MD 97 (GEORGIA AVENUE)

FROM SOUTH OF GOLD MINE ROAD TO NORTHWEST OF BROOKEVILLE

SIDEWALK FEASIBILITY STUDY

PREPARED BY Alvi Associates, Inc.
FOR MDOT SHA

Alvi Associates, Inc.
Consulting Engineers

MDOT
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

JANUARY 2026

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PROJECT BACKGROUND

A feasibility study was performed for the Maryland Department of Transportation State Highway Administration (MDOT SHA) along MD 97 (Georgia Ave.) from Gold Mine Road to Northwest of the town of Brookeville, located within Montgomery County, Maryland. The length of the study is about 0.86 miles (4,518 feet). This study originated from the desire to provide a completed pedestrian connection along MD 97.

PURPOSE AND NEED

The pedestrian facility proposed by this feasibility study meets the MDOT SHA Programmatic Purpose and Need for Fund 79 while incorporating historic and environmental elements identified in the Town of Brookeville Comprehensive Plan. The MDOT SHA Programmatic Purpose and Need states that pedestrian facilities on the State network should provide pedestrian access to goods and services in a safe manner with a high degree of connectivity between major generators.

The purpose of the sidewalk feasibility study is to evaluate the most direct and cost-effective way to provide enhanced pedestrian connectivity and Americans with Disabilities Act (ADA) compatibility along MD 97.

EXISTING CONDITIONS

The following information regarding the existing conditions of the area were compiled via desktop review of available online information and while performing field visits in 2025.

PEDESTRIAN LEVEL OF SERVICE

The Pedestrian Level of Service (PLOS) is a quality-of-service methodology, established in the 2010 Highway Capacity Manual, that analyzes performance for intersections and roadway segments based on user perception research. PLOS is a nationally used measure of user comfort level as a function of a road corridor's geometry and traffic conditions. To determine the PLOS for this project, the Ride Illinois Pedestrian Level of Service Calculator was used. The ratings are categorized with letter grades from "A" through "F", with "A" as the best level of service and "F" as the worst. Pedestrian projects for Fund 79 should achieve an average PLOS of "C" or better, with no segment performing worse than a "D".

The input criteria and PLOS output for each segment is shown below. The portion of roadway being factored into the analysis corresponds to the limit of work illustrated in the improvement plans, and has a length of 4,518 feet or 0.86 miles.

Table 1: Existing PLOS

Lanes per direction:			**1**
Outside lane width:			12 ft.
Paved shoulder/bike lane/marked parking width:			1 ft. (avg.)
Bidirectional ADT traffic volume:			900 veh/day
Posted speed limit:			25 mph
Heavy vehicle percentage:			0%
FHWA's pavement condition rating:			4 (default)
% of segment with occupied parking			0%
% of segment with sidewalks:			34%
Sidewalk width:			5 ft.
Sidewalk buffer/parkway width:			1 ft. (avg.)
Buffer/parkway avg tree spacing:			N/A
Type	**Score**	**Level of Service**	**Compatibility Level**
PLOS:	2.82	B (2.51 – 3.50)	Moderately High

With an existing condition PLOS of "B", this segment currently meets the Fund 79 performance criteria. The PLOS values for the proposed concept layouts are bettered and provided in the Proposed Concept section of this document.

CONNECTIVITY

The performance criteria for Fund 79 projects measure connectivity by determining the Pedestrian Route Directness (PRD). The PRD is a measure of pedestrian connectivity calculated by dividing the actual "route distance" by the straight-line distance between two points. The "route distance" is measured along the shortest ADA-Accessible route that a pedestrian would travel, with street crossings only occurring at locations with curb ramps and detectable warning surfaces. Values closer to 1.0 indicate that a route is more direct, while values greater than 1.5 have been determined to represent an indirect route. The PRD scores between all major generators within or adjacent to a project should be 1.5 or less.

The project limits includes, almost exclusively, suburban single-family housing. Also found within the limits is the Brookeville Academy, a historic structure currently owned by the Town of Brookeville and serving as a community center and office space for town staff, the Salem Methodist Church, a restaurant: Silo Falls, and the Longwood Park and Community Recreation Center. For the purposes of this report, the Longwood Park and Community Recreation center is likely the largest pedestrian generator.

MD 97 includes fragmented segments of sidewalk and Shared Use Path within the vicinity of Brookeville. At the southern limit, an existing Shared Use Path exists on the eastern (northbound) side of MD 97 about 370 feet south of Gold Mine Road and extends south towards Olney. Working north toward Brookeville, sidewalk is present along one side of Gold Mine Road in either direction, but terminates at MD 97. Sidewalk begins along MD 97 at the recently constructed roundabout south of Brookeville and occurs for about 735 feet before terminating again. MD 97 then lacks any sidewalk for about 1,100 feet, at which point a brick sidewalk begins on the west (southbound) side of MD 97; after about 400 feet, the brick sidewalk ends on the west side and begins on the east side of the road and continues to the intersection of MD 97 and Market Street. Continuing north on MD 97, the brick sidewalk continues along the northbound side of the road for about 235 feet at which point it terminates.

Within the project limits, MD 97 has sidewalk on one or both sides of the street for roughly 34% of the project length, and of that existing sidewalk, only that associated with the recently constructed roundabout project is expected to be ADA compliant, which corresponds to about 48%. Due to the lack of ADA compliant connectivity between the projects limits, existing PRD for this project cannot be calculated.

ROADWAY CHARACTERISTICS

MD 97 is primarily a two-lane, undivided Minor Arterial in Montgomery County, Maryland traveling in a north-south direction with an AADT of 600 vehicles per day along the Market Street segment and 900 vehicles per day along the High Street Segment. Note that MD 97 is also known as Georgia Avenue, and furthermore it may be referred to as Market Street within the town of Brookeville and south of the intersection with High Street, and as High Street north of that point. The posted speed limit is 25 MPH. It should be noted that following the completion of the recently construction roundabout project, which bypasses considerable traffic around the town of Brookeville, discussions are underway concerning reclassifying the road to a Local road. This area of MD 97 is identified by the MDOT SHA Context Driven: Access and Mobility for All Users as Suburban context zone as shown in **Figure 1** below. According to the Maryland.gov Open Data Portal, no pedestrian or bicycle crashes were reported within the project limits between January 2024 to present.

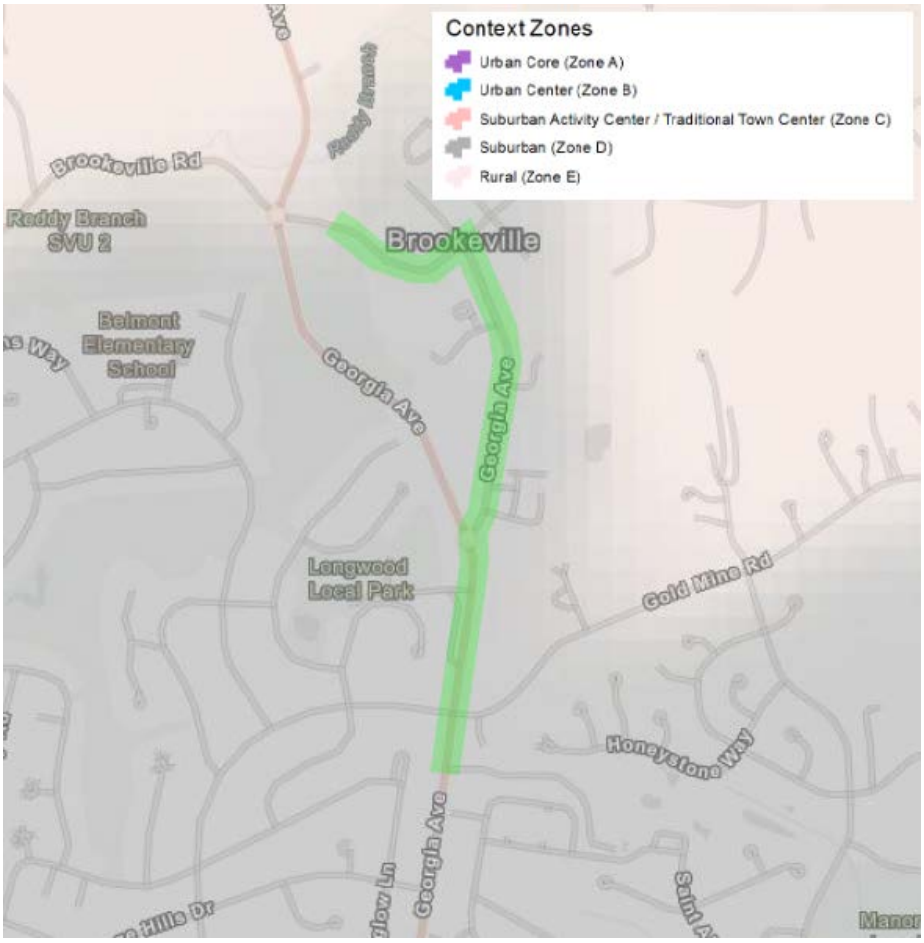


Figure 1. Context Zone Map for Project Area

The roadway within the project limits generally consists of a closed section in the vicinity of the recently constructed roundabout and within the immediately vicinity of the Brookeville "town center", and open section elsewhere. There is limited existing sidewalk within the project limits, as described earlier in this report.

MD 97 South of Brookeville, facing south at recently constructed roundabout

MD 97 South of Brookeville, facing north

MD 97 near Brookeville "town center", facing north

Existing shoulders vary in width throughout the project area from 0' to wide enough to permit on-street parking, and there are no designated bicycle lanes.

There is one signalized intersection within the project limits: at the intersection of MD 97 and Gold Mine Road. Crosswalks are provided between pedestrian ramps within the newly constructed roundabout, but are not found elsewhere in the project limits.

There are a number of visible utility poles within the project limits, and though not as readily apparent, it is reasonable to expect that there are water, sewer, and other buried utilities along the roadway.

CONNECTING FACILITIES

There is a sidewalk both east and west along Gold Mine Road which this project will connect to. Additionally, the improvements will connect with the existing asphalt path on the northbound side of MD 97 at the southern project limit. The proposed improvements also link to an existing asphalt path constructed along the frontage of Silo Falls on the northbound side of MD 97. In general, this project will provide pedestrian connectivity southward to the town of Olney; there are no broader connections in the other cardinal directions.

CONSTRAINTS

The major constraints of the project include limited right-of-way (ROW) and existing utilities. To construct compliant sidewalk throughout the project limits, additional ROW and/or property agreements must be obtained to support the sidewalk, grading tie-ins, and Stormwater Management needs. Utility poles and buried utilities, the extent of which is unknown, will need to be relocated or adjusted, and drainage infrastructure installed to support new curb and gutter.

The entire project limit north of the newly constructed roundabout is within the Town of Brookeville historic boundary. Proposed improvements, such as the replacement of the dry-laid stone walls, must be coordinated with state and county preservation offices.

SPECIALIZED DESIGNATIONS

The 1997 Planning Law recognizes the important role of local governments in managing growth and determining the locations most suitable for state-funded projects. 1997 Planning Legislation capitalizes on the state's influence on economic growth and development. Counties may designate areas as Priority Funding Areas (PFA) that meet guidelines for intended use, availability of plans for sewer and water systems and permitted residential density. PFA's are existing communities and places designated by local governments indicating where they want state investment to support future growth. Much of the study area has been designated as a PFA, as shown in **Figure 2** below.

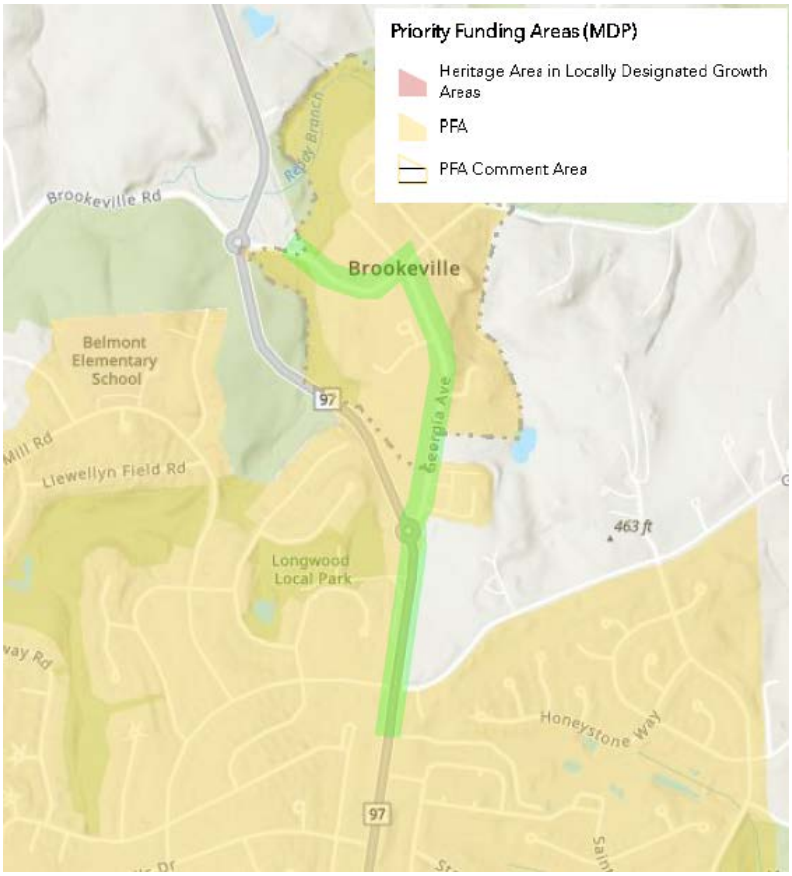


Figure 2. Priority Funding Area Map

EXISTING LOCAL PLANS AND STUDIES

The following summarizes the information regarding this portion of MD 97 that was found within the existing local plans, studies, and other documents.

Town of Brookeville Comprehensive Plan (September 2022)

This document served a major role in the development of the conceptual plans, particularly its stated goals of "*exploring alternative road configurations that provide for traffic calming and streetscape changes that enhance the aesthetics of the Town*, and to *reclaim their streets for local traffic and pedestrians in a manner consistent with its listing on the national Register and designation as a local Historic District."* The 'Transportation, Pedestrian and Streetscaping' section of the report summarized these three transportation related goals as follows:

- **Recapture** High and Market as local streets.
- **Reconnect** a network of sidewalks and trails.
- **Restore** Brooksville's public streetscape and its historic sense of place.

ENVIRONMENTAL COMPLIANCE & PERMITTING

WETLANDS AND WATERWAYS

The project area is entirely within the Patuxent River Watershed (MD 6-Digit Watershed 021311). According to the National Wetlands Inventory Map, no wetlands or waterways were identified within the project limits.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRMs) covering the project area is 24031C0216D. The area of the project is classified as a zone which is determined to be outside the 0.2% (500-year) annual chance floodplain, and as such, this project is not anticipated to have floodplain impacts. Potential locations for stormwater management are identified near Reddy Branch and its floodplain.

CHESAPEAKE BAY CRITICAL AREA

The project is not within the Chesapeake Bay Critical Area, which is an area within 1,000 feet from all tidal waters and wetlands.

LANDSCAPING AND TREES

The proposed concept design will likely impact residential trees and landscaping adjacent to the roadway. It is also possible that additional tree impacts will occur to provide the required stormwater management facilities. The magnitude and location of tree impacts will be determined during final design. Root pruning may be required in areas where the new sidewalk is adjacent to existing mature trees, indicated on the plans. It is anticipated that a roadside tree permit, as well as potentially providing offsite tree mitigation, may be required for this project.

EROSION & SEDIMENT CONTROL

Erosion and sediment control (E&SC) will be required for all areas within the project limits of disturbance (LOD) and permitting should be coordinated through the Montgomery County Soil Conservation District. It is anticipated that the E&SC design will consist mainly of inlet protection, silt fence, and same-day stabilization practices. The LOD is anticipated to be greater than one acre, as a result, a Notice of Intent (NOI) will need to be submitted for coverage under the NPDES permit from MDE.

DRAINAGE

In existing conditions, MD 97 is a mix of closed section roadway (via curbing) and open section roadway. The closed section roadway is located primarily in two segments: in the vicinity of the newly constructed roundabout, and within the “town center” of Brookeville. Near the

roundabout, closed storm drain was integrated into that project and currently in place. In the town of Brookeville, there is generally no storm drain, and runoff simply drains along the roadside gutter to Reddy Branch and its tributaries. The remainder of the study area is open section and generally adjacent to residential lawn and other open spaces. The road is generally crowned and runoff drains to the outside edge of pavement. Runoff from adjacent properties currently flows toward the roadway in ditches along the south side of Market Street, then into the roadway and down toward Reddy Branch.

In proposed conditions, the study area will generally be converted from an open section to a closed section roadway along both sides of the road. In order to address drainage with the proposed improvements, installation of closed storm drain will be needed along the entire study area. The placement of the proposed inlets will primarily be dictated by the spread computations, or where the area drains to a stormwater management facility, by the maximum allowable drainage area for the facility type.

STORMWATER MANAGEMENT

Stormwater management will be required to mitigate the proposed improvements, and permitting should be coordinated through the Montgomery County Department of Permitting Services and the Maryland Department of the Environment.

Three existing MDOT-owned stormwater management facilities were identified with the MDOT SHA National Pollutant Discharge Elimination System (NPDES) database, in the immediately vicinity, and constructed along with, the recently constructed roundabout. Based on the current design, impacts to these facilities are not anticipated.

Detailed SWM calculations have not been performed, however, a qualitative evaluation has been performed based on the impervious area identified in the roadway shading file and professional judgment. The project is anticipated to be new development for stormwater analysis, as less than 40% of the area within the LOD is impervious in the existing condition. The following table presents the qualitative stormwater management analysis results, including the impervious area requiring treatment (IART). These calculations are based on impervious surfaces within the roadway shading file accounting for 44,181 SF (1.01 acre), the assumed development classification, the assumption that none of the impervious will be considered maintenance, and that there are no impacts to existing SWM facilities.

Table 2: Qualitative Stormwater Management Analysis

A	B	C	D	E	F	G
	Development Classification	Proposed Impervious within LOD (acres)	Maintenance Impervious within LOD (acres)	Loss of Water Quality (acres)	IART from New Development (acres)	Total IART (acres)
Site	New Development	1.01	0.00	0.00	1.01	1.01

In addition to the qualitative stormwater management requirements presented in Table 2, the following quantitative stormwater management requirements are outlined in the MDOT SHA PRD Part A Guidelines:

COUNTY	$Q_{2\text{-YR}}$	$Q_{10\text{-YR}}$	$Q_{100\text{-YR}}$
Allegany	NO	(2)	
Anne Arundel	NO	(2)	(2)
Baltimore City	NO	YES	Jones Falls, Gywnns Falls, Herring Run
Baltimore	(2)	(2)	Jones Falls, Gywnns Falls, Herring Run
Calvert	(2)	(2)	
Caroline	(2)	(2)	
Carroll	(2)	(2)	
Cecil	(1)	(1)	
Charles	NO	YES	
Dorchester	YES	YES	
Frederick	NO	YES	Carroll Creek
Garrett	(2)	(2)	
Harford	NO	YES	
Howard	NO	YES	
Kent	NO	(2)	
Montgomery	NO	(2)	(2)
Prince George's	NO	(2)	(2)
Queen Anne's	(2)	(2)	
St. Mary's	NO	YES	YES
Somerset	YES	YES	
Talbot	(3)	NO	
Washington	NO	YES	(2)
Wicomico	(2)	(2)	
Worcester	YES	YES	

(2) Quantity control may be required by the county due to historical flooding problems, downstream floodplain development, inadequate conveyance system, or other county specific criteria. Review the applicable county ordinance for further information.

Figure 3. Quantitative Stormwater Management Requirements

As noted, management of the 10-year design storm may be required by the approval authority.

There are limited areas to provide qualitative and quantitative stormwater management within the study area corridor due to limited available right of way and developed private properties.

Five potential stormwater management locations have been identified on the plans due their being generally undeveloped and lower than the adjacent road; however, utility designation and geotechnical testing will be necessary to verify the feasibility at these locations. The locations will also require right of way acquisition which may prove to be costly and potentially infeasible depending on the property owner's acceptance. It is also possible a variance from quantitative requirements will be required to accompany the stormwater management approval.

Additionally, the use of porous concrete for the sidewalk surface is a potential practice to address some of the stormwater management requirements. However, porous concrete, as with other permeable surfaces, is costly, requires extensive maintenance (vacuum cleaning) and is prone to clogging from local vegetative and manmade debris, as well as salt during winter de-icing operations.

To address the full stormwater management requirements, it is possible that opportunities outside of the study area corridor but within the local watershed, will need to be explored.

UTILITIES

There are many utility poles within the project limits of this study; some will need to be relocated due to impacts from the proposed sidewalk, while others can be avoided by relocating the sidewalk in the vicinity of the pole. All utility poles in the vicinity of work have been located on the proposed concept plans **(Appendix B)** using aerial imagery.

There is existing traffic signal equipment within the project at the intersection of MD 97 and Gold Mine Road, but strategic design of the sidewalk in this area can likely avoid impacts.

Existing underground utilities to be avoided include a WSSC 12" water main under the southbound side of MD 97, a 12" Washington Gas main under the northbound side, and an underground Verizon telecommunications line in close proximity to the gas main.

A utility designation would be required during more detailed design stages to locate exact visible utility locations and any underground utilities, as well as to determine ownership.

RIGHT-OF-WAY

Right-of-way (ROW) information was gathered from a combination of survey and GIS and is shown on the plans. While there is sufficient space to construct the proposed improvements within some segments of the project, for most of the projects length, portions of the sidewalk exceed the available right of way. Additionally, temporary easements will likely be needed for considerable portions of the work in support of tie-in grading behind the proposed sidewalk.

The locations where sidewalk is proposed outside of the existing ROW will require fee acquisition, while temporary construction easements (TCE) will be needed for grading tie-ins denoted by either 'cut' or 'fill' lines on the plans. Other improvements not shown on the plan, such as drainage or stormwater management infrastructure, will require additional ROW, TCE, or perpetual easements (PE).

A ROW designation will need to be performed to determine exact ROW line locations to confirm the anticipated impacts.

PROPOSED CONCEPT

The proposed concept was developed based on three "corridor" types identified in the Comprehensive Plan discussed earlier in this report and described as:

- **Gateway Corridor:** Provides a distinctive entrance to town clearly stating that drivers are entering a settled place.
- **Transition Corridor:** Provides for the gradual narrowing of the look and feel of the street.
- **In-Town Corridor:** Within the core area of the Town, sidewalks are wider and located on both sides of the street with on-street parking. Streets are part of the public spaces and pedestrian are the primary users, with vehicles secondary.

The proposed concept provides a complete pedestrian connection along the project limits and aims to adhere to the aforementioned corridors. Within the Gateway Corridor, two 12' travel lanes are maintained, with a 5' sidewalk along at least one side of the road and separated by a 3' grass buffer. The Transition Corridors are comprised of two 11' travel lanes with a 5' sidewalk along at least one side of the road and separated by grass buffer of various width from 0'-3'. The In Town corridor further narrows the roadway to 10' travel lanes and provides a 5' sidewalk along both sides of the road and without any grass buffer.

PEDESTRIAN LEVEL OF SERVICE

The PLOS provided by the proposed concept is detailed below:

Table 3: Proposed PLOS

Lanes per direction:			**1**
Outside lane width:			10 ft.
Paved shoulder/bike lane/marked parking width:			1 ft. (avg.)
Bidirectional ADT traffic volume:			900 veh/day
Posted speed limit:			25 mph
Heavy vehicle percentage:			0%
FHWA's pavement condition rating:			4 (default)
% of segment with occupied parking			0%
% of segment with sidewalks:			100%
Sidewalk width:			5 ft.
Sidewalk buffer/parkway width:			1 ft. (avg.)
Buffer/parkway avg tree spacing:			N/A
Type	**Score**	**Level of Service**	**Compatibility Level**
PLOS:	2.06	B (1.51 – 2.50)	Very High

The PLOS under the proposed conditions is a substantial improvement to the existing condition, primarily through the addition of sidewalk connections that do not exist today. The narrowing of the lanes within town has a minor negative effect on PLOS, as the low-speed traffic is closer to the pedestrians. Note that the only factors changed were the lane width and percent of segment with sidewalk, and also that the 10' lane width associated with the In-Town Corridor is reflected in the table and PLOS above, but using an averaged lane width, which would be between 10' and 12', would further improve the PLOS.

CONNECTIVITY

The PRD scores between all major generators within or adjacent to a project should be 1.5 or less. The existing PRD for this project cannot be calculated between the limits of the proposed sidewalk due to the lack of existing ADA compliant facilities between them. In the proposed condition, a pedestrian would walk an ADA-Compliant path of 4,518 feet from end-to-end of the project limits; the straight-line distance is 3,530 feet, resulting in a PRD value for this connection of 1.28, which is well within acceptable limits. The table below includes other potential trips within the project corridor and the associated PRD, one of which exceeds 1.5 based on the currently proposed walkway and crosswalk locations.

Table 4: Proposed PRD

Pedestrian Route Directness (PRD) for select corridor trip generators				
Origin	**Destination**	**Straight Line Distance (ft)**	**Pedestrian Route Distance (ft)**	**Calculated Pedestrian Route Directness**
North project limit	South project limit	3,530	4,518	1.28
Silo Falls	Selem Methodist Church	1,090	1,175	1.08
Brookeville Academy	Selem Methodist Church	350	725	2.07
Marian Assisted Living	Longwood Park Entrance	1,170	1,250	1.07

COST ESTIMATES

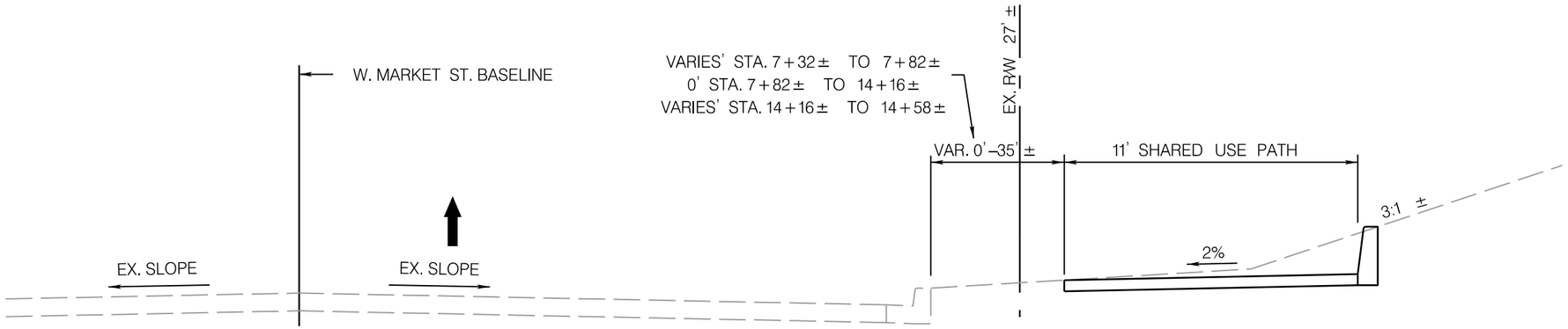
A detailed cost estimate will need to be developed during final design, but a Major Quantities cost estimates for the concept is included in **Appendix C.**

CONCLUSION

The proposed pedestrian facility upgrades will improve safety and accessibility to pedestrians in the Town of Brookeville. The PLOS under the proposed conditions improves compared to the existing conditions and meets the Programmatic Purpose and Need criteria of a minimum PLOS of C.

APPENDIX A

CONCEPT TYPICAL SECTIONS



STA. 7+32± TO STA. 14+58±

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MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

TYPICAL SECTIONS

SCALE 1" = 5' ADVERTISED DATE TBD CONTRACT NO. _____

DESIGNED BY IMS
DRAWN BY IMS
CHECKED BY BGB
MDE/PRD _____

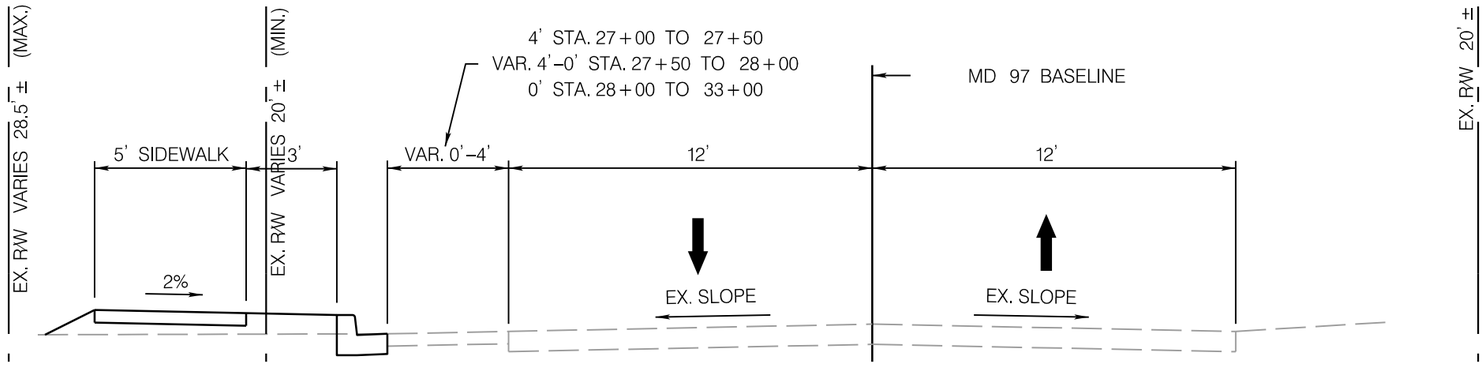
COUNTY _____
LOGMILE _____

DRAWING NO. TS-01 OF 03

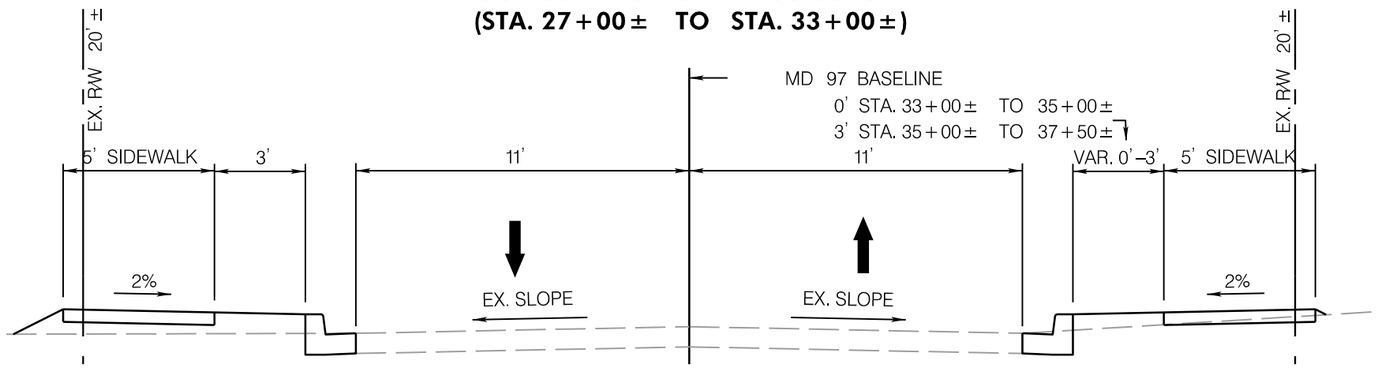
SHEET NO. 01 OF 12

BY: iselock –

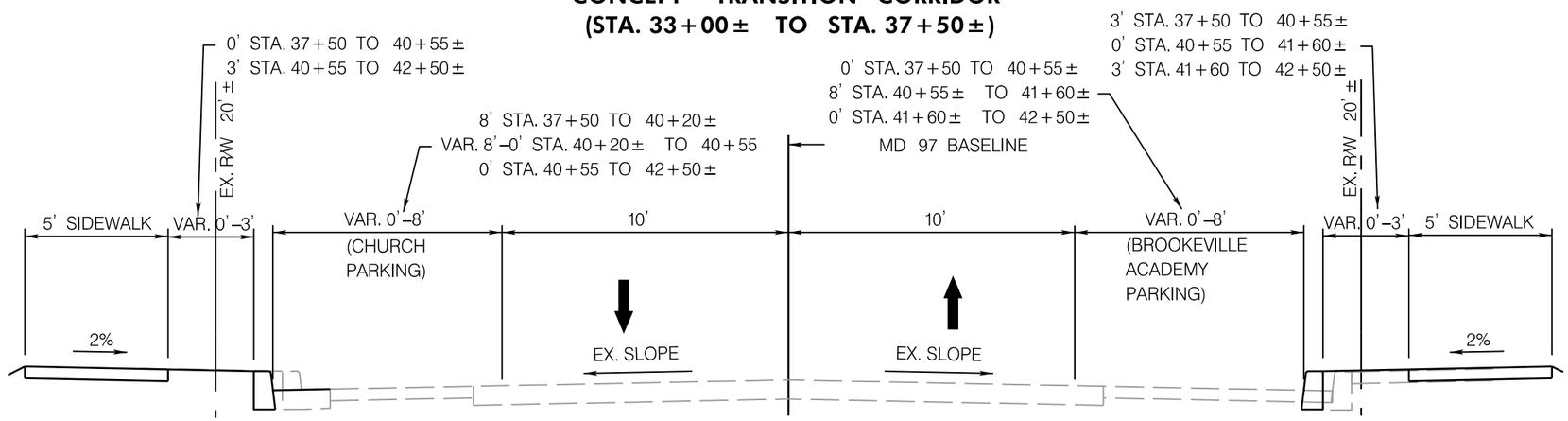
PLOTTED: 1/16/2026



CONCEPT 'GATEWAY CORRIDOR'
(STA. 27+00± TO STA. 33+00±)



CONCEPT 'TRANSITION CORRIDOR'
(STA. 33+00± TO STA. 37+50±)



CONCEPT 'IN–TOWN CORRIDOR'
(STA. 37+50± TO STA. 42+50±)

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SCALE 1" = 5' ADVERTISED DATE TBD CONTRACT NO. _____

DESIGNED BY IMS
DRAWN BY IMS
CHECKED BY BGB
MDE/PRD _____

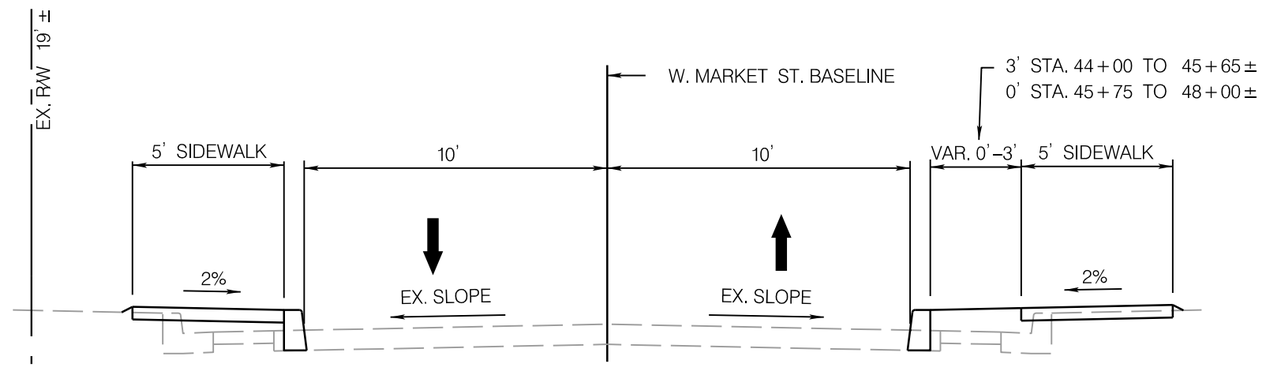
COUNTY _____
LOGMILE _____

DRAWING NO. TS-02 OF 03

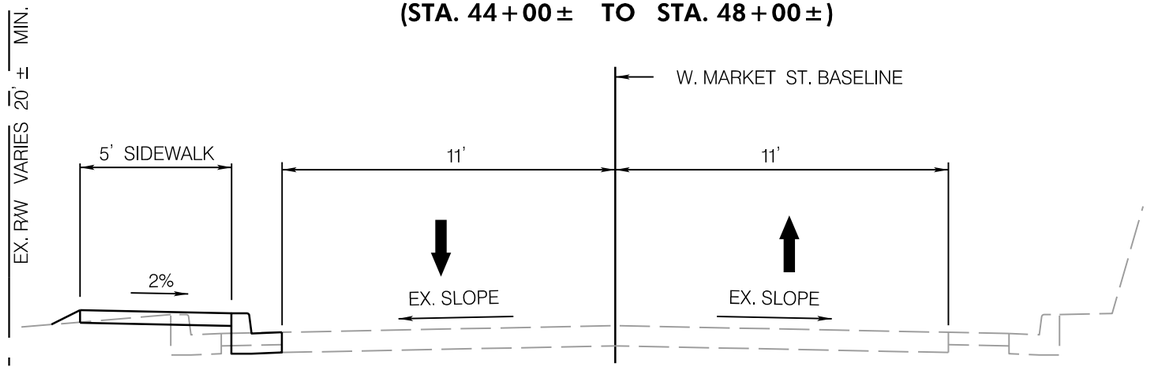
SHEET NO. 02 OF 12

BY: iselock –

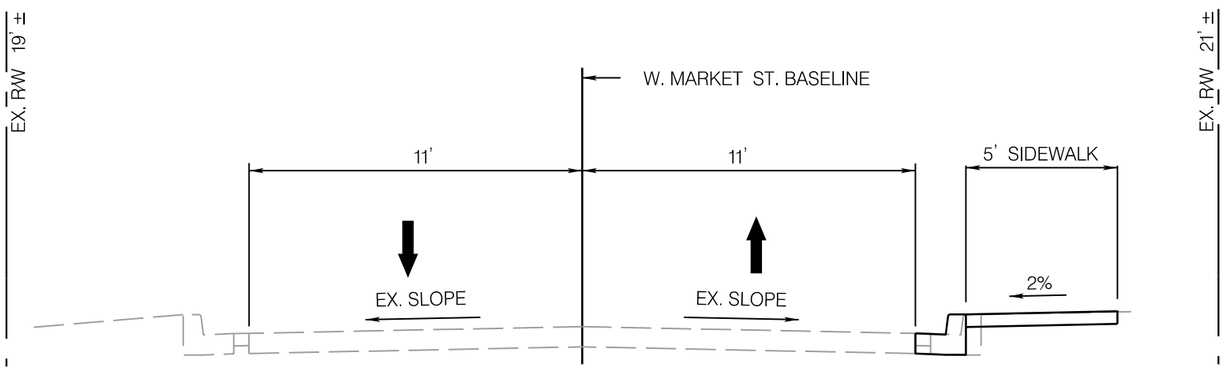
PLOTTED: 1/16/2026



CONCEPT 'IN–TOWN CORRIDOR'
(STA. 44+00± TO STA. 48+00±)



CONCEPT 'TRANSITION CORRIDOR'
(STA. 48+00± TO STA. 51+75±)



CONCEPT 'TRANSITION CORRIDOR'
(STA. 51+10± TO STA. 54+00±)

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DRAWING NO. TS – 03 OF 03

SHEET NO. 03 OF 12

BY: iselock –

PLOTTED: 1/16/2026

APPENDIX B

CONCEPT PLANS

SOUTH TO OLNEY

TO REDDY CREEK BRIDGE

MATCH LINE STA. 23+50 – SEE SHEET PS-02

GEORGIA AVE

N 7° 48' 9" E

N 8° 27' 58" E

7+00 +50 8+00 +50 9+00 +50 10+00 +50 11+00 +50 12+00

POT 10+00.00

NORTHERN END OF EX. SHARED USE PATH

TREE TRIMMING & ROOT PRUNING NEEDED IN VICINITY OF STA. 7+80 TO 8+80 ±

REMOVE TREE STUMP

APPROXIMATE EASEMENT PER PLAT 18593 (PURPLE)

RELOCATE PROPOSED RAMP SHOWN BLUE TO THE LOCATION SHOWN

BLUE LINE WORK IS FROM MO1725176 DESIGN (NEVER CONSTRUCTED)

DRAINAGE INFRASTRUCTURE NEEDED TO TIE TO EXISTING

RELOCATE EX. SIGNS

APPROXIMATE EASEMENT PER PLAT 18593 (PURPLE)

C- 15RD

GOLD MINE ROAD

ROADWAY LEGEND

- BROOKEVILLE HISTORICAL BOUNDARY
- 2 FT CONTOURS FROM LIDAR
- 1 FT CONTOURS FROM SURVEY
- EXISTING PROPERTY LINE
- EX. RIGHT OF WAY FROM SURVEY
- EX. RIGHT OF WAY FROM GIS
- PROPOSED DESIGN
- CONCRETE SIDEWALK / DRIVEWAY
- BRICK SIDEWALK
- PERMEABLE PAVER (PARKING AREA)

NOTE: THE 'CUT' AND 'FILL' LINES ILLUSTRATED ON THESE PLANS CORRESPONDS TO THE LIMITS OF GRADING SHOWN ON THE TYPICAL SECTION SHEETS AND IS VERY APPROXIMATE AND WITHOUT THE BENEFIT OF SURVEY. MODELING WILL BE NECESSARY DURING FINAL DESIGN TO IDENTIFY THE ACTUAL CONSTRUCTION LIMITS.

Alvi Associates, Inc.

CONSULTING ENGINEERS
BALTIMORE, MARYLAND

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

SCALE 1" = 40' ADVERTISED DATE TBD CONTRACT NO.

DESIGNED BY IMS
DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS – 01 OF 11

SHEET NO. 04 OF 12

BY: iselock –

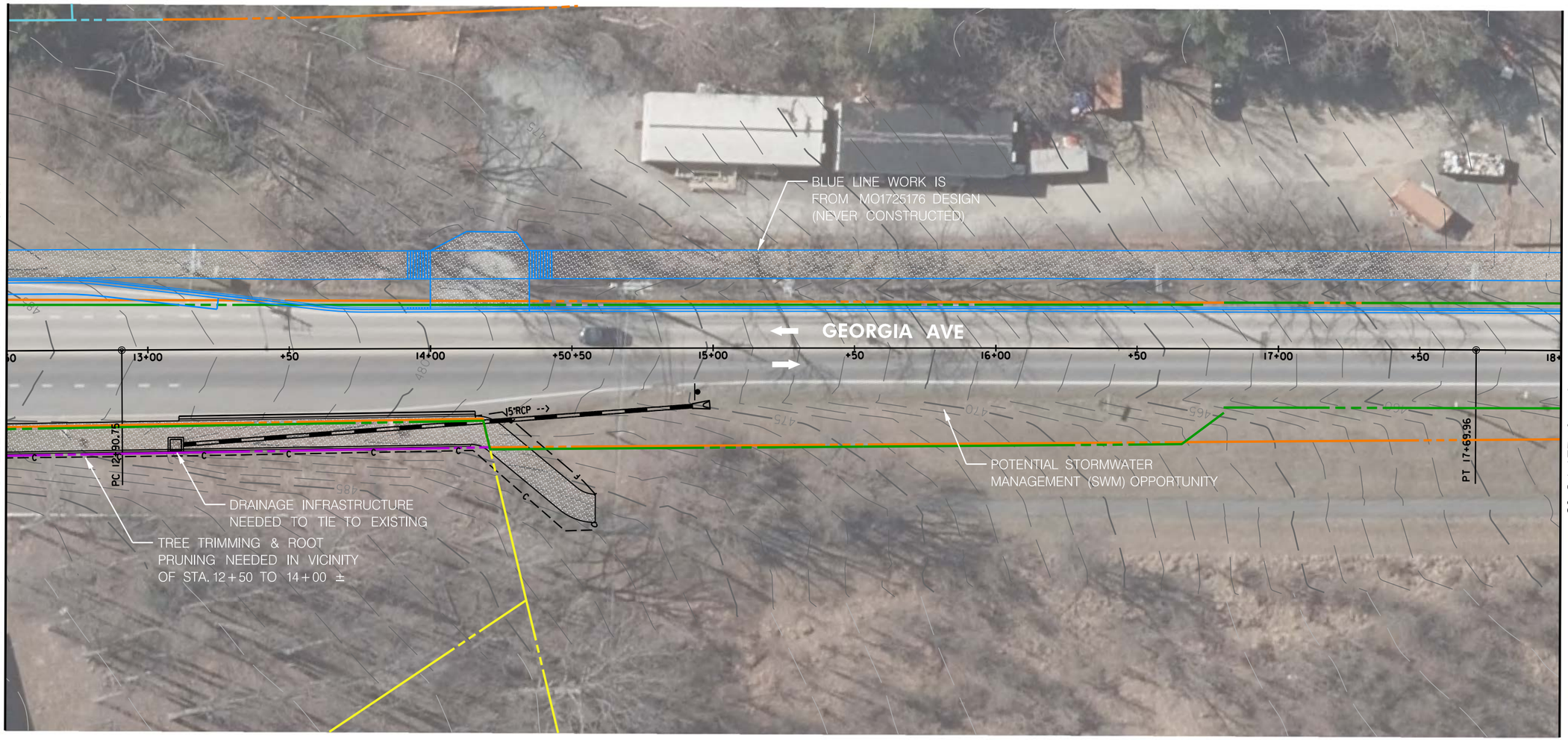
PLOTTED: 1/16/2026

SOUTH TO OLNEY

TO REDDY CREEK BRIDGE

MATCH LINE STA. 18+00 – SEE SHEET PS-01

MATCH LINE STA. 23+50 – SEE SHEET PS-03



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ROADWAY LEGEND

- BROOKEVILLE HISTORICAL BOUNDARY
- 2 FT CONTOURS FROM LIDAR
- 1 FT CONTOURS FROM SURVEY
- EXISTING PROPERTY LINE
- EX. RIGHT OF WAY FROM SURVEY
- EX. RIGHT OF WAY FROM GIS
- PROPOSED DESIGN
- CONCRETE SIDEWALK / DRIVEWAY
- BRICK SIDEWALK
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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

SCALE 1" = 40' ADVERTISED DATE TBD CONTRACT NO.

DESIGNED BY IMS
DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS-02 OF 11

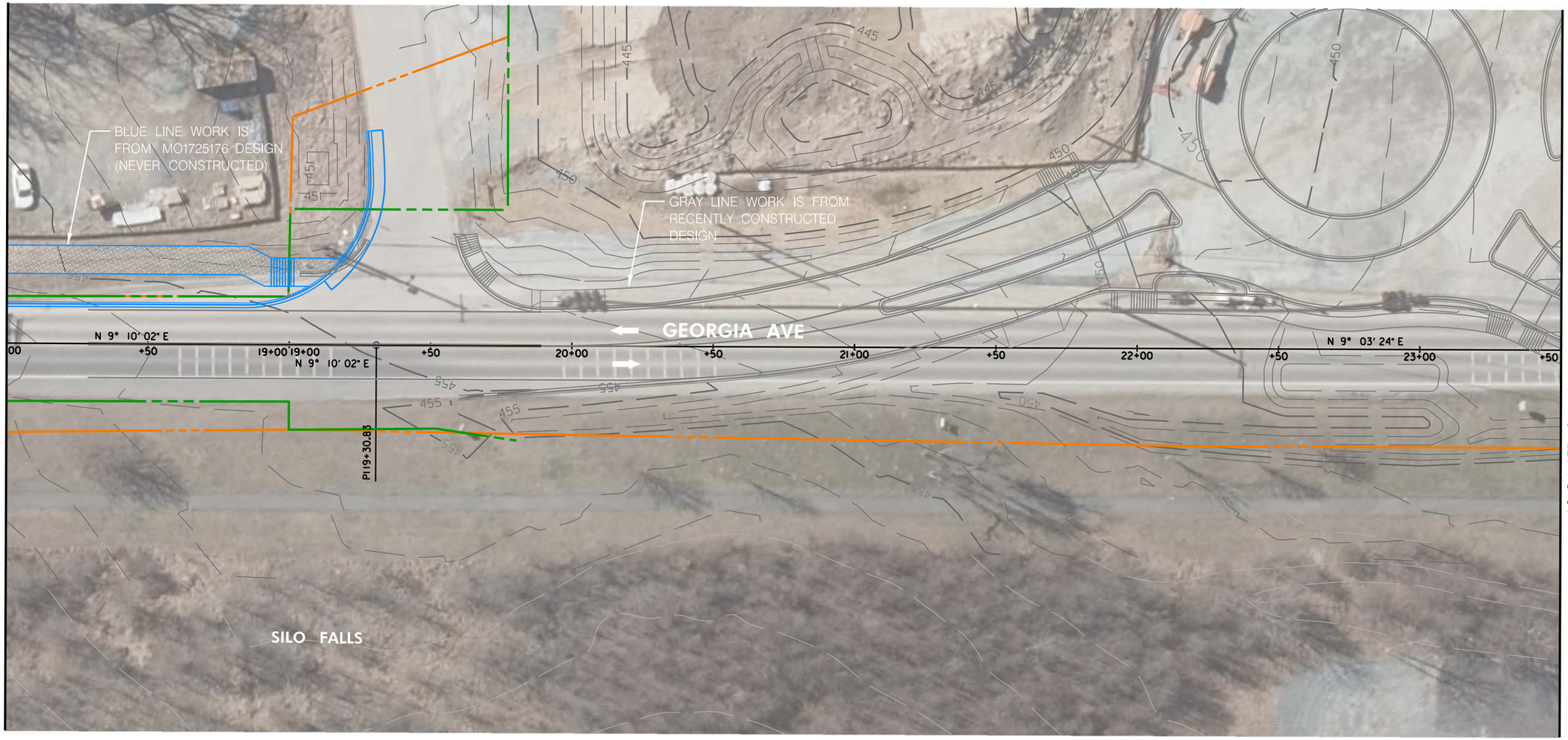
SHEET NO. 05 OF 12

BY: iselock –

PLOTTED: 1/16/2026

SOUTH TO OLNEY

TO REDDY CREEK BRIDGE



MATCH LINE STA. 18+00 – SEE SHEET PS-02

MATCH LINE STA. 23+50 – SEE SHEET PS-04

BY: iselock

Alvi Associates, Inc.

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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
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ROADWAY PLAN

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DESIGNED BY IMS
DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS – 03 OF 11

SHEET NO. 06 OF 12

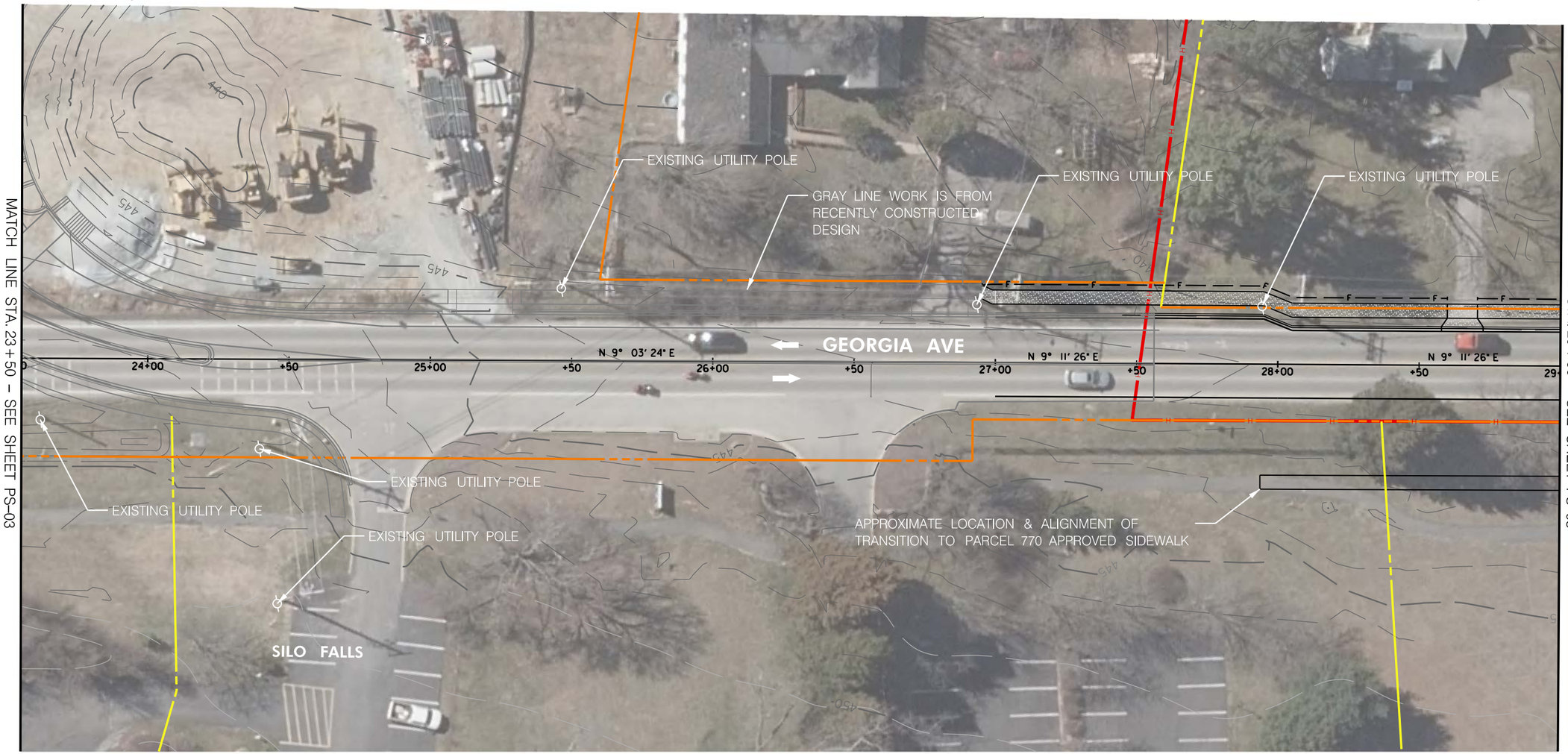
PLOTTED: 1/16/2026

SOUTH TO BROOKEVILLE BYPASS

TO REDDY CREEK BRIDGE

MATCH LINE STA. 23+50 – SEE SHEET PS-03

MATCH LINE STA. 29+00 – SEE SHEET PS-05



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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

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DESIGNED BY IMS
DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS-04 OF 11

SHEET NO. 07 OF 12

BY: iselock –

PLOTTED: 1/16/2026

SOUTH TO BROOKEVILLE BYPASS

TO REDDY CREEK BRIDGE

MATCH LINE STA. 29+00 – SEE SHEET PS-04

MATCH LINE STA. 34+50 – SEE SHEET PS-06

EXISTING UTILITY POLE

EXISTING UTILITY POLE

POTENTIAL SWM OPPORTUNITY (ALONG THIS SIDE OF ROAD ALONG LIMITS OF THIS SHEET)

EXISTING UTILITY POLE

EXISTING UTILITY POLE

GEORGIA AVE

N 9° 21' 33" E

N 9° 21' 33" E

APPROXIMATE LOCATION & ALIGNMENT OF PARCEL 770 APPROVED SIDEWALK

SALEM UNITED METHODIST CHURCH CEMETERY

435

440

445

430

425

30+00

31+00

32+00

34+00

+50

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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

SCALE 1" = 40' ADVERTISED DATE TBD CONTRACT NO.

DESIGNED BY IMS COUNTY

DRAWN BY JRS LOGMILE

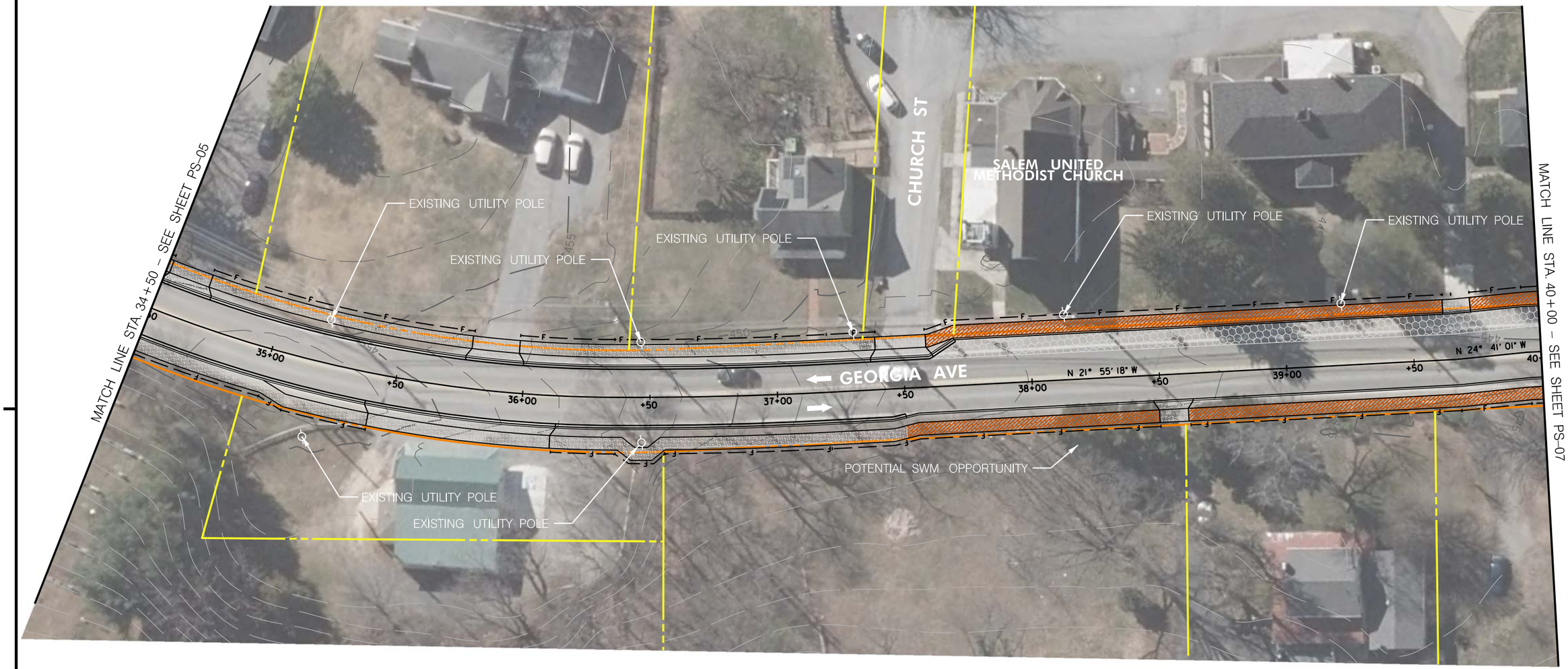
CHECKED BY BGB

MDE/PRD

DRAWING NO. PS-05 OF 11 SHEET NO. 08 OF 12

BY: iselock –

PLOTTED: 1/16/2026



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STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
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ROADWAY PLAN

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DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS-06 OF 11

SHEET NO. 09 OF 12

BY: iselock –

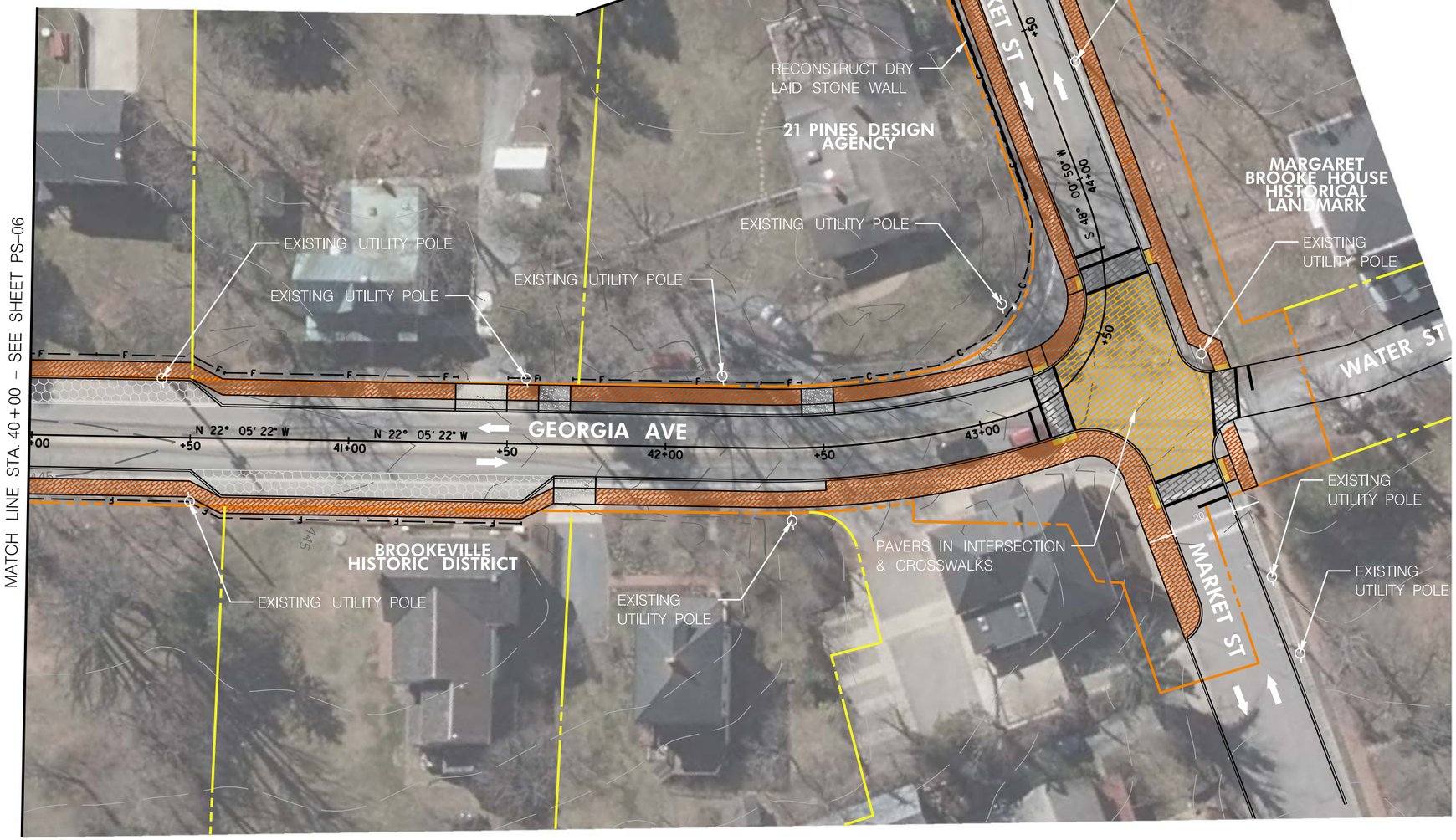
PLOTTED: 1/16/2026

SOUTH TO BROOKEVILLE BYPASS

TO REDDY CREEK BRIDGE

MATCH LINE STA. 45+00 – SEE SHEET PS-08

MATCH LINE STA. 40+00 – SEE SHEET PS-06



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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

SCALE 1" = 40' ADVERTISED DATE TBD CONTRACT NO.

DESIGNED BY IMS
DRAWN BY JRS
CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS – 07 OF 09

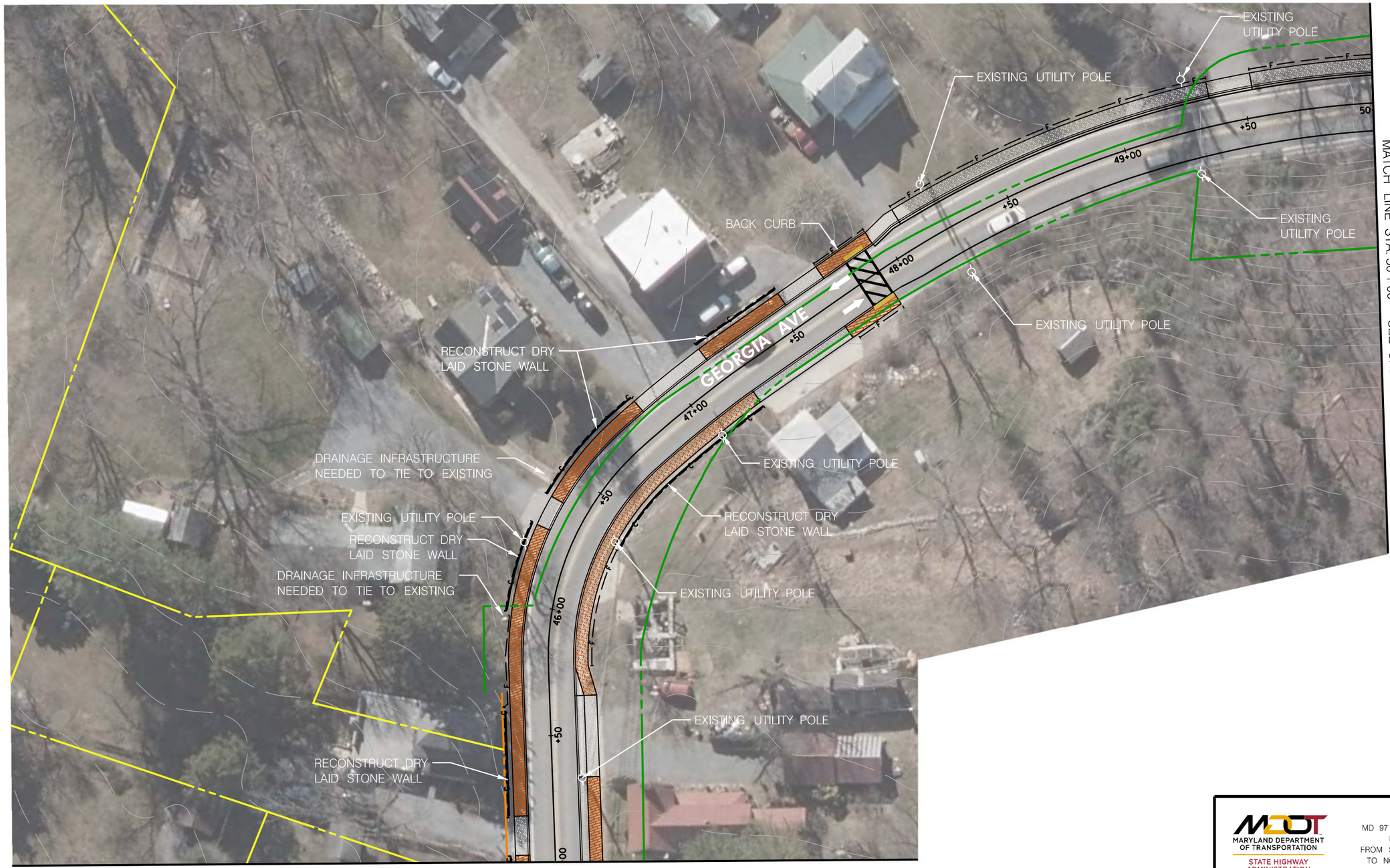
SHEET NO. 10 OF 12

BY: iselock –

PLOTTED: 1/16/2026

SOUTH TO BROOKEVILLE BYPASS

TO REDDY CREEK BRIDGE



MATCH LINE STA. 50+00 – SEE SHEET PS-09

MATCH LINE STA. 45+00 – SEE SHEET PS-07

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MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
TO NORTHWEST OF BROOKEVILLE

ROADWAY PLAN

SCALE 1" = 40' ADVERTISED DATE TBD CONTRACT NO.

DESIGNED BY IMS
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CHECKED BY BGB
MDE/PRD

COUNTY
LOGMILE

DRAWING NO. PS – 08 OF 09

SHEET NO. 11 OF 12

BY: iselock –

PLOTTED: 1/16/2026

SOUTH TO BROOKEVILLE BYPASS

TO REDDY CREEK BRIDGE

MATCH LINE STA. 50+00 – SEE SHEET PS-08

Alvi Associates, Inc.

CONSULTING ENGINEERS
BALTIMORE, MARYLAND

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STATE HIGHWAY ADMINISTRATION

MD 97 SIDEWALK FEASIBILITY STUDY
MD 97 (GEORGIA AVE.)
FROM SOUTH OF GOLD MINE ROAD
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ROADWAY PLAN

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COUNTY
LOGMILE

DRAWING NO. PS-09 OF 09

SHEET NO. 12 OF 12

BY: iselock –

PLOTTED: 1/16/2026

APPENDIX C

CONCEPT COST ESTIMATES

Alvi Associates, Inc. 1/16/2026

MDOT SHA OHD Pedestrian and Cyclist (PACT) Support: MD 97 from Reddy Branch Bridge to Georgia Ave Roundabout

Cost Estimate					
Category No.	**Item Description**	**Quantity**	**Unit**	**Unit Price**	**Price**
Category 1 - Preliminary					
N/A	65% of Cat.'s 2, 4, 5, and 6	1	LS	$1,137,423.95	$1,137,423.95
				Category 1 Total:	***$1,137,423.95***
Category 2 - Grading					
201032	CLASS 2 EXCAVATION	223	CY	$ 60.00	$13,380.00
210019	SAW CUTS	6000	LF	$ 5.00	$30,000.00
202065	COMMON BORROW	777	CY	$ 30.00	$23,310.00
				Category 2 Total:	***$66,690.00***
Category 3 - Drainage					
N/A	40% of Cat.'s 2, 4, 5, and 6	1	LS	$699,953.20	$699,953.20
				Category 3 Total:	***$699,953.20***
Category 4 - Structures					
N/A	NONE WITHIN PROJECT SCOPE				$0.00
				Category 4 Total:	***$0.00***
Category 5 - Paving					
504530	SUPERPAVE ASPHALT MIX 12.5MM FOR SURFACE, PG 64S-22, LEVEL 2	1,158	TON	$ 125.00	$144,750.00
504560	SUPERPAVE ASPHALT MIX 19.0MM FOR BASE, PG 64S-22, LEVEL 2	218	TON	$ 120.00	$26,160.00
508003	STANDARD MILLING ASPHALT PAVEMENT OVER 1 INCH TO 2.5 INCH DEPTH	10,651	SY	$ 2.00	$21,302.00
520113	6 INCH GRADED AGGREGATE BASE COURSE	1,334	SY	$ 20.00	$26,680.00
549001	5 INCH WHITE PAVEMENT MARKING PAINT LINES	6,000	LF	$ 0.25	$1,500.00
549003	5 INCH YELLOW PAVEMENT MARKING PAINT LINES	6,000	LF	$ 0.25	$1,500.00
549609	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	610	LF	$ 10.00	$6,100.00
-	PERMEABLE PAVER	3,055	SF	$ 40.00	$122,200.00
				Category 5 Total:	***$350,192.00***
Category 6 - Shoulders					
634101	STANDARD TYPE A CURB 8 INCH X 16 INCH MINIMUM	277	LF	$ 50.00	$13,850.00
634301	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH MINIMUM DEPTH	2,115	LF	$ 45.00	$95,175.00
655105	5 INCH CONCRETE SIDEWALK	28,013	SF	$ 12.00	$336,156.00
655383	BRICK SIDEWALKS	12,796	SF	$ 45.00	$575,820.00
-	RECONSTRUCT DRY LAID STONE WALL	350	LF	$ 200.00	$70,000.00
-	GRANITE CURB	2,420	LF	$ 100.00	$242,000.00
				Category 6 Total:	***$1,333,001.00***
Category 7 - Landscaping					
N/A	13% of Cat.'s 2, 4, 5, and 6	1	LS	$227,484.79	$227,484.79
				Category 7 Total:	***$227,484.79***
Category 8 - Traffic					
801104	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	100	LF	$15.00	$1,500.00
801605	SHEET ALUMINUM SIGNS	63	SF	$40.00	$2,520.00
				Category 8 Total:	***$4,020.00***
Contingency & Extended Total					
				Subtotal Cat.'s 1-8:	$3,818,764.94
				Contingency (40%):	$1,527,505.98
				Total:	***$5,346,270.92***