

ARDENNES AVENUE AND HALPINE ROAD INTERSECTION IMPROVEMENT REPORT

Ardennes Avenue and Halpine Road Intersection

Twinbrook Safe Routes to School and Transit Access Feasibility Studies
City of Rockville Contract No. BCS 2017-01H

December 2024

Prepared For:

City of Rockville
111 Maryland Ave,
Rockville, Maryland 20850

Prepared By:

Mercado Consultants, Inc.
17830 New Hampshire Avenue
Suite 200
Ashton, Maryland 20861

AECOM
4 North Park Drive, Suite 300
Hunt Valley, Maryland 21030

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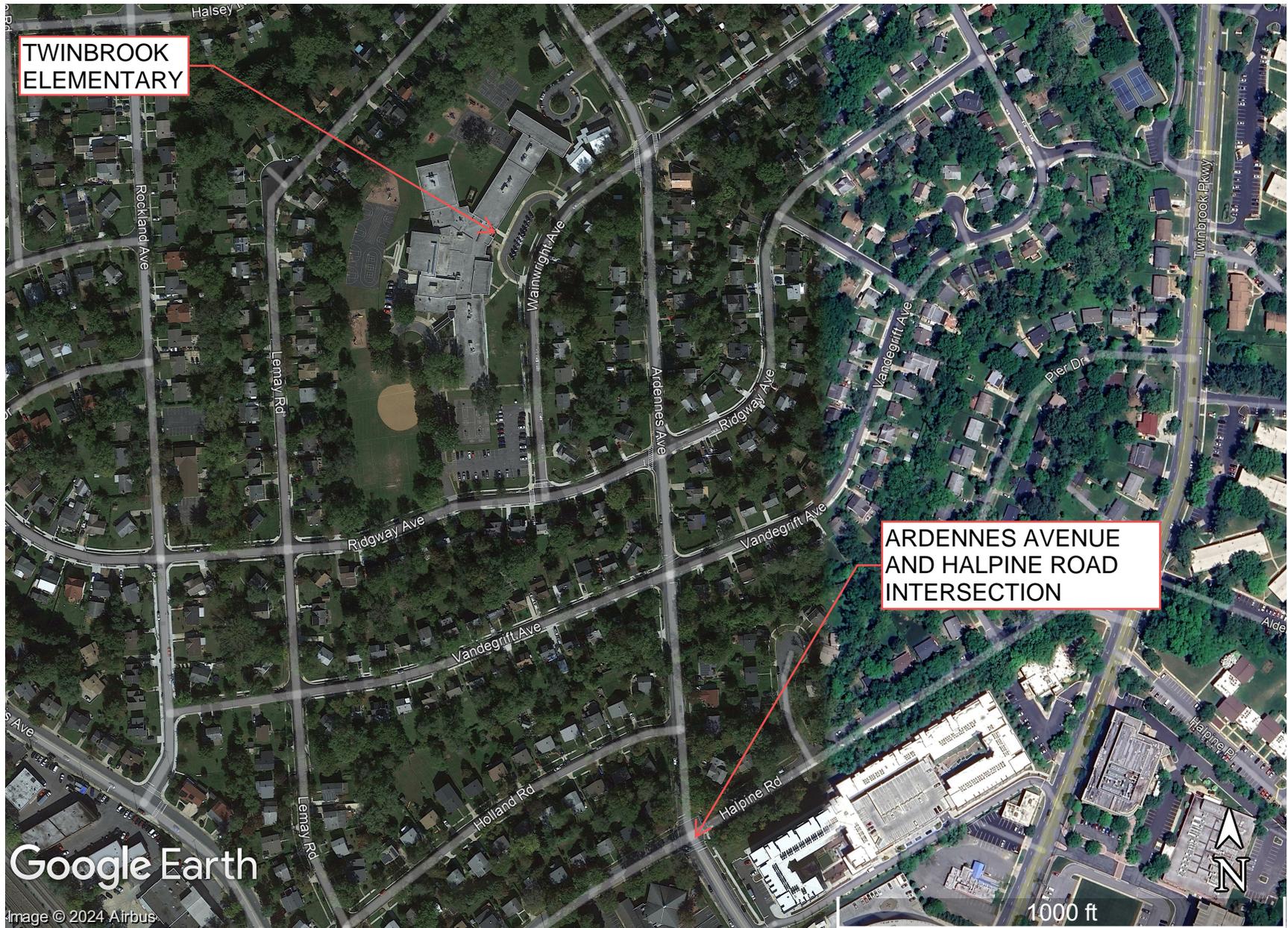
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FIGURE:

1. LOCATION MAP



ARDENNES AVENUE AND HALPINE ROAD INTERSECTION
FIGURE 1: LOCATION MAP

I. PROJECT INTRODUCTION

This report has been prepared for the City of Rockville as part of the Vision Zero program, a priority initiative of the Mayor and Council that seeks to eliminate serious injuries and fatalities that result from traffic crashes. This program is multimodal and aims to improve roadway safety for pedestrians, bicyclists, transit users, and motorists. The Twinbrook Safe Routes to School and Transit Access study will identify opportunities to improve intersection safety for all modes of transportation, especially for trips to and from Twinbrook Elementary School and the Twinbrook Metro Station. The intersections studied included:

1. Ardennes Avenue and Crawford Drive
2. Ardennes Avenue and Halsey Road
3. Ardennes Avenue and Halpine Road
4. Ardennes Avenue and Ridgway Avenue
5. Ardennes Avenue and Wainwright Avenue
6. Chapman Avenue and Bouic Avenue
7. Chapman Avenue and Twinbrook Parkway
8. Lemay Road and Ridgway Avenue

Additionally, as a separate effort, this project evaluated the feasibility of constructing a sidewalk along several street segments in Twinbrook including:

1. Brooke Drive between Lewis Avenue and Rockland Avenue
2. Crawford Drive between Rockcrest Circle and Hillcrest Park
3. Crawford Drive between Atlantic Avenue and Ardennes Avenue
4. Halsey Road between Henry Road and Ardennes Avenue
5. Lemay Road between Vandegrift Avenue and Ardennes Avenue
6. Midway Avenue between Crawford Drive and Stillwell Road
7. Wade Avenue between Edmonston Drive and Crawford Drive

This project was funded by a MDOT Transportation Alternatives (TA) Program grant, and the improvements and cost estimate are proposed by the project team consisting of Mercado Consultants and AECOM.

II. PROJECT DESCRIPTION

This report discusses the feasibility of improvements at the intersection of Ardennes Avenue and Halpine Road. Please see Appendix A for the recommended feasible safety upgrades and cost estimate.

III. DESIGN CRITERIA AND ASSUMPTIONS

The design criteria used for intersection improvements include both intersection and sidewalk aspects. Intersection design criteria come from the AASHTO Geometric Design of Highways and Streets. This reference document outlines specific elements affecting the performance of pedestrians at intersections. The elements outlined include sidewalk and crosswalk width, crossing distances, conflicting traffic volumes, speed and visibility of approaching traffic, turning speeds, permissive right-turn-on-red, permissive left-turn movements, crosswalk lighting, and accessibility for people with disabilities. Improving these elements was explored within this study.

The Maryland Manual on Uniform Traffic Control Devices (MD MUTCD) was referenced for the proposed signs, placement, pavement markings, and traffic control devices applicable to improving the intersections studied. Specifically, the MD MUTCD was referenced for choosing advanced warning signs and sign placement. This document was also used for proposing crosswalks, upgrading crosswalk style, and pavement markings for the crosswalk and stop bar. The MD MUTCD was also used for verifying warrants for additional proposed traffic controls at the intersections.

The NACTO Urban Street Design Guide was also used as a reference for intersection upgrades. Various design techniques are outlined in this document which improve pedestrian safety and mobility across intersections.

The sidewalk criteria for the intersection came from the ADA Standards for Accessible Design and the recently adopted Public Right-of-Way Accessibility Guidelines. A 5-foot minimum width sidewalk was proposed to meet this standard. The acceptable running slopes on the ramps are 12:1 maximum, and the proposed landing pads are a minimum of 5-foot x 5-foot with a 48:1 maximum cross-slope. The depressed landing pads located at crossings contain a 2-foot-wide minimum detectable warning surface.

The buffer between the proposed sidewalk and back of curb was set to a 2-foot minimum but could vary to avoid tree and utility impacts. Any proposed sidewalk was also set to tie into existing sidewalk where applicable.

It was assumed the proposed sidewalk is entirely within the City of Rockville's right-of-way. Impacted fences, mailboxes, and other resident belongings located within the City of Rockville's right-of-way are to be relocated. Impacted steps or resident walkways are to be reconstructed to tie into the proposed sidewalk. Utility impacts such as inlets, fire hydrants, and utility poles were avoided.

The Fire Department Access Performance-Based Design Guide was also referenced for the intersection upgrades. This guide dictates the roadway clear width to be 20-foot minimum for emergency vehicles. The curb radius recommended at intersections is 25-foot minimum and was used to upgrade curb radii throughout the site.

The design vehicle recommended to be used to confirm turning movements for this intersection is a school bus (S-BUS-40) per the direction of the City of Rockville. It is also assumed the intersection will remain an all-way stop-controlled intersection.

IV. EXISTING CONDITIONS

Ardennes Avenue is an undivided two-way road, classified by the city as a primary residential class 2 road. Halpine Road is an undivided two-way road, classified by the city as a primary class 2 residential road and the southbound leg is classified by the city as a business district 2. The intersection of Ardennes Avenue and Halpine Road is stop-controlled in all directions. The posted speed through the intersection is 25 MPH. This intersection is located 0.3 miles from Twinbrook Elementary School and 0.3 miles from the Twinbrook Metro Station.

The approaches to the Ardennes Avenue and Halpine Road intersection are marked with double solid yellow pavement markings in all directions. The north approach from Ardennes Avenue has marked on-street parking. The south approach has marked on-street parking and bike lanes. There are marked crosswalks on all approaches of the intersection.

The Ardennes Avenue and Halpine Road intersection has existing sidewalks on all quadrants of the intersection. There is an existing utility pole on the southwest quadrant and an existing fire hydrant on the southeast quadrant. The existing curb radii at this intersection is approximately 25-feet for all quadrants except for the southwest quadrant.

Please see Appendix B for existing site photos.

V. CRASH DATA

There is one police-reported crash at this location during the 2018-2022 study period. Please see Appendix C for Crash Data.

VI. ALTERNATIVES CONSIDERED

Various strategies were considered for improving safety at the Ardennes Avenue and Halpine Road intersection. The project team first considered proposing curb extensions or bulbouts at this intersection. This strategy is effective in slowing down traffic as it approaches the intersection because the roadway width is narrowed from its existing varied width to 20-feet. Curb extensions also decrease the length of crosswalks and as a result increase pedestrian safety. This strategy was not deemed feasible due to the proximity of the existing bus stop on the southern approach and the footprint of the proposed curb extension. Curb extensions would also impact bike lanes on the southbound approach.

Another strategy considered was implementing raised crosswalks over Ardennes Avenue. The raised crosswalks would require ADA complaint trench drains to ensure water flow patterns remain unchanged. Based on GIS contours water flows east along Halpine Road therefore the raised crosswalk would not interfere with water flow.

Post mounted delineators were also considered along Ardennes Avenue. This simple but effective traffic calming technique ensures vehicles do not encroach into opposing lanes. Vehicles have been known to encroach the opposite lane to get past parked vehicles within the study area.

Another safety improvement strategy that was considered is additional signage. In-street crosswalk signs aligned with the double yellow solid pavement marking line were considered for this intersection. Advanced warning signs were also considered ahead of the existing stop signs and crosswalk.

Refreshing existing pavement markings was also considered for this intersection. Crosswalk marking upgrades to continental style was also considered. These strategies provide a greater visibility and warning to motorists of the upcoming crosswalk and pedestrians.

VII. PUBLIC INPUT

The in-person and virtual meeting to discuss proposed intersection improvements for all eight intersections took place on June 26th and July 1st, 2024. During these meetings improvements across all intersections were discussed and residents overall appeared to be in favor of the proposed improvements. The Twinbrook Community Association submitted formal comments related to this intersection. Please see Appendix D for comments and the project team's response.

VIII. RECOMMENDATIONS

The project team recommends upgrading the curb radii to 25-feet for the southeast quadrant to match the other quadrants. The reduced curb radii will encourage motorists to reduce their speed as they make turns at the intersection.

Advanced warning signs for the pedestrian crosswalk are also recommended along Ardennes Avenue. Ardennes Avenue was chosen as the location for advance warning signs due to its proximity to the business district to the south, a higher-traffic area.

Pavement markings are also recommended to be refreshed and crosswalks upgraded to continental style at this intersection. The crosswalks and receiving landing pads should be shifted to provide perpendicular landing pads that face each other.

Lastly, the project team recommends a lighting survey to be conducted in the future for this intersection.

There are also no impacts outside of the City of Rockville's right-of-way for any of the recommended strategies. Easements are required to allow for the construction of a connection to the pre-existing sidewalk.

A. IMPACTS:

Easements required: 2

B. COST ESTIMATE:

Project cost was estimated using the unit cost method plus an overall 40% contingency to reflect the current level of study. Unit costs were gathered for proposed items and quantities were gathered. The unit costs used were derived from similar projects within Montgomery County. The approximate cost for constructing the recommended safety upgrades is \$77,000. Please see Appendix A for cost estimate breakdown.

IX. SUMMARY

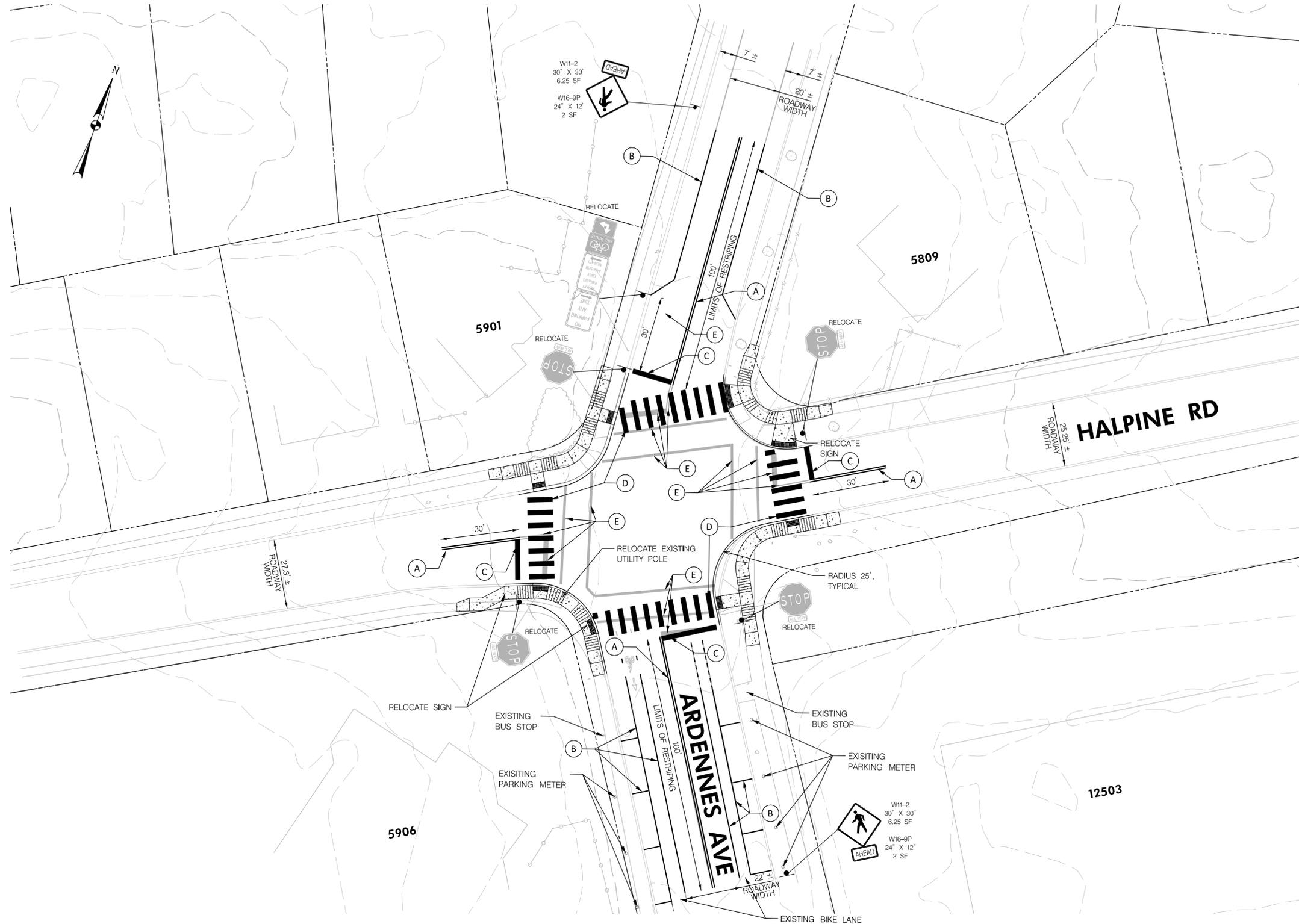
The project team proposes moving forward with several intersection improvement techniques for Ardennes Avenue and Halpine Road. While feasible, the project team recommends upgrading the curb radii to 25-foot radii for the southeast quadrant as a lower priority project to be carried out in a future fiscal year when budget resources permit.

The project team recommends crosswalks and receiving landing pads to be shifted to provide perpendicular landing pads that face each other. Pavement markings should be refreshed for the intersection, and crosswalks should be upgraded to continental style.

Advanced warning signs for the pedestrian crosswalk should be installed along Ardennes Avenue. These upgrades should improve pedestrian safety across the Ardennes Avenue and Halpine Road intersection.

APPENDIX A:

PLAN SHEET(S) AND ESTIMATE



LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE REMOVAL
- 8 INCH PORTLAND CEMENT CONCRETE DRIVEWAY
- 8 INCH ASPHALT DRIVEWAY
- DETECTABLE WARNING SURFACE
- NEW CURB
- APPROX. RIGHT OF WAY
- ADA RAMP
- PROPOSED SIGN
- EXISTING SIGN TO REMAIN

SIGNING AND PAVEMENT MARKING LEGEND

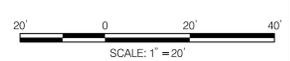
- (A)** 5 INCH DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKINGS
- (B)** 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS
- (C)** 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS
- (D)** 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SPACING: 20-36 INCH, TYPICAL 36 INCH)
- (E)** REMOVAL OF EXISTING PAVEMENT MARKINGS

NOTE: 1. ALL SIGNING AND MARKING SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MD MUTCD), MARYLAND'S STATE HIGHWAY ADMINISTRATION'S BOOK OF STANDARDS, SPECIFICATIONS, AND GUIDELINES.
 2. ALL PAVEMENT MARKING SHALL BE DONE USING THERMOPLASTIC MATERIALS.
 3. STOP LINES SHALL BE 24 INCH WIDE USING THERMOPLASTIC MATERIAL. THE SPACING BETWEEN THE STOP LINE AND THE CROSSWALK MARKING SHALL BE 4 FEET AT A MINIMUM.
 4. SIGN HEIGHT SHALL BE MINIMUM 7 FEET FROM THE BOTTOM OF THE SIGN FACE TO THE GROUND.
 5. FOR SIGN POSTS, USE EITHER 2" GALVANIZED U CHANNEL POSTS OR GALVANIZED BREAKAWAY TUBULAR STEEL SIGN POSTS BASED ON THE MD SHA STANDARD MD-802.04



DEPARTMENT OF PUBLIC WORKS
 CITY OF
ROCKVILLE
 111 MARYLAND AVE. ROCKVILLE, MARYLAND

NOTE: 1. TOPOGRAPHY BASED ON MOBILE LIDAR SCAN
 2. DESIGN VEHICLE FOR THIS INTERSECTION IS A SCHOOL BUS (S-BUS-40).
 3. IMPROVEMENTS ARE TO BE COORDINATED WITH COMMUNITY PLANNING AND DEVELOPMENT SERVICES PRIOR TO IMPLEMENTATION.



INTERSECTION IMPROVEMENT PLAN
 ARDENNES AVE-HALPINE RD INTERSECTION

TWINBROOK SAFE ROUTES TO SCHOOL AND TRANSIT
 ACCESS FEASIBILITY STUDIES

DATE SUBMITTED: 12/2024	SCALE 1"=20'	SHEET NO. 1 OF 1
CONTRACT NO. BCS 2017-01H		

City of Rockville, Maryland

DRAFT



Engineer's Cost Estimate

Contract No. BCS 2017-01H
 Twinbrook Safe Routes to School and
 Transit Access Feasibility Studies
 Ardennes Avenue and Halpine Road Intersection
 December 16, 2024

ITEM NO.	CATEGORY CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CATEGORY 1						
		MAINTENANCE OF TRAFFIC	LS	1	\$5,000.00	5,000.00
		REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH	LF	448	\$1.00	448.00
					CATEGORY 1 TOTAL	\$5,448.00
CATEGORY 2						
		CLASS 1 EXCAVATION	CY	26	\$60.00	\$1,560.00
					CATEGORY 2 TOTAL	\$1,560.00
CATEGORY 3						
					CATEGORY 3 TOTAL	\$0.00
CATEGORY 4						
					CATEGORY 4 TOTAL	\$0.00
CATEGORY 5						
		5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	556	\$3.00	\$1,668.00
		5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS	LF	520	\$3.00	\$1,560.00
		24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	398	\$5.00	\$1,990.00
					CATEGORY 5 TOTAL	\$3,550.00
CATEGORY 6						
		5 INCH CONCRETE FOR SIDEWALK	CY	26	\$650.00	\$16,900.00
		TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	LF	260	\$60.00	\$15,600.00
					CATEGORY 6 TOTAL	\$32,500.00
CATEGORY 7						
					CATEGORY 7 TOTAL	\$0.00
CATEGORY 8						
		RELOCATE UTILITY	EA	1	\$10,000.00	10,000.00
		SHEET ALUMINUM SIGN	SF	18	\$45.00	810.00
		RELOCATE SIGN	SF	37	\$30.00	1,110.00
					CATEGORY 8 TOTAL	\$11,920.00
					SUBTOTAL	\$54,978.00
					40% CONTINGENCY	\$21,991.20
					TOTAL	\$76,969.20

APPENDIX B:

SITE PHOTOS



Ardennes Avenue and Halpine Road Intersection – Looking North



Ardennes Avenue and Halpine Road Intersection – Looking South



Ardennes Avenue and Halpine Road Intersection – Looking East



Ardennes Avenue and Halpine Road Intersection – Looking West

APPENDIX C:

CRASH DATA REPORT



Ardennes Ave

Halpine Rd

Ardennes Ave & Halpine Rd

Halpine Rd

Ardennes Ave

Google Earth

Image Landsat / Copernicus

100 ft



Location: ARDENNES AVE @ HALPINE RD
 County: Montgomery, D3 Period: January 01, 2018 To December 31, 2022

Logmiles: 0.8 At 0.21 Radius: 250 ft.
 Note:

YEAR >>	2018	2019	2020	2021	2022	Total
Fatal	0	0	0	0	0	0
No. Killed	0	0	0	0	0	0
Injury	0	0	0	0	0	0
No. Injured	0	0	0	0	0	0
Prop. Damage	0	0	1	0	0	1
Total Crashes	0	0	1	0	0	1
Severity Index	0	0	1	0	0	Avg 0
Opposite Dir.	0	0	0	0	0	0
Rear End	0	0	0	0	0	0
Sideswipe	0	0	0	0	0	0
Left Turn	0	0	0	0	0	0
Angle	0	0	0	0	0	0
Pedestrian	0	0	0	0	0	0
Parked Veh.	0	0	0	0	0	0
Fixed Object	0	0	0	0	0	0
Other	0	0	1	0	0	1
U-Turn	0	0	0	0	0	0
Backing	0	0	1	0	0	1
Animal	0	0	0	0	0	0
Railroad	0	0	0	0	0	0
Fire / Expl.	0	0	0	0	0	0
Overturn	0	0	0	0	0	0
Truck Related	0	0	0	0	0	0
Night Time	0	0	0	0	0	0
Wet Surface	0	0	1	0	0	1
Alcohol	0	0	0	0	0	0
Intersection	0	0	1	0	0	1
Total Vehicles	0	0	2	0	0	2
Total Trucks	0	0	0	0	0	0
Truck %	0.0	0.0	0.0	0.0	0.0	0.0

Comments:

Location: ARDENNES AVE @ HALPINE RD

Logmiles: 0.8 At 0.21 Radius: 250 ft.

County: Montgomery, D3 Period: January 1, 2018 To December 31, 2022

Note:

SEVERITY											DAY OF THE WEEK																
FATAL	INJURY		P-DAMAGE		TOTAL		SUN	MON	TUE	WED	THU	FRI	SAT	UNK													
Accidents	0		1		1				1																		
Veh Occ							1																				
Pedestrian					AVG Severity Index: 0																						
MONTH OF THE YEAR														CONDITION	DRIVER	PED											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	1													
1														Alcohol:													
														Other:	1												
TIME											VEHICLES INVOLVED PER ACCIDENT																
12	01	02	03	04	05	06	07	08	09	10	11	UNK	1	2	3	4	5	6+	UNK	TOTAL							
AM:											1							1									
PM:																		1								2	
VEHICLE TYPE				SURFACE		MOVEMENTS																					
Motorcycle/Moped		Tractor Trailer		1 Wet		NORTH			SOUTH			EAST			WEST												
2 Passenger Vehicle		Passenger Bus		Dry		LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT										
Sport Utility Veh		School Bus		Sno/Ice					1																		
Pick-Up Truck		Emergency Veh		Mud		-----																					
Trucks (2+3 axles)		Other Types		Other		OTHER MOVEMENTS										1											
PROBABLE CAUSES											COLLISION TYPES				FATAL	INJURY	PROP	TOTAL									
Influence of Drugs				Improper Lane Change							Opposite Dir		Related:														
Influence of Alcohol				1 Improper Backing							UnRelated:		-----														
Influence of Medication				Improper Passing							Rear End		Related:		-----												
Influence of Combined Subst.				Improper Signal							UnRelated:		-----														
Physical/Mental Difficulty				Improper Parking							Sideswipe		Related:		-----												
Fell Asleep/Fainted, etc.				Passenger Interfere/Obstruct.							UnRelated:		-----														
Fail to give full Attention				Illegally in Roadway							Left Turn		Related:		-----												
Lic. Restr. Non-compliance				Bicycle Violation							UnRelated:		-----														
Fail to Drive in Single Lane				Clothing Not Visible							Angle		Related:		-----												
Improper Right Turn on Red				Sleet, Hail, Freezing Rain							UnRelated:		-----														
Fail to Yield Right-of-way				Severe Crosswinds							Pedestrian		Related:		-----												
Fail to Obey Stop Sign				Rain, Snow							UnRelated:		-----														
Fail to Obey Traffic Signal				Animal							Parked Vehicle		Related:		-----												
Fail to Obey Other Control				Vision Obstruction							UnRelated:		-----														
Fail to Keep Right of Center				Vehicle Defect							Other Collision		Related:		1		1										
Fail to Stop for School Bus				Wet							UnRelated:		-----														
Wrong Way on One Way				Icy or Snow Covered							F	Bridge	01														
Exceeded Speed Limit				Debris or Obstruction							I	Building	02														
Operator Using Cell Phone				Ruts, Holes or Bumps							X	Culvert/Ditch	03														
Stopping in Lane Roadway				Road Under Construction							E	Curb	04														
Too Fast for Conditions				Traffic Control Device Inop.							D	Guardrail/Barrier	05														
Followed too Closely				Shoulders Low, Soft or High							O	Embankment	06														
Improper Turn				Other or Unknown							B	Fence	07														
											J	Light Pole	08														
											E	Sign Pole	09														
											E	Other Pole	10														
											C	Tree/Shrubbery	11														
											T	Contr. Barrier	12														
											S	Crash Attenuator	13														
											Other Fixed Object																
WEATHER		ILLUMINATION		TOTALS																							
Clear / Cloudy		1 Day		18-22		1																					
Foggy		Dawn/Dusk																									
1 Raining		Dark - Lights On																									
Snow / Sleet		Dark - No Lights																									
Other		Other																									

Location: ARDENNES AVE @ HALPINE RD

Logmiles: 0.8 At 0.21 Radius: 250 ft.

County: Montgomery, D3

Period: January 01, 2018 To December 31, 2022

Note:

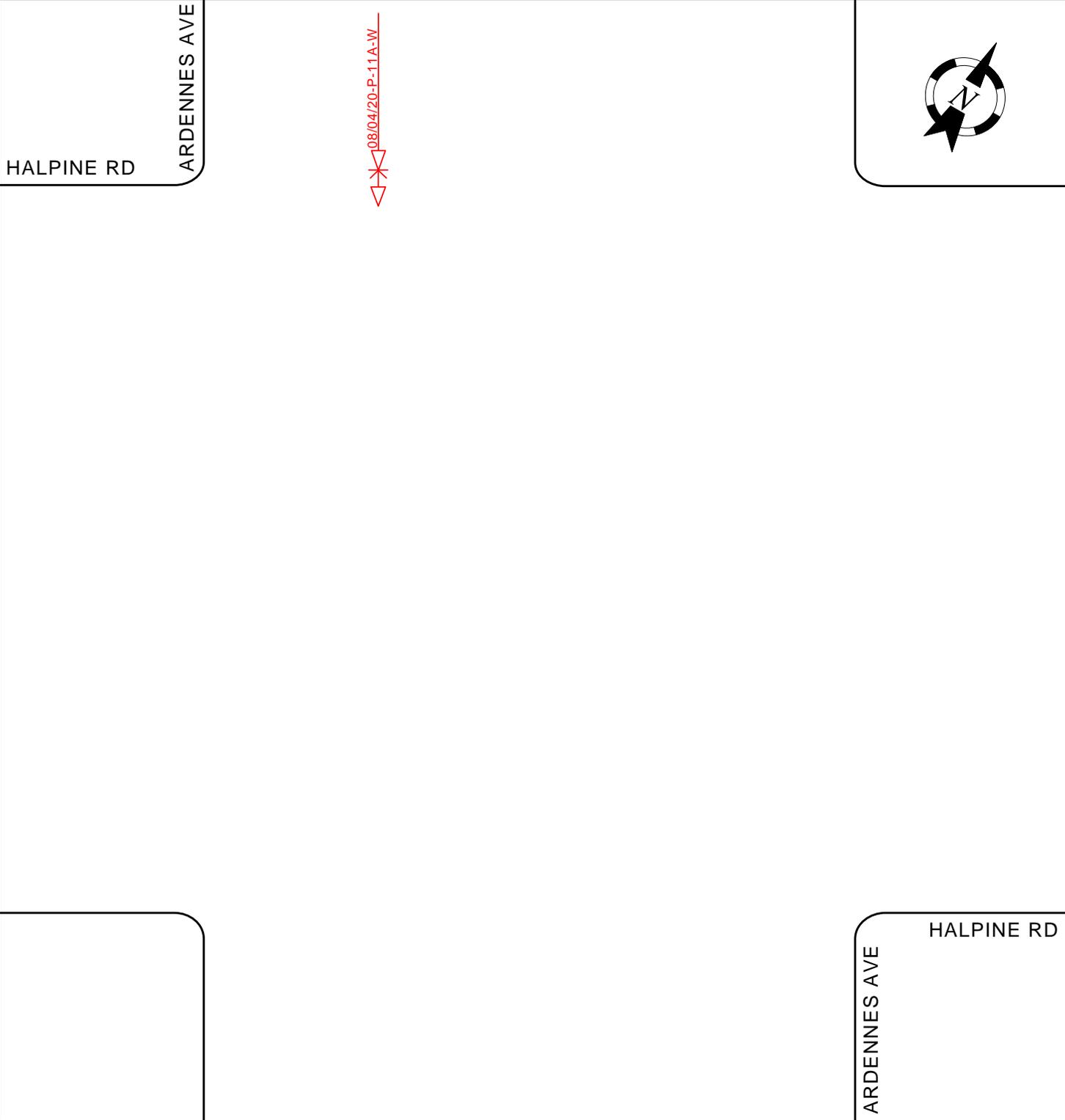
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement		Probable Cause
										V1	V2	
MU140												
0.800	<input type="checkbox"/>	08042020	Property	11A	Day	Wet			OTHER	Su	SS	Improper backing

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
 08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator



Office of Traffic & Safety
 Traffic Development & Support Division
 Crash Analysis Safety Team

Location: Ardennes Ave @ Halpine Rd
 County: MONTGOMERY
 Study Period: 01/01/2018 to 12/31/2022
 Analyst: Robert L. Booker, Jr. Date: 04/18/2024



◀ **DATE-SEVERITY-TIME-SURFACE**
 ◀ **NIGHT**
 ◀ **ALCOHOL** X
 ◀ **DRUGS** ⊗

SEVERITY
 F - Fatalities
 I - Injured
 P - Property Damage
 Only
SURFACE
 D - Dry Surface
 W - Wet Surface
 I - Icy Surface
 S - Snowy Surface

00 - Not Applicable
 01 - Bridge or Overpass
 02 - Building
 03 - Culvert or Ditch
 04 - Curb
 05 - Guardrail or Barrier
 06 - Embankment
 07 - Fence

08 - Light Support Pole
 09 - Sign Support Pole
 10 - Other Pole
 11 - Tree Shrubbery
 12 - Construction Barrier
 13 - Crash Attenuator
 88 - Other
 99 - Unknown

B - Bicycle
 P - Other Pedalcycle
 C - Other Conveyance
 T - Railway Train
 A - Animal
 O - Other Object
 S - Spilled Cargo
 J - Jackknife

U - Units Separated
 N - Other Non collision
 D - Off Road
 R - Downhill Runaway
 F - Explosion or Fire
 ? - Unknown

↻ **U - TURN**
 ↻ **BACKING**
 ↻ **OVERTURN**
 ◻ **Parked Vehicle**
 ◻ **Pedestrian**

APPENDIX D:

RESIDENT COMMENTS AND RESPONSES



TCA Support for Safe Routes to School

July 5, 2024

City of Rockville
111 Maryland Avenue
Rockville, MD 20850

Dear Bryan Barnett-Woods,

On behalf of the Twinbrook Community Association, I am writing to express our strong support for the city's "Safe Routes to School" project. We commend your efforts to enhance pedestrian safety at targeted intersections in Twinbrook, which will greatly benefit our community's residents, particularly our children.

We are pleased to see the city taking proactive steps to improve road safety and encourage walking and cycling to school.

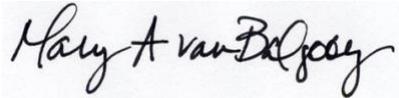
While we fully support the current plans, we would like to respectfully suggest a few additional considerations that we believe would further enhance the project's impact:

1. **Mini Traffic Circle:** We propose the installation of a mini traffic circle at the intersection of Halpine Road and Ardennes Avenue. This would help calm traffic and improve safety at this busy intersection, which is frequently used by students. If possible, the mini circle should incorporate landscaping (e.g. potted plants/trees and/or public art).
2. **Pedestrian-Level Lighting Assessment:** We request a comprehensive assessment of pedestrian-level lighting at all intersections being studied under this project. Adequate lighting is crucial for pedestrian visibility and safety, especially during early morning and evening hours when many students are traveling to and from school-related activities. This would serve as an additional benefit for low-wage workers traveling during off-peak work hours.
3. **Slip Lane Elimination:** We strongly advocate for the elimination of the slip lane on the northwest corner of Twinbrook Parkway and Chapman Avenue. Removing this slip lane would significantly improve pedestrian safety by reducing vehicle speeds and decreasing the number of pedestrian vehicle conflict points.

The Twinbrook Community Association is committed to working collaboratively with the City of Rockville to ensure the success of this important project. We would be happy to provide any additional input or assistance as needed.

Thank you for your consideration of these suggestions and for your ongoing commitment to improving pedestrian safety in our community. We look forward to seeing the positive impact of the “Safe Routes to School” project in Twinbrook.

Sincerely,

A handwritten signature in black ink that reads "Mary A. van Balgooy". The signature is written in a cursive style with a light grey rectangular background behind it.

Mary A. van Balgooy
President, Twinbrook Community Association

In response to the Twinbrook Community Associate comments please see below

1. A mini-traffic circle is only recommended for intersections without stop-control. The intersection of Halpine Road and Ardennes Avenue is an all-way stop control intersection, and has a stop sign on each leg of the intersection. Motorists are required to make a complete stop at this intersection. Staff has reached out to Rockville City Police Department to provide additional traffic enforcement at this intersection.
2. The Transportation Alternatives project did not include an assessment of lighting conditions. Most of the streetlights in Twinbrook are owned and maintained by Pepco. Staff will separately request Pepco to evaluate lighting levels at each intersection.
3. A comprehensive traffic study was not included to evaluate whether the northeast slip lane could be removed. However, the post for the existing signals is installed on the northeast corner refuge island and would require relocation to the new corner if the slip lane were removed. This would be too expensive to implement without being a separate CIP item. Additionally, this intersection is currently subject to an adequacy evaluation and improvements per a county development. Staff is coordinating with MNCPPC regarding this project.