



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB  
2/28/02  
Item No. 13

February 22, 2002

**MEMORANDUM**

TO: Montgomery County Planning Board

VIA: Richard C. Hawthorne, Chief *RC*  
Transportation Planning  
County-wide Planning Division

Daniel K. Hardy, Supervisor *DKH*  
Transportation Planning  
County-wide Planning Division

John Carter, Chief *JC*  
Community-Based Planning Division

FROM: Shahriar Etemadi, Coordinator (301-495-2168)  
Transportation Planning  
County-wide Planning Division *SE*

SUBJECT: MD 355/Montrose Road/Randolph Road  
Intersection Improvement Study Recommendation  
(Project MO830A11)

---

**RECOMMENDATION: Transmit the following comments to the Maryland State Highway Administration (SHA)**

1. The Montgomery County Planning Board recommends selection of Alternate 9 (Randolph Road Under MD 355) for final design because it best meets the project purpose and need.
2. During project engineering, the Maryland State Highway Administration (SHA) should develop designs that connect SHA's project to both the eastern and western segments of the Montrose Parkway. These plans should be presented to the Planning Board as part of the project's mandatory referral.

3. Continue to coordinate with DPWT with regard to other on-going projects in the area, particularly the design and phasing of Nebel Street Extended.
4. During the engineering phase of the project coordinate with M-NCPPC staff regarding urban design opportunities.

## **MEMORANDUM ORGANIZATION**

This memorandum contains the following sections:

- Purpose of briefing
- Previous Planning Board actions
- Alternates description and rationale for staff recommendation
- Coordination with County transportation projects
- Urban design considerations
- Public involvement and comment
- Alternates comparison

## **PURPOSE OF BRIEFING**

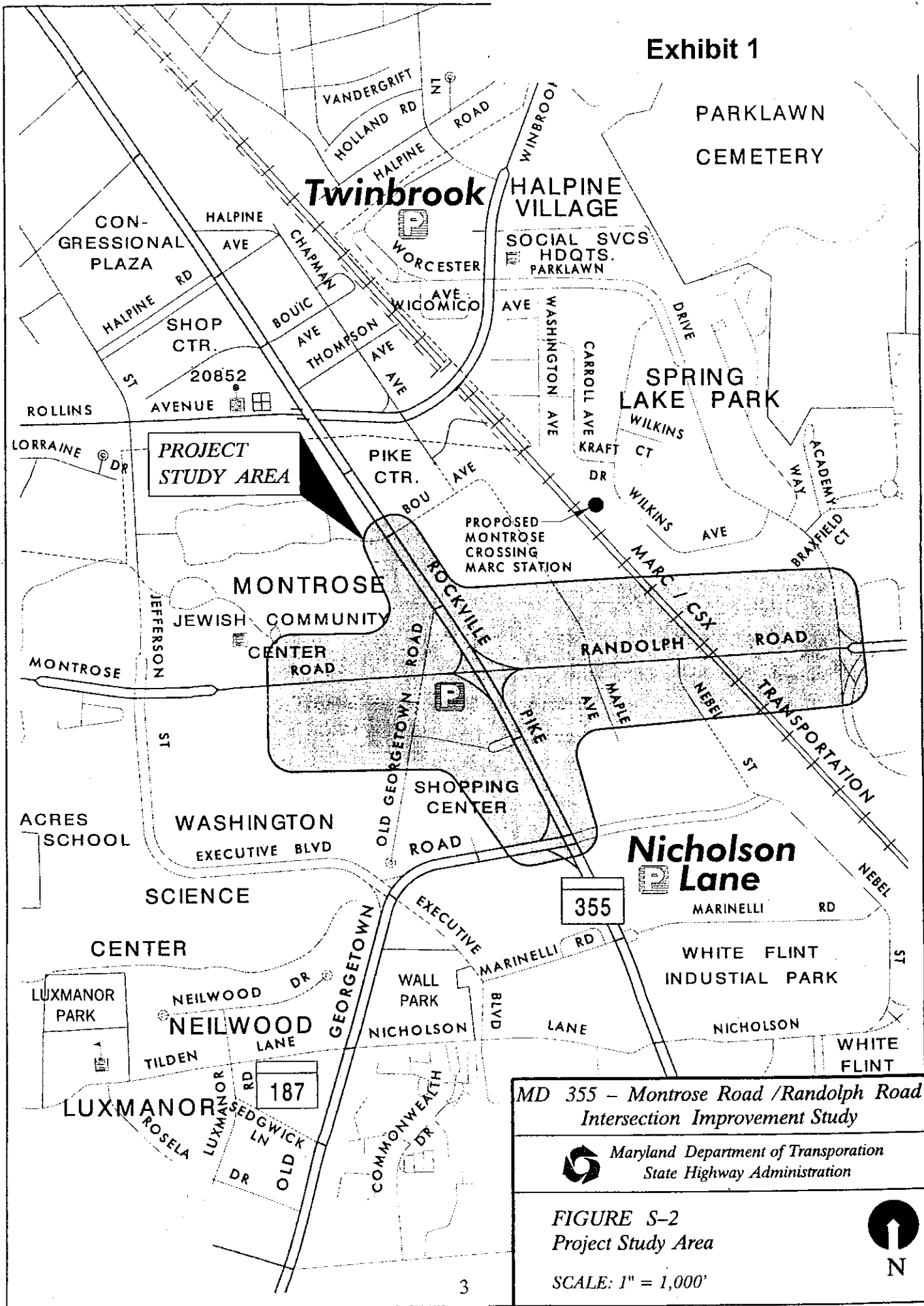
The purpose of this briefing is to present to and solicit comments from the Planning Board regarding the preferred alternate for the MD 355/Montrose Road/Randolph Road Intersection Improvement Study. The study location is shown in Exhibit 1. SHA's study included preparation of a November 2001 Environmental Assessment (EA). The EA was summarized in a brochure prepared for the December 3, 2001 Location and Design Public Hearing. This brochure is attached to the copies of this memo provided to Planning Board members.

The Planning Board recommendations on a preferred alternate will be considered in SHA's alternate selection process. The Planning Board comments will also inform the County Council's Transportation and Environment (T&E) Committee March 7 worksession. After SHA identifies a selected alternate, location and design approval must be obtained from the Federal Highway Administration. Following that decision, the project will enter the final design process, during which SHA will return to the Planning Board for a mandatory referral.

## **PREVIOUS PLANNING BOARD ACTIONS**

SHA has previously briefed the Planning Board on this project twice, first on July 20, 2000 and again on December 14, 2000. On July 20, 2000, SHA briefed the Planning Board on the MD 355/Montrose Road/Randolph Road Intersection Improvement Study status, prior to selecting Alternates Retained for Detailed Study (ARDS). The Planning Board recommended that two alternates, "M-NCPPC # 2" and "M-NCPPC #3", be carried forward into ARDS because they best represented the intent of the Master Plan and because a finding that other alternates were clearly superior had not been documented. These two alternates implemented the Montrose Parkway across MD 355

**Exhibit 1**



**MD 355 - Montrose Road / Randolph Road  
Intersection Improvement Study**

Maryland Department of Transportation  
State Highway Administration

**FIGURE S-2  
Project Study Area**

SCALE: 1" = 1,000'



and the CSX tracks without closing any portion of existing Montrose Road or Randolph Road.

The second SHA briefing to the Planning Board was on December 7, 2000. In response to the July 20 briefing, SHA had documented that there are three primary measures by which the "M-NCPPC #2" and "M-NCPPC #3" alternates were significantly inferior to other ARDS alternates; intersection level of service, capital cost, and reducing at-grade rail crossing conflicts. At this time, the Planning Board recommended to SHA that they not carry forward these two alternates as ARDS.

## **ALTERNATES DESCRIPTION**

Four alternates were documented in the EA and presented to the public at the December 3, 2001 Location and Design Public Hearing:

- Alternate 1: No-Build
- Alternate 2: Single-Point Urban Diamond Interchange (SPUI)
- Alternate 3: At-Grade Signalized Intersection
- Alternate 9: Randolph Road Under MD 355

These alternates are shown in Attachments A through D. Each of the build alternates includes a relocation of Randolph Road to cross over the CSX railroad tracks in the Montrose Parkway right-of-way (option B-1), and an optional partial connection to Nebel Street (option B-1 modified). The alternates vary in the treatment of the MD 355/Montrose Road/Randolph Road intersection. Further descriptions of the alternates and comparison of their environmental effects are provided in the last section of this memorandum.

## **Rationale for Staff Recommendation**

The development of the staff recommendation in support of Alternate 9 is based on the following logic:

- Alternate 1 (the No-Build alternate) does not address the need to provide additional transportation capacity to support Master Plan development
- Alternate 3 (an expanded at-grade intersection) provides a design unacceptable from pedestrian accessibility and urban design perspectives, and is inconsistent with the Master Plan

The two grade-separated alternates, Alternate 2 and Alternate 9, meet SHA's Purpose and Need and are consistent with the Master Plan. Alternate 9 is preferred because it:

- Provides better access to adjacent commercial properties. Access to all existing properties will be retained with Alternate 9, whereas certain turning movements

to and from the Mid-Pike Plaza and the Montrose Crossing office complex would be restricted with Alternate 2

- Provides a better pedestrian environment, dispersing pedestrian crossings to two smaller signalized ramp intersections rather than the larger single-point intersection
- Provides longer “weaving” distances between the MD 355 on-ramps and the next downstream intersections
- Costs approximately \$12 million less

Staff recommends implementing Option B-1 Modified because it:

- Provides increased vehicular and pedestrian accessibility within the study area, and
- Reduces the traffic volumes crossing the CSX railroad tracks at-grade

## **COORDINATION WITH COUNTY TRANSPORTATION PROJECTS**

The 1992 North Bethesda/Garrett Park Master Plan recommends a series of transportation improvements in the study area to accommodate planned development. Those improvements included better transit services, pedestrian and bicycle facilities, travel demand management and roadway improvements. The primary highway capacity improvements proposed in the Master Plan are shown in Exhibit 2.

Exhibit 3 summarizes the status of transportation system improvements in the vicinity of SHA’s study area, between the White Flint and Twinbrook Sector Plan areas. Three projects in particular require increased levels of multi-agency coordination; Montrose Parkway West, Montrose Parkway East, and Nebel Street Extended, as discussed below.

### **Montrose Parkway West and Montrose Parkway East**

The Master Plan recommends the implementation of Montrose Parkway across North Bethesda. The Montrose Parkway crossing of MD 355 and the CSX railroad tracks has been incorporated in SHA’s study. The County is implementing the remaining portions of the Montrose Parkway on either side of SHA’s project in two stages:

- Montrose Parkway West, from near Tildenwood Drive to “Old” Old Georgetown Road (including widening Montrose Road between Montrose Parkway and I-270)
- Montrose Parkway East, from Parklawn Drive to Veirs Mill Road

# Exhibit 2

## PROPOSED HIGHWAY CAPACITY IMPROVEMENTS

### FIGURE 56



page  
159

(See Urban Design Graphics for Additional Minor Streets)

## Exhibit 3

### Exhibit 3. Status of Study Area Transportation Improvements

Project Description	Status	Responsible Agency
Montrose Parkway West	Facility Planning Phase II complete, construction funding recommended in draft FY 03-08 CIP	DPWT
Montrose Parkway East	Facility Planning Phase I initiated FY 02	DPWT
Nebel Street Extended	Facility Planning Phase I completed November 2001 and Phase II initiated	DPWT
Chapman Avenue (from south of Marinelli Road to Nicholson Lane)	Construction funding recommended for FY 08 in FY 03-08 CIP	DPWT
Intersection improvement at Rockville Pike and Old Georgetown Road	Conference Center improvement in Facility Planning	DPWT
Randolph Road East	Facility Planning Phase I initiated FY 02	DPWT
Randolph Road Transit Improvement Study	Facility Planning Phase I initiated FY 02	DPWT
Woodglen Drive Extended	Facility Planning Phase I initiated FY 02	DPWT
Grade separation at Rockville Pike and Nicholson Lane	To be reviewed during White Flint Metrorail station joint development approval process	SHA/DPWT
Increase capacity at MD355 and Marinelli	To be reviewed during White Flint Metrorail station joint development approval process	SHA/DPWT
Chapman Avenue Extended (Maple Avenue to Marinelli Road)	To be reviewed during White Flint Metrorail station joint development approval process	SHA/DPWT
North Bethesda MARC Station	Master Plan recommendation	MTA

Key:

SHA = Maryland State Highway Administration

DPWT = Montgomery County Department of Public Works and Transportation

MTA = Maryland Mass Transit Administration

Montrose Parkway West has been funded for 35% design through the Facility Planning process and this process has been completed. The County Executive has included a \$57M project in the draft FY 03-08 Capital Improvements Program (CIP) to fund the remaining design and construction.

Montrose Parkway East is a new facility planning study initiated in FY 02. This project is closely linked with a concurrent facility planning study for Randolph Road between Parklawn Drive and Veirs Mill Road. These facility planning studies will examine both capacity improvements on Randolph Road and implementation of Montrose Parkway East to determine if either or both projects merit construction. These projects will share an initial public meeting scheduled for March 6.

The SHA project has been closely coordinated with both Montrose Parkway projects throughout the project planning and facility planning processes. SHA's project alternates are designed to connect either to the existing Montrose and Randolph Roads or to the future Montrose Parkway, pursuant to Federal laws requiring determination of independent utility for federally funded projects.

As the projects proceed into detailed design and engineering phases, the implementing agencies need to ensure that the projects are optimally phased and implemented to provide a seamless east-west arterial connection throughout North Bethesda.

### **Montrose Parkway West**

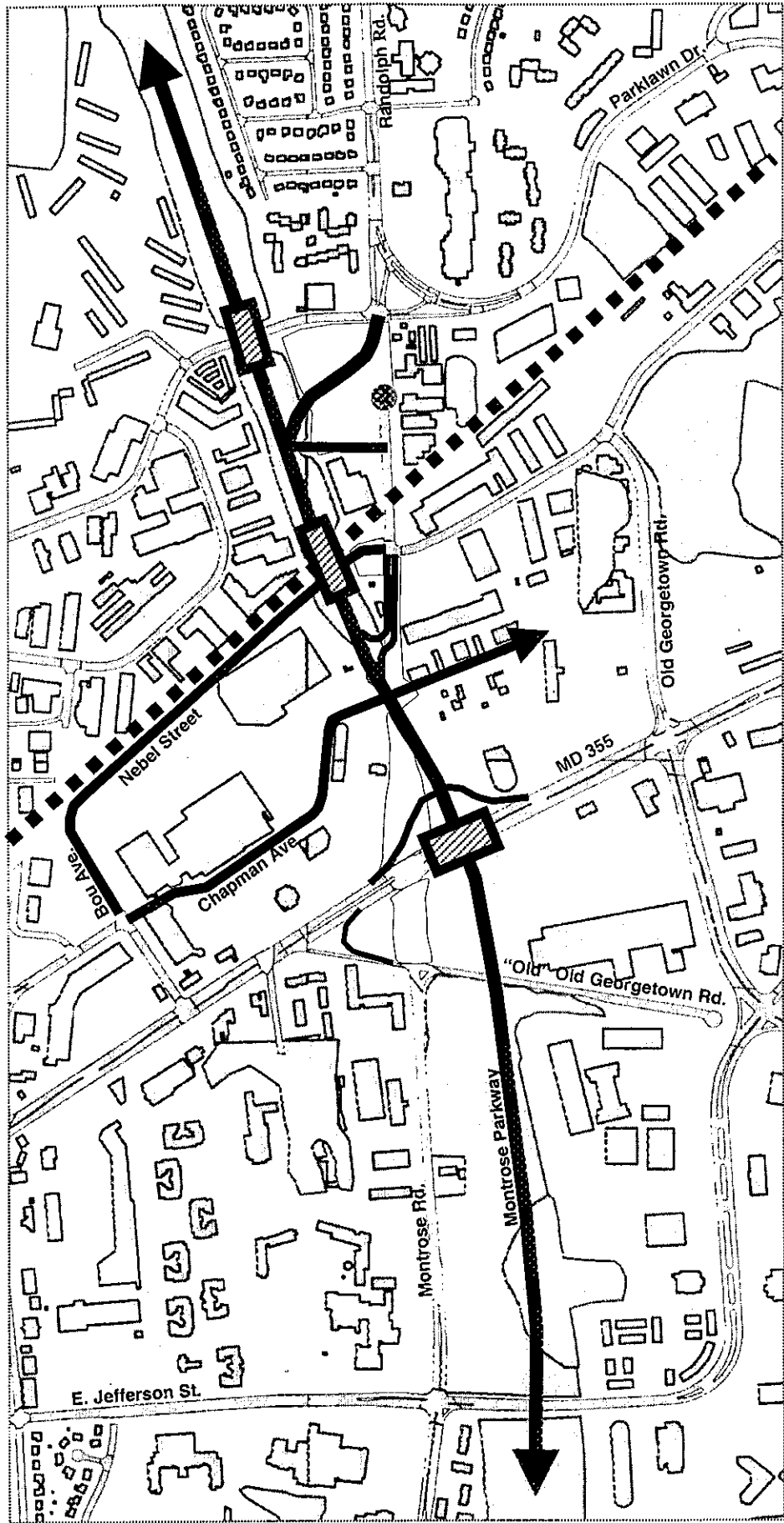
At the western end of SHA's project, staff believes this seamless connection will be achieved by connecting SHA's project directly to the County's Montrose Parkway project and terminating the existing Montrose Road at a "T" intersection with "Old" Old Georgetown Road, as shown in Exhibit 4. Staff recommends that the further SHA engineering efforts on Alternate 9 proceed with the Montrose Parkway connection rather than the Montrose Road connection shown in Attachment D.

Currently, the Montrose Parkway West timetable is slightly ahead of SHA's project, with draft budget documents suggesting that construction could begin in FY 05 for Montrose Parkway West and FY 06 for the MD 355/Montrose Road/Randolph Road project:

- The Executive's Draft FY 03-08 Capital Improvements Program (CIP) budget indicates that construction on the Montrose Parkway West could begin in FY 05, as indicated in Attachment E
- The State's Draft FY 2002-2007 Consolidated Transportation Program (CTP) budget suggests that engineering for the MD 355/Montrose Road/Randolph Road project could be completed in FY 06. No construction funding is identified in the draft CTP, as indicated in Attachment F.



# Exhibit 4 Schematic of Montrose Parkway Connections



Staff recommends that during the detailed design phases, SHA and DPWT develop designs that establish a common road grade, cross-section, and other design features for SHA's project to connect directly to Montrose Parkway West. This design should be included in SHA's project mandatory referral submission.

Staff understands that SHA will likely need to continue to design an option for Alternate 9 that connects to Montrose Road (as shown in Attachment D), in the event that budgetary constraints or maintenance of traffic considerations allow SHA's project to precede the Montrose Parkway West project at their common terminus.

### **Montrose Parkway East**

At the eastern end of SHA's project, the connection to the future County transportation network is less certain, because the County facility planning process is just beginning. Staff believes that the logical connection between the eastern portion of Montrose Parkway and SHA's project is via a fourth leg on the new, proposed signalized intersection in the Montrose Parkway right-of-way, as shown in Exhibit 4. SHA's project efforts have indicated that construction of such an intersection is feasible and will operate at a satisfactory level of service. Intersection design details, however, should be based on DPWT's study recommendation for the junction between Montrose Parkway and Parklawn Drive. This junction could be an at-grade, signalized intersection or an interchange with Montrose Parkway crossing Parklawn Drive above grade and either full or partial ramp access.

At the eastern end of the project, DPWT's study should investigate the feasibility of these alternate Montrose Parkway/Parklawn Drive treatments and, as a priority, recommend a preferred concept for the connection to SHA's project. SHA and DPWT should also establish a common road grade, cross-section, and other design features for SHA's project to connect directly to Montrose Parkway East. This design should also be included in SHA's project mandatory referral submission.

### **Nebel Street Extended**

Nebel Street Extended is a planned business district street between Randolph Road and Chapman Avenue/Bou Avenue. DPWT has recently completed Phase I of Facility Planning for this project. The Planning Board recommended that this project proceed to Phase II (detailed design) on November 8, 2001. One of the Planning Board comments was a recommendation that Nebel Street Extended be completed prior to construction of SHA's project to serve as part of the maintenance of traffic program while construction activity occurs along Rockville Pike.

### **URBAN DESIGN CONSIDERATIONS**

SHA's project planning study has incorporated landscaping and urban design considerations as part of SHA's "Thinking Beyond The Pavement" initiative. These considerations, represented through color renderings from various perspectives and

three-dimensional model representations of the alternates, have helped staff and others understand the aesthetic and urban design effects of alternate treatments. From an urban design perspective, Alternate 9 provides an advantage over the other build alternates in that the triangular green space bounded by "Old" Old Georgetown Road, Rockville Pike, and Montrose Road can be retained, a concept envisioned in the Legacy Open Space Master Plan.

SHA's design incorporates Master Plan recommendations for a Class I bikeway along the Montrose Parkway, providing an east-west bikeway connection under Rockville Pike. The design also extends the Class I bikeway on the east side of Rockville Pike across Randolph Road via the signalized intersection with the northbound MD 355 ramps.

During the project-engineering phase, staff recommends additional urban design considerations to explore opportunities to weave the project into the community. Such opportunities include:

- Ensuring that stormwater management facilities are an attractive natural feature rather than simply a fenced barrier.
- Examining the use of graded and landscaped slopes to minimize the extent of retaining walls needed to achieve grade separations
- Retaining and improving the sidewalk access along the front of the Montrose Schoolhouse and incorporating it into the Class I bikeway rather than relocating it along the depressed section of Randolph Road. (This option could also reduce visual impacts to the Schoolhouse)
- Establishing the level of need and an appropriate treatment for continued use of the SHA-owned parking spaces at the north end of the Mid-Pike Plaza lot.

## **PUBLIC INVOLVEMENT AND COMMENT**

SHA formed a focus group at the beginning of this project planning process. Representatives of nearby communities, businesses, and state and local agencies have met periodically throughout the study. Alternate 9 was developed specifically in response to focus group comments.

The Location and Design Public Hearing was held on December 3, 2001. The purpose of the public hearing was to formally present the results of the engineering and environmental studies that have been completed for the MD 355/Montrose Road/Randolph Road Intersection Improvement Study.

Eighty-two people attended the public hearing. SHA received 17 comments made during public testimony and 4 comments made during private testimony at the

public hearing. SHA received an additional 17 written comments as of February 13, 2002. The testimony can be summarized as follows:

Comments supporting a particular alternate or project in general:

Alternate 1 – No-Build	11
Alternate 2 – Single Point Urban Diamond Interchange	5
Alternate 3 – At-Grade Intersection Improvement	1
Alternate 9 – Randolph Road Under MD 355	7
B-1 Modified Option	2
No preference stated	17

## **ALTERNATES COMPARISON**

Exhibit 5 provides a comparison of environmental impacts and estimated capital costs. The following paragraphs provide a brief description of each of the alternates and rationale for selecting Alternate 9 and Option B-1 Modified

### **Alternate 1, No-Build**

The no-build alternate would not provide any significant improvements to MD 355 at Montrose Road/Randolph Road. Minor improvements would occur as part of normal maintenance and safety operations. These improvements would not affect the capacity, reduce accidents or improve the movements of pedestrian and bicyclists. The congestion will increase and drivers will experience extensive delay. Alternate 1 results in poor levels of service, with forecast 2020 volume-to-capacity (V/C) ratio of 1.44 at the intersection of Rockville Pike and Montrose/Randolph Roads.

### **Alternate 2, Single Point Urban Diamond Interchange**

Alternate 2 proposes a grade separation of Montrose Road/Randolph Road below MD 355. Turning movements are made through a single-point urban diamond, or SPUI, configuration. A one-way diagonal-type ramp is provided in each quadrant. Turning movements are confined to a single at-grade signalized intersection beneath the MD 355 structure. Alternate 2 provides good levels of service, with a forecast 2020 V/C ratio of 0.78 at the single-point signalized intersection.

### **Alternate 3, At-Grade Signalized Intersection**

Alternate 3 would maintain an at-grade intersection with additional turning lanes provided on each leg of the intersection. The resulting intersection would have:

- eight approach lanes on the northbound leg,
- five approach lanes on the southbound leg,
- nine approach lanes on the eastbound leg, and
- eight approach lanes on the westbound leg

**MD 355 – Montrose Road/Randolph Road Intersection Improvement Study  
Preliminary Environmental Impact Summary**

RESOURCE CATEGORY	UNIT	Alternative 1		Alternative 2		Alternative 3		Alternative 9	
		No-Build	SPUI	SPUI w/ Option B1-Mod.	At-Grade	At-Grade w/ Option B1-Mod.	Randolph Road Under MD 355	Randolph Road Under w/ Option B1- Mod.	
<b>DISPLACEMENTS</b>									
Residential	No.	0	0	0	0	0	0	0	0
Commercial Property Structural*	No.	0	7	9	7	9	7	9	9
Business**	No.	0	23	28	23	28	23	28	28
<b>RIGHT-OF-WAY REQUIRED</b>									
Residential	Acre	0	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Commercial	Acre	0	9.8	10.2	9.6	10.0	9.5	9.9	9.9
Montrose School***	Acre	0	0.10	0.10	0.07	0.07	0.08	0.08	0.08
Temp. Construction Impact within Montrose School	Acre	0	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Undeveloped	Acre	0	17.4	17.4	16.5	16.5	17.5	17.5	17.5
Park and Ride Lot	Acre	0	4.20	4.20	4.30	4.30	3.90	3.90	3.90
Shopping Center Lot (Montrose Crossing)	Acre	0	0.03	0.03	0.03	0.03	0.03	0.03	0.03
<i>Total Right-of-Way Required</i>	<i>Acre</i>	<i>0</i>	<i>31.6</i>	<i>32.0</i>	<i>30.6</i>	<i>31.0</i>	<i>30.0</i>	<i>31.4</i>	<i>31.4</i>
<b>NUMBER OF PROPERTIES IMPACTED BY RIGHT-OF-WAY ACQUISITIONS</b>									
Residential	No.	0	1	1	1	1	1	1	1
Commercial	No.	0	7	9	7	9	7	9	9
Agricultural	No.	0	0	0	0	0	0	0	0
Undeveloped	No.	0	5	5	5	5	5	5	5
Montrose School***	No.	0	1	1	1	1	1	1	1
Park and Ride (one lot occupying five parcels)	No.	0	5	5	5	5	5	5	5
<i>Total Properties Impacted</i>	<i>No.</i>	<i>0</i>	<i>19</i>	<i>21</i>	<i>19</i>	<i>21</i>	<i>19</i>	<i>21</i>	<i>21</i>
<b>NATURAL ENVIRONMENT</b>									
Wetlands	Acre	0	0	0	0	0	0	0	0
Stream Crossings	No.	0	0	0	0	0	0	0	0
Stream Impacts	L.F.	0	0	0	0	0	0	0	0
Floodplain	Acre	0	0	0	0	0	0	0	0
Woodland	Acre	0	10.7	10.7	10.3	10.3	10.7	10.7	10.7
<b>CULTURAL RESOURCES</b>									
NR/NRE Historic Sites Impacted	No.	0	1	1	1	1	1	1	1
Archeological Sites Impacted	No.	0	0	0	0	0	0	0	0
NOISE IMPACTS	No.	4 residences, 1 outdoor pool, 1 school	4 residences 1 school		0		6 residences 1 outdoor pool 1 school		
AIR QUALITY IMPACTS	No.	4 (8 hr, 2020) 0 (1 hr, 2020)	0	0	1 (8 hr, 2020) 0 (1 hr, 2020)	1 (8 hr, 2020) 0 (1 hr, 2020)	0	0	0
PRELIMINARY COST ESTIMATES (MILL)	\$	0	84.63	87.51	59.72	62.55	72.90	75.78	75.78

\*Commercial Property Structural Displacements include the number of commercial buildings being displaced.  
 \*\*Business Displacements include the number of individual businesses located within each commercial building.  
 \*\*\*Encroachment within Montrose School Historic Boundary

The number of through and turning lanes at the intersection is influenced by the objective to provide sufficient intersection capacity to adequately meet forecast demand. Alternate 3 has a forecast 2020 V/C ratio of 0.99.

### **Alternate 9, Randolph Road Under MD 355**

This alternate was developed as a result of Focus Group comments. With this alternate, through traffic on MD 355 would travel over Randolph Road on a bridge. Slip ramps located east of the intersection with Chapman Avenue would tie into the existing Randolph Road intersection with Nebel Street. Southbound MD 355 would connect with Montrose and Randolph Roads via "Old" Old Georgetown Road. Alternate 9 provides a forecast 2020 V/C ratio of 0.77 at both signalized intersections between the Rockville Pike ramps and Montrose/Randolph Road.

### **Alternate options**

SHA presented two options for each alternate:

#### **Option B-1**

SHA developed several options for both western and eastern project termini to demonstrate independent utility with the ability to connect either to the existing Montrose and Randolph Roads or to the master-planned Montrose Parkway. Each of the alternates shown in Attachments A through D includes the eastern terminus of the project labeled Option B-1. Option B-1 proposes to relocate Randolph Road to the Montrose Parkway right-of-way from Chapman Avenue to a new structure across the CSX railroad tracks. From this point east, relocated Randolph Road turns toward the south to tie back into the existing Randolph Road/Parklawn Drive intersection. The existing Randolph Road at-grade crossing of the CSX tracks remains in place, but ends in a cul-de-sac west of the Parklawn Drive intersection. On the east side of the CSX tracks, access between existing Randolph Road and relocated Randolph Road is provided via a short, north-south, connecting roadway east of the Brandon Direct Importers Warehouse. On the west side of the CSX tracks, existing Randolph Road intersects Nebel Street at-grade.

Option B-1 requires the displacement of seven commercial structures directly north and northwest of the Randolph Road/Parklawn Drive intersection. SHA examined other options that avoid these displacements by connecting relocated Randolph Road to Parklawn Drive within the Montrose Parkway right-of-way. These options, Option B-2 and Option B-3, do not have independent utility because if the Montrose Parkway is not constructed to the east of Parklawn Drive, the prevailing commuter flow is forced into a "dog-leg" movement along Parklawn Drive between relocated Randolph Road and existing Randolph Road, resulting in failing intersection levels of service.

Because Options B-2 and B-3 do not have independent utility, SHA's study did not examine the effect of constructing Montrose Parkway eastward to Veirs Mill Road

on the levels of service. Staff expects this analysis to be conducted during DPWT's studies of Montrose Parkway East and Randolph Road. Based on qualitative review, however, staff supports Option B-1 for the following reasons:

- Option B-1 visually directs westbound Randolph Road traffic toward the CSX grade-separated crossing and the continuous arterial route connection, rather than toward an at-grade rail crossing and a discontinuous route (through traffic would need to turn left or right onto Nebel Street)
- If Montrose Parkway is constructed eastward to Veirs Mill Road in the near future, Option B-1 disperses traffic between Montrose Parkway and Randolph Road more efficiently than options that require the "dog-leg" movement via Parklawn Drive
- If Montrose Parkway is not constructed eastward to Veirs Mill Road in the near future, Option B-1 provides an acceptable connection to Randolph Road.

### **Option B-1 Modified**

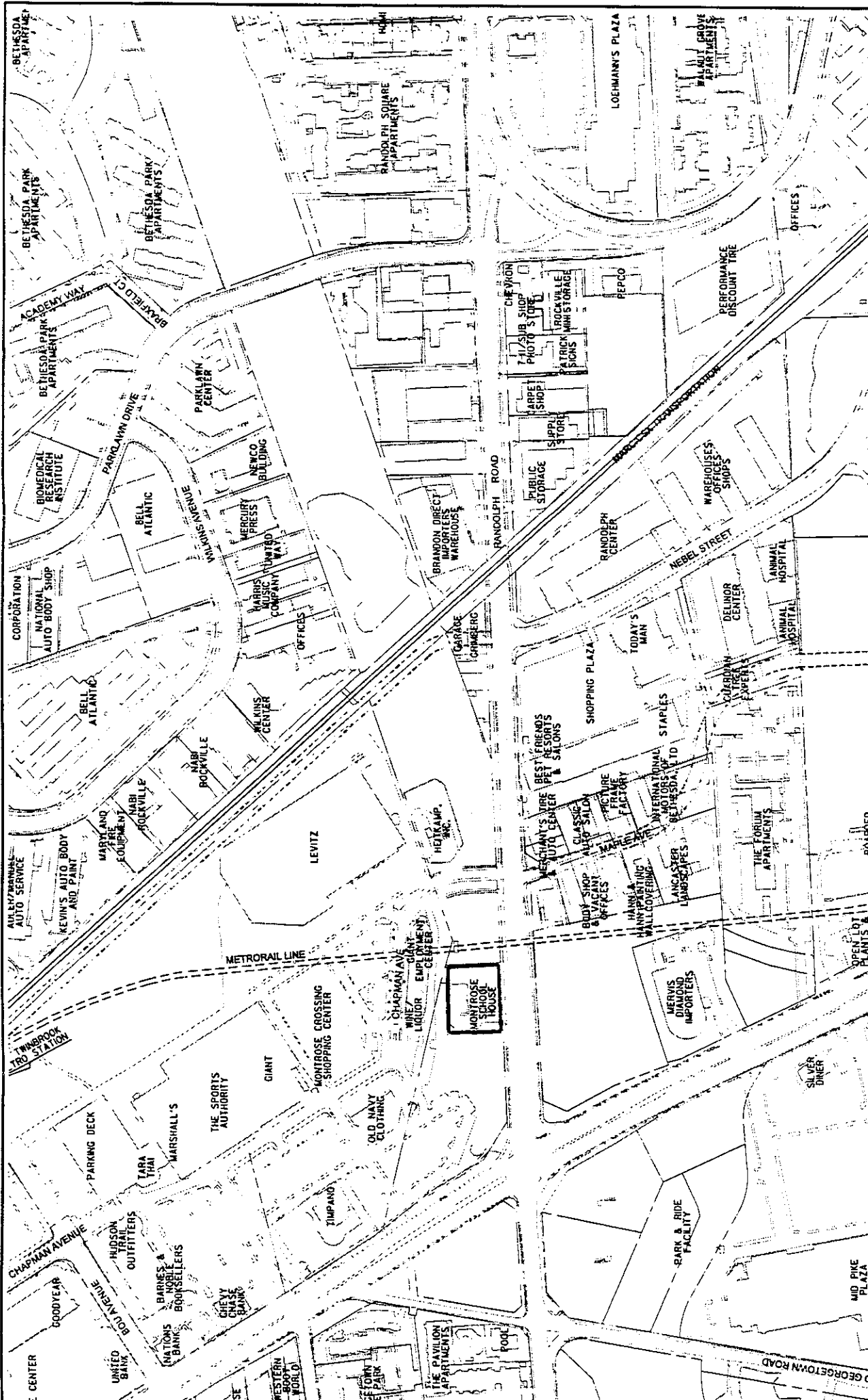
The term "modified" in Option B-1 Modified refers to a connection between existing Randolph Road and relocated Randolph Road between Chapman Avenue and Nebel Street. This modification improves access to properties located south of relocated Randolph Road, replacing a proposed cul-de-sac on existing Randolph Road. Option B-1 Modified extends the west leg of a future four-leg intersection of Randolph Road and Nebel Street. Traffic could access this west leg from eastbound relocated Randolph Road near the Chapman Avenue intersection. Traffic heading away from the Randolph Road/Nebel Street intersection on the west leg would travel on a loop ramp connecting to eastbound relocated Randolph Road. An acceleration lane would be provided across the bridge over the CSX track between Randolph Road.

SE:cmd

### **Attachments**

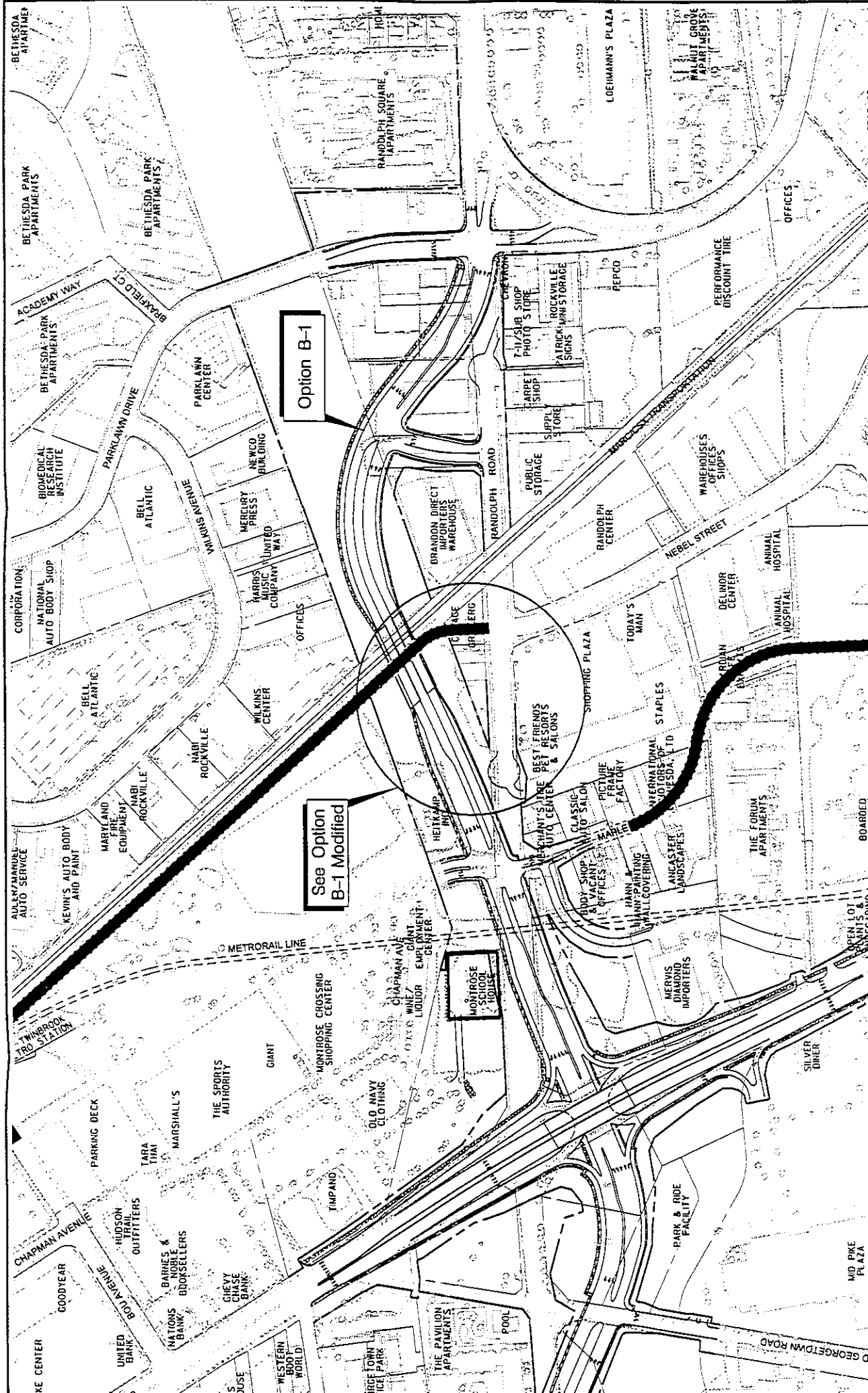
md355 montrose at mcpb 022802.DOC

# Randolph Road Intersection Improvement Study Alternate 1: No-Build



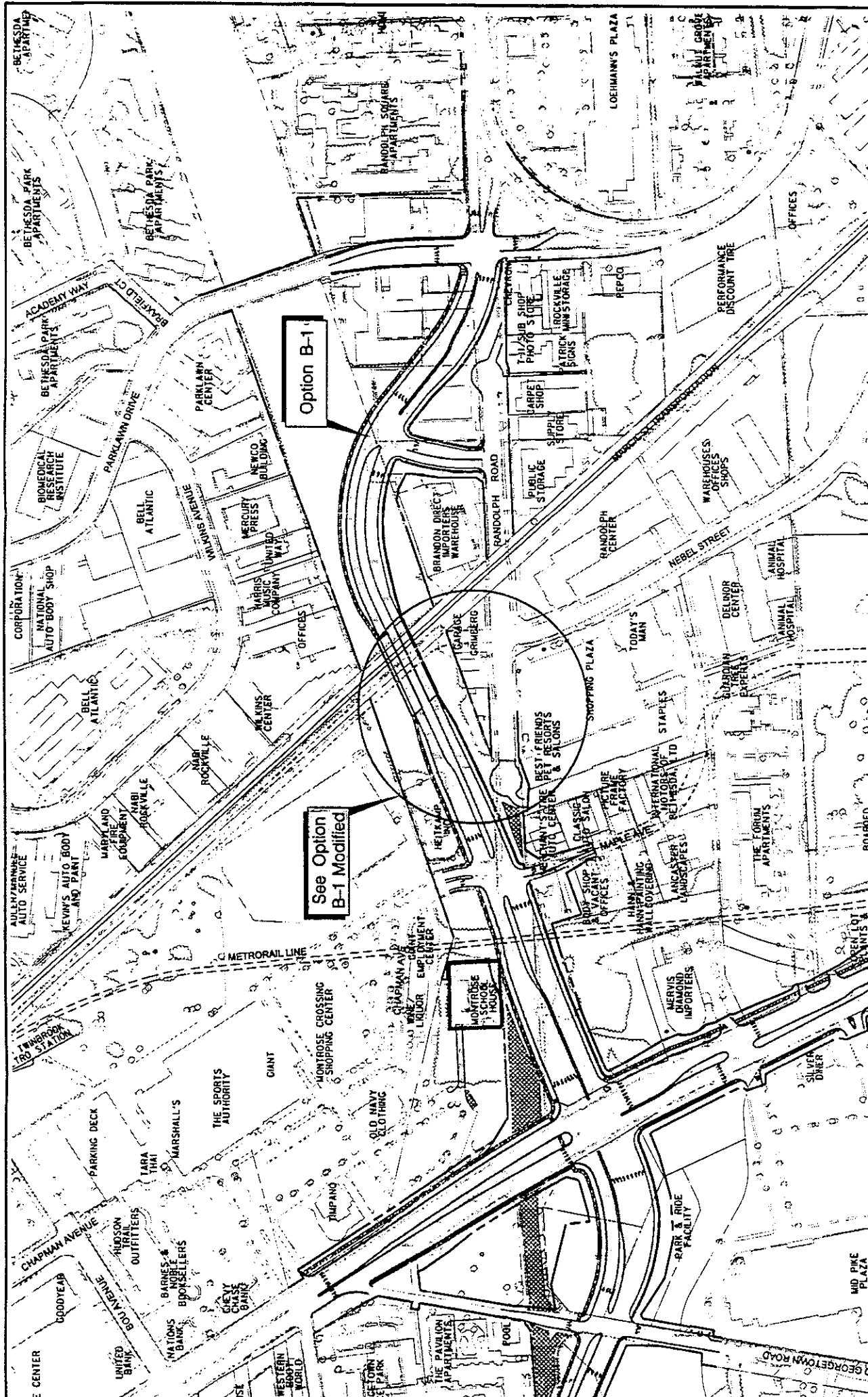


# Randolph Road Intersection Improvement Study with Option B-1



# Randolph Road Intersection Improvement Study

## Option B-1: At-Grade Intersection with Option B-1



Option B-1

See Option B-1 Modified

MONTROSE CROSSING SHOPPING CENTER

BEST FRIENDS PET RESORTS

STAPLES

DELINOR CENTER

ANIMAL HOSPITAL

WALGREENS

CVS

WALMART

WALMART SUPER CENTER

WALMART NEIGHBORHOOD MARKET

WALMART GROCERY

WALMART OPTICAL

WALMART PHARMACY

WALMART BOOKS

WALMART TOYS

WALMART HOME

WALMART GARDEN CENTER

WALMART ELECTRONICS

WALMART SPORTS & OUTDOORS

WALMART BABY

WALMART PETS

WALMART FLOWERS

WALMART HOME IMPROVEMENT

WALMART HARDWARE

WALMART PAINTS

WALMART SEEDS

WALMART FERTILIZERS

WALMART PEST CONTROL

WALMART ELECTRICAL

WALMART PLUMBING

WALMART AC

WALMART HEATING

WALMART ROOFING

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART BATHS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING

WALMART LIGHTING

WALMART PAINTS

WALMART WALLCOVERING

WALMART FLOORING

WALMART CARPETING

WALMART TILE

WALMART GRANITE

WALMART MARBLE

WALMART QUARTZ

WALMART COUNTERS

WALMART SINKS

WALMART TUBS

WALMART SHOWERS

WALMART BATHS

WALMART KITCHENS

WALMART HALLS

WALMART STAIRS

WALMART FLOORS

WALMART WALLS

WALMART CEILING



# Montrose Parkway West -- No. 500311

# Attachment E

Category  
Agency  
Planning Area  
Relocation Impact

Transportation  
Public Works & Transportation  
Rockville  
Five residences.

Date Last Modified  
Previous PDF Page Number  
Required Adequate Public Facility

NONE  
YES

### EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY01	Estimate FY02	Total 6 Years	FY03	FY04	FY05	FY06	FY07	FY08	Beyond 6 Years
Planning, Design and Supervision	3,517	0	0	3,517	620	620	142	854	914	367	0
Land	27,444	0	0	27,444	6,600	12,600	3,138	0	5,106	0	0
Site Improvements and Utilities	4,310	0	0	4,310	0	0	0	200	2,450	1,660	0
Construction	22,184	0	0	22,184	0	0	2,700	6,880	8,720	3,884	0
Other	145	0	0	0	0	0	0	0	0	0	145
<b>Total</b>	<b>57,600</b>	<b>0</b>	<b>0</b>	<b>57,455</b>	<b>7,220</b>	<b>13,220</b>	<b>5,980</b>	<b>7,934</b>	<b>17,190</b>	<b>5,911</b>	<b>145</b>

### FUNDING SCHEDULE (\$000)

EDAET	3,654	0	0	3,654	0	0	1,340	2,314	0	0	0
G.O. Bonds	26,366	0	0	26,221	5,880	10,620	0	0	9,650	71	145
Impact Tax	27,580	0	0	27,580	1,340	2,600	4,640	5,620	7,540	5,840	0

### ANNUAL OPERATING BUDGET IMPACT (\$000)

#### DESCRIPTION

This project provides for construction of a new four-lane divided road from Montrose Road (starting 200 feet east of Tildenwood Drive) travelling east to 'old' Old Georgetown Road (approximately 5,700 feet) in the undeveloped land formerly reserved for the Rockville facility. The typical section for the Parkway will be a closed section road with 12-foot wide lanes and a 20 to 30 foot wide median. A 10-foot bikeway will run along the north side of the Parkway east of Old Farm Creek, and a 5-foot sidewalk will run along the south side. In addition to the new Parkway, Montrose Road will be widened to six lanes with a median, and a 5-foot sidewalk on the north side, from Tower Oaks Boulevard, east to the new Parkway. Other improvements include extending Hitching Post Lane to Farm Haven Drive, and providing a new four-way signalized intersection with pedestrian phasing at the new Hitching Post Lane/Farm Haven Drive/Montrose Road intersection.

#### Service Area

North Bethesda-Garrett Park

#### Capacity

By 2020, the average daily traffic volume for Montrose Road between Tildenwood Lane and East Jefferson Street is estimated to exceed 74,000 vehicles. Without this project, several intersections will reach peak-hour Critical Lane Volumes that exceed 1,800.

#### JUSTIFICATION

This project is a Required Adequate Public Facility. The North Bethesda Master Plan allows for 21,000 additional jobs and 9,000 additional residences (beyond 1999, and this project is one of the master-planned transportation facilities needed to accommodate the master-planned growth. In addition, the project will provide congestion relief on Montrose Road, safe turning movements onto and off of Montrose Road, safe places for pedestrians to cross Montrose Road, and reduced cut-through traffic in neighborhoods abutting Montrose Road.

#### Plans and Studies

M-NCPPC North Bethesda/Garrett Park Master Plan, 1992; M-NCPPC Master Plan of Highways.

#### Specific Data

This project is the western portion of the master-planned Montrose Parkway. The eastern portion (east of MD 355) is currently in Facility Planning Phase I, and will be ready for final design in FY07. The Randolph Road/MD 355/Montrose Road intersection is in the planning stage by the Maryland State Highway Administration (MSHA). Schedules for both Montrose Parkway West and the MSHA are running concurrently.

#### STATUS

Preliminary engineering design complete.

#### OTHER

The scope and schedule are new for FY03. The project warrants noise abatement measures and these will be funded under the new Highway Noise Abatement project, in accordance with the Highway Noise Abatement Policy. In coordination with M-NCPPC's recommendations for the Wilgus East development, the alignment of the Parkway east of East Jefferson Street has been shifted to the south. This allows for a greater distance between the Parkway and the residential development to the north. The project cost assumes acquisition of approximately 8.7 acres of the 16.7 acre Armstrong tract, the necessary portion of the MSHA's right-of-way, and approximately 130 feet of right-of-way on the Wilgus tract. Consistent with M-NCPPC's staff recommendation for the Wilgus East development, the project assumes dedication of a 130 foot wide portion of the Wilgus Parcel N231. Impact Tax funds consistent with the proposed new legislation are assumed for this project. Special Projects Legislation will be proposed by the County Executive.

#### APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY03	(\$000)
Initial Cost Estimate		57,600
First Cost Estimate		
Current Scope	FY03	57,600
Last FY's Cost Estimate		0
Present Cost Estimate		57,600
Appropriation Request	FY03	7,703
Appropriation Request Est.	FY04	20,981
Supplemental Appropriation Request	FY02	0
Transfer		0
Cumulative Appropriation		0
Expenditures/Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY00	0
New Partial Closeout	FY01	0
Total Partial Closeout		0

#### COORDINATION

Specific recommendations and design criteria have been developed in close coordination with the:  
County Council  
M-NCPPC  
Maryland State Highway Administration  
Maryland Department of Environment  
Maryland Department of Natural Resources  
U.S. Army Corps of Engineers  
Department of Permitting Services  
City of Rockville  
Affected communities

#### MAP

See Map on Next Page

STATE HIGHWAY ADMINISTRATION -- Montgomery County -- Line 25

SECONDARY DEVELOPMENT AND EVALUATION PROGRAM

PROJECT: MD 355, Rockville Pike

**DESCRIPTION:** Study to construct a CSX Railroad grade separated crossing and interchange improvements on Randolph Road / Montrose Road. Wide curb lanes will accommodate bicycles. Sidewalks will be included where appropriate.

**JUSTIFICATION:** This project would improve safety and relieve traffic congestion that occurs at the MD 355 / Randolph / Montrose Roads intersection and at the CSX railroad crossing.

**SMART GROWTH STATUS:**

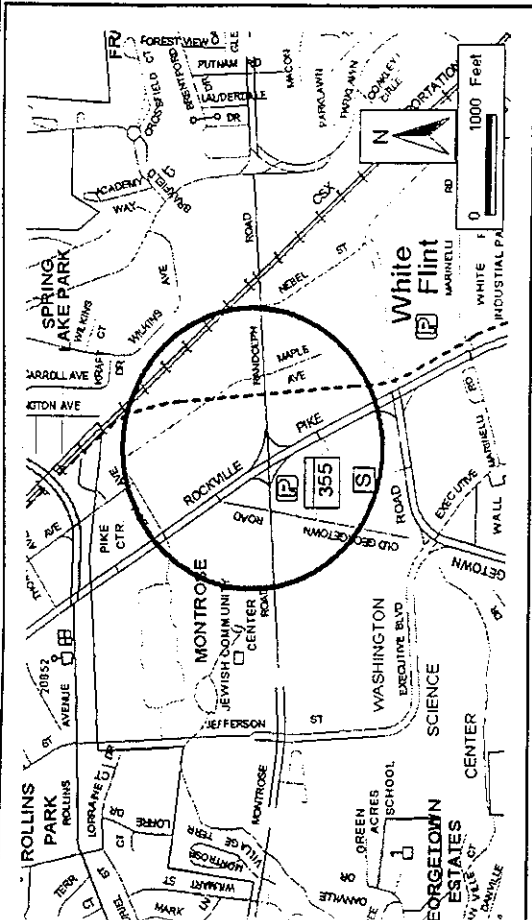
- Project Not Location Specific or Location Not Determined
- Project Within PFA  Project Outside PFA; Subject to Exception
- Grandfathered  Exception Approved by BPW/MDOT

**ASSOCIATED IMPROVEMENTS:**

- East/West Intersection Improvement Program (Construction Program)
- East/West Link Improvement (D&E Program)
- Montrose Parkway (Montgomery County Project)
- Nebel Street (Montgomery County Project)

**STATUS:** Project Planning underway. Final Engineering to begin during budget fiscal year.

**SIGNIFICANT CHANGE FROM FY 2001 - 06 CTP:** None.



**Federal Funding By Year of Obligation**

HASE	FFY 2002	FFY 2003	FFY 2004	FFY 2005	FFY 2006 - 2007	FEDERAL CATEGORY
P	0	0	0	0	0	---
E	0	3771	0	0	0	STP
W	0	0	0	0	0	---
O	0	0	0	0	0	---

**POTENTIAL FUNDING SOURCE:**

BASE	TOTAL ESTIMATED COST (\$000)	PROJECT CASH FLOW						CURRENT YEAR	BUDGET YEAR	FOR PLANNING PURPOSES ONLY	SIX YEAR TOTAL	BALANCE TO COMPLETE
		2001	2002	2003	2004	2005	2006					
Engineering	1,378	878	300	200	0	0	0	0	0	500	0	
Int-of-way	5,387	0	0	1,030	2,060	2,060	237	0	0	5,387	0	
Instruction	0	0	0	0	0	0	0	0	0	0	0	
Total	6,765	878	300	1,230	2,060	2,060	237	0	0	5,887	0	
Federal-Aid	3,771	0	0	721	1,442	1,442	166	0	0	3,771	0	

**FUNCTION:**

- STATE - Intermediate Arterial
- FEDERAL - Other Principal Arterial
- STATE SYSTEM: Secondary
- DAILY TRAFFIC: (USAGE IMPACTS)
- CURRENT (2000) - 77,900
- PROJECTED (2025) - 98,600
- OPERATING COST IMPACT N/A