

MD 355 Intersection Improvements (CTP Project No. MO5365187), Mandatory Referral No. MR201829



Stephen Aldrich, Master Planner/Supervisor, FP&P, stephen.aldrich@montgomeryplanning.org, 301-495-4528



Matthew Harper, Acting Supervisor, Park Planning & Stewardship, matthew.harper@montgomeryparks.org, (301) 650-4383



Pamela Dunn, Chief, FP&P, pamela.dunn@montgomeryplanning.org, 301-650-5649

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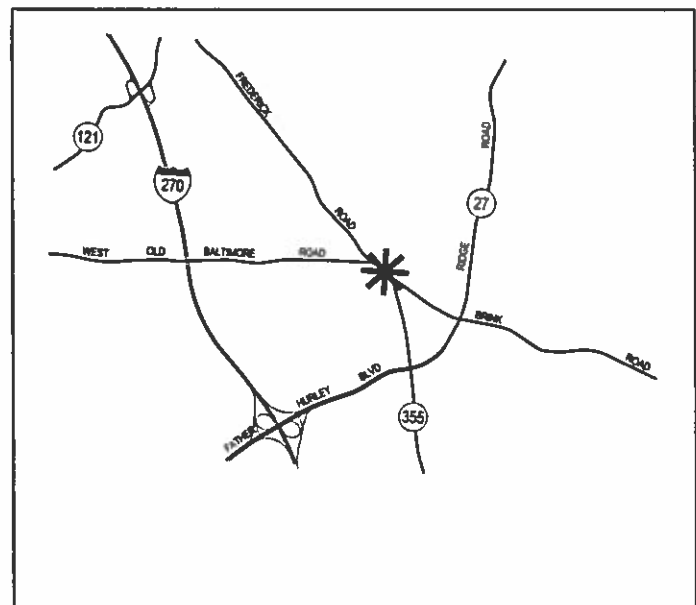
Description

Mandatory Referral MR2018029: MD 355 Intersection Improvements at West Old Baltimore Road

Construct intersection improvements at the intersection of MD 355 with West Old Baltimore Road. This will include the design and construction of a traffic signal, roadway, bicycle and pedestrian improvements along a 2,030-foot-long section of MD 355 and a 400-foot-long section of West Old Baltimore Road.

Master Plan: 1994 Clarksburg

- Applicant: Maryland Department of Transportation – State Highway Administration



Summary

- Staff recommends approval of the Mandatory Referral (Item 8) with comments shown on page 3.
- This project is located within the Clarksburg Special Protection Area (SPA) and on SHA right-of-way.
- The Maryland Department of Transportation State Highway Administration proposes to construct intersection improvements at the intersection of MD 355 with West Old Baltimore Road. This will replace the existing temporary traffic signal now in place. The project includes intersection/geometric modifications to a 2,030-foot long section of MD 355 and a 400-foot-long section of West Old Baltimore Road in Clarksburg, Maryland. This project is CTP Project No. MO5365187; state funds will be used for the project.

The site vicinity and project location are displayed in Figure 1. The project includes the following improvements:

- Widening and realignment of the existing MD 355/West Old Baltimore Road intersection to provide a traffic signal, an exclusive northbound left-turn lane, an exclusive southbound right-turn lane, and a separate left-turn lane and a channelized right-turn lane on the West Old Baltimore Road approach to the intersection,
- Construction of a 5-foot wide bike lane in the southbound direction on MD 355 within the intersection limits of Frederick Road with West Old Baltimore Road and Greenbrook Road,
- Construction of an 8-foot wide shoulder for bike use in the northbound direction on MD 355 within the project limits,
- Construction of a 5-foot wide sidewalk along the east side of MD 355 (Frederick Road) between the Greenridge Baptist Church and Greentree Drive (850 feet total length), and
- Construction of a ten-foot wide shared use path along the west side of MD 355 (Frederick Road) along the project limits from the vicinity of the Greenridge Baptist Church to approximately 450 feet north of Brink Road (1,615 feet total length).



Figure 1: Project Limits and Site Vicinity

Recommendations

We recommend that the Board approve this project with the following comments transmitted to the Maryland Department of Transportation State Highway Administration:

1. Submit roadway and stream restoration construction plans to the M-NCPPC Department of Parks for review as part of the park permit process to ensure that all work on Parkland is performed in accordance with M-NCPPC standard details, specifications, and policies.
2. The provision of private driveways within the functional areas of signalized intersections should be avoided wherever possible. Two such driveways for 21913 Frederick Road and 21917 Frederick Road are located directly within this planned intersection. These driveway locations should be relocated, at a minimum, outside of the immediate intersection area defined by the stop bars and crosswalks on each intersection approach. This would require a shifting of the driveway at 21913 Frederick Road by 20 feet to the southeast and the driveway at 21917 Frederick Road by about 40 feet to northwest (opposite side of the proposed crosswalk).
3. MDOT SHA is requested to develop a long-term improvement concept or corridor study for Frederick Road through the Clarksburg planning area. In the vicinity of West Old Baltimore Road, this concept would need to accommodate the planned four-lane divided cross section with planned bus rapid transit and a 250'-wide planned Right-of-Way.

Existing Conditions

MD 355 (Frederick Road) is a two-lane, undivided roadway that travels in a northwest-southeast direction. Within the project limits, it is classified as Suburban Controlled Major Highway with planned Bus Rapid Transit according to Montgomery County's Master Plan of Highways and Transitways. The existing travel lanes are 11 feet wide with narrow (varying from one to four feet in width) paved shoulders. The posted speed limit is 45 MPH and the roadway's horizontal alignment is curvilinear. The roadway is primarily an open-section design (no curbs) with no pedestrian facilities or bicycle accommodations.

Land uses along MD 355 (Frederick Road) within the project limits include vacant land, residential neighborhood, forest and the Greenridge Baptist Church immediately to the northeast of the project site. Figure 2 illustrates the surrounding land use.



Figure 2. Generalized Land Use

Proposed Improvements/Mandatory Referral Narrative

This project, located in Montgomery County, is for roadway and intersection improvement along MD 355 (Frederick Road) near West Old Baltimore Road. This project is an intersection capacity improvement that will slightly realign the existing intersection to a 90-degree angle, add geometric lane improvements and signalization, and add bicycle and pedestrian accommodations. The project is anticipated to start construction in FY19 and be completed by FY21. The total length of this project is 2,030 feet on MD 355 and 400 feet on West Old Baltimore Road. Currently both MD 355 and West Old Baltimore Road are open section two-lane roadways.

The proposed geometric improvements include providing two eleven-foot (11') through lanes, along with an eight-foot (8') shoulder for bike use on the northbound side, a five-foot wide bike lane in the southbound direction, an eleven-foot (11') wide left-turn lane on northbound MD 355, addition of deceleration and acceleration right-turn lanes along southbound MD 355 (11' each), and the realignment of West Old Baltimore Road intersection with MD 355. The addition of a signal at the realigned West Old Baltimore Road intersection has also been incorporated into this project. The southbound direction of MD 355 will include curbing, while the northbound direction will remain as an open-section design with shoulders, ditches and swales. These improvements provide improved traffic operations as well as improved safety for the turning movements at the intersection. According to MDOT SHA, crash data confirms that the rear end collision rate for this intersection is significantly higher than the statewide rate.

Widening of the roadway for these geometric improvements and providing bike compatibility requires replacement of an existing small structure (Structure No. 15025X01) where a perennial tributary of Little Seneca Creek crosses underneath Frederick Road. This is located between Greenbrook Drive and Brink Road. Under the project, the typical section for West Old Baltimore Road and the southbound side of MD 355 will provide curb and gutter with adjacent sidewalk or shared use path along with a new drainage system. The northbound side will provide sidewalk six feet off the open shoulder to connect from the church to Greenbrook Drive, a distance of approximately 850 linear feet. The realignment of Brink Road, adjacent to the project, will occur prior to the project construction by a developer. The shared use path in the project will connect to a Montgomery County trail project (Frederick Road Bike Path CIP Project 501118) approximately 450 feet north of Brink Road which extends south to connect to the North Germantown Trail.

The signing and striping plan for the proposed project is included in this Staff Report as Attachment A. This project was generally designed using a design speed of 50 miles per hour, with the intention of MDOT SHA to operate this road at a posted speed limit of 45 mph. The current master planned target speed on MD 355 in this area is 40 mph.

Typical Sections

The proposed typical section along Frederick Road generally contains the follow elements:

- 10'-wide shared use path on the west side of MD 355 (1,615 feet total length) starting at the northern project limits,
- No buffer for the northernmost 170 feet (station 11+90 to 13+60) followed by generally a variable width buffer ranging from 4' to 13'9".
- 5'-wide one-way southbound bike lane,
- 11' travel lanes (one per direction),
- 8'-wide shoulder for bike use in the northbound direction, and
- 5'-wide sidewalk with a 6'-wide buffer between the Greenridge Baptist Church and Greenbrook Drive (850 feet total length).
- The road will be curbed in the southbound direction only between Stations 12+08 and 28+79.69 (approximately 1,670 feet total length)

In addition, for the intersection of MD 355 with West Old Baltimore Road, the following features are being added:

- Northbound 400-foot long left-turn lane on MD 355,
- Southbound 350-foot long right-turn lane on MD 355,
- Eastbound West Old Baltimore Road approach re-aligned and widened to provide a 160-foot long left-turn lane and a 160-foot long right-turn lane. The right-turn lane will provide a free-flow movement from eastbound West Old Baltimore Road onto southbound MD 355 with a 495-foot long acceleration lane downstream from the intersection.

The proposed shared use path width is 10-feet wide, which is consistent with MDOT SHA Bicycle Design Guidelines and Montgomery County standards. National, state and county guidelines call for a minimum 6'-wide buffer between the roadway edge and sidewalks or shared use paths. Except for the first 170 feet of the path on the northern end and a short section where the southbound right-turn lane is added, this minimum is exceeded for approximately 80 percent of the path length. The shared use path will connect at the southern project limits with a planned shared use path to be constructed by MCDOT (CIP Project 501118).

The provision of a shared use path along the west side of MD 355 is consistent with the ongoing Bicycle Master Plan recommendations. The provision of on-road bike lanes is consistent with MDOT SHA Bike Policy; however, it is not a recommendation in the ongoing Bicycle Master Plan.

The provision of a 5'-wide sidewalk with a 6'-wide vegetated buffer on the east side of MD 355 meets MDOT SHA and Montgomery County standards.

Relationship to Adjacent Transportation Projects

There are two adjacent transportation projects that require coordination with the subject. These include the Frederick Road Bike Path project (MCDOT CIP project # 500118) and the MD 355/Brink Road intersection improvements. The Frederick Road Bike Path project will include a 10'-wide shared use path on the west side of MD 355 between Stringtown Road and 325 feet south of Little Seneca Creek (where it connects to an existing 8'-wide shared use path which then ends approximately 550 feet north of the

northern limits of this subject project). The shared use paths will not connect, and a 550-foot long gap will remain. In addition, this same MCDOT Bike path project will construct a 10'-wide shared use path from the southern limit of the shared use path being constructed by the subject project and will continue south to its completion where it will connect to the North Germantown Trail. The MCDOT project is anticipated to be constructed by August 2019. To the south of the subject project on MD 355 at Brink Road, a developer project by the Skylark development is anticipated. Currently this work is under construction. MDOT SHA has been coordinating with MCDOT on an ongoing basis.

Traffic Study and Supporting Information

Traffic evaluations by MDOT SHA were prepared for the subject project on several occasions between 2014 and 2018. These evaluations included traffic counts, speed studies, signal warrant analyses, turn lane storage analysis, traffic forecasts and an evaluation of existing and future peak hour traffic operations. Through this process, it was determined that the proposed intersection geometry would provide acceptable traffic operations for existing conditions; however, long-range 2034 traffic forecasts would require additional roadway improvements to provide acceptable traffic operations (see next section). The required improvement identified for long-range consideration is a widening of MD 355 to provide one additional travel lane in each direction. The subject project does not accommodate this future widening (two travel lanes) which would have to occur entirely on the north/east side of MD 355.

Adequate Facilities – Subdivision Staging Policy – Intersection Delay

The subject project is located within the Clarksburg policy area per the 2016 Subdivision Staging Policy (SSP). All Master Plans, development projects, and Capital Improvement Projects must comply with SSP congestion/delay standard for the Clarksburg policy area which is an average intersection delay no greater than 51 seconds per vehicle. Per documents submitted by MDOT SHA, the intersection of MD 355 at West Old Baltimore Road was projected to have existing commuter peak hour average intersection delays of 13 seconds or less per vehicle during the morning and evening peak hours once the project is constructed and operational. By 2034, these delays will exceed the SSP congestion standard during the morning peak hour with an average intersection delay of 76 seconds/vehicle as projected by MDOT SHA.

Constraints and Impacts

Environmental Analysis

This project is located primarily within road right-of-way in the Clarksburg SPA. The watershed location is the Black Hills Mainstem sub-watershed of Little Seneca Creek, currently with good water quality. Section 19-62(c) of the Montgomery County Code states:

Publicly owned property. Before engaging in any land-disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.

Section 19-62(c) encourages, but does not require, state agencies to submit water quality plans for work conducted on publicly-owned property. In this case, SHA has declined to submit a water quality plan. Under the Environment Article of the Maryland Code, SHA is required to receive approval of a sediment control plan and a stormwater management plan, as applicable, from the Maryland Department of the Environment.

Stormwater Management

A stormwater management pond is proposed, along with three bio-swales and five micro-bioretenion facilities. These are proposed to address Stormwater Management and Environmental Site Design (ESD) requirements. Although discharge rate will still have increases during 1-yr and 10-yr storm events, it is anticipated that the increase will not have any noticeable adverse impact on the stream. Instream stabilization measures are proposed both upstream and downstream of the culvert under MD 355. Stormwater concept approval was obtained from MDOT SHA Plan Review Division (PRD).

Forest Conservation

According to MD State Department of Natural Resources, a Forest Conservation Plan has been approved for this intersection improvement. Two and a half acres will be removed. Nearly all of the existing roadside areas in this vicinity are heavily forested resulting in the 2.5 acre loss. Mitigation will consist of 0.28 acres of forest will be replanted along the finished roadway. The State accepted an in-lieu fee payment for the remaining 2.23 acres of mitigation.

Environmental Buffer Protection

This project involves the crossing of the Black Hills tributary to Little Seneca Creek. Significant areas of Floodplain, Riparian Forest, and Wetlands will be impacted. This is due primarily to the location of the existing intersection within a highly sensitive area.

The existing roadway culvert will be replaced with a larger extended box culvert. The upstream and downstream areas of the crossing will be realigned and stabilized. The project will permanently impact 230 square feet of emergent nontidal wetland, 6,941 square feet of wetland buffer and 94 linear feet of a perennial tributary. 85,080 square feet of 100-year floodplain will be impacted.

Impacts to these areas will be mitigated by making improvements to stormwater management, stream channel restoration, and replacement plantings in sensitive areas. SHA is undertaking a stream restoration under the direction of the Department of Parks. In addition, a payment into the Nontidal Wetlands Compensation Fund will be made.

Impervious Surfaces

As a result of proposed improvement, there will be 1.46 acres of new impervious area, 0.44 acres of redeveloped impervious area, and 0.13 acres of existing impervious area removal.

Wetlands and Waters of the U.S.

SHA-Environmental Planning Division conducted an identification/delineation of wetlands and waters of the U.S. (WUS) within the project area. The study area is within the Seneca Creek watershed and subject to United States Army Corps of Engineers (US ACE) and/or Maryland Department of the Environment (MDE) regulation. Temporary and permanent impacts were proposed to resources that require the submittal of a Joint Permit Application (JPA) to MDE/ US ACE. The project area occurs within FEMA FIRM panel 240049005 0B, which shows that the project area is located outside of the 1 00- year floodplain.

The project will include widening MD 355, replacing an existing roadway culvert with a larger, extended double box culvert, realigning and stabilizing a perennial stream upstream and downstream of the culvert, drainage improvements, and use of temporary erosion and sediment controls. The project will permanently impact 230 square feet of emergent nontidal wetland, 6, 941 square feet to the 25 -foot nontidal wetland buffer, and 94 linear feet of a perennial tributary to Little Seneca Creek. The project will temporarily impact 657 linear feet of a perennial tributary to Little Seneca Creek. The project will impact 85,080 square feet of 100- year floodplain. The project is proposed within the watershed of Seneca Creek, a Use IV-P waterway. The Applicant proposes to mitigate for permanent impacts to emergent nontidal wetlands through payment into the Nontidal Wetlands Compensation Fund. The project is located along MD 355 approximately 100 feet southeast of the MD 355/Greenbrook Drive intersection in Montgomery County, Maryland.

Descriptions of delineated resources are listed below.

Waters of the U.S. (WUS)

WUS 001 – WUS 001 is a perennial stream which flows west through a box culvert beneath MD 355. The stream is a tributary to Little Seneca Creek and is designated as a Use IV-P stream. The stream was previously stabilized around the box culvert with gabion baskets and rip rap. Otherwise, the channel' s substrate and banks consist of cobbles, gravel, silt, and sand.

WUS 002 – WUS 002 is an intermittent stream which begins at a culvert under Greenbrook Drive and flows south into WUS 001. The stream is also designated as a Use IV-P stream. WUS 002 was delineated in 2013 and is downcutting from the culvert and also problematically incised. Channel substrate and banks consist of cobble, silt and sand.

WUS 003 – WUS 003 is an ephemeral stream which begins as a seep and flows to WUS 001. The stream is also designated as a Use IV-P stream. WUS 003 has defined bed and banks but likely only has flow during a portion of the year. Channel substrate and banks consist of silt although debris/organic matter were also observed within the stream.

Wetlands

WET001 – WET001 is a palustrine emergent wetland located outside of the study area, west of MD 355 and south of WUS 001. WET001 drains northwest through a swale towards WUS 001. The wetland is fed by a seep and surface runoff. Standing water, hydrogen sulfide odor, oxidized rhizospheres, and drainage patterns were observed within the wetland.

WET002 – WET002 is a palustrine emergent wetland located immediately along WUS 001 in the northeast portion of the study area, north of MD 355 and east of Greenbrook Drive.

WET002 drains south, directly into the floodplain of WUS 001. The wetland is fed by a seep and surface runoff. Standing water, water stained leaves, drainage patterns, and moss trim lines were observed within the wetland. Skunk cabbage (*Symplocarpus foetidus*) was observed within the wetland area, although WET002 was sparsely vegetated due to the time of year of the survey.

Park Property

Parkland on the south side of the roadway, containing a portion of the perennial WUS 001 stream, is part of the 5.15 acre “Parcel G,” which was recently deeded to MNCPPC to fulfill the parkland dedication requirements of Tapestry’s approved Site Plan for use as a conservation park per the Clarksburg Master Plan. This parcel will be an addition to our existing North Germantown Greenway Stream Valley Park. As a result of stream impacts resulting from the road widening and the replacement of the existing culvert under MD 355, a 657 linear foot stream restoration (235 linear feet on Parkland) will be constructed within the perennial tributary of Little Seneca Creek.

In close collaboration with Montgomery Parks throughout the concept design, the stream restoration proposed has been designed to promote fish passage and habitat, stabilize the existing channel to better accommodate the impervious drainage in the watershed, improve water quality through enhanced floodplain access and grade control, and create opportunities for groundwater recharge. MDOT SHA will be required to obtain a Park Construction Permit from Montgomery County Department of Parks prior to commencement of any construction activities on Parkland. The Park Construction Permit process will include technical review of all roadway, infrastructure (WSSC), and stream restoration plans affecting parkland. Final ROW plats and compensation for any loss of parkland as a result of widening MD 355 must be agreed to and finalized between MDOT SHA and MNCPPC before the issuance of a Park Construction Permit.

Historical

MHT has determined that the subject project has No Adverse Effect on historic properties. There are no locally designated or National Register listed or eligible properties or known cemeteries within the project vicinity. There is an archaeological site, but it is being adequately protected and is shown on plans as a “sensitive area”. There are no historic preservation issues with this project.

Utilities

Utility impacts/coordination for this project includes:

- Potomac Edison – previously Potomac Edison stated that the majority of poles along MD 355 did not need to be relocated and renewal of the poles was dependent upon the lowest utility clearances. The pole located at Sta. 28+50 LT would need to be moved back. There are guying issues at two locations. The existing electric pole line carries a 34.5 kV sub-transmission, primary distribution and secondary lines. Considering that pole configuration, if poles need to

be renewed, the estimated time frame is weather dependent, meaning the work would have to take place during the spring or fall months.

- Verizon – Verizon has determined that they do not have the clearances required to remain in place and that the existing pole line will not accommodate the upward shifting of all lines. Therefore, they will need to place at least 4 new poles and then cut over lines (fiber and copper) one at a time. Estimated design time is 3 to 6 months and 14 to 18 months to complete the actual work. Impacts to buried cable along West Old Baltimore Rd. has been reduced due to the revised limits since Semi Final Review.
- AT&T Telecommunications – Cut and fill information was needed to determine extent of required relocation of their cable. Their coaxial cable will be abandoned and if any portion of cable needs to be removed, it must be done by AT&T.
- Level 3 Fiber Optic – Level 3 Fiber Optic has overhead facilities attached to the Potomac Edison poles and impacts will depend on Potomac Edison. Level 3 also has an existing direct buried fiber running from pole at Sta. 17+00 to Sta. 29+00. Test pits on this fiber optic were added to the cross sections. Impacts are still anticipated, but the extent of their relocation requirements was not determined due to the change in concept. Design is currently underway.
- Washington Gas – Test pits information was added to the plans and cross sections. Washington Gas has provided comments and manhole MH1 was adjusted to avoid an impact. Impacts due to drainage and stormwater management facilities were noted. Relocation design was started after the March 2018 meeting. No relocation construction would be possible between November and April.
- Washington Suburban Sanitary Commission – 16-inch water line and fire hydrants will be impacted by storm water management, drainage design, culvert replacement, and widening. There is also a proposed 24-inch water main that will be constructed as part of this project. Any relocations of existing WSSC water will be included in the contract. Design plans are currently at 70 percent (March 27, 2018 update).
- Zayo – Zayo is attached to Potomac Edison poles and any relocation would depend on relocations by Potomac Edison. Design and relocation time is approximately 60 days.
- Comcast - Comcast overhead facilities are also attached to the Potomac Edison poles along MD 355 and would need to relocate if poles relocate.

Relationship to Other Capital Improvement Projects

There are several projects now under design in the southern Clarksburg area including:

- Subject project – MD 355 intersection improvements at West Old Baltimore Road (CTP Project No. MO563A21),
- Skylark Development – Improvements to the intersection of MD 355 with Brink Road. Limits of this project include intersection realignment with no bicycle and pedestrian improvements. This project and subject project are directly adjacent to each other. This project is now under construction.
- Frederick Road Bike Path (CIP Project No. 500118) –This project is a 10'-wide shared use path proposed in two sections: 1) along the west side of MD 355 between Stringtown

Road to approximately 325 feet south of Little Seneca Creek. This section of the planned shared use path ends here where the design ties into an existing 8-foot wide shared use path (1,300 feet in length), and 2) from a point approximately 700 feet south of the existing West Old Baltimore Road intersection to a tie-in to the North Germantown Trail to the south of Milestone Manor Lane (north). This section of the shared use path is approximately 1,500 feet in length).

It should be noted that there is one existing section of shared use path and one missing link along the west side of MD 355 between just south of Little Seneca Creek and the subject project. From just south of little Seneca Creek to 300 feet north of Greenridge Drive, there is an existing 8-foot wide shared use path (1,300 feet in length). From this point south to the northern limits of the subject project (a distance of approximately 550 feet), there is a missing link where currently no shared use path projects have been funded to-date.

Figure 3 displays the limits of each capital improvement project.



Figure 3. Capital Improvement Projects – Road and Bike/Ped Projects

Master Plan Consistency

Transportation/Master Plan of Highways and Transitways

The 2013 Countywide Transit Corridors Functional Master Plan (and the 2018 Master Plan of Highways and Transitways) classify MD 355 (Frederick Road) between Little Seneca Creek Parkway and Shakespeare Boulevard as a planned four-lane divided suburban major highway with planned bus rapid transit (BRT) with a 250-foot wide master planned right-of-way. The proposed design is consistent with this planned classification. A planned BRT station has been master planned at the intersection of MD 355 and West Old Baltimore Road.

The 1994 Clarksburg Master Plan classified West Old Baltimore Road between MD 355 and MD 121 as a two-lane (existing and planned lanes) suburban arterial with an 80-foot wide master planned right-of-way. The proposed design is consistent with this classification.

Frederick Road (MD 355) between Little Seneca Creek and Great Seneca Creek has a master planned target speed of 40 mph, as adopted in the 2009 Germantown Employment Area Sector Plan.

More broadly, the 1994 Plan recommended separating through from local traffic through the Clarksburg Historic District. Through traffic was to be carried on a new bypass of the historic district, designated A-251 by the Plan. The 2014 Ten Mile Creek Limited Amendment to the Clarksburg Master Plan recommended retaining the bypass and relocating its northern terminus to avoid significant environmental impacts. A portion of this bypass has been constructed, but state transportation officials have raised concerns about intersection configurations on this roadway. These concerns, coupled with the 2014 limited amendment relocation recommendation, suggests that a broader study of MD 355 through the Clarksburg planning area may be appropriate. This cooperative study should consider future transportation needs and design and operational issues around the proposed bypass, determine if other transportation capital improvement projects are needed in Clarksburg and evaluate MD 355 in light of master planned bus rapid transit recommendations for MD 355, which are now under more detailed study by the Montgomery County Department of Transportation in their MD 355 Bus rapid Transit (BRT) Study.

Bicycle Master Plan

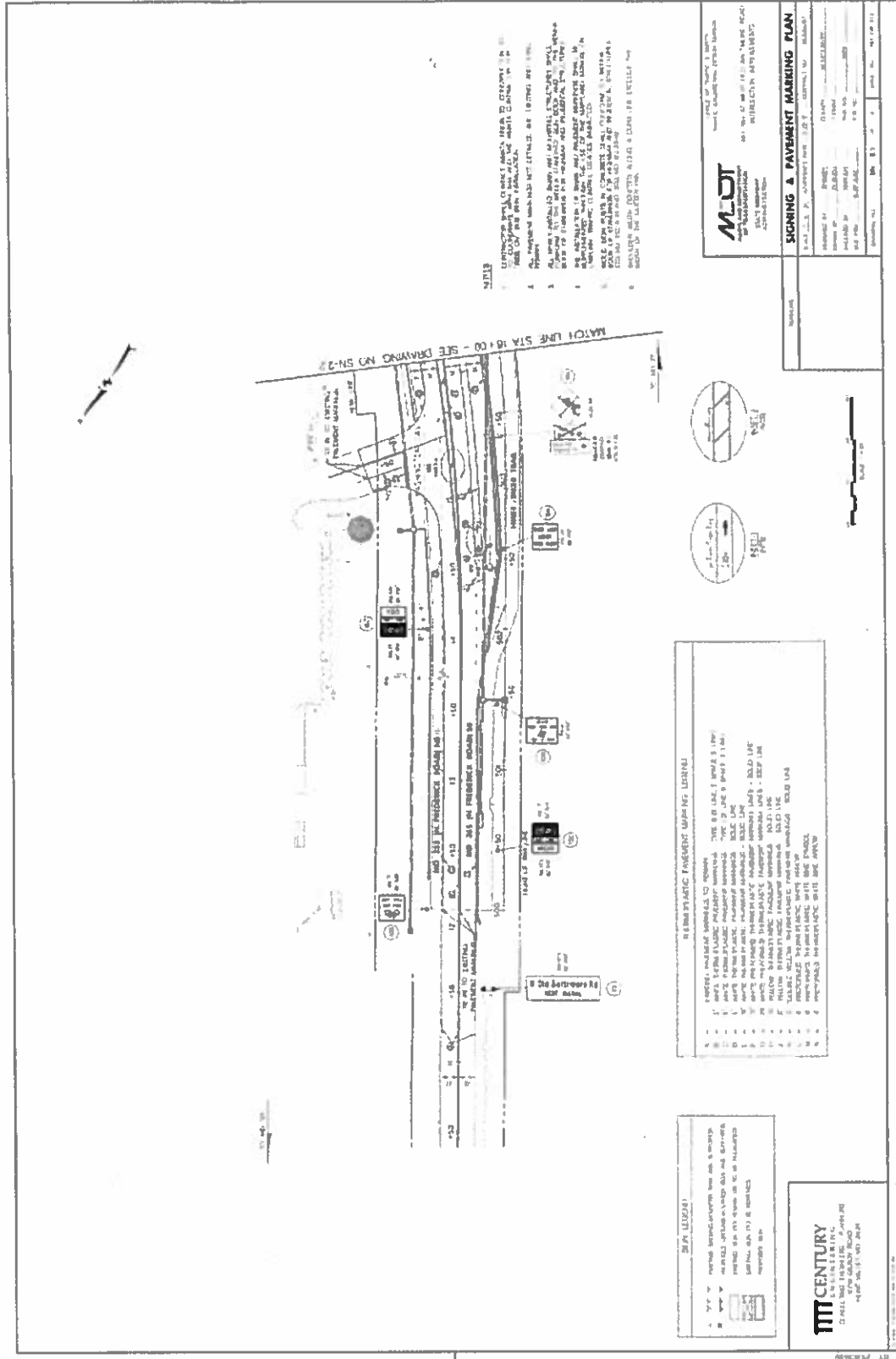
The Public Hearing draft of the Bicycle Master Plan recommends the following improvements:

- Frederick Road (MD 355) between Stringtown Road and Ridge Road (MD 27) – separated bikeway – sidepath on west side.

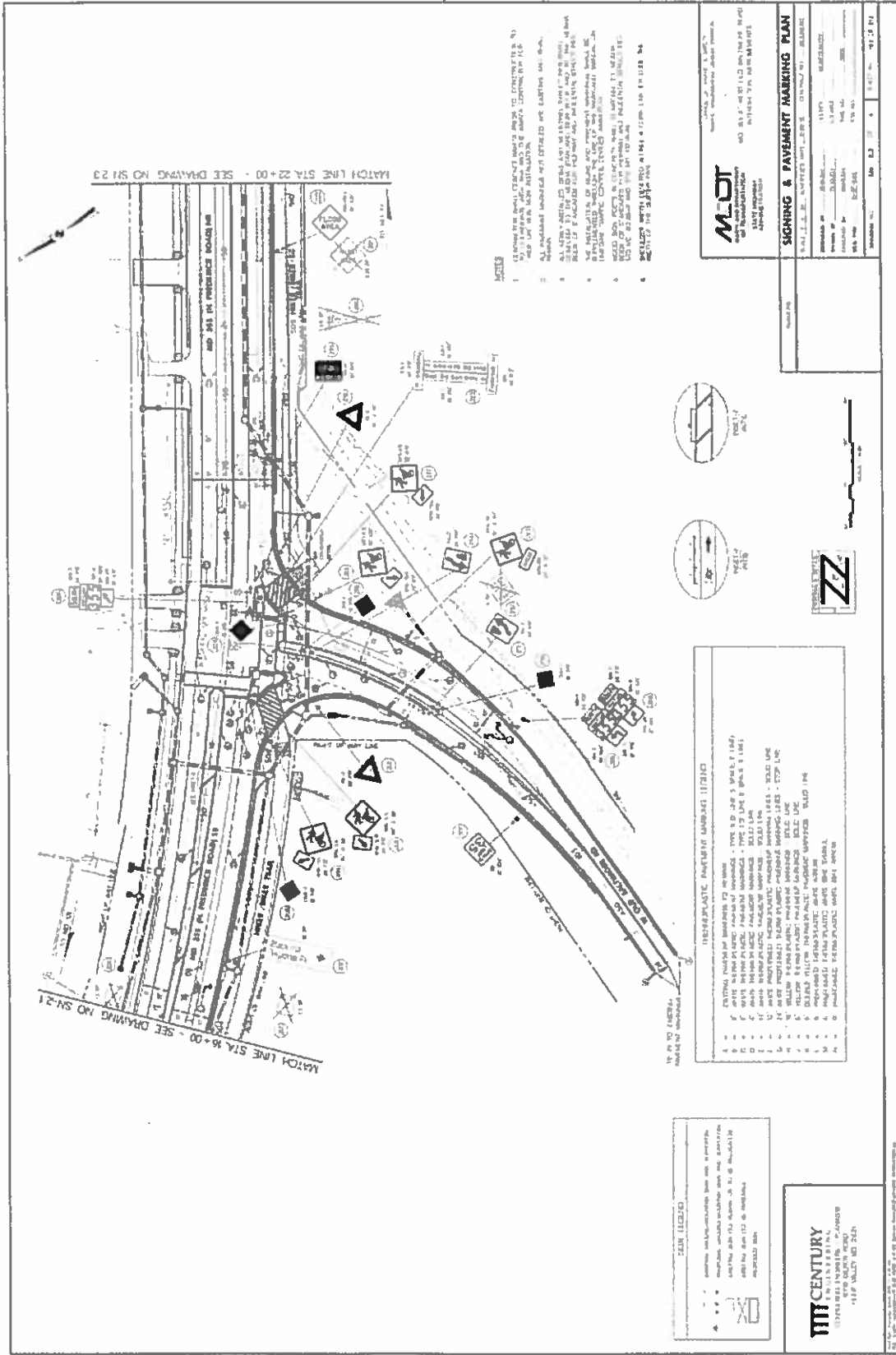
All bicycle-related improvements are consistent with the Public Hearing Draft of the Bicycle Master Plan with two exceptions. The subject project includes two bicycle facilities not recommended in the Public Hearing Draft of the Bicycle Master Plan: 1) a 5'-wide bike lane in the southbound direction, and an 8'-wide shoulder for bike use in the northbound direction.

ATTACHMENT A

Signing and Marking Plans (Sheet SN-2.4 sheet 180 of planset)



Signing and Marking Plans (Sheet SN-2.2 sheet 181 of planset)



1. ALL SIGNING AND MARKING SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE M.I.T. MANUAL ON SIGNING AND MARKING.
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M.I.T.
 CONSULTING ENGINEERS
 111 CENTURY TRAIL
 SUITE 100
 WASHINGTON, D.C. 20004
 PHONE (202) 462-1000
 FAX (202) 462-1001
 WWW.MIT-CE.COM

PROJECT INFORMATION

PROJECT NO. 111-111-111
 SHEET NO. 181 OF 181
 DATE: 11/11/11

DESIGNED BY: J. J. J.
CHECKED BY: J. J. J.
DATE: 11/11/11

TRAFFIC SIGNING AND MARKING PLAN

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111 CENTURY TRAIL
 CONSULTING ENGINEERS
 111 CENTURY TRAIL
 SUITE 100
 WASHINGTON, D.C. 20004
 PHONE (202) 462-1000
 FAX (202) 462-1001
 WWW.MIT-CE.COM

Signing and Marking Plans (Sheet SN-2.3 sheet 182 of planset)

