

T&E COMMITTEE #1
December 9, 2010

MEMORANDUM

December 7, 2010

TO: Transportation, Infrastructure, Energy and Environment Committee
FROM: ^{Go} Glenn Orlin, Deputy Council Staff Director
SUBJECT: Facility planning review—Roberts Tavern Drive Extended

The Council programmed \$990,000 under the Facility Planning—Transportation project for the Department of Transportation (DOT) for the planning of the extension of Roberts Tavern Drive, part of the planned relocation of MD 355 in Clarksburg. DOT has completed Phase I of facility planning for this project—the feasibility study stage—for which \$332,000 had been obligated: \$96,000 in staff charges and \$236,000 in consultant funding.

This worksession is the opportunity for Committee members and other interested Councilmembers to provide informal feedback to DOT as to whether to proceed to Phase II of facility planning—the detailed planning stage—that would produce the precise project scope and develop reliable estimates of cost and community and environmental impact—and if so, what should be studied. DOT could proceed to Phase II soon after this review; its programmed cost is \$658,000: \$188,000 in staff charges and \$470,000 in consultant costs. If the Phase II study goes forward according to the funding schedule in the current capital program, a Roberts Tavern Drive Extended Capital Improvements Program (CIP) project could possibly be ready to be included in the Recommended FY13-18 CIP in early 2012, or as a CIP amendment the following year.

DOT staff will brief the Committee on its findings and recommendations. Ki Kim of the Planning staff will summarize the Planning Board's perspective. Council staff will conclude with its analysis and recommendations. After the Committee has explored the issues, it will be asked for its guidance to DOT, which subsequently will be transmitted in a memorandum from the Committee Chair to the DOT Director.

Background. The Clarksburg Master Plan (1994) down-classified Frederick Road (MD 355) through the Historic District to a 2-lane Business District Street meant to serve local traffic. Most longer

distance north-south through traffic is anticipated to remain on I-270, but the shorter through traffic was to be served by relocating MD 355 as a four-lane divided arterial around the Historic District, via the combination of planned Roberts Tavern Drive and Observation Drive. Traffic proceeding north from Germantown on MD 355 would gently veer to the left onto Roberts Tavern Drive and then gently veer right onto Observation Drive. From there the route would cross Stringtown and Clarksburg Roads as it heads northwest and parallel to Frederick Road, and then veer back into Frederick Road south of its intersection with Snowden Farm Parkway at the north end of the Clarksburg Town Center. Existing Frederick Road would tee into Relocated MD 355 where Roberts Tavern Drive begins, Observation Drive from Germantown would tee into it at the other end of Roberts Tavern Drive, and existing Frederick Road would tee into it where Observation Drive rejoins MD 355 heading north towards Hyattstown. Excerpts from the Clarksburg Master Plan describing both MD 355 and Relocated MD 355 in text and on a map are on ©1-2.

The Roberts Tavern Drive Extended study examines only the southernmost 1,500' segment of the bypass, the segment between MD 355 south of the Historic District and the point where it connects with Observation Drive. A prior-approved subdivision has built 500' of this segment as a two-lane divided roadway; in this segment the proposed improvement would be merely to add a lane in each direction in the median. The study's scope did not evaluate the feasibility of building the northern segment of Relocated MD 355 from Stringtown Road to the north end of the Clarksburg Town Center.

The study evaluated four options, including a "no build" option. The three "build" options are similar in most ways: all assume a four-lane divided roadway with a 5'-wide sidewalk on the north side and an 8'-wide shared use trail (i.e., bike path) on the south side. All assume that Roberts Tavern Drive would tee into Observation Drive at its west end. All have nearly the same benefits, cost, and impacts. The build alternatives only differ by how they tie in with existing MD 355 at its east end. The study was influenced by the State Highway Administration's position that MD 355 should not tee-into Roberts Tavern Drive until the entirety of Relocated MD 355 is constructed.

DOT is recommending carrying a modified version of Alternate 3 to the detailed planning stage. This alternative would tee-in three of Roberts Tavern Drive's four lanes at a right angle into existing MD 355. The outside eastbound lane, however, would transition at speed into southbound MD 355 following the ultimate alignment of the road, as would the bike path on the south side. Most of this intersection, however, would have to be reconstructed once the entirety of Relocated MD 355 is complete, in order to have Frederick Road from the Historic District tee into it. The full cost of Roberts Tavern Drive under DOT's recommended option is \$6-8 million; about \$1 million of this would be for land acquisition. The Executive Summary of the Phase I Project Prospectus is on ©3-12.

The Planning Board reviewed the Phase I study at its meeting of October 28, 2010. A majority of the Board concurred with DOT's recommended option, adding certain normal conditions. A minority of the Board expressed concern about the need for the project at all, given its small projected traffic benefit (©13-14). The Planning staff's analysis and recommendations are also attached (©15-27). The Planning staff recommended that Roberts Tavern Drive in its interim state (that is, until the entirety of Relocated MD 355 is built) should only be two lanes, and that these lanes tie into MD 355 at a right angle. The Planning staff, however, does recommend that the bike path follow the road's ultimate planned alignment.

Council staff comments. The central concern is the extremely low traffic volume projected for Roberts Tavern Drive. The Prospectus's Year 2030 traffic forecasts shows that MD 355 will carry 1,794 vehicles/hour (vph) in the morning peak hour and 1,650 vph in the evening peak hour, and that Observation Drive will carry 2,132 vph in the morning peak hour and 2,142 vph in the evening peak hour. In contrast, Roberts Tavern Drive will carry only 181 vph in the morning peak hour and 199 vph in the evening peak hour, or about 3 vehicles a minute in both directions combined (see ©6).

Much of this, of course, stems from the fact that until Observation Drive is extended north of Stringtown Road to the point where it would rejoin MD 355; until then, Roberts Tavern Drive would not be part of a bypass, but merely another local street. But the forecasted traffic volume on MD 355 does not suggest the need for adding more capacity in the next 20 years. The intersection of Stringtown Road and Observation Drive in 2030 is projected to operate at a 1,247 Critical Lane Volume (CLV) in the morning peak and 1,310 CLV in the evening peak, well better than the 1,425 CLV standard under the Subdivision Staging Policy. The intersection of Stringtown and Frederick Roads in 2030 is projected to operate at 1,479 CLV in the morning peak (worse than the standard by 54 CLV) and 1,399 CLV in the evening peak hour; a small reallocation of traffic in the morning between these two intersections only a block apart would have both intersections operating within the standard.

Furthermore, the master-planned function of Roberts Tavern Drive has already been compromised by the design of the 500'-long segment that has been built. Constructed as part of a subdivision, this segment tees into Observation Drive, not vice-versa as called for in the Clarksburg Master Plan. With the placement of the subdivision's townhouses in the northeast quadrant of this intersection, it no longer appears feasible to realign this intersection in the future without several homes being removed. Thus the master-planned Relocated MD 355 has a permanent 90-degree kink in it—requiring through traffic to make a hard left or hard right turn—at what would certainly be a signalized intersection in the future.

Finally, as has been noted above, either DOT's or the Planning staff's option would require the east-end intersection be rebuilt in the future as the entire bypass is being completed. With so little need for the southern piece on its own, the question is begged why it is necessary construct a \$6-8 million project that would cost even more to rebuild at a later time.

Council staff recommendation: Terminate this study at the end of Phase I. There is no need for this road in the next ten years, and, according to the Prospectus's forecasts, not in the next twenty years either. Not proceeding to Phase II would save \$253,000 of the Current Revenue appropriation in FY11—which Council staff is recommending be recognized in the FY11 Savings Plan (see Agenda Item #2 for this meeting)—as well as \$90,000 in FY12 and \$315,000 in FY13.

In the future, Phase II planning for Roberts Tavern Drive Extended should not proceed unless a Phase I study for the balance of the bypass north of Stringtown Road is conducted which shows that: (1) future traffic on Frederick Road through the Historic District cannot be accommodated with just two lanes; (2) if not, then can the northern segment piece be built without major impacts (it passes through property designated as historic); and (3) even if it can, would the bypass divert sufficient traffic from Frederick Road to make a discernible difference to the quality of the Historic District. The Council could consider funding for this other Phase I study as part of the FY13-18 CIP, but given the lack of need, it should be a low priority in a year far, far away.

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- The character of MD 355 (Frederick Road) between Germantown and Clarksburg Town Center should be compatible with existing and proposed residential uses.

This Plan recommends that the classification of MD 355 be changed from a major highway to an arterial to support the Plan's objective that the existing character of MD 355 be continued. The only section of MD 355 in Clarksburg which will continue as a major highway is south of Newcut Road.

- MD 355 should not be widened in the Clarksburg Historic District.

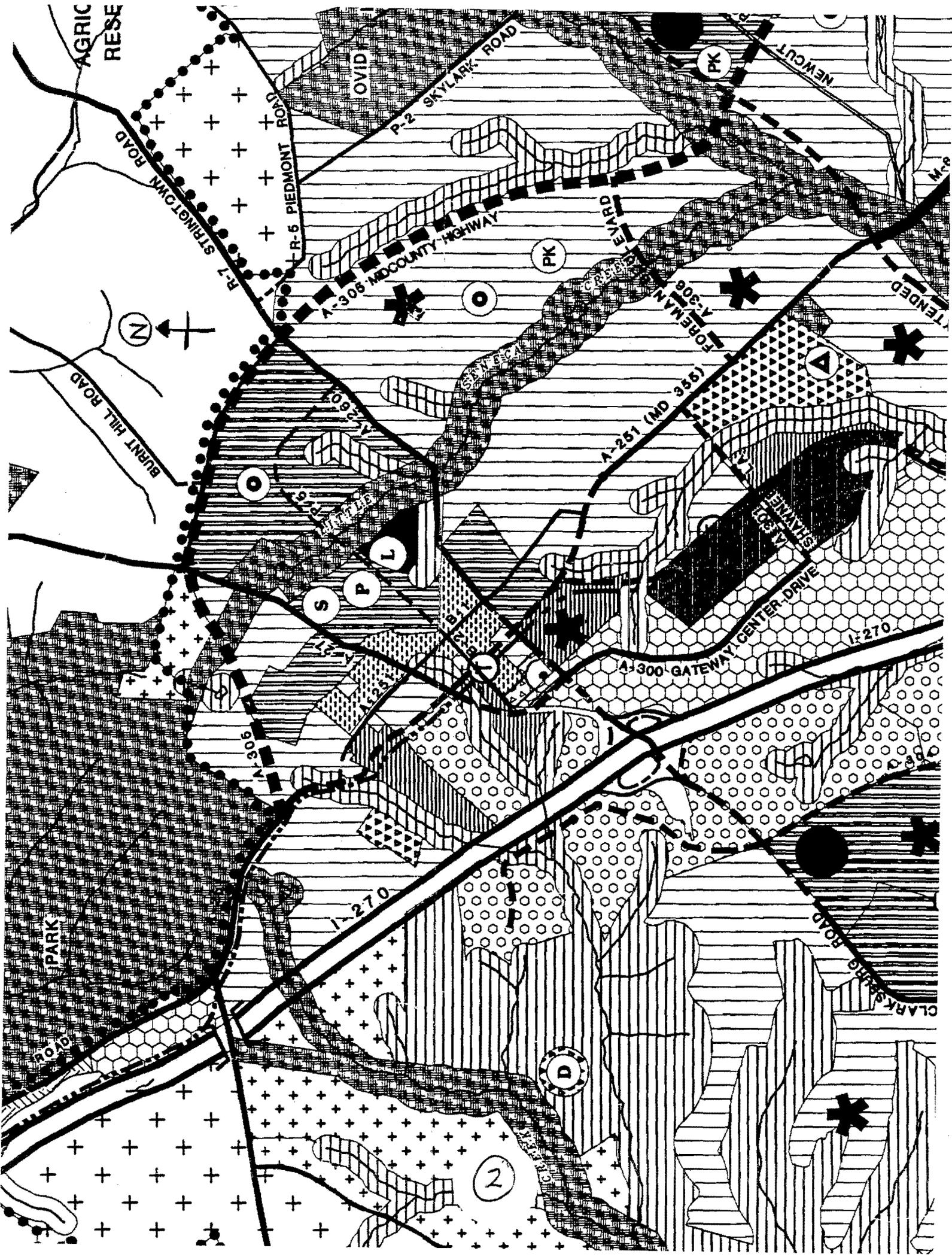
The section of MD 355 which runs through the Clarksburg Historic District has severe limitations on its ability to be widened. This Plan recommends that Frederick Road not be widened due to impacts on historic structures and the character of the Clarksburg Historic District. This Plan acknowledges that intersection improvements may be necessary. Such improvements should result in minimum impacts to contributing structures and the historic setting. To avoid widening the section of MD 355 through the historic district, this Plan recommends that MD 355 be relocated approximately 500' west of the district, beginning at Suncrest Avenue and running north to existing Frederick Road.

- MD 355 should not be widened in the Hyattstown Historic District.

Like the Clarksburg Historic District, the section of MD 355 that runs through the Hyattstown Historic District has severe limitations on its ability to be widened. This Plan recommends that MD 355 not be widened due to impacts on historic structures and the character of the district and proposes designating this portion of MD 355 as rustic. The current traffic congestion problems in the district are, for the most part, the result of traffic traveling through the area between I-270 and MD 75 via MD 109 and MD 355.

This Plan recommends that the I-270 interchange with MD 109 be closed and replaced with an interchange at MD 75 (extended) in Frederick County. If the MD 109 interchange is maintained or improved, then this Plan recommends that a bypass of the Hyattstown Historic District be provided. Frederick Road should become a secondary residential street through the Hyattstown Historic District if the bypass is constructed. The bypass recommended by this Plan extends MD 109 from its intersection with MD 355 eastward and then northward to intersect with MD 355 north of the County line. The northern end of MD 355 will be a "T" intersection with MD 109 as the primary movement. This alignment:

- Minimizes the traffic volumes along Frederick Road.
- Limits the need for traffic improvements along MD 355 to the intersections with MD 109 and the bridge over Little Bennett Creek.



AGRIC RESE

B7 STRINGTOWN ROAD

L-R-5 PIEDMONT ROAD

OVID

P-2 SKYLARK ROAD

A-306 MDCOUNTY HIGHWAY

PK

NEWCUT

(N)

BUNT HILL ROAD

PK

FOREMAN BLVD
A-306

A-251 (MD 351)

S
P
L

HENNINGSHAM
A-306
CENTER DRIVE

A-306 GATEWAY CENTER DRIVE

I-270

PARK

I-270

D

2

CLARKSVILLE ROAD

EXECUTIVE SUMMARY

I. Introduction

The Montgomery County Department of Transportation (MCDOT), Division of Transportation Engineering, has completed a Phase I Facility Planning Study to extend Roberts Tavern Drive to MD 355 (Frederick Road) in Clarksburg, Maryland. This Prospectus concludes the Phase I Study and will be used by the Director of MCDOT to determine whether the project should proceed to a Phase II Facility Planning Study.

II. Background and Description

Currently, a 500-foot segment of Roberts Tavern Drive exists between Observation Drive and 200 feet east of Latrobe Lane. This Phase I Facility Planning Study evaluates widening the existing two-lane divided roadway to its master-planned four-lane divided section and completing the 1000-foot extension of Roberts Tavern Drive from its existing terminus east of Latrobe Lane to MD 355.

The Roberts Tavern Drive study area predominantly consists of established residential homes, townhouses, and apartment/condominium properties along MD 355 and planned residential development throughout the study area. Other land uses include industrial park along Gateway Center Drive and existing and planned retail, commercial, office and community spaces in the Town Center. Nearby community facilities include 3 schools (Clarksburg Elementary, Rocky Hill Middle and Clarksburg High), 2 parks, one fire station, one post office and one church. The study area is within the Clarksburg Annual Growth Policy Area.

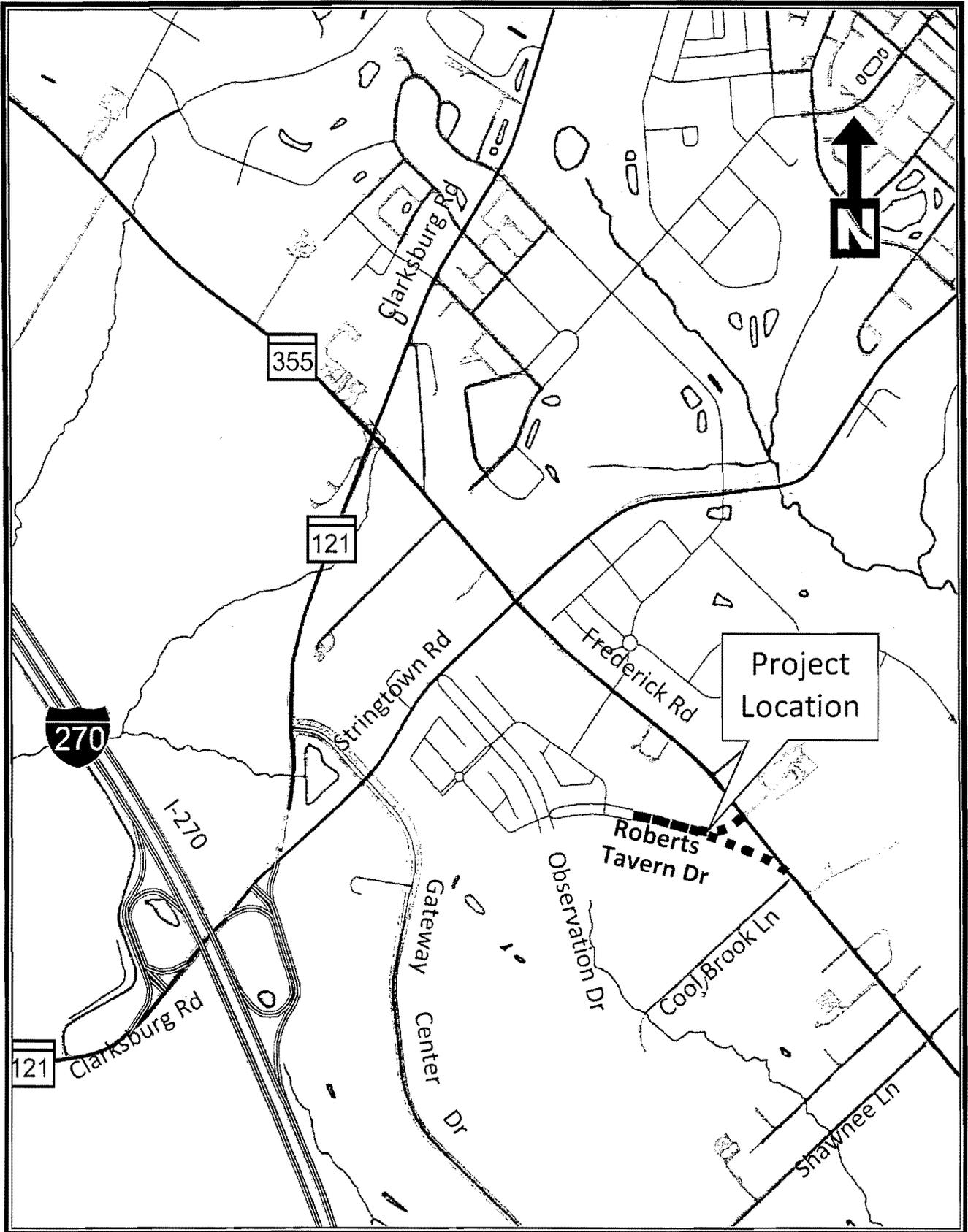
Roberts Tavern Drive is located along the master planned alignment for relocated MD 355, designated as A-251 in the 1994 *Clarksburg Master Plan & Hyattstown Special Study Area*. A major transportation objective of the master plan is to divert the area's regional through traffic away from the Clarksburg Town Center and historic district. To address this, the *Clarksburg Master Plan & Hyattstown Special Study Area* recommends MD 355 be relocated from north of Cool Brook Lane to Snowden Farm Parkway via future Roberts Tavern Drive and Observation Drive. Between these limits, future relocated MD 355 is proposed as a four-lane divided arterial (A-251) and existing MD 355 is proposed to be reclassified as a business street (B-1) and remain as a two-lane roadway. In addition, the *2005 Countywide Bikeways Functional Master Plan* recommends an off-road shared use bike path (SP-72) along Roberts Tavern Drive / Relocated MD 355.

III. Purpose of the Project

The purpose of Roberts Tavern Drive Extended is to improve mobility and access for people and goods that use MD 355 and the surrounding roadway network. These improvements are necessary to improve travel efficiency, allow for future diversion of regional through traffic around the Clarksburg Town Center and historic district, provide congestion relief, expand neighborhood connections, and enhance multimodal access.

IV. Project Need

The need for extending Roberts Tavern Drive between Latrobe Lane and MD 355 is to:



- Accommodate land use
- Reduce future traffic congestion
- Improve network efficiency
- Provide local neighborhood connection
- Enhance bicycle and pedestrian connections

V. Alternatives Evaluated

As part of the Phase I Facility Planning Study, the following four alternatives were evaluated by the study team and presented to the public for input:

- **Alternative 1: No Build**
- **Alternative 2: Master Plan**
- **Alternative 3: T-Intersection**
- **Alternative 4: Master Plan Modified**

VI. Recommended Alternative

The recommended alternative (see Figure 2) is a modification of Alternative 3 that provides a T-intersection between Roberts Tavern Drive and MD 355. The intersection will accommodate all traffic movements between Roberts Tavern Drive and includes a direct connection between eastbound Roberts Tavern Drive and southbound MD 355 that follows the ultimate Master Plan alignment. Both MD 355/Roberts Tavern Drive and Observation Drive/Roberts Tavern Drive intersections are recommended to be signalized to facilitate all traffic movements and enhance pedestrian and bicyclist safety. Future studies will determine the viability and feasibility of each signal. The proposed typical section for Roberts Tavern Drive complies with the Montgomery County design standards and includes the following features:

- 120-foot right-of-way
- Four-lane divided roadway with a 24-foot median
- Bike lanes in each direction
- 13-foot landscape buffer with a 5-foot sidewalk along the north side
- 9-foot landscape buffer with an 8-foot shared use path along the south side

The proposed Roberts Tavern Drive typical section is illustrated below in Figure 1. The existing two-lane divided Roberts Tavern Drive is also proposed to be widened to the proposed four-lane divided section.

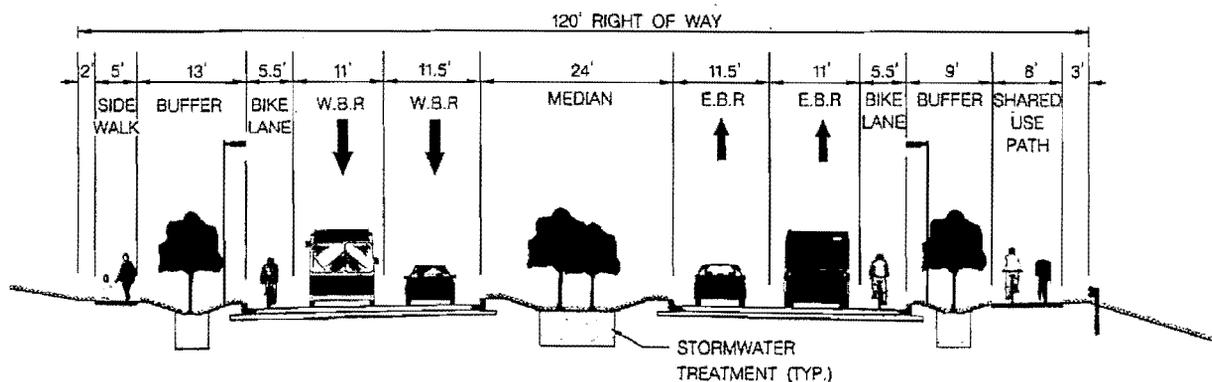
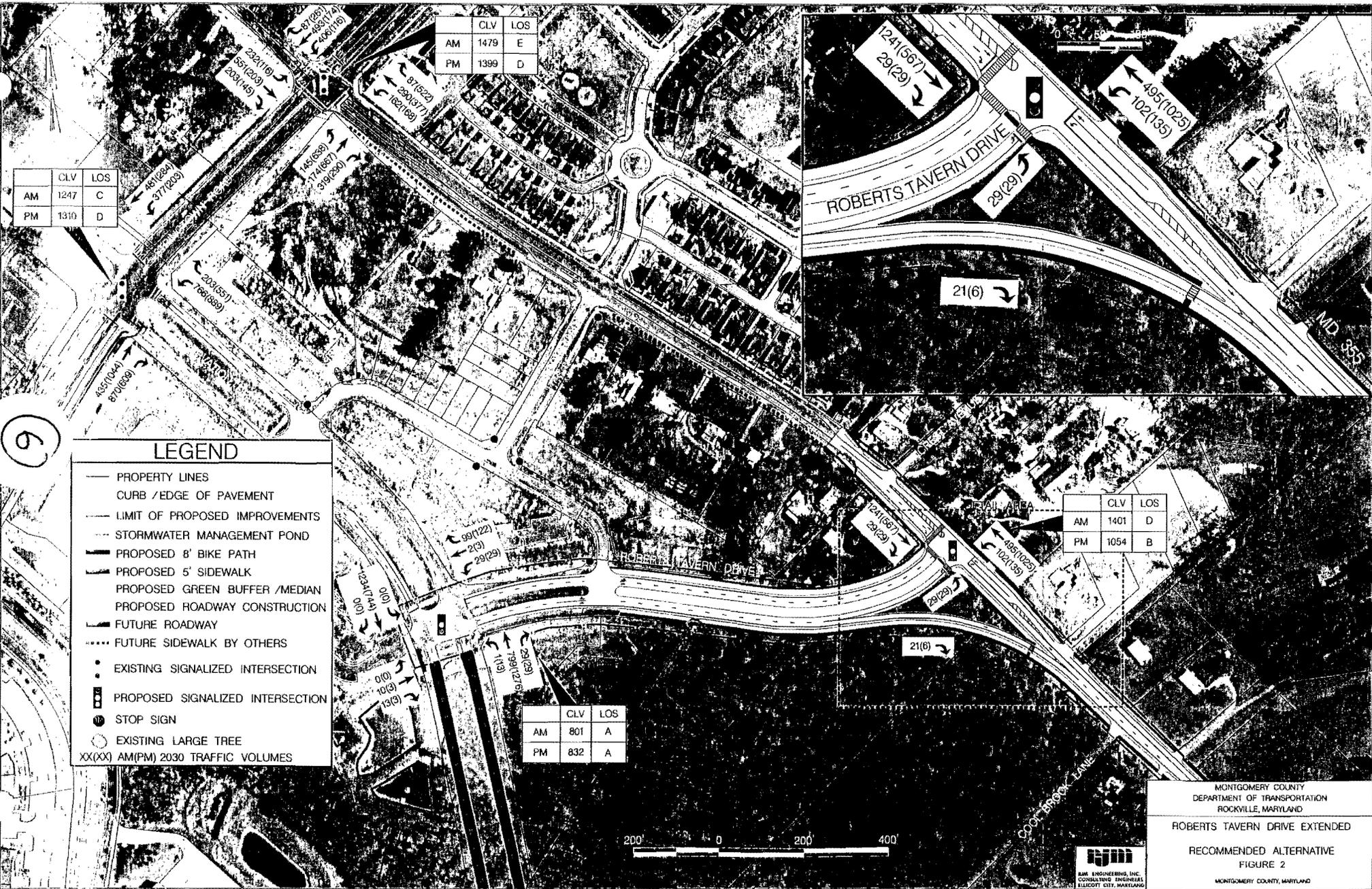


Figure 1 – Proposed Roberts Tavern Drive Typical Section



	CLV	LOS
AM	1479	E
PM	1399	D

	CLV	LOS
AM	1247	C
PM	1310	D

	CLV	LOS
AM	1401	D
PM	1054	B

	CLV	LOS
AM	801	A
PM	832	A

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LEGEND

- PROPERTY LINES
- CURB /EDGE OF PAVEMENT
- LIMIT OF PROPOSED IMPROVEMENTS
- STORMWATER MANAGEMENT POND
- PROPOSED 8' BIKE PATH
- PROPOSED 5' SIDEWALK
- PROPOSED GREEN BUFFER /MEDIAN
- PROPOSED ROADWAY CONSTRUCTION
- FUTURE ROADWAY
- FUTURE SIDEWALK BY OTHERS
- EXISTING SIGNALIZED INTERSECTION
- ◻ PROPOSED SIGNALIZED INTERSECTION
- ⊙ STOP SIGN
- EXISTING LARGE TREE
- XX(XX) AM(PM) 2030 TRAFFIC VOLUMES

200' 0 200' 400'



MONTGOMERY COUNTY
 DEPARTMENT OF TRANSPORTATION
 ROCKVILLE, MARYLAND

ROBERTS TAVERN DRIVE EXTENDED

RECOMMENDED ALTERNATIVE
 FIGURE 2

MONTGOMERY COUNTY, MARYLAND

Estimated impacts for the Recommended Alternative are summarized in Table 1 below.

Table 1: Impacts for Recommended Alternative	
Erodible Soils	Yes
Prime Farmland / Farmland of Statewide Importance	Yes
Forest	1.8 ac.
Specimen Trees (> 24" dbh)	2
Floodplains	None
Waters of the U.S.	None
Wetlands	None
Special Protection Area	Yes
Rare, Threatened and Endangered Species	None
Forest Interior Dwelling Bird Habitat	Low
Historic and Archeological Resources	None
Parks and Recreational Facilities	None
Community Facilities	None
Properties Impacted	10
Right-of-Way Required	2.5 ac.
Displacements	None
Hazardous Material Sites	None
Utilities	Yes

(7)

**ROBERTS TAVERN DRIVE EXTENDED, FACILITY PLANNING STUDY – PHASE I
PROJECT PROSPECTUS / JUNE 2010**

ROBERTS TAVERN DRIVE EXTENDED – SUMMARY TABLE	
PROJECT STUDY INFORMATION	
Name of Project and CIP #	Roberts Tavern Drive Extended, CIP #509337
Study Phase	Facility Planning, Phase I
Transportation Category	Roadway/Pedestrian and Bicycle Facilities
Study Performed by	Montgomery County Department of Transportation (MCDOT) Division of Transportation Engineering
Phase I Project Manager	Greg Hwang, (240)777-7279
Phase I Consultant	Rummel, Klepper & Kahl, LLP (RK&K) Rick Adams, (410)462-9247
Road Name	Roberts Tavern Drive
Project Limits	Observation Drive to MD 355 (Frederick Road)
Project Length	<ul style="list-style-type: none"> • 1,000 feet Road Extension of Roberts Tavern Drive • 500 feet Road Widening of Existing Roberts Tavern Drive • 1,300 feet Road Improvement of MD 355 to accommodate the extension of Roberts Tavern Drive
Functional Classification of Roadway	Arterial
EXISTING CONDITIONS	
# of Lanes	2
Typical Lane Width	16' including parking
Average Daily Traffic (ADT)	Less than 50
# of Bus Stops	1 (MD 355 at Woodport Rd.)
Signalized Intersections	1 (MD 355/Stringtown Rd.)
Stop-Controlled Intersections	Stringtown Rd./Observation Dr. Latrobe Ln./Roberts Tavern Dr. Roberts Tavern Dr./Observation Dr. Latrobe Ln./Observation Dr. Cool Brook Ln./MD 355 Suncrest Ave./MD 355
Posted Speed	MD 355 north of Suncrest Ave. – 30 mph MD 355 south of Suncrest Ave. – 40 mph Stringtown Rd. – 40 mph
Adjacent Communities	Gateway Commons Highlands at Clarksburg Garnkirk Farms Clarkbrook Estates Brickleys Subdivision
Homes Adjacent to Roberts Tavern Drive	11
Homes with Driveway Access	10 on MD 355
Schools	3 (Clarksburg Elementary, Rocky Hill Middle and Clarksburg High)
Places of Worship	1 (Lakewood Church of God)

**ROBERTS TAVERN DRIVE EXTENDED, FACILITY PLANNING STUDY – PHASE I
PROJECT PROSPECTUS / JUNE 2010**

Parks	2 (Dowden's Ordinary Special Park, Little Seneca Greenway Stream Valley Park)
Other Places of Interest	Fire Station, Post Office
Portion with Closed/Open Section	Closed Section: 500' Existing Roberts Tavern Drive outside lanes Open Section: 500' Existing Roberts Tavern Drive median
Portion with Sidewalk	300' of Existing Roberts Tavern Drive between Observation Drive and Latrobe Lane
Portion with Shared Use Path	500' of Existing Roberts Tavern Drive
Right-of-Way Widths	Roberts Tavern Drive – 120' MD 355 – Varies 40' to 70' Stringtown Road – 120' Observation Drive – 150'
CRASH HISTORY	
2003 to 2007	MD 355/Stringtown Road Intersection: 13 crashes, no fatalities MD 355, between Cool Brook Lane and Stringtown Rd.: 6 crashes, no fatalities
FACILITY PLANNING, PHASE I SUMMARY	
Transportation Category	Roadway/Pedestrian and Bicycle Facilities
Referenced Master Plans	1994 Clarksburg Master Plan and Hyattstown Special Study Area 2005 Countywide Bikeways Functional Master Plan
Annual Growth Policy Area	Clarksburg
Purpose	<ul style="list-style-type: none"> • Improve mobility and access for people and goods that use MD 355 and the surrounding roadway network • Allow for future diversion of regional through traffic around the Clarksburg Town Center and historic district • Improve travel efficiency • Provide congestion relief • Expand neighborhood connections • Enhance multimodal access
Need	<ul style="list-style-type: none"> • Accommodate land use • Reduce future traffic congestion • Improve network efficiency • Provide local neighborhood connection • Enhance bicycle and pedestrian connections
Project Start Date	April 2009
Facility Planning, Phase I Project Prospectus Completion Date	June 2010
Alternatives Evaluated	<ol style="list-style-type: none"> 1. No Build 2. Master Plan 3. T-Intersection 4. Master Plan Modified

Recommended Alternative	<p>The Recommended Alternative is a refinement to Alternative 3 and includes the extension of Roberts Tavern Drive to MD 355 as a signalized T-intersection with a direct connection between eastbound Roberts Tavern Drive and southbound MD 355.</p> <ul style="list-style-type: none"> • 120-foot right-of-way • Four-lane divided roadway • On-road bicycle lanes • Green space buffer • Sidewalk along the north side • Shared use path along the south side
Recommended Alternative Impacts	<p><u>Property Impacts</u></p> <ul style="list-style-type: none"> • 10 properties • 2.5 acres of right-of-way • 1.0 acre of grading easement • No displacements <p><u>Natural Environment Impacts</u></p> <ul style="list-style-type: none"> • 1.8 acres of forest • 1.3 acres of additional impervious area • 2 specimen trees • Within Clarksburg Special Protection Area <p><u>Utility Impacts</u></p> <ul style="list-style-type: none"> • 6 electric poles w/ luminaries, 1200 ft. • 5 telephone poles (4 for sidewalk, 1 for roadway), 900 ft • 1 water valve, 1 fire hydrant assembly, possible water line conflicts with drainage improvements
PUBLIC OUTREACH	
Public Meeting	November 12, 2009
Newsletters	October 2009 March 2010
Mailing List	143
PERMITS	
Permits Required	<ul style="list-style-type: none"> • Access Permit – Maryland State Highway Administration • Roadside Tree Permit – Maryland Department of Natural Resources (DNR) • NRI/FSD, Forest Conservation Plan – M-NCPPC • Erosion and Sediment Control and Stormwater Management – Montgomery County Department of Permitting Services

**ROBERTS TAVERN DRIVE EXTENDED, FACILITY PLANNING STUDY – PHASE I
PROJECT PROSPECTUS / JUNE 2010**

Agencies Requiring Coordination	<ul style="list-style-type: none"> • Montgomery County Department of Transportation (MCDOT) • Montgomery County Department of Permitting Services (MCDPS) • Montgomery County Department of Environmental Protection (MCDEP) • Maryland-National Capital Park & Planning Commission (M-NCPPC) • Maryland Department of the Environment (MDE) • Maryland Department of Natural Resources (MDNR) • Maryland Historical Trust (MHT) • Maryland State Highway Administration (MDSHA) • US Fish and Wildlife Service (USFWS)
OTHER	
Unresolved Issues	Consolidation/modification of access to adjacent driveways and entrances
Unique Features	None
Basis for Typical Section	The proposed Roberts Tavern Drive typical section is based on the December 2008 Montgomery County Context Sensitive Road Design Standards (Road Code) No. 2004.10, Divided Suburban Arterial Road – 4 Lanes With Bike Lanes. The green space buffers, sidewalk and shared use path are proposed to match the existing roadway cross section.
Basis for Major Decisions of Recommended Alternative	<p>The recommended alternative addresses the following goals:</p> <ul style="list-style-type: none"> • Meets the project’s purpose and need; • Maintains full movement for roadways; • Provides safe, direct pedestrian and bicycle access; • Completes a portion of the master-planned MD 355 Bypass; • Accommodates future construction of the MD 355 Bypass.
Basis for Streetscape, Landscape Panel, Streetlights, etc.	<ul style="list-style-type: none"> • Master Plan • Montgomery County Context Sensitive Road Design Standards, December 2008 (Road Code) No. 2004.10, Divided Suburban Arterial Road – 4 Lanes With Bike Lanes
Basis for Stormwater Management (SWM) Design	<ul style="list-style-type: none"> • Incorporate the latest Maryland Stormwater Design Manual including the requirements of the Stormwater Management Act of 2007. • Use low impact development (LID) techniques. • Be coordinated and compatible with design of the future Observation Dr. Extended/MD 355 Bypass.
Planning Board Briefing Date/Comments	TBD
Montgomery County Council’s Transportation, Infrastructure, Energy and Environment Committee (T&E) Date/Comments	TBD

STUDY TEAM CONTACT INFORMATION

Team Member	E-Mail Address	Phone Number
Montgomery County Department of Transportation		
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Mark Terry, Traffic Engineer	Mark.Terry@montgomerycountymd.gov	240-777-2198
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Maryland-National Capital Park and Planning Commission (M-NCPPC)		
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Ron Cashion, Planner Coordinator	Ronald.Cashion@mncppc-mc.org	301-650-5671
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Maryland State Highway Administration		
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AJ Durham, Straughan Environmental Services	adurham@straughanenvironmental.com	301-362-9200



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

November 2, 2010

Arthur Holmes, Director
Department of Transportation
Executive Office Building
101 Monroe Street, 10th floor
Rockville, Maryland 20850

RE: Roberts Tavern Drive Extended Phase I
Transportation Facility Planning Study - Project Prospectus

Dear Mr. ~~Holmes~~:

At our regularly scheduled meeting on October 28, 2010, the Planning Board reviewed the Project Prospectus for the Roberts Tavern Drive Extended Transportation Phase I study and recommended that it proceed to Phase II of the Facility Planning process to develop a detailed design of the Project Prospectus-recommended alternative.

The Board also made the following comments regarding the Phase II work:

1. The Phase II Facility Planning study for the Roberts Tavern Drive Extended should:
 - a. Minimize any construction for this interim phase that will have to be removed in the ultimate condition.
 - b. Minimize forest loss.
2. During the Phase II Facility Planning Study, MCDOT must submit a Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) for approval.
3. A preliminary design of the ultimate configuration of the MD355 intersection should be included in the Mandatory Referral submittal during Phase II of Facility Planning for the interim project.

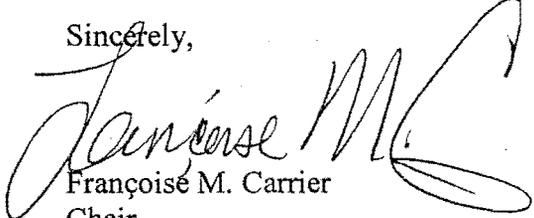
While the majority of the Board believes that this study should proceed, some Board members expressed concern about the estimated cost of this project in relation to its small traffic benefit. A broader discussion of this issue can be undertaken when the project is considered for inclusion in the County's Capital Improvements Program, or as an offsite improvement for developer participation.

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Arthur Holmes
November 2, 2010
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Thank you for your attention to this matter. If you have any questions or comments concerning our review, please call Ki Kim at 301-495-4538.

Sincerely,



Françoise M. Carrier
Chair

cc: Glenn Orlin



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item No. 7
10-28-2010

MEMORANDUM

DATE: October 20, 2010

TO: Montgomery County Planning Board

VIA: Dan Hardy, Chief *DKH*
Transportation Planning Division

Sue Edwards, Team Leader *for Sue/RC*
I-270 Corridor Team
Community-Based Planning Division

Larry Cole, Highway Coordinator *LC*
Transportation Planning Division

FROM: Ki H. Kim, Planner/Coordinator (301) 495-4538 *KHK*
Transportation Planning Division

SUBJECT: Roberts Tavern Drive Extended Phase I Transportation Facility Planning Study -
Project Prospectus Recommendations

RECOMMENDATION: Transmit the following comments to the Montgomery County Department of Transportation (MCDOT):

1. The Roberts Tavern Drive Extended Transportation Facility Planning Study should proceed to Phase II of the Facility Planning process to develop a detailed design of a modified version of the Project Prospectus recommended alternative:
 - a. The design for the interim Roberts Tavern Drive Extended should include only two through lanes. Two options could accomplish this change:
 - 1) A two-lane undivided roadway, approximating the proposed northbound through lanes of the proposed alternative, or
 - 2) A two-lane divided roadway, continuing the design of the existing segment of Roberts Tavern Drive

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- b. The new roadway should intersect MD355 at a 90-degree angle, and it should be located opposite the driveway to the Green Gardens landscaping company, if possible.
 - c. The design should include the proposed shared use path on its ultimate alignment for the master-planned Relocated MD355.
 - d. The long free-right-turn lane from Roberts Tavern Drive to southbound MD355 should not be built as part of the interim project; this lane should be deferred until the ultimate configuration of the MD355 intersection is constructed.
 - e. A preliminary design of the ultimate configuration of the MD355 intersection should be included in the Mandatory Referral submittal during Phase II of Facility Planning for the interim project.
2. The Phase II Facility Planning study for the Roberts Tavern Drive Extended should:
 - a. Minimize any construction for this interim phase that will have to be removed in the ultimate condition.
 - b. Minimize forest loss.
 3. During the Phase II Facility Planning Study, MCDOT must submit a Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) for approval.

PURPOSE OF THIS BRIEFING

The purpose of this briefing is to present to the Montgomery County Planning Board the Phase I Facility Planning Study completed by MCDOT for the Roberts Tavern Drive Extended project and to solicit your comments on the draft Project Prospectus. Your comments will be considered in the MCDOT's preparation of the final document, which will then be submitted to the County Council.

SUMMARY OF THE STUDY

The Roberts Tavern Drive Extended study considered the extension of the existing Roberts Tavern Drive (A-251) from 200 feet east of Latrobe Lane to Frederick Road (MD 355) in Clarksburg, a distance of approximately 1,000 feet. Attachment 1 shows the subject segment of Roberts Tavern Drive Extended, the limits of the existing segments of Roberts Tavern Drive and Observation Drive, and future completion of Observation Drive (A-251) north of Stringtown Road. When A-251 is completed, it will serve as the bypass of existing MD355 through the Clarksburg Historic District, however no planning is currently underway for the segment north of Stringtown Road.

Staff finds that Roberts Tavern Drive Extended is needed in the near term to improve connectivity for all modes of travel in the Clarksburg Town Center. The ultimate four-lane arterial capacity of the roadway, however, will not be utilized until A-251 is completed as a fully Relocated MD 355 around the Clarksburg Historic District. In fact, the ultimate design cannot be constructed until Relocated MD 355 is completed, and that relocation project will necessarily involve some reconstruction of the current project. Therefore, **staff recommends**

reducing the scope of the current Roberts Tavern Drive Extended project from four lanes to two lanes, to provide the needed connectivity in the near term while reducing the costs, impacts, and potential speeding concerns associated with building a roadway wider than needed for the foreseeable future.

The Roberts Tavern Drive Extended study area is in the MD 355 corridor, between Gateway Center Drive to the west, Little Seneca Creek to the east, Shawnee Lane to the south, and Stringtown Road to the north. This area consists predominantly of established residential homes, townhouses, and apartment/condominium properties along MD 355 and planned residential development throughout the study area.

The primary purpose of the road extension would be to improve mobility and access for people and goods that use MD 355 and the surrounding roadway network. These improvements are necessary to improve travel efficiency, allow for future diversion of regional through-traffic around the Clarksburg Town Center and historic district, provide congestion relief, expand neighborhood connections, and enhance multimodal access. The road extension is needed to:

- Accommodate planned land use;
- Reduce future traffic congestion;
- Improve network efficiency;
- Provide local neighborhood connection; and
- Enhance bicycle and pedestrian connections.

As part of the Roberts Tavern Drive Extended Facility Planning Phase I Study, the following four alternatives were considered and presented to the public for their review and input:

- Alternative 1: No-Build;
- Alternative 2: Master Plan Alignment;
- Alternative 3: T-Intersection; and
- Alternative 4: Master Plan Alignment Adjusted

The Project Prospectus recommends that a modified version of Alternative 3 advance to Facility Planning Phase II. Alternative 3 Modified would provide a continuous four-lane divided roadway from Observation Drive to MD355, with a T-intersection at MD355 and a long free-right turn lane to southbound MD355. It would:

- Meet the project's purpose and need;
- Maintain full movement for roadways;
- Provide safe, direct pedestrian and bicycle access;
- Complete a portion of the master-planned Relocated MD 355; and
- Accommodate future construction of the ultimate Relocated MD 355.

The existing and proposed typical sections of Roberts Tavern Drive are shown as Attachment 2. A graphic of MCDOT's Alternative 3 Modified is shown as Attachment 3. For purposes of discussing the staff recommendations, staff has prepared a conceptual representation of Alternative 3 Modified as shown in Attachment 4. In Attachment 4, the existing two lanes are

shown as solid lines; the proposed additional lanes and shared use path are shown as dashed lines.

Tables from the Project Prospectus showing the impacts of MCDOT's recommended Alternative 3 Modified and original Alternatives 1-4 are shown as Attachment 5. Graphics for Alternatives 1-4 (including the original Alternative 3) are not shown in this memo but will be available for viewing at the Board's meeting. In summary, each of the build alternatives have similar impacts, with 7 to 10 properties affected and between 1.3 and 1.7 acres of forest loss.

Master Plan Consistency

The Clarksburg Master Plan recommends diverting through traffic on MD 355 around the west side of the Clarksburg Historic District via Roberts Tavern Drive Extended and Observation Drive Extended, as indicated in Attachment 1. These roadways form the planned four-lane north-south arterial connection (A-251) that will constitute a new Relocated MD355, and allow the existing Frederick Road to be downgraded to a two-lane business district street (B-1) through the historic district. The Clarksburg Master Plan recommends that MD 355 ultimately be signed to follow A-251 as the through roadway, and graphics indicate that the intersections should be aligned so that the through traveler would be directed along A-251, with existing Frederick Road ultimately realigned to "tee" into A-251.

A completely consistent alignment of Roberts Tavern Drive Extended per the Master Plan is not possible at this time since SHA will not permit a realignment of MD355 at the Roberts Tavern Drive intersection until the northern segment of Observation Drive, which would allow a complete relocation of MD355 through the center of Clarksburg, is also constructed. Thus, any project resulting from this study would be only an interim project until the complete roadway could be built.

Staff Analysis

All the alternatives discussed in the Project Prospectus meet the Purpose and Need for this interim project. To determine which alternative best meets the County's needs, our analysis included two additional considerations: maximizing the usefulness of what is built in attaining the ultimate facility recommended by the Master Plan, and minimizing the initial cost of the interim project while meeting the Purpose and Need.

All of the alternatives considered in the Project Prospectus would construct the ultimate four-lane divided road but the projected peak-hour traffic levels for the proposed in the 2030 design year are very low. The low traffic projections are due to the fact that the northern half of Relocated MD355 would not be built, diminishing the road's usefulness for other than local traffic in the near term. A four-lane Roberts Tavern Drive is projected to carry only 10%-12% of the vehicles in the peak hour that MD355 would carry in two lanes in 2030.

Roberts Tavern Drive	Morning peak hour traffic	Evening peak hour traffic
westbound	131	164
Eastbound	50	35
Total	181 vehicles in AM peak	199 vehicles in PM peak
MD355		
northbound	524	1054
southbound	1262	573
Total	1786 vehicles in AM peak	1627 vehicles in PM peak

The forecast volumes on Roberts Tavern Drive reflect a combination of local traffic (such as residents of the proximate Gateway Commons development) and a dispersion of other traffic from communities to the south and east along MD 355 that needs to access I-270 at MD 121. Roberts Tavern Drive Extended provides an additional access point for Gateway Commons residents heading south along MD 355, reducing their vehicle-miles of travel. It also relieves pressure on the MD 355 / Clarksburg Road signalized intersection, forecast to operate at LOS E in 2030. The connection also provides bicycle and pedestrian connectivity between Clarksburg Town Center communities.

The project serves the need for better connectivity in Clarksburg, but building the ultimate four-lane typical section on an interim basis does not appear to be cost-effective, particularly considering that the MD 355/Roberts Tavern Drive intersection will ultimately need to be reconstructed to satisfy the Master Plan intent. We agree with the overall alignment of MCDOT's preferred alternative – that Roberts Tavern Drive intersect MD355 at a 90-degree angle in this interim condition. But we recommend that this alternative be revised to include only a two-lane roadway that could easily accommodate the projected traffic and minimize the extent of reconstruction needed at a later date. We suggest either of two implementation options described below.

Staff's Two-lane Implementation Option 1: The northernmost two lanes of the recommended alternative could be used as a two-way undivided roadway that intersects MD355 at a 90-degree angle. A transition section between the existing two-lane divided roadway would be needed and providing a short right-turn lane on Roberts Tavern Drive at MD355 should be considered (see Attachment 6.) Staff expects that the primary advantages of this option would be a reduction in near-term project costs, forest loss, and impervious surface.

Staff's Two-lane Implementation Option 2: The existing cross-section of Roberts Tavern Drive, which is a two-lane divided road, could be extended to MD355, modifying the section only where needed close to the MD355 intersection (see Attachment 7.) Staff expects that the primary advantages of this option would be the establishment of a greater extent of the ultimate drainage, pedestrian and streetscape elements on both sides of the roadway.

Either of the above options would satisfy the staff recommendations. Staff does not recommend that the Board identify a preference for either implementation option at this time as the decision should be based on balancing near-term and long-term cost considerations for which additional engineering analysis would be needed.

The proposed shared use path should still be built under either of the above options on its ultimate alignment for the MD355 Clarksburg Bypass, meeting the need to improve bike accommodation in this area and following the shortest path along the ultimate MD 355 Relocated alignment.

Minimizing the work done in this initial phase of the project would be less costly in the near-term and would avoid an obvious imbalance between the two roads in regard to roadway capacity and demand. It would also reduce the potential for speeding; a problem that can occur with underutilized roads. While this is a short segment of road, the problem would likely be greatest at the Roberts Tavern Drive free-right turn lane to southbound MD355. The design of this lane would be similar to the alignment of southbound 16th Street as it diverges from Georgia Avenue in Montgomery Hills. This design might reduce a driver's expectation of pedestrians along MD355 who would have to cross this lane. While this lane would be on the ultimate alignment of the A-251 and would help establish the limits of the future widening, we recommend that the separate right turn lane to southbound MD355 not be built as part of this project to avoid potential problems in the interim.

On a detailed design-oriented note, the proposed signalized intersection is slightly offset from the driveway of the Green Gardens landscaping company on the east side of MD355. Constructing the interim roadway directly opposite this driveway on MD355 would better accommodate their large vehicles. We recommend that this be considered.

On a broader note, all of the alternatives include taking sufficient right-of-way to accommodate the ultimate configuration of the MD355 Relocated intersection (teeing the north leg of existing MD355 into the MD 355 Relocated alignment), but no analysis is shown in the study report as to which alternative would best facilitate it. We recommend that a preliminary design of the ultimate Master Plan "tee" intersection (with A-251 as the through movement and the northern leg of Frederick Road serving as the stem of the "tee") be included with the Mandatory Referral submittal for the interim project so that future rework can be considered and minimized.

PUBLIC OUTREACH

The MCDOT study team held one public meeting during the Phase I Facility Planning process. The public meeting, on November 12, 2009, discussed the Facility Planning process, presented the study and discussed roadway concepts, and received public input. As summarized in Attachment 5, the citizens who attended generally supported the project and in particular Alternative 3 with a tee intersection, but would accept the other two build alternatives if deemed necessary for environmental reasons.

Attachments

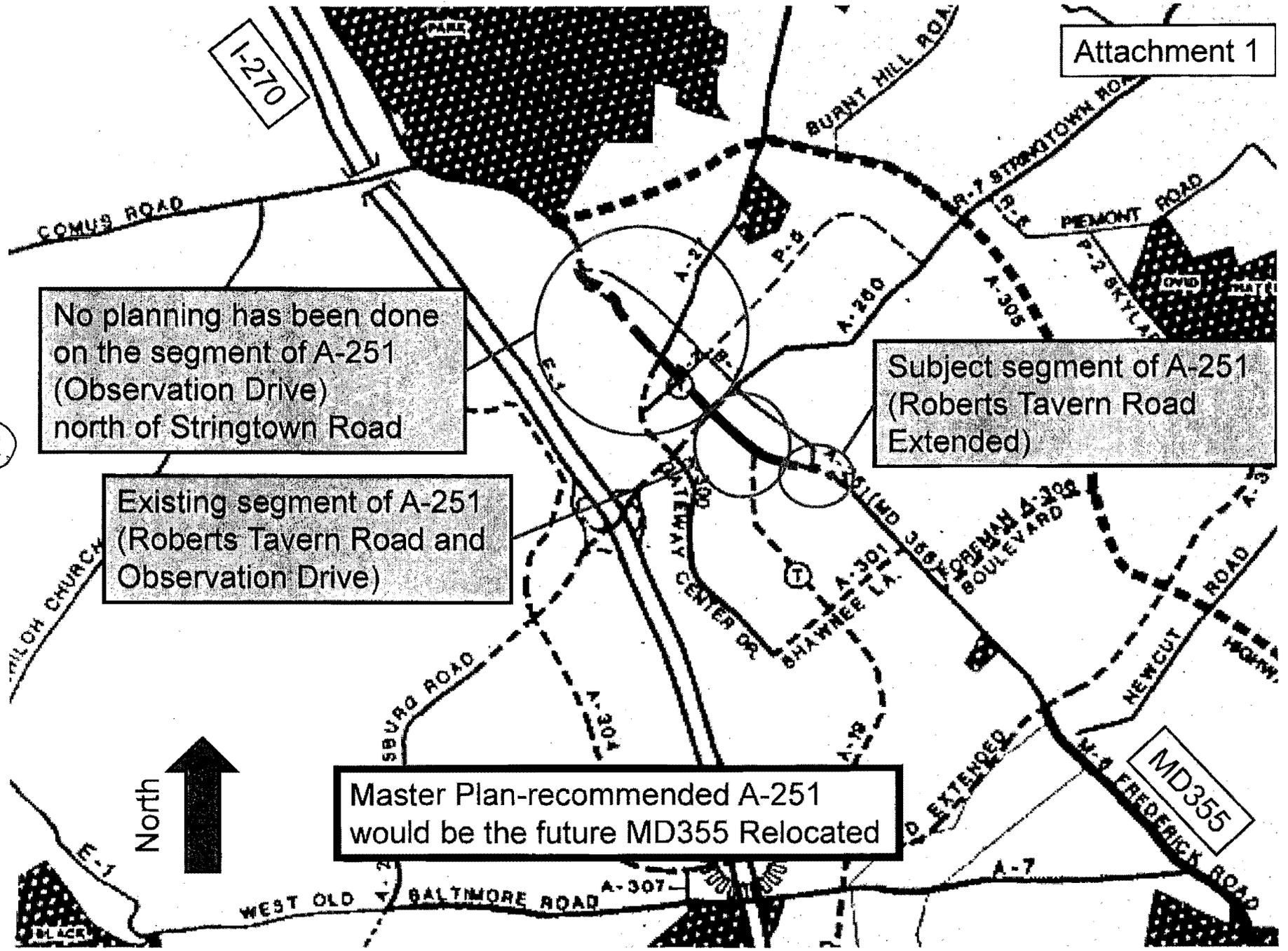
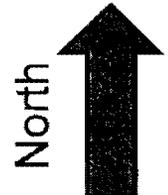
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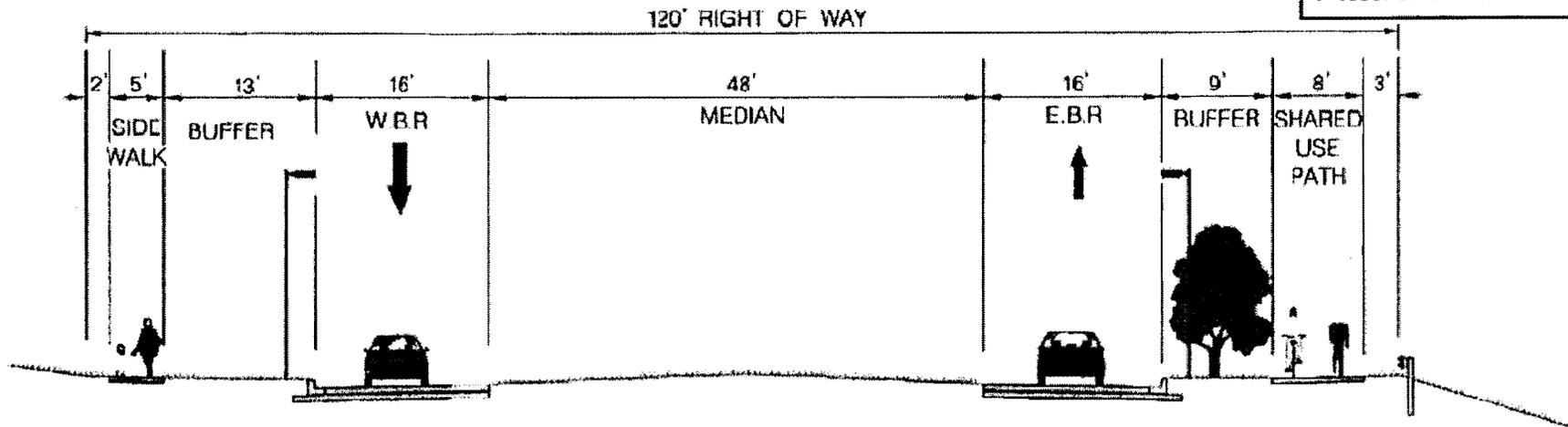
No planning has been done on the segment of A-251 (Observation Drive) north of Stringtown Road

Subject segment of A-251 (Roberts Tavern Road Extended)

Existing segment of A-251 (Roberts Tavern Road and Observation Drive)

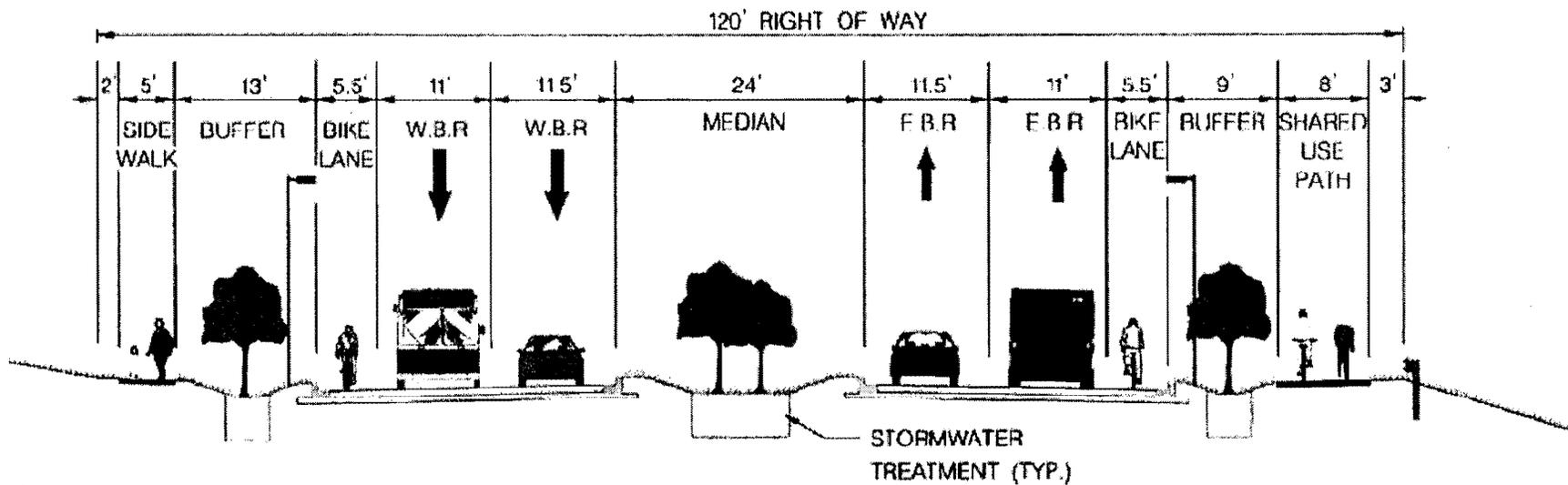
Master Plan-recommended A-251 would be the future MD355 Relocated





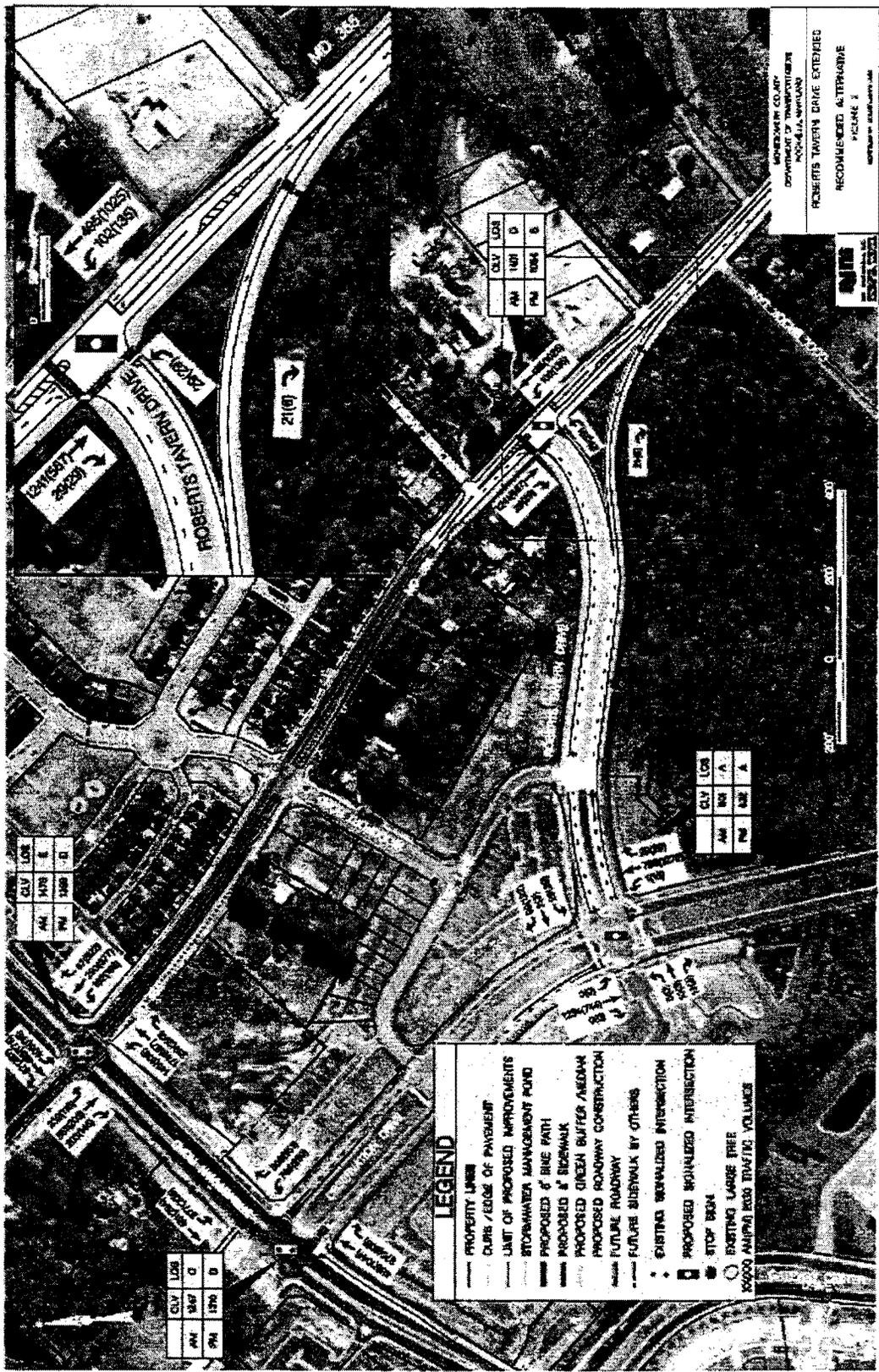
Existing Roberts Tavern Drive Typical Section

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Proposed Roberts Tavern Drive Typical Section

Attachment 3



Attachment 4

Existing two-lane divided roadway to be widened to four lanes and extended to MD355

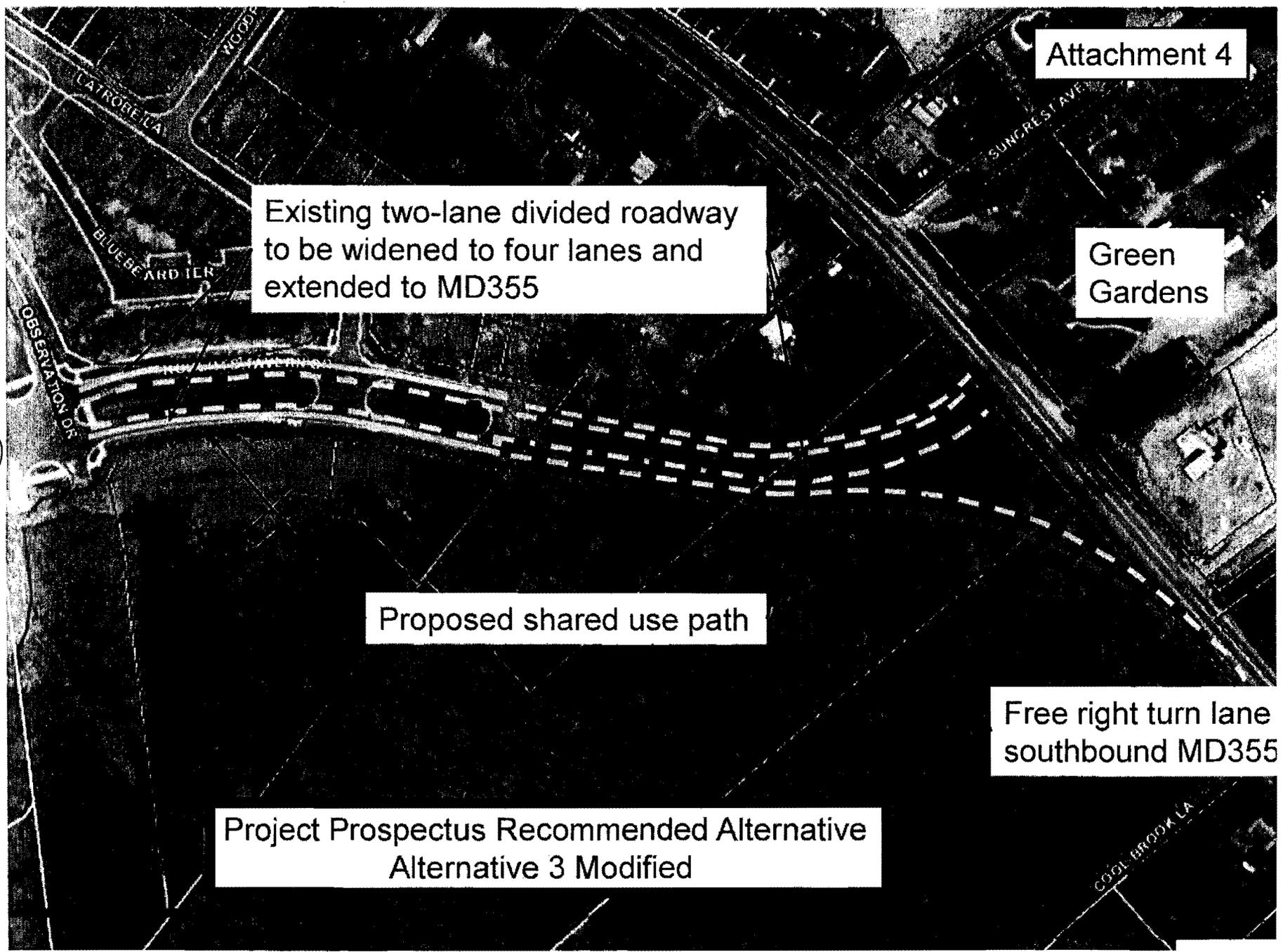
Green Gardens

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Proposed shared use path

Free right turn lane southbound MD355

Project Prospectus Recommended Alternative
Alternative 3 Modified



Impacts Summary of Project Prospectus-Preferred Alternative: Alternative 3 Modified

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Impact Category	Impact
Erodible Soils	Yes
Prime Farmland / Farmland of Statewide Importance	Yes
Forest	1.8 ac.
Specimen Trees (> 24" dbh)	2
Floodplains	None
Waters of the U.S.	None
Wetlands	None
Special Protection Area	Yes
Rare, Threatened and Endangered Species	None
Forest Interior Dwelling Bird Habitat	Low
Historic and Archeological Resources	None
Parks and Recreational Facilities	None
Community Facilities	None
Properties Impacted	10
Right-of-Way Required	2.5 ac.
Displacements	None
Hazardous Material Sites	None
Utilities	Yes

Impacts Summary of Alternatives 1-4 Considered in Project Prospectus

	Alternative 1: No Build	Alternative 2: Master Plan	Alternative 3: T-Intersection	Alternative 4: Master Plan Modified
Accommodates Planned Land Use	No	Yes	Yes	Yes
Accommodates Future MD 355 Bypass	No	Very Good	Good	Best
Improves Network Efficiency	No	Yes	Yes	Yes
Provides Local Neighborhood Access	No	Yes	Yes	Yes
Enhances Bicycle and Pedestrian Access	No	Good	Best	Good
Roberts Tavern Drive/MD 355 Intersection Control	N/A	Unsignalized	Signalized*	Unsignalized
Number of Properties Impacted	0	9	7	9
ROW Impact Area (Acres)	0	2.4	1.8	2.2
Forest Stand Impact (Acres)	0	1.7	1.3	1.7
Public Support for Option	Low	Moderate	High	Moderate

* Future studies will determine the viability and feasibility of signalization.

Existing two-lane divided roadway

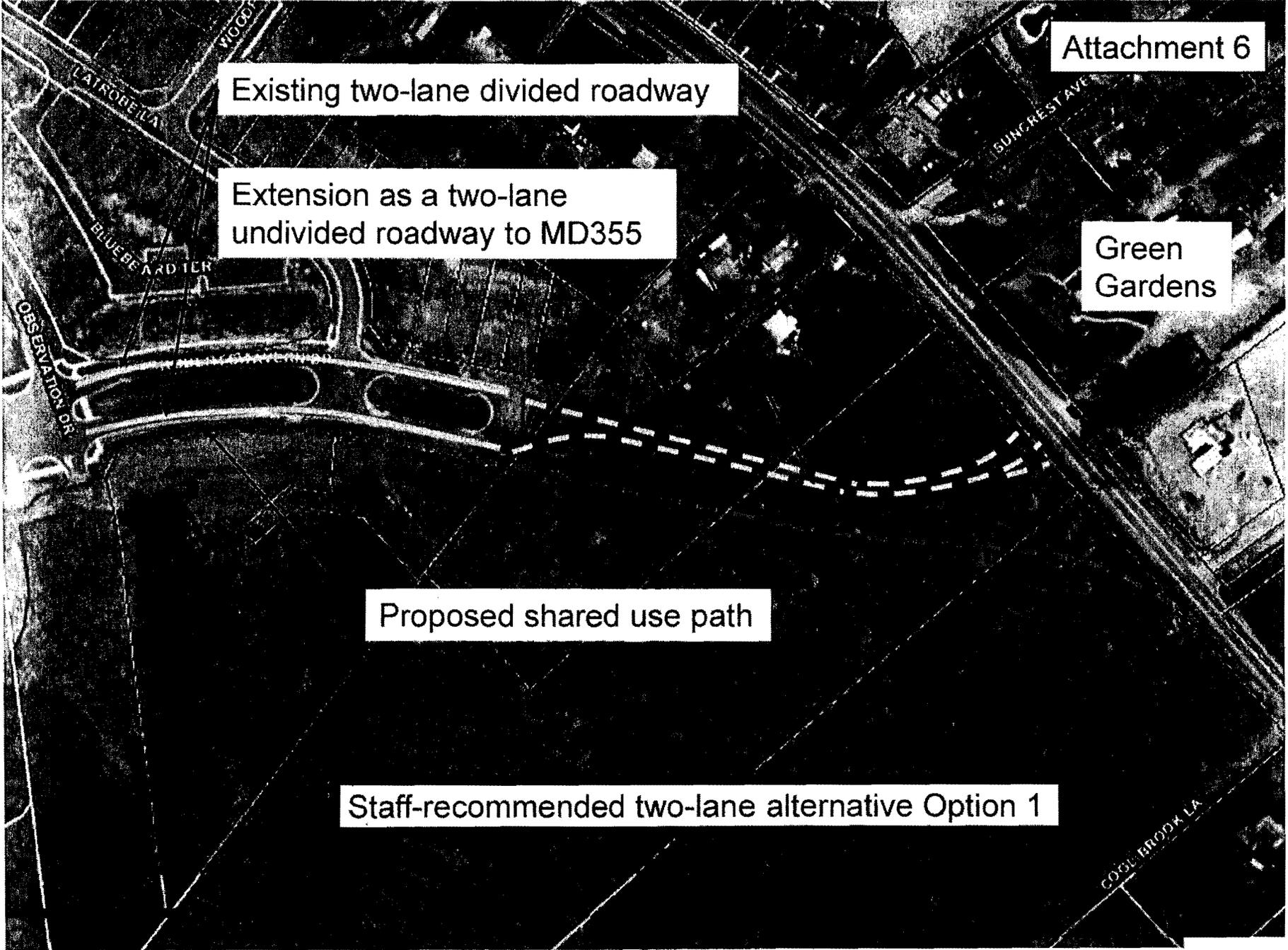
Extension as a two-lane undivided roadway to MD355

Green Gardens

Proposed shared use path

Staff-recommended two-lane alternative Option 1

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Existing two-lane divided roadway

Extension as a two-lane undivided roadway to MD355

Green Gardens

Proposed shared use path

Staff-recommended two-lane alternative Option 2

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