



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

MCPB
Item No. 102
10-16-08

October 2, 2008

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Daniel K. Hardy, Acting Chief *DKH*
Transportation Planning Division

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

Larry Cole, Highway Coordinator *DKH for*
Transportation Planning Division

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

SUBJECT: Observation 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 Observation Drive Extended Transportation Facility Planning Study should proceed to Phase II of the Facility Planning process as recommended in the September 2008 Project Prospectus to develop a detailed design for Alternative 4, Master Plan Alignment Adjusted, after including the required horizontal and vertical geometric criteria for light rail transit (LRT) and addressing the comments of the Maryland Transit Administration (MTA).
2. Per the Project Prospectus recommendation, the design for Observation Drive Extended should be a four-lane closed section roadway as recommended in the Germantown and Clarksburg Master Plans.

3. During the Phase II Facility Planning Study, MCDOT must submit a Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) for approval.
4. We support the Project Prospectus recommendation that the typical section of the roadway be temporarily reduced in width in the vicinity of the Moyer and Sons Moving and Storage Company and the Montgomery County Public Schools (MCPS) property until such time when adjacent properties redevelop whereby the developer will be required to construct the ultimate section of the road.
5. The Phase II Facility Planning study for the Observation Drive should:
 - a. Lower the design speed to reflect the anticipated 35 mph posted speed, if consistent with MTA comments regarding light rail design speeds.
 - b. Consider narrowing the median width to approximately 36 feet outside station areas to reduce impacts in environmentally sensitive areas where station platforms and left turn lanes are not needed.
 - c. Include a twelve-foot-wide sidewalk/path on each side of the bridge over Little Seneca Creek.
 - d. Consider including a barrier on the bridge over Little Seneca Creek to separate the sidewalk/path from traffic to protect pedestrians and bicyclists.
 - e. Include a bike path on the east side of Observation Drive Extended from existing Observation Drive northward to Little Seneca Parkway to provide greenway connectivity as recommended in the Countywide Park Trails Plan, the Clarksburg Master Plan, and the Clarksburg Greenway Implementation Study.
 - f. Include spirals in the roadway horizontal geometry so that LRT can be accommodated without variations in the median offset.
6. During the Phase II Facility Planning study, mitigation strategies for impacted Conservation Easement areas must be identified.
7. During the Phase II Facility Planning study, park impacts must be clearly identified and quantified. Mitigation for any right-of-way impacts in parkland in excess of the master planned right-of-way will need to be mitigated per our Memorandum of Understanding with MCDOT.

PURPOSE OF THIS BRIEFING

The purpose of this briefing is to apprise the Montgomery County Planning Board on the Phase I Facility Planning Study completed by MCDOT for the Observation Drive Extended project.

This study, commenced in March 2005, produced a Draft Project Prospectus in September 2008 based on several public meetings and discussions.

SUMMARY OF THE PROJECT

The Observation Drive project area extends from existing Observation Drive at Waters Discovery Lane in Germantown to Stringtown Road in Clarksburg, a distance of approximately 2.3 miles. The project area is in the I-270 corridor, between I-270 to the west and Frederick Road (MD 355) to the east. The Clarksburg Master Plan recommended land uses along Observation Drive Extended include office and light industrial in the southern portion of the study area residential in the northern portion of the study area. The project area is shown as Exhibit 1.

As part of the Observation 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: Master Plan Alignment Modified & Option "A"; and
- Alternative 4: Master Plan Alignment Adjusted (Team Recommended)

The Project Prospectus recommends Alternative 4 to advance to Facility Planning Phase II because it closely follows the Clarksburg Master Plan alignment while providing acceptable geometry in the area of the proposed Corridor Cities Transitway (CCT) stations. The recommended alternative for the roadway is presented in Exhibit 2. The recommended alternative includes the following design elements:

- 150-foot-wide right-of-way
- Four lane divided closed section roadway with two lanes in each direction
- 58-foot-wide raised median to accommodate future provisions for the Corridor Cities Transitway (CCT)
- 8-foot-wide shared use path along the west side of the roadway and a 5-foot-wide sidewalk on the east side
- Landscape panel, both sides
- The Final Design will confirm to the latest Road Code Standards

The typical section of the recommended alternative is shown in Exhibit 3. The typical section incorporates the design elements described above and shows a ten-foot landscape panel and an eight-foot hiker-biker trail on the west side, a thirteen-foot panel and a five-foot sidewalk on the east side.

MASTER PLAN CONSISTENCY

The 1989 Germantown Master Plan and the 1994 Clarksburg Master Plan identify infrastructure improvements to include the extension of Observation Drive as a four-lane arterial roadway with 150 feet of right-of-way from Waters Discovery Lane to Frederick Road (MD 355).

Staff finds that the recommended alternative for Observation Drive Extended is consistent with the intent of the area master plans. There is one element, however, where the design does not reflect specific recommendations resulting from Clarksburg Master Plan implementation decisions to date:

- The typical section of the recommended alternative does not include a bike path on east side of Observation Drive Extended from existing Observation Drive north to Little Seneca Parkway.

Staff recommends that the Phase II Facility Planning study for Observation Drive Extended should include a bike path on east side of Observation Drive Extended from existing Observation Drive northward to Little Seneca Parkway to provide greenway connectivity as recommended in the Countywide Park Trails Plan, the Clarksburg Master Plan and the Clarksburg Greenway Implementation Study. Further discussion is provided in the Park Planning and Stewardship Division's memo, Exhibit 4. In this segment the road would have a shared use path on both sides, as there is already a shared use path planned along the west side of the road for the full project length.

The specific need for a shared use path on the east side of the road is bolstered by the recommendation of American Association of State Highway and Transportation Officials (AASHTO), which state that sidewalks along Major Highways and Arterials outside central business districts be six feet to eight feet wide (p. 58, Guide for the Planning, Design, and Operation of Pedestrian Facilities). Given the connection to a park trail and the greater-than-average usage expected on a road with a transit line, an eight-foot width should be provided on the east side of the road also, fulfilling part of the purpose and need of the project to enhance community cohesion and the greenway system.

The pedestrian and bicyclist accommodation on the bridge over Little Seneca Creek should also be improved over the design included in the Draft Prospectus. To accommodate an eight-foot-wide path with a two-foot-wide shy distance from the parapet and from vehicles in the curb lane, as recommended by AASHTO, ***we recommend that the sidewalk/path on the bridge over Little Seneca Creek be twelve feet wide on each side. A barrier separating the sidewalk/path from traffic should also be considered to protect pedestrians and bicyclists.***

Design Speed

The anticipated posted speed for this project is 35 mph, but the design speed is noted as 50 mph, inconsistent with the Executive's proposed Road Code target speed standard that recommends a common target speed, design speed, and anticipated posted speed. The reason given for the higher design speed is the need to accommodate light rail transit (LRT) should this mode be chosen for the Corridor Cities Transitway (CCT), and that the 50 MPH design speed was specified by the Maryland Transit Administration. We recommend that the stated design speed be lowered for three reasons.

First, even if more stringent design requirements are needed to accommodate a rail line, only those requirements that would be different for light rail, such as horizontal and vertical

curvature, should be reflected in the roadway design. Using a 50 mph design speed for the roadway would trigger an unnecessary requirement for greater superelevation (banking) on horizontal curves, for example (6% vs. 4%). This would encourage higher vehicular operating speeds, which could result in a higher number or severity of crashes. We endorse the street trees proposed in the landscape panel that reflect the 35 mph anticipated posted speed, but note that the trees would not be allowed in the landscape panel per the proposed Executive Regulation if the project target speed were higher than the anticipated posted speed.

Second, we understand that MTA expects the operating speed for rail along Observation Drive will only be 35 mph, the same as for other motorized vehicles. Where light rail is on an independent right-of-way, a 50 mph design speed may be reasonable, but where it would be running in a roadway median with at-grade intersections, it is undesirable for transit vehicles to be operating at such a high speed. Similar to MTA's expectation for Observation Drive, the New Jersey Transit Hudson-Bergen Light Rail Project's Manual of Design Criteria (February 1996) states, "*Where the LRT operates within or adjacent to surface streets, the maximum design speed for the track alignment shall be limited to 35 mph.*"

Third, it appears that a 50 mph *roadway* design speed was used for this study rather than a 50 mph rail design speed, which would have required longer, flatter curves both vertically and horizontally, and created more impacts on adjacent properties and environmental resources. It appears that the current design would accommodate only a 27 mph operating speed for LRT along the curves in the Little Seneca Creek Stream Valley.

We recommend that the design speed be lowered to 35 mph to be consistent with the proposed target speed standard and anticipated posted speed.

Similar to the horizontal geometric criteria, the vertical criteria for rail are also more stringent, requiring flatter profiles in stream valleys, for example. It appears that MTA has not yet done a full review of the Prospectus. If the current design proves insufficient to accommodate rail at an adequate speed, the profile may need to be revised and require more impacts in the stream valley and at other environmentally sensitive locations in the project area.

The required geometric criteria for LRT should be included in the Phase II design and MTA's comments should be addressed before finalizing the Project Prospectus.

Whereas roadways are usually designed with straight-line tangent segments connected by horizontal curves, rail lines are designed with a spiral segment between the tangent and curve to eliminate abrupt shifts for their vehicles and passengers. The expectation for this project is that a rail line would be constructed with spirals even though the roadway median would not, resulting in undesirable variations in the offset between the curb and rail. ***We recommend that the roadway horizontal geometry be designed with spirals so that LRT can be accommodated without these variations.*** Should an LRT alternative not be chosen for the CCT, the spirals would still prove useful, providing a smoother-than-normal alignment of the roadway.

Median Width

A 58-foot-wide median is proposed throughout the length of the project. This width would accommodate the transitway and street trees, and would also accommodate some minor roadway widening should full-time parking near the stations be determined to be desirable. This width reflects the maximum width needed at the transit stations but more than is needed outside the station areas. For the Century Boulevard project, which the Planning Board reviewed as a Mandatory Referral on May 8, 2008, MCDOT proposed a minimum median width of 36 feet outside the station area and 56 feet at the station.

Given that this project has three stream crossings and impacts wetlands, one Conservation Easement, and North Germantown Greenway Park, strong consideration should be given to using a 36-foot-wide median outside station areas. The Army Corps of Engineers required a similar reduction in the median width of the Montrose Parkway West project as a condition of their permit for the stream crossing on that project. Master planned right-of-way has been established for Observation Drive as it crosses North Germantown Greenway Park. **The effects of a potentially narrower median but wider sidewalks recommended by staff on the bridge over Little Seneca Creek should be examined in Phase II.** We have an MOU with MCDOT that addresses how any park impacts of master planned roadways should be addressed. The project also impacts a 1.6-acre Conservation Easement on the Moyer and Sons property. This Conservation Easement predates both the 1991 Forest Conservation Law and the establishment of the Observation Drive alignment in the 1994 Clarksburg Master Plan. During Phase II mitigation strategies for impacted Conservation Easement areas must be identified.

Staff supports the Project Prospectus recommendation that the typical section of the roadway be temporarily reduced in width in the vicinity of the Moyer and Sons Moving and Storage Facility and the Montgomery County Public Schools (MCPS) property until such time when adjacent properties redevelop whereby the developer will be required to construct the ultimate section of the road. We support this recommendation because at the time of the Phase II Study, design considerations will be made to avoid the displacement of the Moyer and Sons property and minimize the loss of parking spaces to MCPS property. This recommendation responds to public comment regarding the impact of the proposed alignment of Observation Drive to the Moyer and Sons property.

Environmental Impacts

The recommended alternative is expected to have the following natural environmental impacts:

- 0.4 acres of wetlands (shadowing only) – Little Seneca Creek
- 22.6 acres of forest
- Three stream crossings
- 65 specimen trees (to be determined in Phase II)
- 1.6 acres of Conservation Easement

During Phase II of Facility Planning, the Project Prospectus notes that the issues identified by Phase I Facility Planning Process and the remaining elements of the project will be addressed in further detail to minimize the impacts as indicated above, including conducting Natural Resources Inventory/Forest Stand Delineation (NRI/FSD).

The Conservation Easement area impacted by this project must be replaced and should be identified during the Phase II Facility Planning study.

The Project Prospectus recommends Alternative 4 among three build alternatives to advance to Facility Planning Phase II because it meets the standards for a rail station in the area of the proposed Corridor Cities Transitway (CCT) station while following the Master Plan alignment.

Purpose and Need

The purpose of the Observation Drive Extended project is to provide a north-south corridor that links the existing Observation Drive to Stringtown Road, providing multi-modal access to rapidly developing residential and business area between I-270 and Frederick Road (MD 355). The Observation Drive Extended Project is needed to:

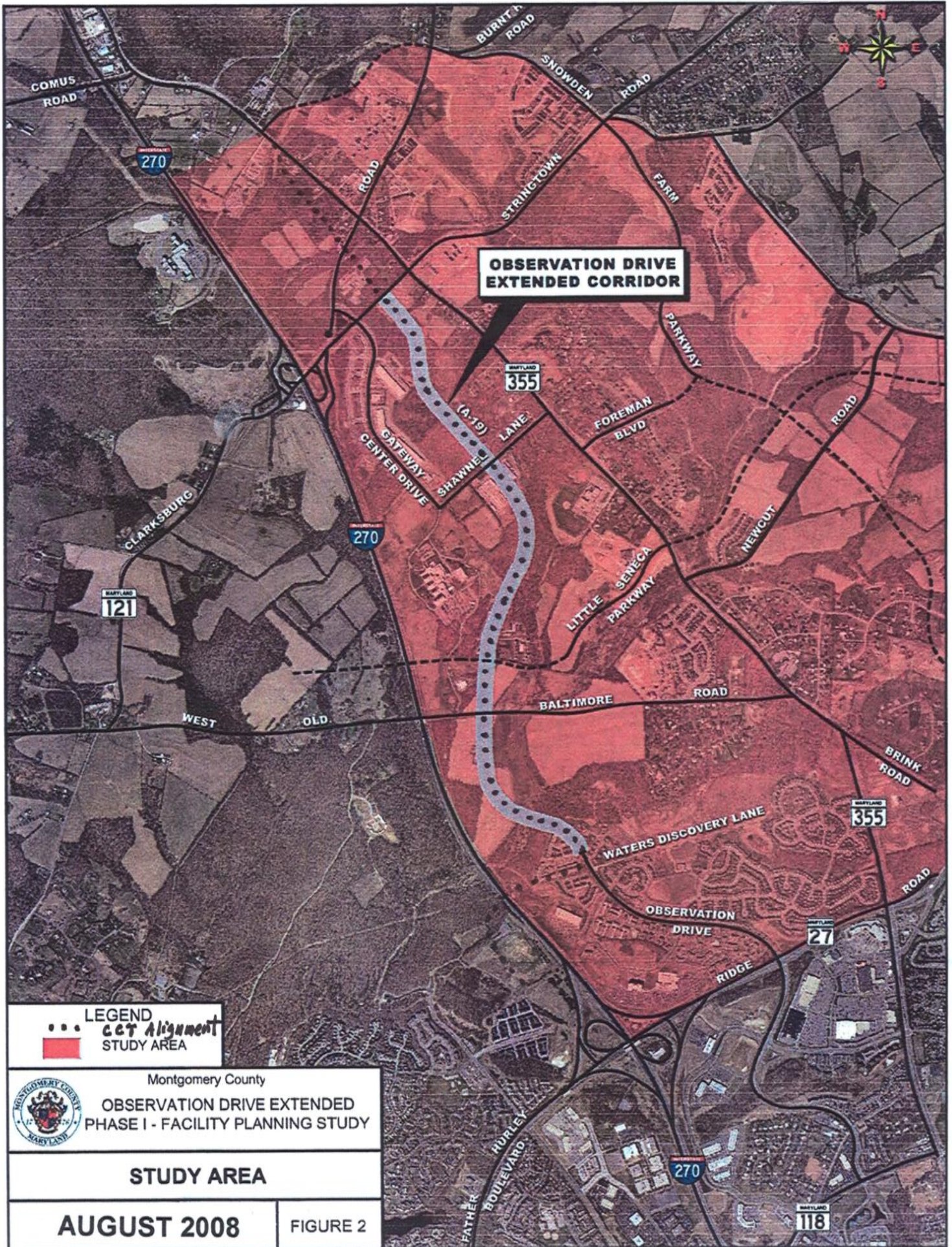
- Accommodate planned land use and future growth;
- Provide needed access to new and planned development;
- Improve mobility and safety for local trips;
- Provide alternative access for emergency vehicles;
- Preserve the corridor for planned transit facilities;
- Facilitate and provide bicycle and pedestrian access to transit connections; and
- Enhance community cohesion and the greenway system.

PUBLIC OUTREACH

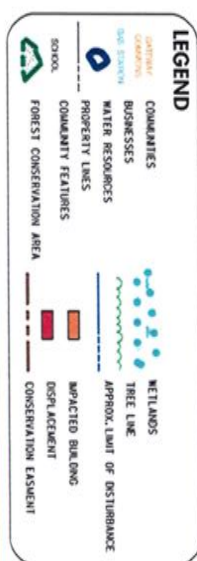
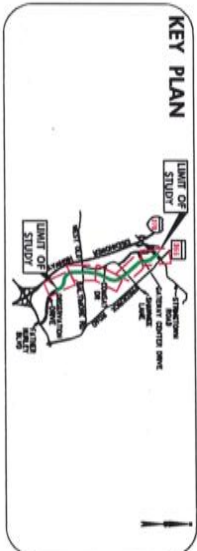
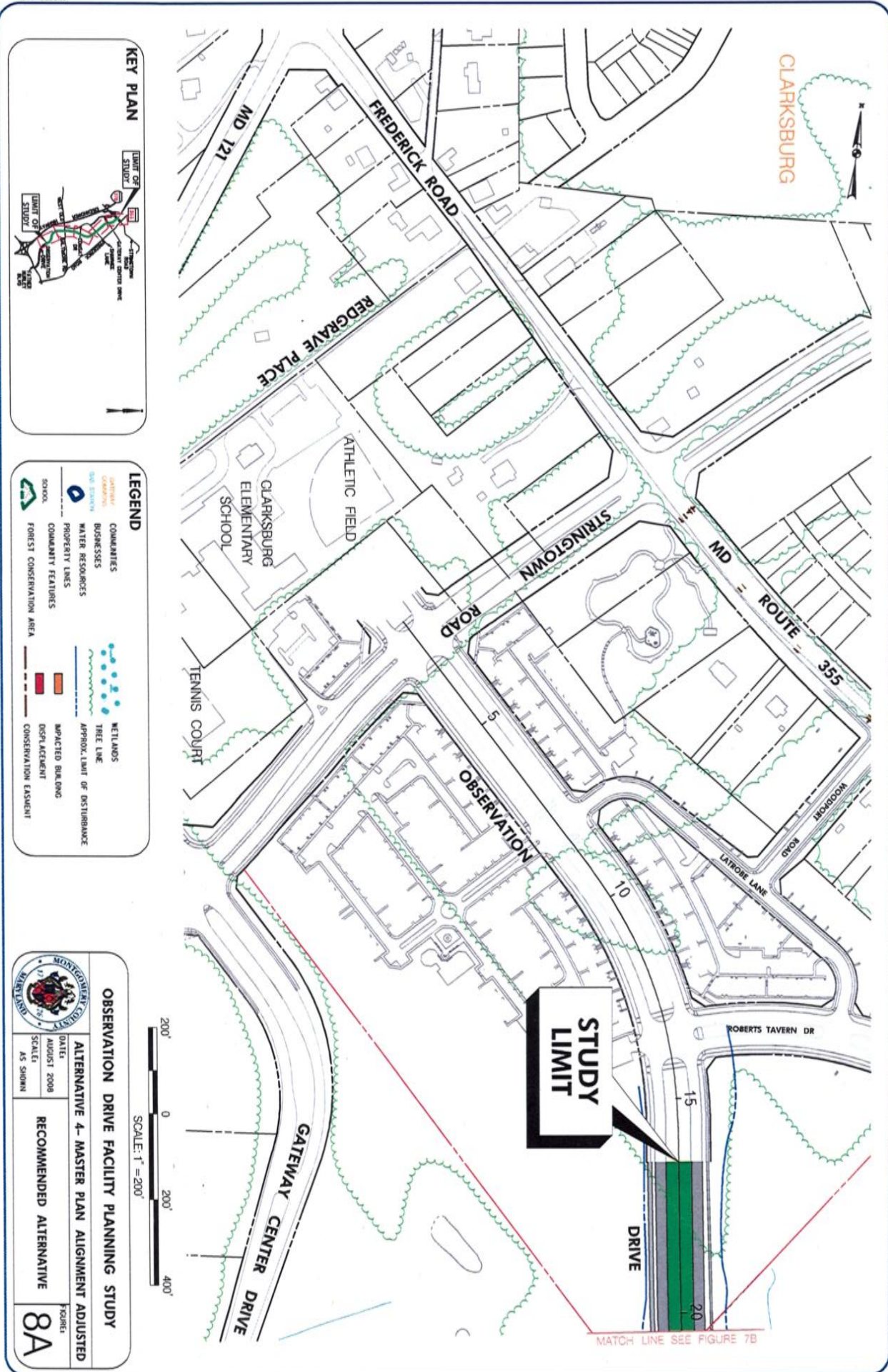
The MCDOT study team held two public meetings during the Phase I Facility Planning process. The first meeting, on April 6, 2005, was intended to share information about the project, discuss the Facility Planning Process, community concerns and to receive public input. The study team held the second public meeting on November 14, 2007, to inform and familiarize the citizens with the study process, purpose and need of the project, the two alignment alternatives, and the initial environmental findings.

Attachments

KK:tc



BY: Hasefer



OBSERVATION DRIVE FACILITY PLANNING STUDY

ALTERNATIVE 4- MASTER PLAN ALIGNMENT ADJUSTED

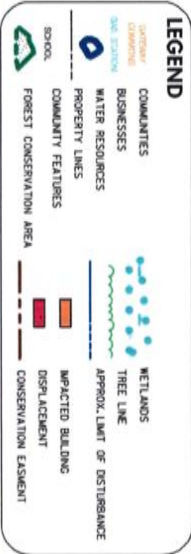
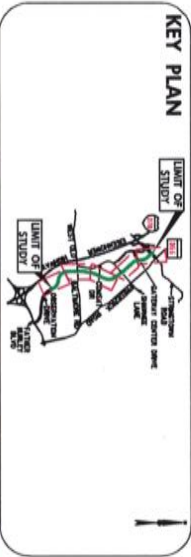
RECOMMENDED ALTERNATIVE

DATE: AUGUST 2008

SCALE: AS SHOWN

8A





MONTEGOMERY COUNTY

OBSERVATION DRIVE FACILITY PLANNING STUDY

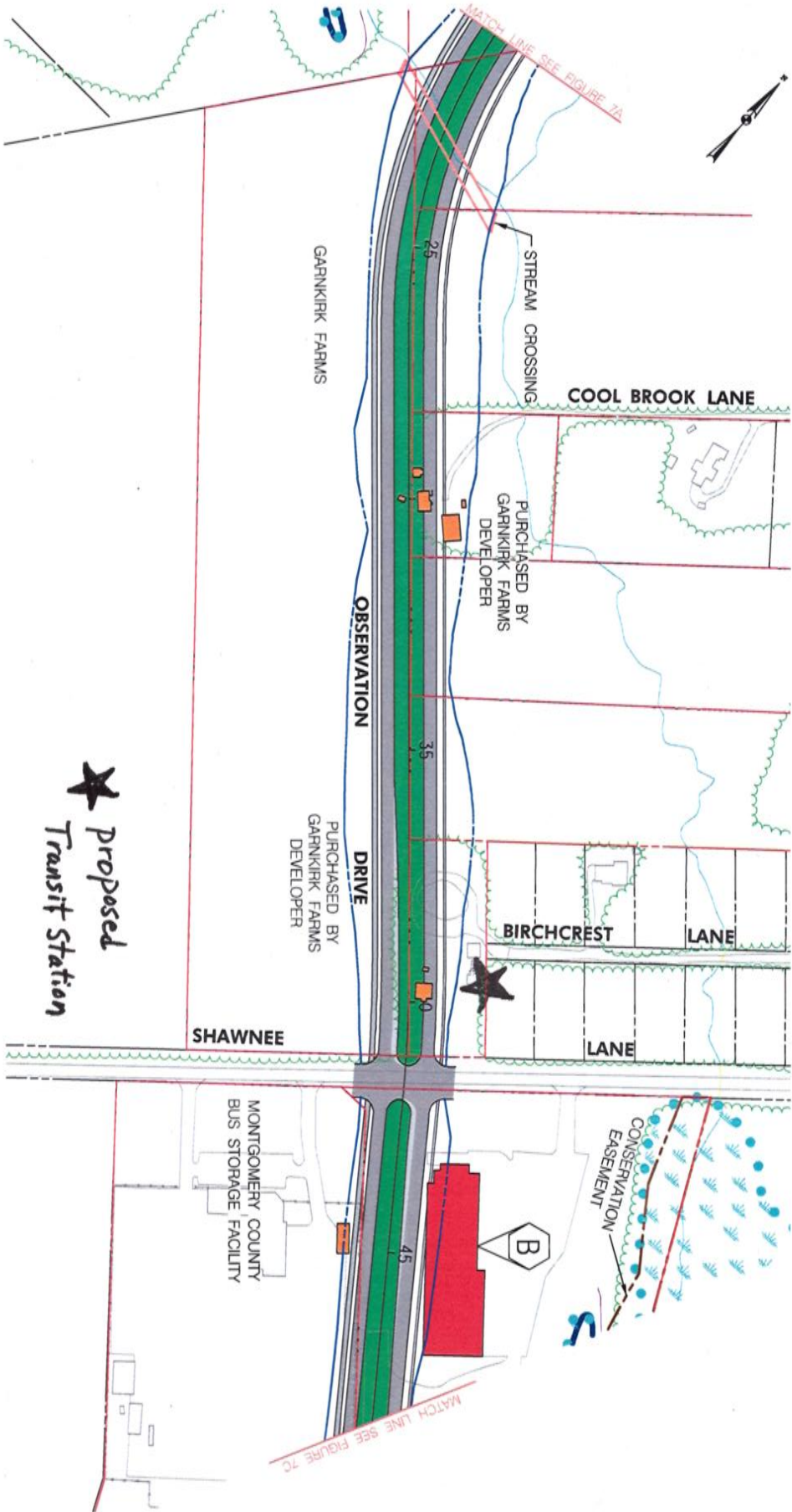
ALTERNATIVE 4 - MASTER PLAN ALIGNMENT ADJUSTED

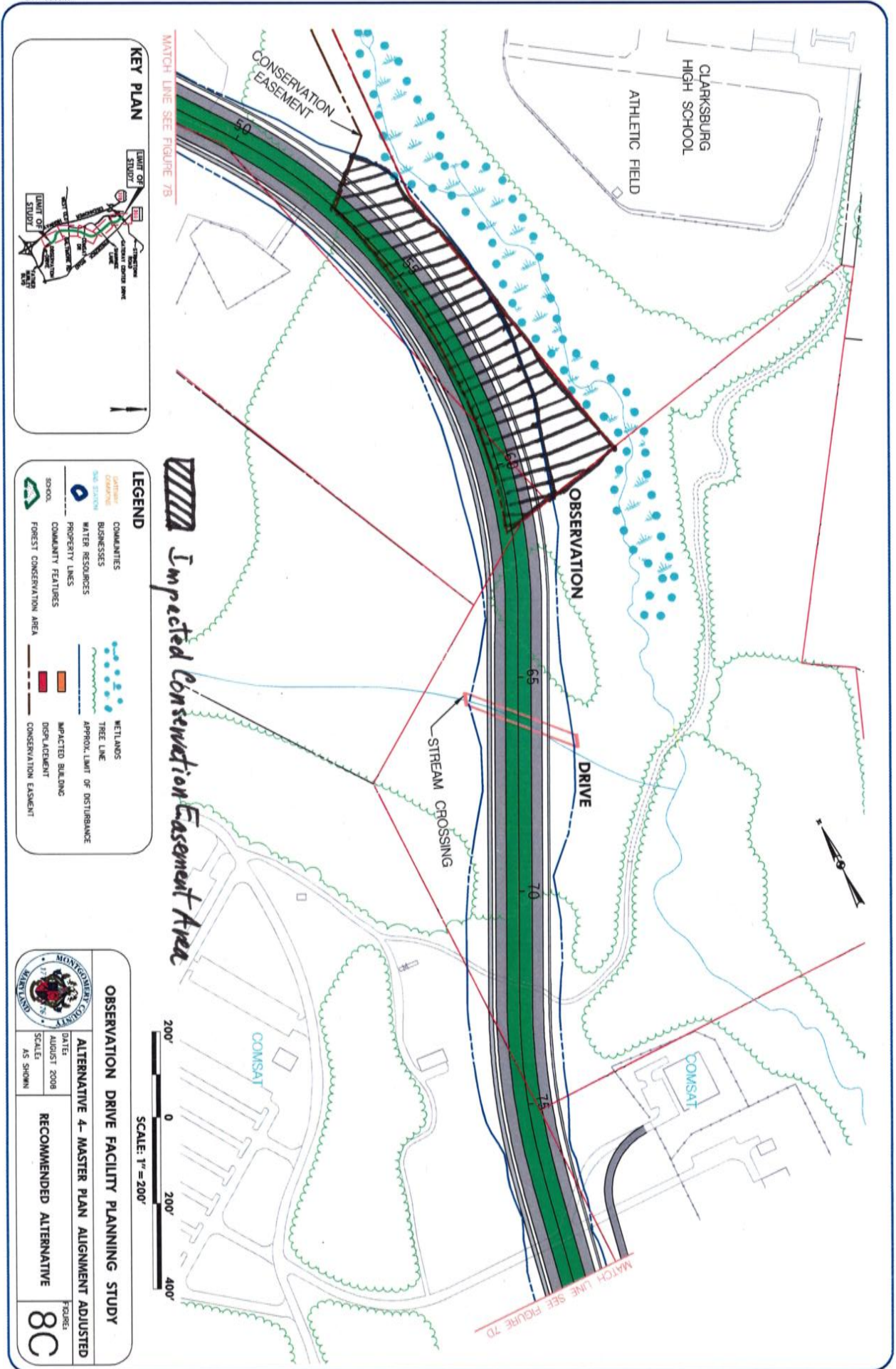
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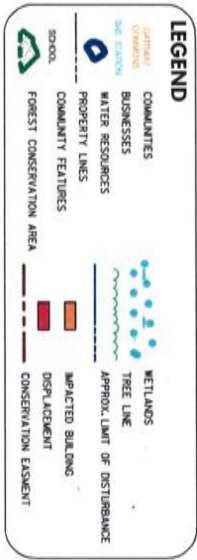
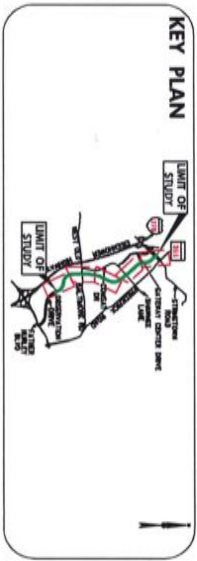
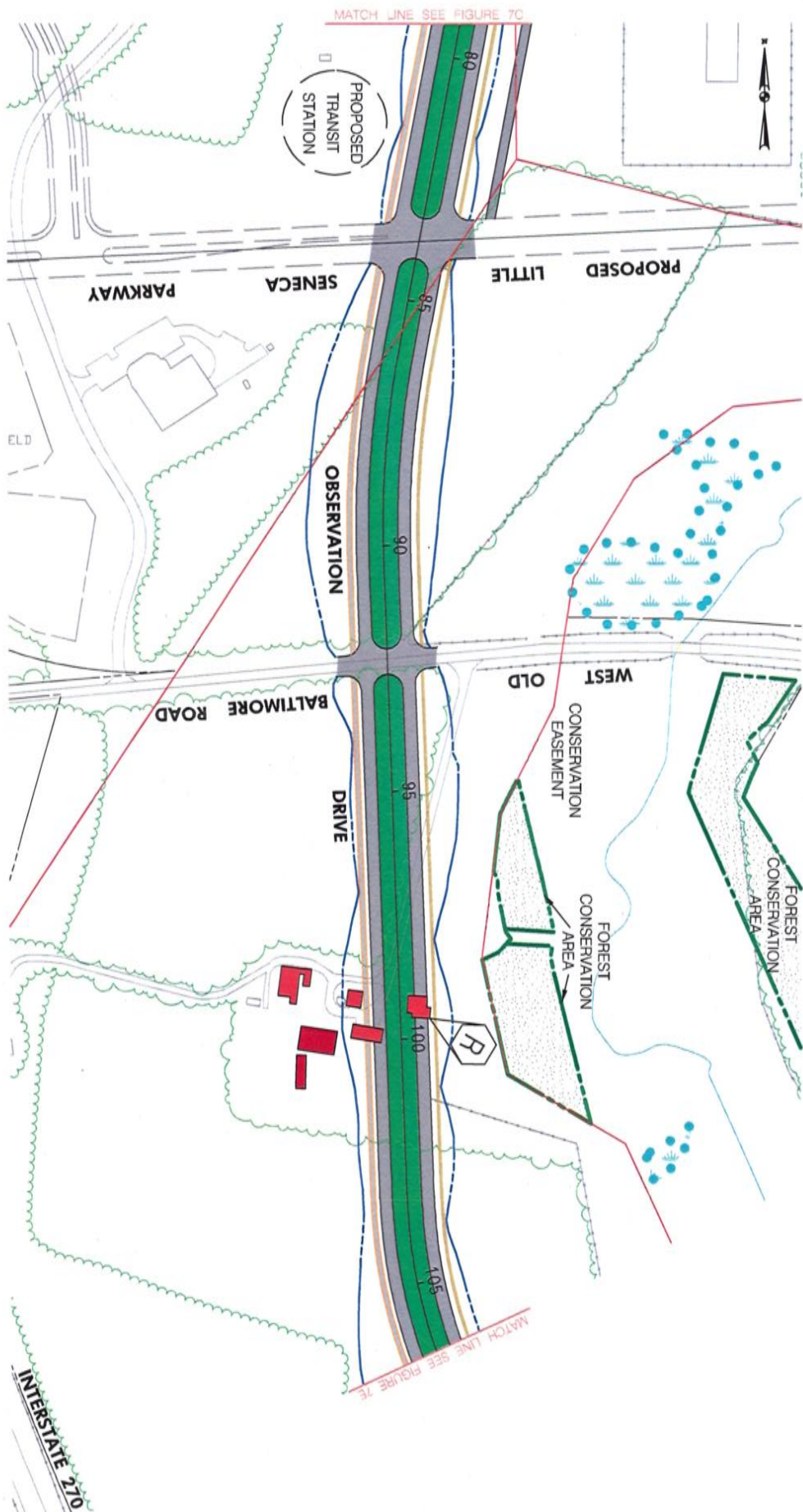
RECOMMENDED ALTERNATIVE

FIGURE: **8B**





Exh. # 2-3



MONTEGUT COUNTY

OBSERVATION DRIVE FACILITY PLANNING STUDY

ALTERNATIVE 4 - MASTER PLAN ALIGNMENT ADJUSTED

RECOMMENDED ALTERNATIVE

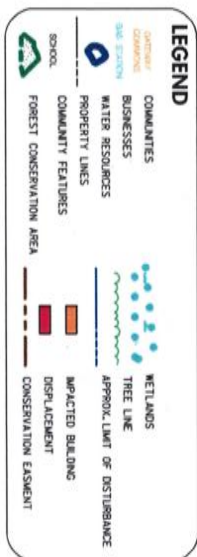
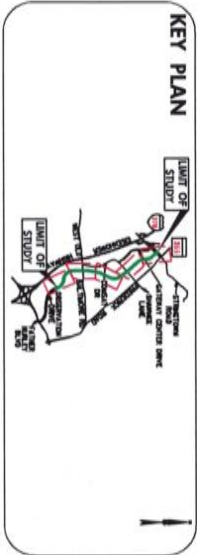
8D

DATE: AUGUST 2008
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FIGURE: 8D

Exh # 2-4

MATCH LINE SEE FIGURE 7D



MONTECALM COUNTY

OBSERVATION DRIVE FACILITY PLANNING STUDY

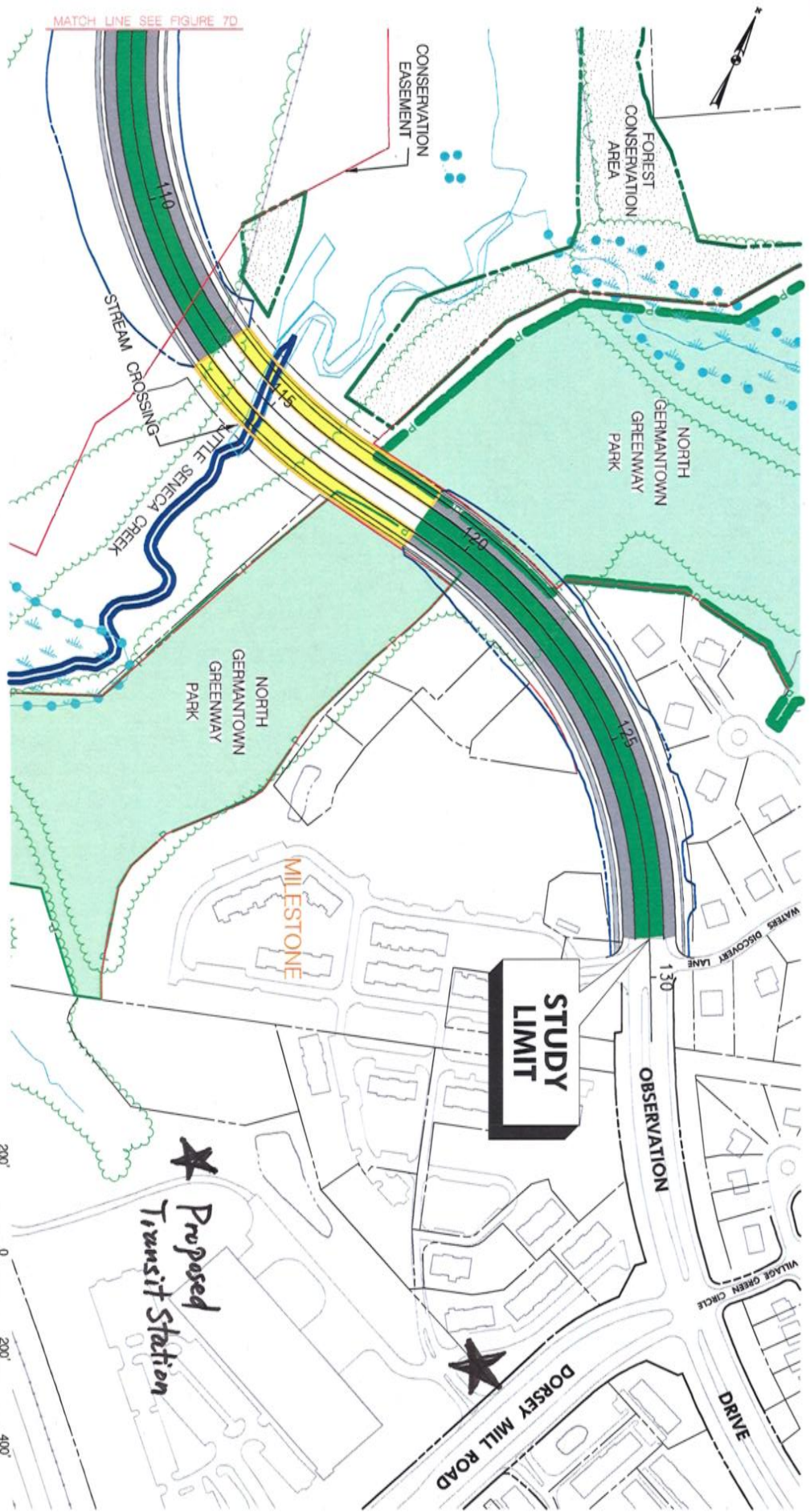
ALTERNATIVE 4 - MASTER PLAN ALIGNMENT ADJUSTED

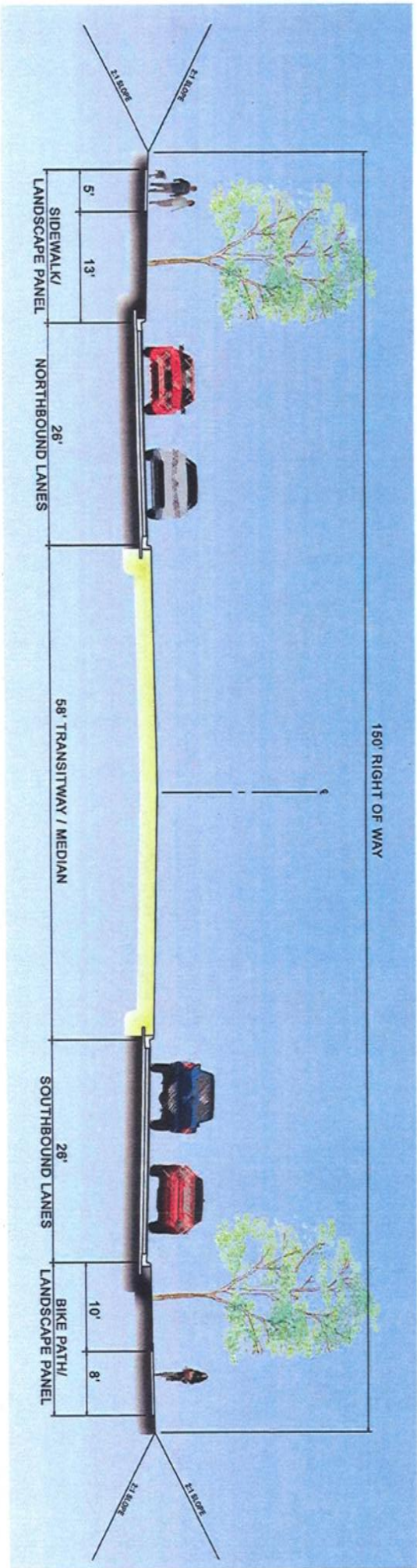
RECOMMENDED ALTERNATIVE

DATE: AUGUST 2008

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FIGURE: **8E**





ALTERNATE 4 - MASTER PLAN ALIGNMENT ADJUSTED

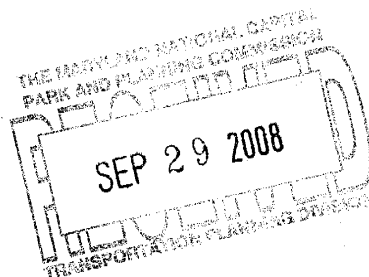
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MONTGOMERY COUNTY DEPARTMENT OF PARKS
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

September 25, 2008

MEMORANDUM



TO: Ki Kim, Planner Coordinator, Transportation Planning Division
Larry Cole, Highway Coordinator, Transportation Planning Division

FROM: Brooke Farquhar, Planner Coordinator, Park Planning and Stewardship Division
Brooke Farquhar

VIA: John Hench, Chief, Park Planning and Stewardship Division
John Hench

SUBJECT: DEPARTMENT OF PARKS REVIEW OF OBSERVATION DRIVE
EXTENDED: PHASE 1 FACILITY PLANNING STUDY

Department of Parks Staff Recommendation:

Include in Phase 2 of the facility planning process a bike path on east side of Observation Drive Extended from existing Observation Drive to Little Seneca Parkway. The bike path is essential to provide greenway connectivity as an important link of the Clarksburg Greenway as recommended in the Countywide Park Trails Plan, the Clarksburg Master Plan and the Clarksburg Greenway Implementation Study.

Approve expenditure of funds by MCDOT that were provided by Pulte Homes (see MCPB Resolution dated November 2007) to help finance the greenway bike trail.

Background:

The Department of Parks position on the need for a bikeway east of Observation Drive between Germantown and Little Seneca parkway has been voiced since the initiation of this project in 2005. Staff has submitted supporting text and maps from the Countywide Park Trails Plan, the Clarksburg Master Plan and the Clarksburg Greenway Implementation Study. Our support for the bike trail is included in minutes of team meetings. Montgomery County Department of Transportation (MCDOT) staff have already studied the feasibility of adding the bike path on the east side and concluded that the bike trail can be included within the existing right of way. **None of the greenway elements of these studies and plans are referenced in the Phase 1 Facility Planning Study despite being forwarded by park planning staff in August 2005.** Despite our recommendation, MCDOT is proposing a sidewalk rather than a bike trail on the east side of Observation Drive. This is the critical link in the greenway trail network that connects Germantown to Clarksburg. A bike trail on the east side will provide a park setting and a safe, pleasant experience for users that will include children.

Instead the Phase 1 Facility Plan directs pedestrians and cyclists to the west side of Observation Drive, to an area zoned for industrial uses that will feature curb cuts and driveway aprons. It will also require users to cross Observation Drive twice. We are not disagreeing that a bike trail should be on the west side; we have been recommending for 3 years that a bike trail also be provided on the east side for this critical less than mile stretch.

The Planning Board recognized the importance of this bike trail for continuation of the park like setting of the regional Clarksburg Greenway network in 2007. At that time, the Planning Board accepted from Pulte Homes Corporation a contribution of \$300,000 toward this greenway bike path. The Board agreed with staff that this contribution would meet Pulte's greenway requirement by facilitating a bike trail in a park like setting along Observation Drive.

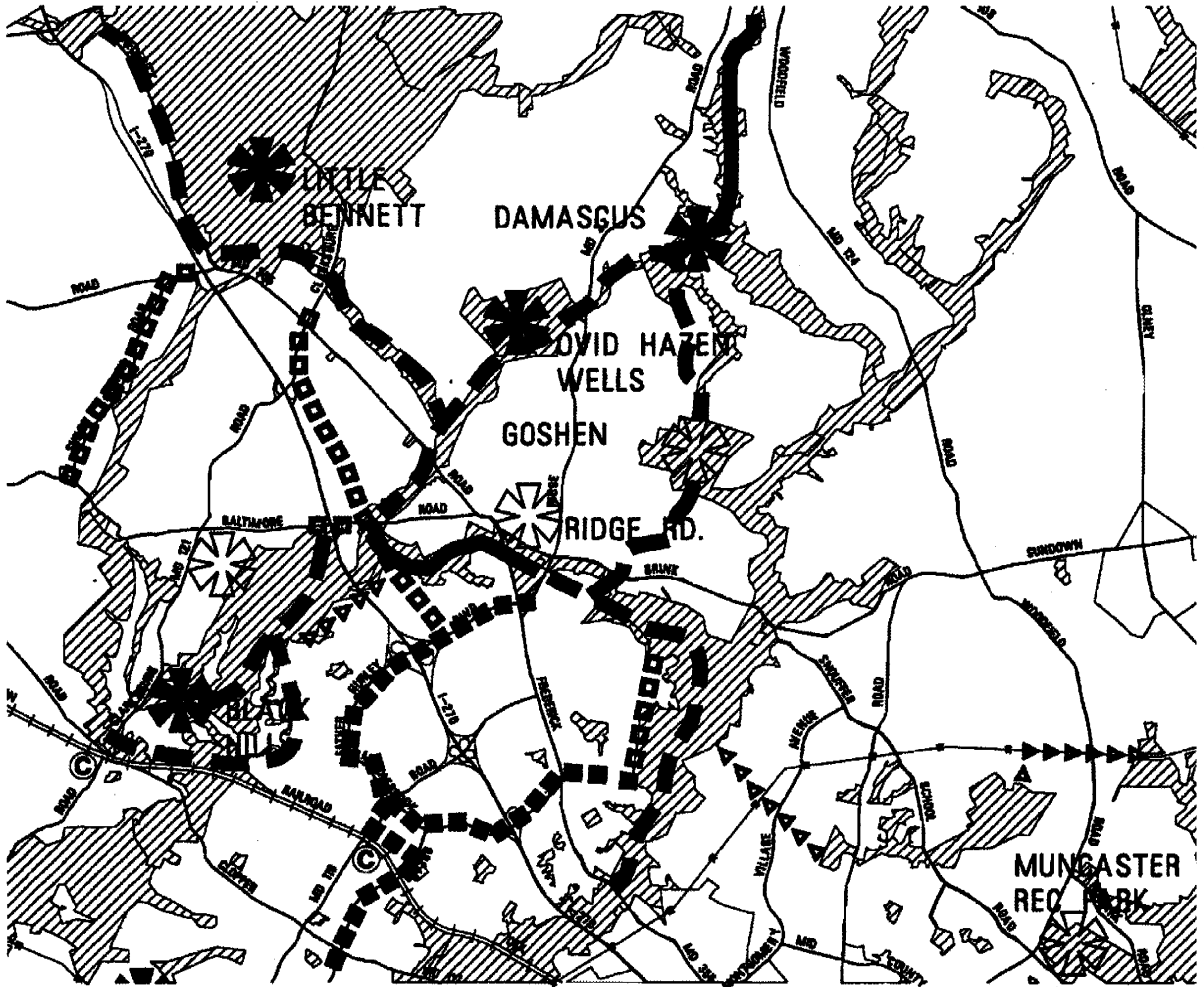
In closing, there is no discussion or rationale in the Phase 1 Facility Plan for placing a sidewalk rather than a bike trail on the east side in this one section of the project. For all the reasons stated, Department of Parks feels that in the public's best interest a bike trail on the east side should be part of the Phase 2 Facility Plan for Observation Drive Extended.

Attachments

BF:cg

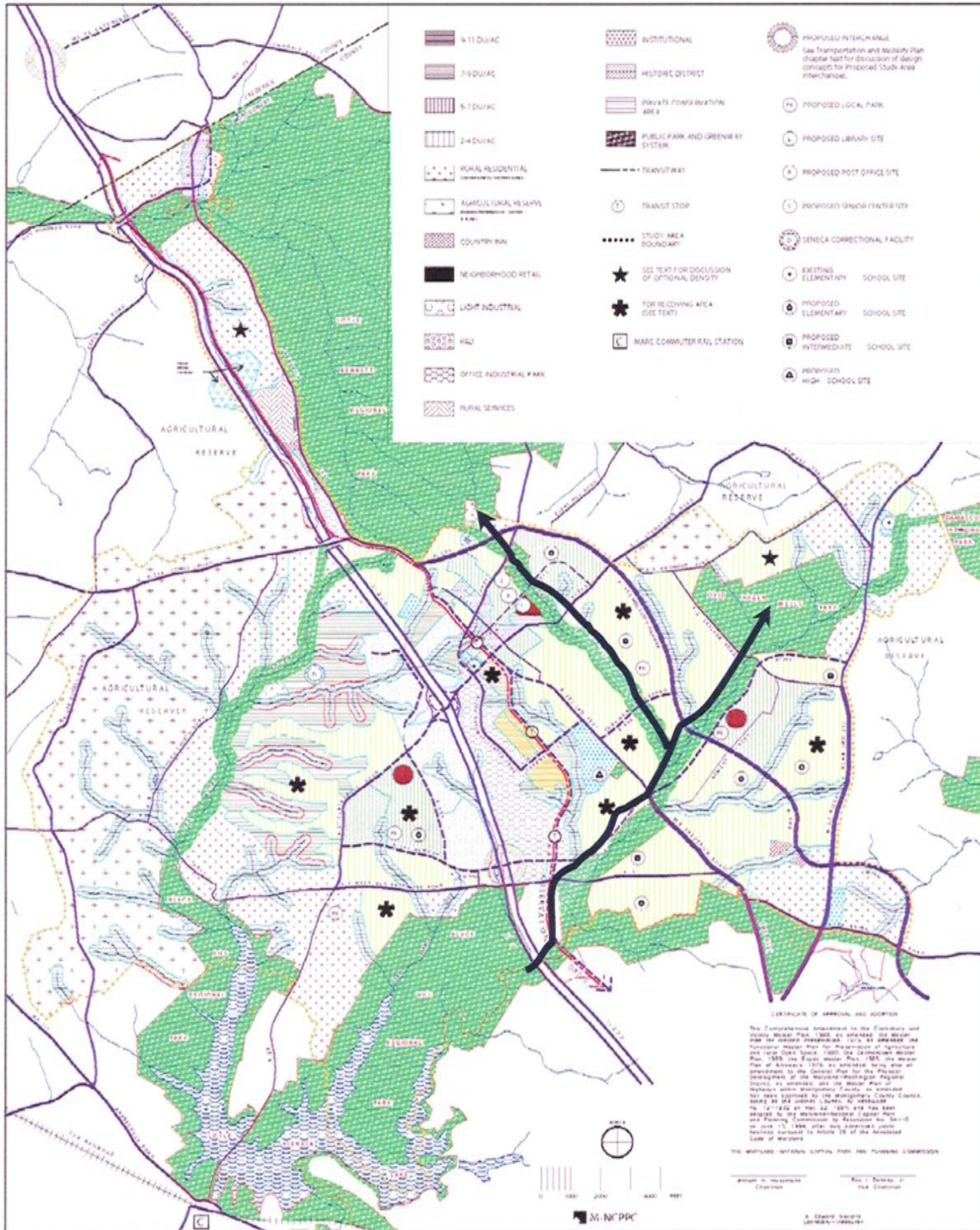
CC: Gordon Rosenthal
Mike Horrigan
Wendy Hanley
Doug Alexander
Marian Elsasser
Todd Johnson
Mitra Pedoeem
Mary Bradford
Mike Riley

COUNTYWIDE HARD SURFACE CONCEPT: UPCOUNTY CORRIDOR

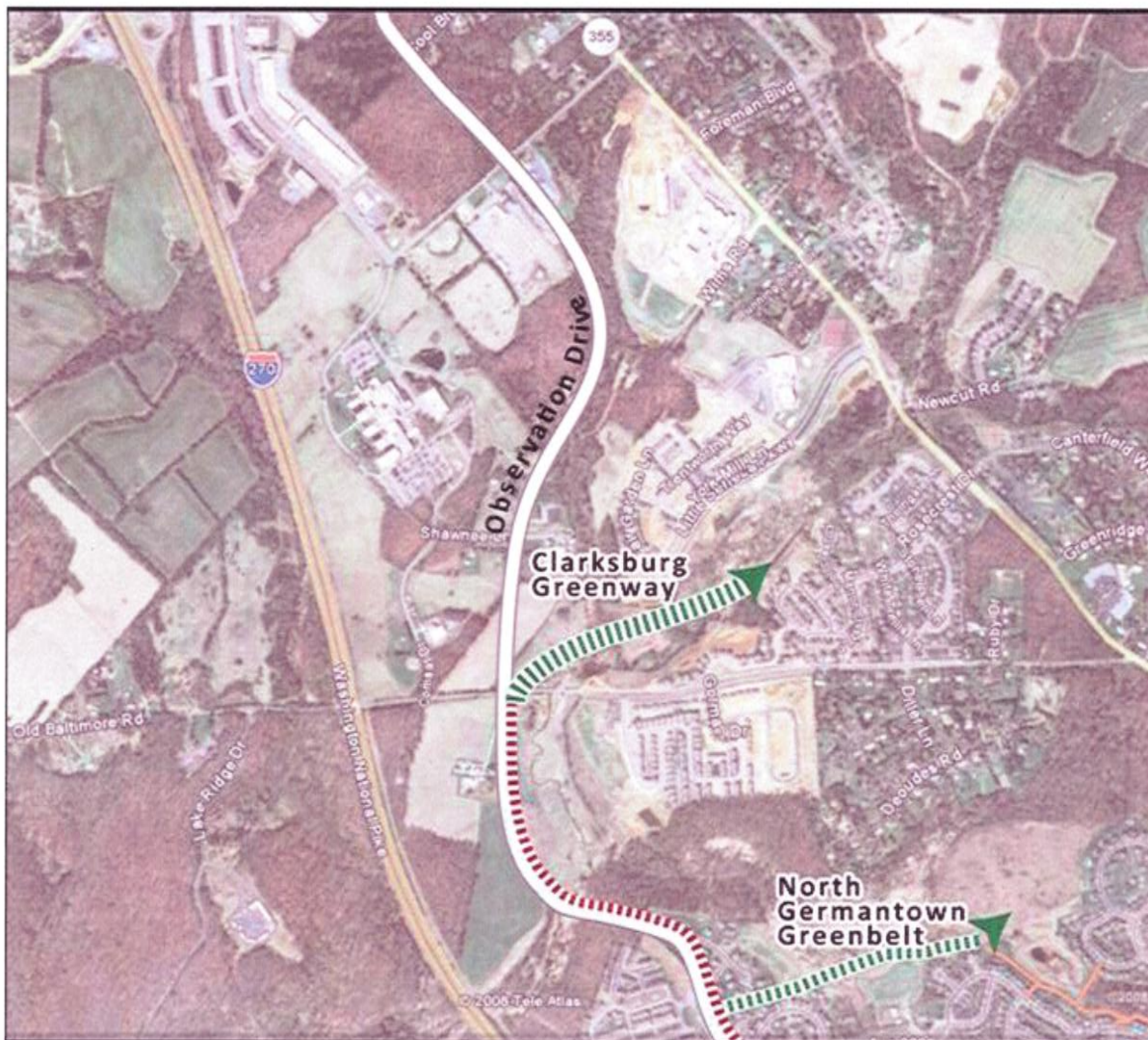


	EXISTING	PROPOSED
HARD SURFACE RECREATIONAL TRAILS		
NON-PARK CONNECTOR BETWEEN RECREATIONAL TRAILS		
Bikeway		
Other (See Text)		
REGIONAL/RECREATIONAL PARK DESTINATIONS		

Attachment B – Clarksburg Greenway Trail Concept PROPOSED LAND USE AND TRANSPORTATION PLAN



Attachment C - Hard Surface Trail Concept Greenway Connections – Aerial View



Attachment D - Hard Surface Trail Concept Greenway Connections – Planning View

