a noise abatement procedure. The front wall is located 63 feet from Diamond Avenue, and is elevated over Diamond by 7 feet. No exterior use areas are apparent here.

With the exception of Site 4, the sites chosen for this survey fall under Activity Category B as defined in the Federal-Aid Highway Program Manual, Volume 7. Site 4 is Type C land. Recommended noise levels for these land use types are L₁₀ of 70 dBA for Category B exterior and L₁₀ of 55 dBA for Category B interior and L₁₀ of 75 dBA exterior for Type C land.

A field measurement program to determine ambient noise levels was conducted utilizing the latest methods for environmental noise analysis. Sampling was done three times per day during the a.m. rush-hours, the early afternoon non-rush hours and the p.m. rush-hours. The duration of each noise level measurement was 8-20 minutes. L₁₀ noise levels, which describe noise levels that are exceeded 10 percent of a given time period were recorded.

The results of the survey are shown in Table 10 on page 85.

There was no substantial difference between noise levels observed at various periods during the day. It is important to note that the railroad component of the ambient noise environment at the study area is significant. There is an AMTRAK station located near South Summit Avenue, and the railroad lines transect the study area. Train noise (horn, engine, and wheels) accounted for the bulk of the peak noise measured during the survey at Sites 2 and 4. Train horn sounds could be heard during all sampling runs at all sites.



KEY

NOISE RECEPTOR SITES

- 1 ST. MARTIN'S SCHOOL
- 2 STANLEY'S BARBER SHOP
- 3 EXECUTIVE GARDEN APARTMENTS
- 4 C&P TELEPHONE COMPANY

TYPES OF STRUCTURES ADJOINING MD RTE. 355

A - APARTMENTS
 C - COMMERCIAL SITES
 R - RESIDENTIAL SITES
 GLY - GAITHERSBURG LUMBER YARD
 GHS - GAITHERSBURG HIGH SCHOOL
 PW - GAITHERSBURG PUBLIC WORKS

MARYLAND STATE HIGHWAY ADMINISTRATION

MARYLAND ROUTE 355 NOISE RECEPTOR SITES TYPES OF STRUCTURES ADJOINING MD RTE. 355

SCALE 1" = 250'

FIGURE 14

Aircraft flyovers, often a major source of noise, were minimal. Based on an auxiliary survey, a daytime "noise floor" (minimum noise level) of 43 dBA was measured: on the eastern side of the study area, Maryland Route 355 and general commercial activity seem to limit this figure, on the western side, noise from Interstate 270 establishes the true background.

Table 10
A.M. RUSH HOUR (7:00-8:30 a.m.)

<u>Site</u>	<u>L₁₀</u>
1	75 (73-79)*
2	71 (71-73)
3	71 (69-73)
4	75 (73-77)

EARLY AFTERNOON (2:00-4:00p.m.)

<u>Site</u>	<u>L₁₀</u>
1	71 (71-75)
2	79 (75-85)
3	69 (67-75)
4	71 (69-75)

P.M. RUSH HOUR (4:00-5:30 p.m.)

<u>Site</u>	<u>L₁₀</u>
1	69 (69-71)
2	71 (69-73)
3	67 (65-71)
4	69 (69-71)

* All values are in dBA. Values in parantheses are the limits of the L₁₀ deviations at the 95 percent confidence level.

Impacts. To determine the impact of the proposed project on noise levels, an analysis was conducted to predict the noise levels that would occur in the design year 2005.

The FHWA* Traffic Noise Prediction Model, MOD-04, developed by the Transportation Systems Center, was used to calculate all noise predictions for the build and no-build alternates. MOD-04 was used in its computer-coded version, implemented on a UNIVAC 1108.

The model was executed using traffic data representative of peak noise exposure conditions, and receptors were selected that were proximal and unprotected by barriers or absorbing strips of tall vegetation. The traffic figures used were for p.m. rush hour, i.e., 5-6 p.m., and a 30 mph running speed was selected to maximize road emissions.**

The determination of environmental noise impact is based on the relationship between predicted noise levels, established design noise levels, and ambient noise levels in the project area. The Federal Highway Administration has established a design noise level/activity relationship (see Table 11 on page 87 published in FHPM 7.7.3. Impact assessment is also based on the increase in L₁₀ noise levels over existing levels. The degree or amount of the increase is assessed according to the following criteria.

<u>L₁₀ Increase Over Ambient</u>	<u>Degree of Impact</u>
Decrease over Ambient	Positive
0-5 dBA	Negligible Increase
6-10 dBA	Minor Increase
11-15 dBA	Significant Increase
Over 15 dBA	Severe Increase

The remainder of this section presents the results of the noise impact assessment for Alternate A Modified and the No-Build Alternate. Construction noise impacts are also discussed.

* FHWA document number FHWA-RD-77-18, Users Manual: TSC Highway Noise Prediction Code: MOD-04, January 1977.

** Selected from the list of predicted probably vehicle running speeds.

DESIGN NOISE LEVEL/ACTIVITY RELATIONSHIP
(From FHPM 7.7.3)

Design Noise Levels - dBA		Description of Activity Category
Leq(h)*	L10(h)**	
57 (Exterior)	60 (Exterior)	Tracts of land in 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. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
72 (Exterior)	75 (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
---	---	For requirements on undeveloped lands see paragraphs 11a and c.***
52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

*Leq(h) - The equivalent steady state sound level which would contain the same acoustic energy as the time-varying sound level for a period of one hour.

**L₁₀(h) - The sound level that is exceeded 10 percent of a one hour period.

***FHPM 7.7.3, Section II - NOISE ABATEMENT MEASURES FOR LANDS WHICH ARE UNDEVELOPED ON THE DATE OF PUBLIC KNOWLEDGE OF THE PROPOSED HIGHWAY PROJECT.

- a. Noise abatement measures are not required for lands which are undeveloped on the date of public knowledge of the proposed highway project (except as provided in paragraph 11b).
- b. For lands which are undeveloped on the date of public knowledge of the highway project, the highway agency should treat the activity or land use as developed land in the following situations:
 - (1) the development was planned, designed, and programmed before the highway studies and there is firm evidence that the development has been only temporarily delayed, or
 - (2) the development is planned, designed, and programmed during the highway project planning and design; there is a very high probability of the development being constructed; and the developer has considered the noise impacts to the extent reasonable and practicable.
- c. A highway agency may request Federal-aid participation in the cost of providing noise abatement measures for undeveloped lands along Type IA and IB projects when the noise analysis demonstrates a need in the following situations:
 - (1) development occurs between the date of public knowledge of the proposed highway project and the actual construction of the project, or
 - (2) the probability of development occurring within a few years is very high and a strong case can be made in favor of providing noise abatement measures as part of the highway project based on consideration of need, expected long term benefits to the public interest, and the difficulty and increased cost of later incorporating abatement measures into either the highway or the development.

4.1 Alternate A Modified and the No-Build Alternate

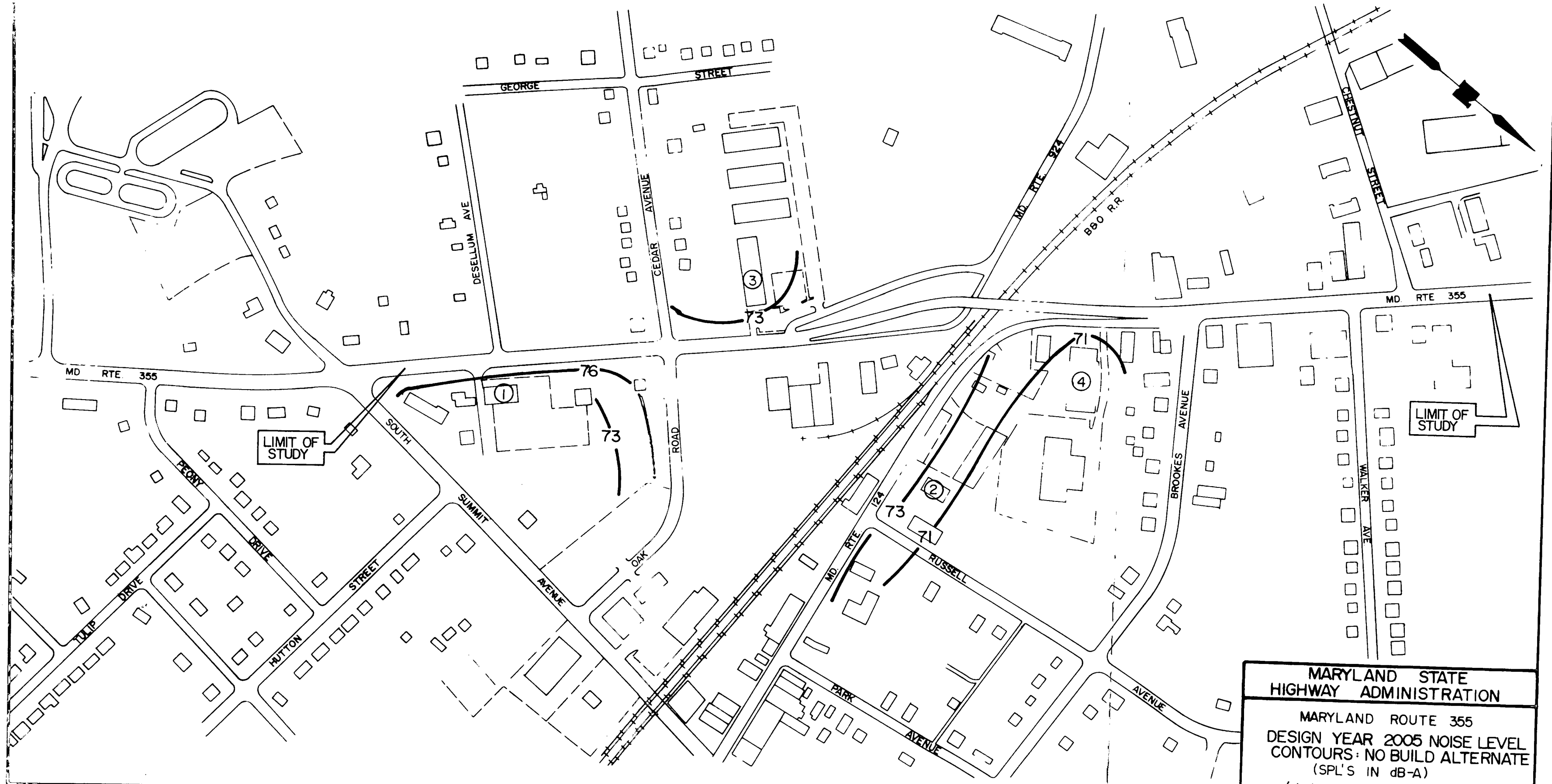
Four noise sensitive areas were identified and studied for potential noise impacts (these four areas are the same as those identified for the ambient noise survey). The projected noise levels for the year 2005 are presented in Table 12 below. Figures 15 and 16 show the predicted SPL contours (Sound Pressure Levels in dBA) corresponding to the build and no-build alternates.

Table 12
PROJECT NOISE LEVELS, dBA

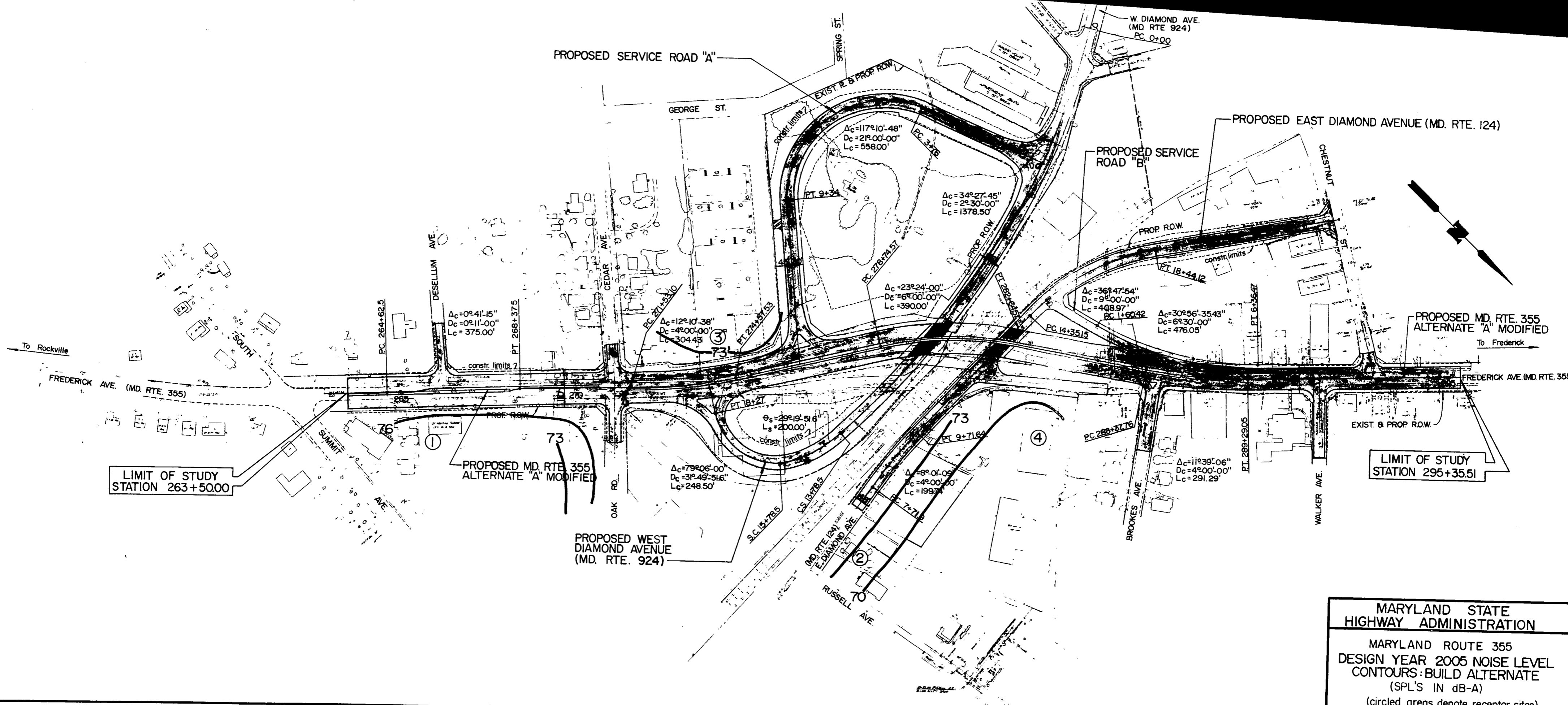
Receptor Site	Ambient L ₁₀	Design Year L ₁₀		Increase Over Ambient	
		No-Build	Selected	No-Build	Selected
1	69.0	75.8	76.0	6.8	7.0
2	71.0	72.5	72.6	1.5	1.6
3	67.0	73.0	73.1	6.0	6.1
4	69.0	70.9	69.8	1.9	0.8

The data in Table 13 show a minimal difference in predicted noise levels between Alternate A Modified and the No-Build Alternate. Projected L₁₀ noise level increases range from 0.8 to 7.0 dBA for Alternate A Modified and 1.5 to 6.8 dBA for the No-Build Alternate. The maximum increase of 7 dBA is projected to occur at Site 1 due to the fact that it is the nearest to the segment of Maryland Route 355 with the highest traffic volume. Site 4 will experience a minimum increase of 0.8 dBA since the building stands almost completely below the bridge's surface, and is thus sheltered from much of the roadway noise.

Sites 1 and 3 will experience noise levels in excess of the suggested federal design noise levels. Noise levels at Site 2 currently exceed the suggested design noise level and are projected to remain in excess of the 70 dBA level. Design noise levels will be exceeded for both the build



MARYLAND STATE HIGHWAY ADMINISTRATION
 MARYLAND ROUTE 355
 DESIGN YEAR 2005 NOISE LEVEL
 CONTOURS: NO BUILD ALTERNATE
 (SPL'S IN dB-A)
 (circled areas denote receptor sites)
 SCALE 1" = 250' FIGURE 15



MARYLAND STATE
 HIGHWAY ADMINISTRATION
 MARYLAND ROUTE 355
 DESIGN YEAR 2005 NOISE LEVEL
 CONTOURS: BUILD ALTERNATE
 (SPL'S IN dB-A)
 (circled areas denote receptor sites)
 SCALE: 1"=200' FIGURE: 16

and no-build alternates. However, based on the noise impact criteria presented on page 86, the maximum increased noise levels that are projected to occur in the study area will be of minor impact.

Since the St. Martin's School is used most extensively during off-peak hours, a special study of Maryland Route 355 impact was conducted to assess expected noise levels during the time of day associated with exterior usage of the building - noontime lunch recess, during which traffic demand is still quite high (6 percent of ADT, as opposed to 8.6 percent during design hour). The results were as follows:

	<u>L₁₀, Year 2005</u>
Alternate A Modified (Selected Alternate)	75.1 db-A
No-Build Alternate	74.8 dB-A

These values are only slightly lower than the prediction for the design hour (5-6 p.m.), as shown in Table 14.

Due to the prohibitive cost and limited effectiveness of a barrier system, the only feasible mitigative measure at Site 1, St. Martin's School is to air condition the school. By air conditioning the school, the windows could be closed thereby achieving a decrease in noise of as much as 25 dBA. This measure will be considered in conjunction with the right-of-way negotiations for the reconstructed of Maryland Route 355 south of South Summit Avenue since right-of-way from the church grounds is being acquired for the project. All costs associated with air conditioning the school will be paid for by the State of Maryland. No partial abatement measures are considered to be feasible and no interior noise measurements will be taken. Since noise levels at Site 2 already exceed suggested design levels, SHA is not committing themselves to air conditioning this site.

In the case of the Executive Garden Apartments, Site 3, closing the windows is already a feasible measure, since the apartments are air conditioned.

4.2 Construction Noise Impacts

As with all major construction projects, areas around the construction site are likely to experience varied periods and degrees of impact from noise.

It is possible that construction activity will not occur before 7:00 a.m. or after 5:00 p.m. on weekdays, and is not likely to occur on weekends. Limiting construction activity to non-critical time periods will minimize noise impacts to the surrounding areas.

The construction contractor should follow the Noise Control Strategies described in the FHWA document entitled, Highway Construction Noise Measurement, Reduction and Mitigation to maintain good community relations.

5. CULTURAL RESOURCES

5.1 Historic Sites

Alternate A Modified will require right-of-way from property associated with Historic District B. In compliance with Section 4(f) requirements*, a section 4(f) statement has been prepared and appears as Chapter V of this document.

In accordance with Section 106 procedures**, the State Historic Preservation Officer has determined that the proposed project will have no effect on District A or any sites eligible for inclusion on the National Register of Historic Places. Therefore, all Section 106 requirements have been met. See Appendix B for correspondence from the Maryland Historic Trust.

5.2 Archeological Sites

Based on the low archeologic potential of the area due to extensive disturbance by various forms of construction, no detailed archeological work is recommended. Should any significant site be uncovered during construction, applicable Federal Regulations will be followed.

* 49 U.S.C. 1653(f), also known as Section 4(f) of the Department of Transportation Act of 1966, P.L. 89-670.

** 36 CFR Part 800, Procedures for the Protection of Historic and Cultural Properties.

V. SECTION 4(f) STATEMENT

1. INTRODUCTION

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. 1653(f)) requires that the proposed use of any land from an historic site of National, State, or Local significance be given particular attention. The proposed action requires the taking of such land. This statement will document that there are no feasible or prudent alternatives to the use of 4(f) property. Additionally, a full evaluation of measures to minimize harm will be made.

2. PROJECT DESCRIPTION

The project under consideration is the widening and upgrading of Maryland Route 355 (Frederick Avenue) from South Summit Avenue to a point just past Chestnut Street (See Figure 1 on page 2) for a distance of approximately 0.6 miles. As proposed, the project involves the construction of dual 38 foot curbed roadways separated by a raised 16 foot median and seven foot sidewalks within a minimum right-of-way width of 110 feet. The existing bridge over the B&O railroad tracks will be replaced with a three span bridge that will extend over the railroad tracks, and East Diamond and West Diamond Avenues. The bridge will have 3 travel lanes in each direction and 5 foot sidewalks on each side. In addition some side streets will be upgraded and new service roads constructed. The typical section described above are shown in Figures 9A and 9B on pages 39 and 41.

Heavy traffic congestion, poor sight distance and maneuverability at two intersection, and several hazardous left turn intersections have resulted in an extremely high accident rate in the study area highway network. The proposed project will increase the operating capacity of

the roadway and eliminate the dangerous intersections, thereby alleviating existing traffic congestion and providing a safer facility for area motorists. Additional information relative to the need for the proposed project can be found on page 63 of this document.

Alternate A Modified would require right-of-way from property associated with a district of local historic significance. No other potential 4(f) lands, including publicly-owned parks, recreation areas, or wildlife and waterfowl refuges would be affected.

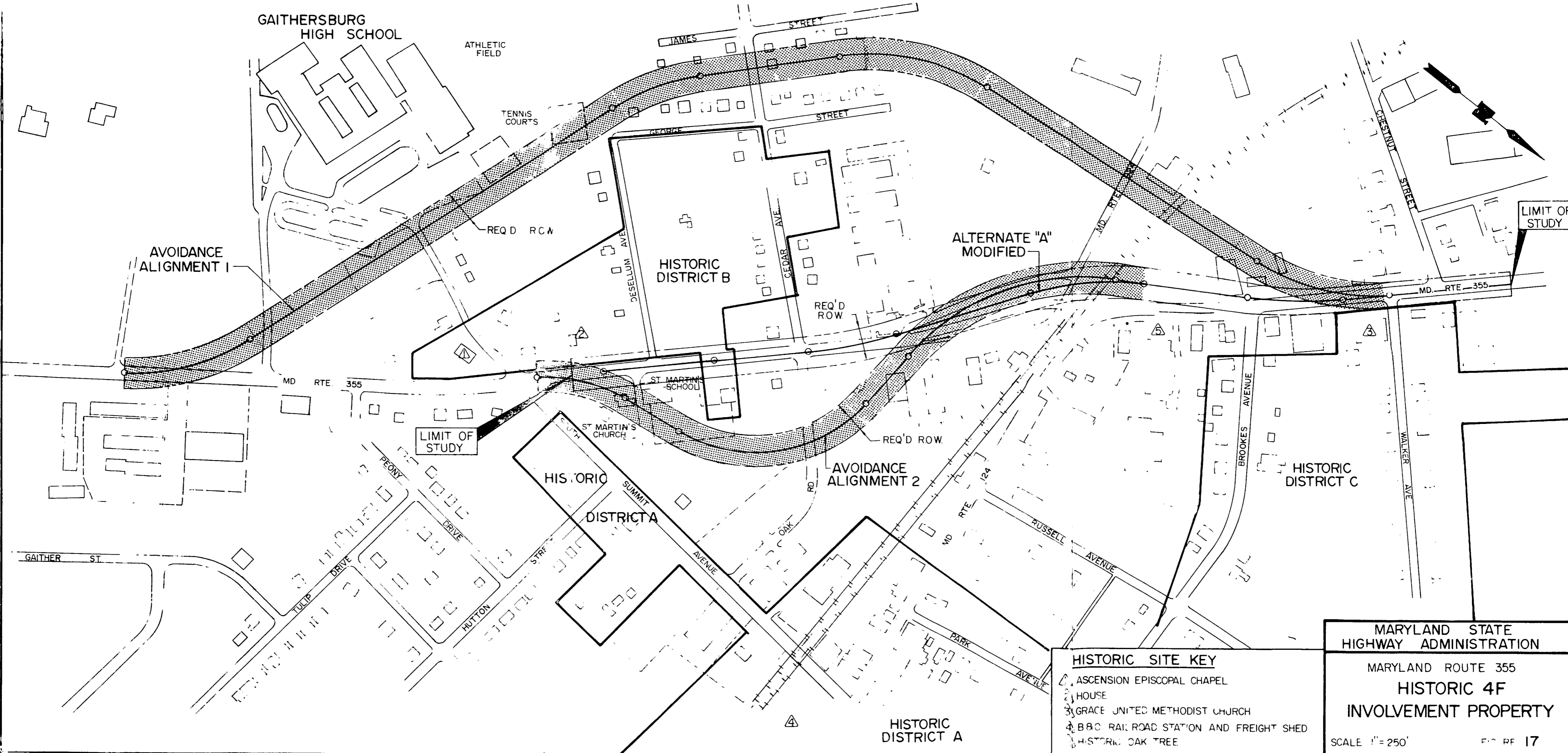
3. LOCATION AND DESCRIPTION OF 4(f) INVOLVEMENT

The 4(f) issue for the proposed project is the use of property for right-of-way associated with Historic District B, one of three districts of historic significance in the City of Gaithersburg. Figure 17 on the following page shows the location of Historic District B in relation to Maryland Route 355.

Historic District B encompasses a concentration of buildings significant for their harmonious expression of late 19th and early 20th century architectural styles. Included within the boundaries of the district are the National Register eligible Ascension Episcopal Chapel (1882) and the Thomas II Fulks House (1897), large frame houses on the west side of DeSillum Avenue and Cedar Avenue and several smaller houses such as those along the east side of Cedar Avenue and at 109 South Frederick Avenue. These buildings, taken together, provide a visual reference to Gaithersburg's past, and a striking contrast to the burgeoning commercial strip development along Frederick Avenue (Maryland Route 355).

4. AREA AFFECTED

Historic District B is almost completely bounded on one side by existing Maryland Route 355. The acquisition of right-of-way for



HISTORIC SITE KEY

1	ASCENSION EPISCOPAL CHAPEL
2	HOUSE
3	GRACE UNITED METHODIST CHURCH
4	B&O RAIL ROAD STATION AND FREIGHT SHED
5	HISTORIC OAK TREE

MARYLAND STATE HIGHWAY ADMINISTRATION
 MARYLAND ROUTE 355
HISTORIC 4F INVOLVEMENT PROPERTY
 SCALE 1" = 250'
 FIGURE 17

Alternate A Modified will necessitate taking approximately 0.26 acres of property from this district. This is less than 2 percent of the total 16.7 acres in the district. In addition, the following trees and bushes would be removed: five oaks ranging in size from 15 to 44 inches, one 18 inch maple, 18 inch and 10 inch cedars, two bushes and approximately eight feet of a 16 foot row of bushes. The State Historic Preservation Officer has determined that the proposed project will have no effect on Ascension Episcopal Chapel or the Thomas I. Fulks House, both of which are eligible for the National Register, nor will any other sites or remaining property in the district be affected. Access to the historic district will not be altered and would be maintained during construction.

Projected design year noise levels for two noise sensitive areas adjacent to Historic District B indicate that suggested design noise levels will be exceeded for both Alternate A Modified and the No-Build Alternate. The difference in projected levels between these two alternates is less than 1 dBA. Based on federal noise impact criteria, the maximum increase in noise levels that will occur (7.0 dBA) are considered to be of minor impact. Due to the prohibitive cost and limited effectiveness of a barrier system, the only feasible mitigative measure at the affected sites is air conditioning. More detailed information on noise levels is presented on pages 81 through 94.

5. ALTERNATIVES TO THE PROPOSED PROJECT

During the first stage of the project planning two alternate alignments (A and B) and the No-Build Alternate were developed and analyzed in terms of engineering, safety and environmental considerations. Alternates A and B had identical vertical and horizontal alignments but differed in their interchange configurations at Maryland Route 924.

Based upon comments at an Alternates Location Public Meeting and after extensive meetings with city officials in Gaithersburg, Alternate A Modified was developed. This alternate satisfies the concerns of local citizens, businessmen, and city officials to the greatest extent possible without sacrificing safety or traffic carrying capacity.

In addition to affecting Historic District B, Alternates A and B would also have significantly impacted the traditionally valued historic Washington Oak Tree by requiring extensive trimming and cutting back to accommodate the alignment of the reconstructed bridge over the railroad tracks.

A four-lane facility, which would have minimized right-of-way requirements was not considered to be a feasible alternative due to the fact that traffic projections indicated that a six-lane facility is needed to provide for a Level of Service C by 2005. In addition, a six-lane roadway will provide for uniformity of construction and traffic flow with the sections of Maryland Route 355 north and south of the project limits.

As shown in Figure 17 on page 97, two alternate alignments were considered in an attempt to completely avoid taking any property from Historic District B. The first avoidance alignment would begin approximately 1,400 feet southeast of South Summit Avenue and curve southwesterly away from existing Maryland Route 355, crossing the Gaithersburg High School property, then swing westerly on the south side of George Street. The alignment then curves back to the north to join Maryland Route 355 at Chestnut Street, the present project limit.

The following relocations and acquisitions would be required for Avoidance Alignment 1:

1. Require acquisition of 4 acres of Gaithersburg High School ground including 4 tennis courts. Since the tennis courts are open to the public, this would create another 4(f) involvement.
2. Would require acquisition and relocation of 6 residences and 4 businesses. It is estimated that 18 family members would have to be relocated and 22 employees would be impacted due to the acquisition of residences and businesses.
3. Property would be taken from the backyards of residences.

This alignment would be considerably more costly than Alternate A Modified due to the fact that the alignment is 0.4 miles longer and on completely new location, in addition to increased right-of-way acquisition costs. The estimated project cost for Avoidance Alignment 1 is \$16,500,000.

The second avoidance alignment would begin at South Summit Avenue and curve sharply to the north side of Maryland Route 355 and around Historic District B, and then back to Alternate A Modified at the northwest end of the proposed bridge. A sharp reverse curve produced an undesirable alignment that is inconsistent with the rest of Maryland Route 355, which generally consists of long tangents and flat horizontal curves. In addition, when compared to the selected alternative, this alignment would result in a less safe operating condition due to the use of minimum design standards for horizontal curves and super-elevation transitions.

The following relocations and acquisitions would be required for Avoidance Alignment 2:

- 1. Would require the acquisition of 6 businesses (the same businesses relocated by Alternate A Modified).
- 2. In addition, it would require the acquisition of the St. Martin Church and Rectory, the St. Martin's School, and another building on the Church property.

The estimated project cost for Avoidance Alignment 2 is \$15,000,000.

The No-Build Alternate, while not requiring right-of-way from Historic District B or any historic sites, would do nothing to alleviate the problems discussed in the need section. In addition, the study portion of Maryland Route 355 would not be consistent with the typical sections of approved construction at either project termini.

As can be seen from Figures 11 and 17, a shift of the selected alternate to either the north or south may slightly lessen the impact to one portion of the Historic District, but would increase impacts to the other portion.

Shifting the alternate to the north would slightly lessen the impacts to the individual sites and historic district on the south side of Maryland Route 355. However, a shift to the north would require the acquisition of additional right-of-way from the portion on the north side of Maryland Route 355. It would also require additional right-of-way from the St. Martin's School property and move the roadway closer to the school. This is not desirable relative to both air and noise levels at the school.

Shifting the alternate to the south would obviously require additional property from the portion of the historic district on the south side of Maryland Route 355 and result in additional impacts to the sites in the area of the district. It would also require the acquisition of two additional homes fronting on Maryland Route 355. See Figure 11.

6. MEASURES TO MINIMIZE HARM

The area required for right-of-way will be graded and sodded to blend into the existing ground. Any shrubbery or trees removed during construction will be replaced in such a manner as to blend into and complement the existing aesthetic environment of Historic District B. This work would be performed to the satisfaction of the property owners in District B.

7. COORDINATION

The Maryland Historic Trust established the boundaries for the three historic districts and identified individual historic sites in the study area. The State Historic Preservation Officer, in accordance with Section 106 procedures, made a determination of effect for the sites and district considered eligible for inclusion on the National Register of Historic Places. Historic District B is not considered to be eligible for the National Register by the State Historic Preservation Officer. All pertinent correspondence from the Trust is included in Appendix B of this report. Copies of the Draft Negative Declaration were circulated to various agencies for their review and comment. A listing of those agencies is on the following page. All of the agencies who responded concurred in the 4(f) portion of the document. Copies of letters received are included in Appendix B.

8. CONCLUSION

The above factors and considerations establish that there is no prudent or feasible alternate to use of land from the historic district and that the project includes all possible planning to minimize harm from such use.

VI. CONCURRING STATEMENTS AND SUMMARY
OF COORDINATION

The government agencies listed below were asked to review and comment upon the proposed project. Copies of pertinent correspondence appear in Appendix B.

- Mr. Bruce Blanchard
Director, Office of Environmental Project Review
U.S. Department of Interior
18th and C Streets, N.W.
Washington, D.C. 20242
- Environmental Impact Statement Coordinator
U.S. Environmental Protection Agency, Region III
Curtis Building
Sixth and Walnut Streets
Philadelphia, Pennsylvania 19106
- Regional Administrator
U.S. Department of Housing and Urban Development
Curtis Building
Sixth and Walnut Streets
Philadelphia, Pennsylvania 19106
- Office of the Secretary
U.S. Department of Agriculture
Washington, D.C. 20250
- Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
21 State Circle
Annapolis, Maryland 21401

A combined Location/Design Public Hearing for the proposed project was held at 7:30 p.m. on Monday, December 17, 1979 at Gaithersburg High School, Gaithersburg, Maryland. Two alternates, Alternate A Modified and the No-Build Alternate) were presented for discussion at the hearing. There were 12 speakers at the hearing; their comments are summarized

below, and responses to their comments are also presented. Complete comments are available for review in the Public Hearing Transcript.

- Comment Number 1: Mr. Richard T. Reed, Assistant to the City Manager of Gaithersburg and representing the City of Gaithersburg, went on record in support of Alternate A Modified. However, he asked that clarification be given for the higher costs associated with Alternate A Modified than for the originally considered Alternates A and B.

Response: The higher overall cost of Alternate A Modified can be attributed in part to the extension of the northern project limit from Brookes Avenue to Chestnut Street, thereby increasing paving and grading costs, more costly bridge structure due to its slight curve, and additional right-of-way costs.

- Comment Number 2: Mr. Bob Bernaro, President of St. Martin's Parish Council, requested that a pedestrian bridge spanning Maryland Route 355 be constructed to provide pedestrians, especially students of St. Martin's School, with a safer route across the roadway. It was also requested that a retaining wall and ornamental fence be constructed to reduce impacts to the church property.

Response: A meeting was held on January 30, 1980 between representatives of St. Martin's Church and the State Highway Administration to discuss the issue of a pedestrian overpass. At that meeting, both parties agreed that a pedestrian bridge was not a viable mitigative measure. However, the possibility of pedestrian traffic signalization at the intersections of Cedar Avenue and Maryland Route 355, and South Summit Avenue and Maryland Route 355, and a mid-block signal are currently being investigated. In addition, a retaining wall and ornamental fence will be constructed in front of the Church playground and parking lot. The construction of an additional retaining wall in front of the Church itself is currently being negotiated.

- Comment Number 3: A representative of the Chamber of Commerce endorsed Alternate A Modified.

Response: Alternate A Modified is the selected alternate.

- Comment Number 4: The owner of the Gaithersburg Lumber Company also supported the construction of Alternate A Modified and requested that the State coordinate the proposed project with the development of the new lumber yard property.

Response: Consideration will be given to the new lumber yard site during the detailed design phase of the proposed project.

- Comment Number 5: An area resident requested that a four-lane facility with a turning lane be considered in order to reduce impacts to the Gaithersburg community. A request was also made to identify the three noise sensitive areas that will experience noise levels in excess of suggested design levels and to describe the archeological survey that was conducted.

Response: Contracts to upgrade Maryland Route 355 dating back as early as 1973 have been maintained with the Mayor and City Council of Gaithersburg. During yearly program tours conducted with planners and elected officials, the six-lane concept was discussed and agreed upon. The outside lanes of a six-lane facility can be used as storage lanes for the Diamond Avenue ramps proposed under this study and can also be used as bus lanes. In this way, four through lanes can remain open to provide continuity of traffic flow. Further, the project now under construction connecting to the north provides for ultimate six-lane construction. The project adjoining to the south is currently designed as a six-lane roadway. The proposed project will provide for uniformity of construction and traffic flow for this high volume facility. The noise sensitive areas are identified in the section on noise levels beginning on page 81. The archeological survey consisted of an examination of all exposed surfaces (such as plowed fields, bank cuts, and areas under construction) within the proposed right-of-way. A literature search of previous investigations in the vicinity was also conducted.

- Comment Number 6: An area resident indicated his support for improvements to Maryland Route 355 but recommended that the segment of the roadway between Deer Park Road and South Summit Avenue be included in the proposed project and that a five-lane facility would be preferable. The resident also questioned the possibility of a pedestrian overpass and asked if there could be a westerly shift in the proposed alignment to minimize the impacts to St. Martin's Church.

Response: The need for a six-lane facility is addressed in the response to Comment Number 4. A westerly alignment shift would result in significant adverse impacts to Historic District B.

- Comment Number 7: The owner of the Chesline Apartments on Chestnut Street voiced her concern over the impacts of additional traffic from proposed relocation of East Diamond Avenue (Maryland Route 124) onto Chestnut Street.

Response: The increase in traffic projected for Chestnut Street will be primarily the result of normal area traffic growth rather than from the relocation of Maryland Route 124. It is anticipated that much of the traffic currently using Chestnut Street to gain access to the south side of Gaithersburg would use proposed service roads and Maryland Route 924 if the proposed project is implemented.

- Comment Number 8: A representative of the Maryland Route 355 Reconsideration Committee indicated support of a five-lane facility from the bridge to Deer Park Road. Identification of the impacted noise sensitive areas was also requested.

Response: See response to Comment Number 4 on the need for a six-lane facility and see the section on noise levels beginning on page 81 for a discussion of noise sensitive areas.

- Comment Number 9: An area resident requested traffic data for Maryland Route 355, asked what the cost differential would be for a four-lane versus a six-lane bridge, and suggested that Meem and Chestnut Streets be used instead of the proposed service roads.

Response: Traffic data for Maryland Route 355 is presented on pages 43, 45, and 47. Construction of a four-lane bridge rather than a six-lane bridge would result in a cost savings of approximately \$340,000. However, the roadway would operate at a level of service less than C. A six-lane bridge would operate at a Level of Service C in 2005, the design year. Meem and Chestnut Streets could not be feasibly used to route traffic onto Maryland Route 924 due to the at-grade railroad crossing.

- Comment Number 10: The vice president of St. Martin's Parish Council felt the need for a pedestrian bridge was not adequately addressed in this document.

Response: See the response to Comment Number 2.

- Comment Number 11: A part-owner of the Waters Motors property endorsed Alternate A Modified.

Response: Alternate A Modified is the selected alternate.

- Comment Number 12: An area resident opposed the extent of the proposed widening of Maryland Route 355 and feels that the roadway should not be used as a major commuter route through Gaithersburg.

Response: The adopted Master Plan for Gaithersburg designates Maryland Route 355 as a major north-south traffic carrier in the area transportation network.

Prior to the December 17, 1979 public hearing, two letters were received and four letters were received subsequent to the hearing. These comments and responses to them are presented below.

- Comment Number 13: An area property owner endorsed Alternate A Modified.

Response: Alternate A Modified is the selected alternate.

- Comment Number 14: An area resident questioned the need for seven-foot sidewalks and suggested that the proposed right-of-way be reduced to 76 feet at its widest point.

Response: Due to the commercial nature of the study area, a wider sidewalk is warranted. A 76-foot right-of-way would not allow adequate width to construct a six-lane roadway divided by a 16-foot raised median.

- Comment Number 15: An area resident suggested that Maryland Route 924 be rerouted under the bridge or be eliminated and an exit be provided off the bridge to Diamond Avenue to avoid impacting businesses on the south side of the railroad crossing.

Response: In order to provide an exit ramp an additional and elaborate flyover bridge structure would be required, which is not feasible from either an engineering or cost standpoint.

88

- Comment Number 16: Two area residents requested that provisions be made for bicyclists using Maryland Route 355.

Response: Bicyclists will be encouraged to use the outside roadway lane which is intended to be a combined motorist/cyclist facility.

- Comment Number 17: The Town Council of Kensington opposes the acquisition of any property for the proposed project and recommended staged bridge construction.

Response: Staged bridge construction is not considered to be economically feasible. State traffic projections, based on future needs, indicate a new facility would be required to accommodate future traffic demands. The existing bridge, which is in a state of deterioration, makes any attempt at salvaging the structure impractical on the basis of engineering and economic considerations.

APPENDIX A
ASSESSMENT OF
SIGNIFICANT ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ASSESSMENT FORM

The Environmental Assessment Form, which is included on the following pages, was developed in response to the requirements of the Maryland Environmental Policy Act of 1974. This report is to be prepared for all state actions and registered with the Maryland State Clearinghouse through the Maryland Department of Transportation.

The form provides a rather comprehensive summary of the areas of environmental concern. The items that are noted as having comments attached are discussed within the text of the Negative Declaration. Footnote references are provided for the convenience of the reader.

ASSESSMENT OF SIGNIFICANT ENVIRONMENTAL EFFECTS

The following questions should be answered by placing a check in the appropriate column(s). If desirable, the "comments attached" column can be checked by itself or in combination with an answer of "yes" or "no" to provide additional information or to overcome an affirmative presumption.

In answering the questions, the significant beneficial and adverse, short and long term effects of the proposed action, on-site and off-site during construction and operation should be considered.

All questions should be answered as if the agency is subject to the same requirements as a private person requesting a license or permit from the State or Federal Government.

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
A. Land Use Considerations			
1. Will the action be within the 100 year flood plain?	---	<u>X</u>	---
2. Will the action require a permit for construction or alteration within the 50 year flood plain?	---	<u>X</u>	---
3. Will the action require a permit for dredging, filling, draining or alteration of a wetland?	---	<u>X</u>	---
4. Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?	---	<u>X</u>	---
5. Will the action occur on slopes exceeding 15%?	---	<u>X</u>	---
6. Will the action require a grading plan or a sediment control permit?	<u>X</u>	---	---
7. Will the action require a mining permit for deep or surface mining?	---	<u>X</u>	---
8. Will the action require a permit for drilling a gas or oil well?	---	<u>X</u>	---
9. Will the action require a permit for airport construction?	---	<u>X</u>	---
10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?	---	<u>X</u>	---

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
11. Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?	_____	<u>X</u>	_____
12. Will the action affect the use of any natural or man-made features that are unique to the county, state or nation?	_____	<u>X</u>	_____
13. Will the action affect the use of an archaeological or historical site or structure?	_____	<u>X</u>	_____
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?	_____	<u>X</u>	_____
15. Will the action require the construction, alteration or removal of a dam, reservoir or waterway obstruction?	_____	<u>X</u>	_____
16. Will the action change the over-land flow of storm water or reduce the absorption capacity of the ground?	<u>X</u>	_____	See comments on <u>page A(5)</u>
17. Will the action require a permit for the drilling of a water well?	_____	<u>X</u>	_____
18. Will the action require a permit for water appropriation?	_____	<u>X</u>	_____
19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	_____	<u>X</u>	_____
20. Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?	_____	<u>X</u>	_____
21. Will the action result in any discharge into surface or sub-surface water?	_____	<u>X</u>	_____

APPENDIX A(4)

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	<u> </u>	<u> X </u>	<u> </u>
C. Air Use Considerations			
23. Will the action result in any discharge into the air?	<u> X </u>	<u> </u>	See pages 72-77
24. If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	<u> X </u>	<u> </u>	See pages 72-77
25. Will the action generate additional noise which differs in character or level from present conditions?	<u> X </u>	<u> </u>	See pages 83-100
26. Will the action preclude future use of related air space?	<u> </u>	<u> X </u>	<u> </u>
27. Will the action generate any radiological, electrical, magnetic, or light influences?	<u> </u>	<u> X </u>	<u> </u>
D. Plants and Animals			
28. Will the action cause the disturbance, reduction or loss of any rare, unique or valuable plant or animal?	<u> </u>	<u> X </u>	<u> </u>
29. Will the action result in the significant reduction or loss of any fish or wildlife habitats?	<u> </u>	<u> X </u>	<u> </u>
30. Will the action require a permit for the use of pesticides, herbicides or other biological, chemical or radiological control agents?	<u> </u>	<u> X </u>	<u> </u>
E. Socio-Economic			
31. Will the action result in a pre-emption or division of properties or impair their economic use?	<u> X </u>	<u> </u>	See page 45

APPENDIX A(5)

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
32. Will the action cause relocation of activities, structures or result in a change in the population density or distribution?	<u>X</u>	<u> </u>	See page 45
33. Will the action alter land values?	<u> </u>	<u>X</u>	
34. Will the action affect traffic flow and volume?	<u>X</u>	<u> </u>	
35. Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?	<u> </u>	<u>X</u>	
36. Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	<u> </u>	<u>X</u>	
37. Is the action in accord with federal, state, regional and local comprehensive or functional plans--including zoning?	<u>X</u>	<u> </u>	See page 61
38. Will the action affect the employment opportunities for persons in the area?	<u> </u>	<u>X</u>	
39. Will the action affect the ability of the area to attract new sources of tax revenue?	<u> </u>	<u>X</u>	
40. Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	<u> </u>	<u>X</u>	
41. Will the action affect the ability of the area to attract tourism?	<u> </u>	<u>X</u>	
F. Other Considerations			
42. Could the action endanger the public health, safety or welfare?	<u> </u>	<u>X</u>	
43. Could the action be eliminated without deleterious effects to the public health, safety, welfare or the natural environment?	<u> </u>	<u>X</u>	

APPENDIX A(6)

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
44. Will the action be of statewide significance?	___	<u>X</u>	___
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?	___	<u>X</u>	___
46. Will the action require additional power generation or transmission capacity?	___	<u>X</u>	___

G. Conclusion

17. This agency will develop a complete environmental effects report on the proposed action.	___	<u>X</u>	___
--	-----	----------	-----

B.16 The widening of the highway will increase the amount of impervious surface in the study area, but this increase will be minimal.

APPENDIX B
CORRESPONDENCE



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER-79/1035

JAN 8 1980

Dear Mr. Elinsky:

This is in response to a request for the Department of the Interior's comments on the draft Section 4(f) statement and Negative Declaration for SR-355 (Frederick Avenue - from South Summit Avenue to Chestnut Street), Montgomery County, Maryland.

This Department concurs with the proposed response to Section 4(f), and would offer no objection to U.S. Department of Transportation approval thereof.

The Negative Declaration is adequate with respect to our concerns.

Sincerely yours,
James H. Rathlesberger
Special Assistant to

James H. Rathlesberger
Secretary of the Interior

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda, Suite 220
Baltimore, Maryland 21211

cc: Mr. Eugene T. Camponeschi
Chief, Bureau of Project Planning
Maryland Department of Transportation
State Highway Administration
P.O. Box 717
300 West Preston Street
Baltimore, Maryland 21211

HCERS:NERO:MGordon:tso:12/17/79

NATIONAL CAPITAL PLANNING COMMISSION

1325 G STREET NW.
WASHINGTON, D.C. 20576

98
APPENDIX B(2)

In Reply Refer To:
NCPC File No. 1966

RECEIVED

December 6, 1979

DEC 11 1979

Mr. M. S. Caltrider
State Highway Administrator
State Highway Administration
Maryland Department of Transportation
300 West Preston Street
Baltimore, Maryland 21201

DIRECTOR, OFFICE OF
PLANNING & TECHNICAL ENGINEERING

Dear Mr. Caltrider:

In response to your request, the National Capital Planning Commission, at its meeting on December 6, 1979, reported to the Maryland Department of Transportation State Highway Administration that the plan for the improvement of Maryland Route 355 from South Summit Avenue to Chestnut Street as shown on NCPC Map File No. 3115(44.10)28761 will not have a negative impact on the functions of the Federal establishment or other Federal interests in the National Capital Region.

A copy of the Acting Executive Director's Recommendation, as approved by the Commission, is enclosed for your information.

Sincerely,

George H.F. Oberlander
Acting Executive Director

Enclosure

STATE HWY ADM

10 DEC 10: 15

DEC 11 1979
11 2 45
1001.0000.000006



U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION THREE

The Rotunda - Suite 220
711 West 40th Street
Baltimore, Maryland 21211

NOV 13 PM 1 40

ADVISORY
COMMISSION
PROJECT PLANNING

November 9, 1979

IN REPLY REFER TO:

Mr. M. S. Caltrider
State Highway Administrator
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

FAP No.: M 5113()
SHA No.: M 733-101-371
Maryland Route 355
Eligibility Determinations


Dear Mr. Caltrider:

The enclosed response from the Keeper of the National Register indicates that the sites listed below are eligible for the National Register:

1. Ascension Chapel
2. Thomas Fulks House
3. Grace United Methodist Church

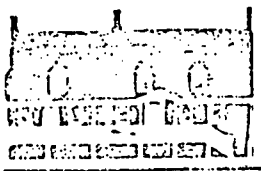
Sincerely yours,

Emil Elinsky
Division Administrator

By: 
Roy D. Gingrich
District Engineer

Enclosure

100



September 14, 1979

Maryland Historical Trust

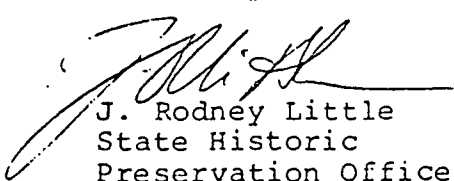
Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
Maryland State Highway Administration
P.O. Box 717
300 West Preston Street
Baltimore, Maryland 21203

Subject: Maryland Route 355, South Summit Avenue to Brooks Avenue
Contract No. M733-101-027

Dear Mr. Camponeschi:

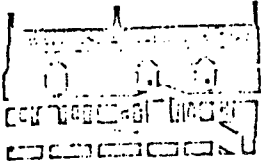
Since my letter to you of August 16, I have had an opportunity to review detailed plans for the subject project which had not been available previously. In light of these plans, I am willing to make a determination of no effect by proposed construction on the Ascension Episcopal Chapel, Thomas Fulks House, and Grace United Methodist Church.

Sincerely,


J. Rodney Little
State Historic
Preservation Officer

cc: F. DeSantis
M. Edwards
R. Krolak
R. Suffness

SEP 14 1979
STATE HISTORIC PRESERVATION OFFICE



15

Maryland Historical Trust

August 16, 1979

APPLICANT
PROJECT PLANNING

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

Subject: Maryland Route 355, South Summit Avenue to Brooks Avenue,
Contract No. M 733-101-027

Dear Mr. Camponeschi:

Further investigation by my staff largely confirms the information provided in Mr. Andreve's letter of October 30, 1978. The boundaries which he established for three historic districts within Gaithersburg have been revised somewhat as the enclosed map indicates (revised boundaries are shown in red). Of the three, District A would likely be eligible for the National Register, while B and C are of local significance only. Preliminary determination shows that the proposed widening of Route 355 would have no effect on District A, nor on the NR listed Gaithersburg B&O Railroad Station within this district.

The following sites appear to be eligible for the Register, and their associated boundaries are indicated in brown on the map:

1. Ascension Chapel
2. Thomas Fulks House, 208 S. Frederick Ave. (rt. 355)
3. Grace United Methodist Church (Wesley Church)

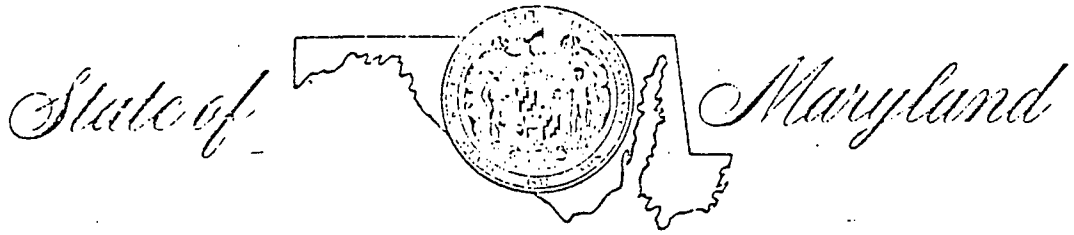
It is my preliminary determination that proposed construction would have an adverse effect on these sites.

Sincerely,

J. Rodney Little
State Historic Preservation Officer

JRL/PK/van
Enclosure

cc: M. Edwards
R. Krolak



DEPARTMENT OF HEALTH AND MENTAL HYGIENE
ENVIRONMENTAL HEALTH ADMINISTRATION

P.O. BOX 13387
201 WEST PRESTON STREET
BALTIMORE, MARYLAND 21203
PHONE • 301-383-3245

CHARLES R. BUCK, JR., Sc.D.
SECRETARY

Max Eisenberg, Ph. D.
Acting Director

July 30, 1979

Mr. Andy Brooks
Bureau of Landscape Architecture
2323 West Joppa Road
Brooklandville, Maryland 21022

Dear Andy,

RE: Air Quality Analysis, Maryland
Route 355

We have reviewed the Air Quality Analysis prepared for the above sub-
ject project and have found that it is consistent with the Programs' plans
and objectives.

Thank you for the opportunity to review this analysis.

Sincerely yours,

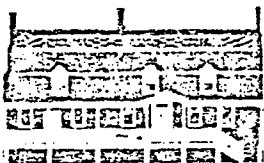
William K. Bonta, Chief
Division of Program Planning & Analysis
Air Quality Programs

WKB:fes

RECEIVED

AUG 1 1979

C. R. ANDERSON



Maryland Historical Trust

December 13, 1978

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT PLANNING

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
301 West Preston Street
Baltimore, Maryland

RE: Md. Rt. 355
South Summit Ave. to Brookes Ave.
M 733-101-371

Dear Mr. Camponeschi:

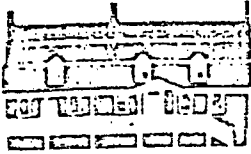
Thank you for your letter of December 1, 1978, regarding the project listed above. I cannot concur with your determination of no effect to the character and/or integrity of the possible National Register district(s) and sites of Gaithersburg. While I believe the preliminary historic district boundaries to be reasonably correct, the final ones need to be established after additional research by the SHA/MHT highway corridor surveyors who should be under contract in January.

Sincerely,

J. Rodney Little
State Historic
Preservation Officer

JRL:GJA:mms

cc: Mr. Andreve
Ms. McGuckian
Mr. Rinn



Maryland Historical Trust

October 20, 1978

Mr. Eugene T. Camponeschi
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203

RE: Md. Rt. 355
S. Summit Ave. to Brooks Ave.
M 733-101-027

Dear Mr. Camponeschi:

Thank you for your letter of August 31 regarding the project listed above. After a recent visit to Gaithersburg, I feel the historic district boundary should be revised so as to give three smaller districts. The approximate boundaries of these are shown on the attached map. The boundaries of the single large district sent to you by Ms. McGuckian coincides with that on the Trust's county survey.

Depending on further research, District A may be eligible for the National Register, but B and C taken as a whole would probably be considered of local significance. However, within B and C are several buildings which, I believe, would be eligible for the Register. These are:

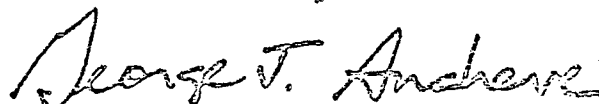
1. Ascension Episcopal Chapel (District B)
(This was incorrectly located by Ms. McGuckian)
2. House on the west side of Frederick Road
(2nd house north of the intersection of Frederick Road and Summit Avenue)
3. Wesley Church
(corner of Walker Avenue and Frederick Avenue)

The nomination of Gaithersburg B & O Railroad Station and Freight Shed has been sent to Washington but has not yet been officially accepted for the National Register. The nomination form for the station is attached. Shown on the map of the districts are the approximate locations of three buildings listed above.

Please let me know if you need additional information.

Mr. Eugene T. Camponeschi
October 20, 1978
Page -2-

Sincerely,



George J. Andreve
Architectural Historian

GJA:rms

Enclosures

cc: Margaret Ballard
Eileen McGuckian
David Rinn

106

APPENDIX B(9)



UNITED STATES ENVIRONMENTAL PROTECTION
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

RECEIVED
MAY 13 1979

SEP 13 1979

SEP 7 1979

C. R. ANDERSON

Mr. Charles Anderson
Chief, Bureau of Landscape Architecture
Maryland State Highway Administration
2323 West Jappa Road
Brooklandville, Maryland 21022

Re: Draft Air Quality Analysis, Maryland Route 355, South Summit
Avenue to Brookes Avenue


Dear Mr. Anderson:

Thank you for sending us a copy of the draft air quality analysis referenced above. We have reviewed the document and would like to make the following comments:

1. It is not clear why the ADT counts are assumed to be identical for both the build and no-build alternates. Since the build alternate appears to substantially increase the capacity of the road, please explain this assumption.
2. Queuing at traffic signals was assumed to be "minimal." Data substantiating this assumption would be beneficial to our review and should be included in additional environmental studies that may be prepared for the project.
3. We note that "generic site" receptors (varying from 8m - 2m from the edge of the right-of-way) were selected for modeling, 10 levels. Future assessments should consider placing generic site receptors at the edge of the right-of-way, since this may be more representative of the worst case.
4. Please elaborate on the consistency statement concerning the State Implementation Plan. Is a pollutant burden analysis being prepared for this project?
5. On page I-1 it is stated that this proposal is consistent "with work ongoing or planned for other segments of Route 355." This issue should receive further attention in the EIS for this project, and the influence of this other work on this project should be clearly explained. As we have noted in our review of other projects, the practice of piecemealing should be avoided.

Thank you for the opportunity to review this air quality analysis. If you have any questions concerning our comments, or if we can be of further assistance, please call Mr. Eric Johnson of my staff at (215) 597-4388.

Sincerely yours,



John R. Pomponio
Chief

EIS and Wetlands Review Section

APPENDIX C
SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE
STATE HIGHWAY ADMINISTRATION OF MARYLAND

"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/or the Annotated Code of Maryland, Article 21, Sections 12-201 thru 12-209. 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. In addition, but within the above limits, certain payments may be made for increased mortgage interest costs and/or incidental expenses. 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 moving expenses are limited

to a 50 mile radius. In both cases, the expenses must be supported by receipted bills. An inventory of the items to be moved must be prepared, and estimates of the cost may be obtained. The owner may be paid an amount equal to the low bid or estimate. In some circumstances, the State may negotiate an amount not to exceed the lower of the two bids. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business's vehicles or equipment, wages paid to persons who physically participate in the move, and the cost of the actual supervision of the move.

When personal property of a displaced business is of low value and high bulk, and the estimated cost of moving would be disproportionate in relation to the value, the State may negotiate for an amount not to exceed the difference between the cost of replacement and the amount that could be realized from the sale of the personal property.

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 personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement costs minus the net proceeds of the sale 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.

If no offer is received for the personal property and the property is abandoned, the owner is entitled to receive the lesser of the value for continued use of the item in place or the estimated cost of moving the item and the reasonable expenses of the sale. When personal property is abandoned without an effort by the owner to dispose of the property by sale, 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 \$500. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, but such rate may not exceed \$10 per hour.

In lieu of the payments described above, the State may determine that the owner of a displaced business is eligible 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.

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, with approval of the Federal Highway Administration, 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, but for twelve consecutive months during the two taxable years prior to the taxable year in which it is required to relocate, the owner of the business is 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, 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 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.

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 will be completed by the State Highway Administration and approved by the Federal Highway Administration before "housing as a last resort" could be utilized. "Housing as a last resort" could be provided to displaced persons in several different ways although not limited to the following:

1. An improved property can be purchased or leased.
2. Dwelling units can be rehabilitated and purchased or leased.
3. New dwelling units can be constructed.
4. State acquired dwellings can be relocated, rehabilitated, and purchased or leased.

Any of these methods could be utilized by the State Highway Administration and such housing would be made available to displaced persons. In addition to the above procedure, individual replacement housing payments can be increased beyond the statutory limits in order to allow a displaced person to purchase or rent a dwelling unit that is within his financial means.

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 person, 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.