

# CRAWFORD DRIVE SIDEWALK GAP REPORT

Crawford Drive from Atlantic Avenue to Ardennes Avenue

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:

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FIGURE:

1. LOCATION MAP



CRAWFORD DRIVE  
FIGURE 1: LOCATION MAP

## I. PROJECT INTRODUCTION

This report has been prepared for the City of Rockville as one of their Vision Zero Projects. Vision Zero is a priority initiative of the Mayor and Council to create safe and livable neighborhoods. The Twinbrook Safe Routes to School and Transit Access feasibility study focuses on improving multimodal access and mobility in the Twinbrook neighborhood in Rockville. The goal of this project is to evaluate the feasibility of constructing new sidewalks along roads and 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 following sidewalk segments were studied:

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

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

This project was funded by a Maryland Department of Transportation (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 sidewalk improvements along the southern side of Crawford Drive between Ardennes Avenue and Atlantic Avenue. Please see Appendix A for the sidewalk options and cost estimate.

## III. DESIGN CRITERIA AND ASSUMPTIONS

The design criteria used for the proposed sidewalks comes from the ADA Standards for Accessible Design and the recently adopted Public Right-of-Way Accessibility Guidelines. A 5-foot minimum width sidewalk is proposed to meet this standard. The 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 is a minimum 2-foot but may vary to avoid impacts with utilities or trees. Proposed sidewalk must also tie into adjacent existing sidewalk where applicable.

It is assumed the sidewalk is also proposed entirely within the City of Rockville's right-of-way. Temporary construction easements will only be necessary for driveway reconstruction to tie-in to existing driveway grades. Driveways will be reconstructed in-kind. 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. The study looked at shifting sidewalk to avoid moving utilities such as inlets, fire hydrants, and utility poles. At a time of more detailed design, the City of Rockville should coordinate with Pepco about moving utility poles.

Retaining walls or knee walls are to be proposed at locations with steep slope adjacent to the proposed sidewalk.

Marked crosswalks are proposed at intersections along the proposed sidewalk. Proposed marked crosswalks are to include advanced warning signage and stop bars at stop-controlled intersections. The MD MUTCD is to be followed for crosswalk placement. Per the MD MUTCD marked crosswalks are to be 6-foot wide minimum.

The Fire Department Access Performance-Based Design Guide also dictates the roadway clear width to be 20-feet minimum for emergency vehicles. The curb radius recommended at intersections is 25-foot minimum and was used to upgrade curb radii throughout the site. Intersections used specific AASHTO design vehicles proposed by the City of Rockville.

#### IV. EXISTING CONDITIONS

Crawford Drive is an undivided one-way road, classified as a secondary residential street. The westernmost limits of the study, the intersection of Crawford Drive and Ardennes Avenue, is located 0.9 miles from the Twinbrook Metro Station and 0.3 miles from Twinbrook Elementary. The easternmost limits of the study, the intersection of Crawford Drive and Hillcrest Park, is located 1.0 miles from the Twinbrook Metro Station and 0.4 miles from Twinbrook Elementary School.

The proposed sidewalk gap on Crawford Drive extends from Ardennes Avenue to Atlantic Avenue and measures approximately 1480 linear feet. The limits of Crawford Drive are intersected by three streets, Ardennes Avenue, Midway Avenue, and Atlantic Avenue. Ardennes Avenue and Atlantic Avenue have existing sidewalk for the proposed sidewalk on Crawford Drive to tie into. There is another Sidewalk Feasibility Study for proposed sidewalk on either side of the intersecting Midway Avenue and an Intersection Improvement Study for the intersection of Crawford Road and Ardennes Avenue.

Existing utilities poles are located on the south side of Crawford Drive for entire study limits. There is also an existing fire hydrant on the southeast corner of the Crawford Drive and Midway Avenue intersection. There are many trees on both sides of Crawford Drive. The roadway clear width is approximately 25-feet along Crawford Drive. Properties at 13125, 5824, 5822, and 13117 Crawford Drive do not have driveways. Even though most residents do have a driveway there are multiple cars parking along the street.

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**

Two alternatives were considered for the sidewalk gap along the south side of Crawford Drive. Option 1 was designed using the criteria mentioned in the Design Criteria and Assumptions section. The buffer in Option 1 is a consistent 2-foot buffer throughout the sidewalk gap limits, except where it increases to up to 7-feet to avoid impacting utility posts. Option 1 also includes two segments of knee walls totaling up to approximately 382-feet. Option 1 impacts include tree removal (21), bush removal (16), driveway impact (18), and easements required (18).

The second alternative, Option 2, for the south side of Crawford Drive is based on offsetting a segment of curb alignment 5-feet to accommodate the proposed sidewalk. The segment proposed to be offset is between Midway Avenue and Atlantic Avenue. Offsetting the curb alignment decreases the road clear width to 20-feet. This is the minimum allowable clear width for a road to accommodate emergency vehicles. To keep an allowable clear width of 20-feet, on street parking must be removed throughout this segment. The existing curb alignment for the segment of road between Ardennes Avenue and Midway Avenue was not proposed to be offset because the residents in this segment require on-street parking because they do not have driveways. Other impacts of Option 2 include tree removal (5), driveway impact (18), and utility relocation (1).

Options 1 and 2 both propose a crosswalk and stop bar across Crawford Drive at the intersection of Atlantic Avenue.

**VII. PUBLIC INPUT**

Residents and the Study Team participated in the walk the block meeting for Crawford Drive sidewalk gap on May 22<sup>nd</sup>. Residents were overall strongly against any proposed sidewalk on the south side of Crawford Drive. Residents asked about other neighboring streets without any existing sidewalk that may better benefit than Crawford Drive. Residents also asked about repairing the existing sidewalk on the north side of Crawford Drive instead of constructing sidewalk on the south. Residents were strongly against tree removal needed to construct sidewalk on the south side, and they were also strongly against the new proposed curb alignment that would not require tree removal but removal of on-street parking instead. The steep slopes would also require a proposed knee wall across many properties and multiple easements for driveway tie-ins. Overall the residents opposed both Options 1 and 2 and did not seem open to any proposed sidewalk on the south side of Crawford Drive. Please see Appendix D for formal resident comments received for this location.

**VIII. RECOMMENDATIONS**

The study team recommends not proceeding with any proposed sidewalk on the south side of Crawford Drive from Ardennes Avenue to Atlantic Avenue. The study team came to this conclusion based on several factors. Residents showed strong opposition through the in-person "walk the block" meeting as well as formal written comments. Option 1, which keeps the existing curb line, would require many trees to be removed. This option also requires 382 linear feet of knee wall. This greatly increases construction costs for implementing sidewalk on Crawford Drive. Option 1 was not recommended because of these factors.

Option 2 has fewer impacts to existing features throughout the study limits such as trees, and existing slopes but would require narrowing the existing clear-width of the road from 25-feet to 20-feet. This would prohibit on-street parking between Midway Avenue and Atlantic Avenue. Although 20-feet meets the minimum required clear-width for emergency vehicles, it is not ideal. The removal of on-street parking also was met with much resident opposition. Due to these impacts Option 2 is not recommended either.

A. IMPACTS:

Option 1 impacts include:

Tree removal: 21  
Bush removal: 16  
Driveways impacted: 18  
Easements required: 18

Option 2 impacts include:

Tree removal: 5  
Bush removal: 0  
Driveways impacted: 18  
Easements required: 0  
Utility Relocation: 1

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 in each option and quantities were gathered. The unit costs used were derived from similar projects within Montgomery County. The approximate cost for constructing Option 1 is \$625,000 and for Option 2 is \$544,000. Please see Appendix A for cost estimate breakdown.

IX. SUMMARY

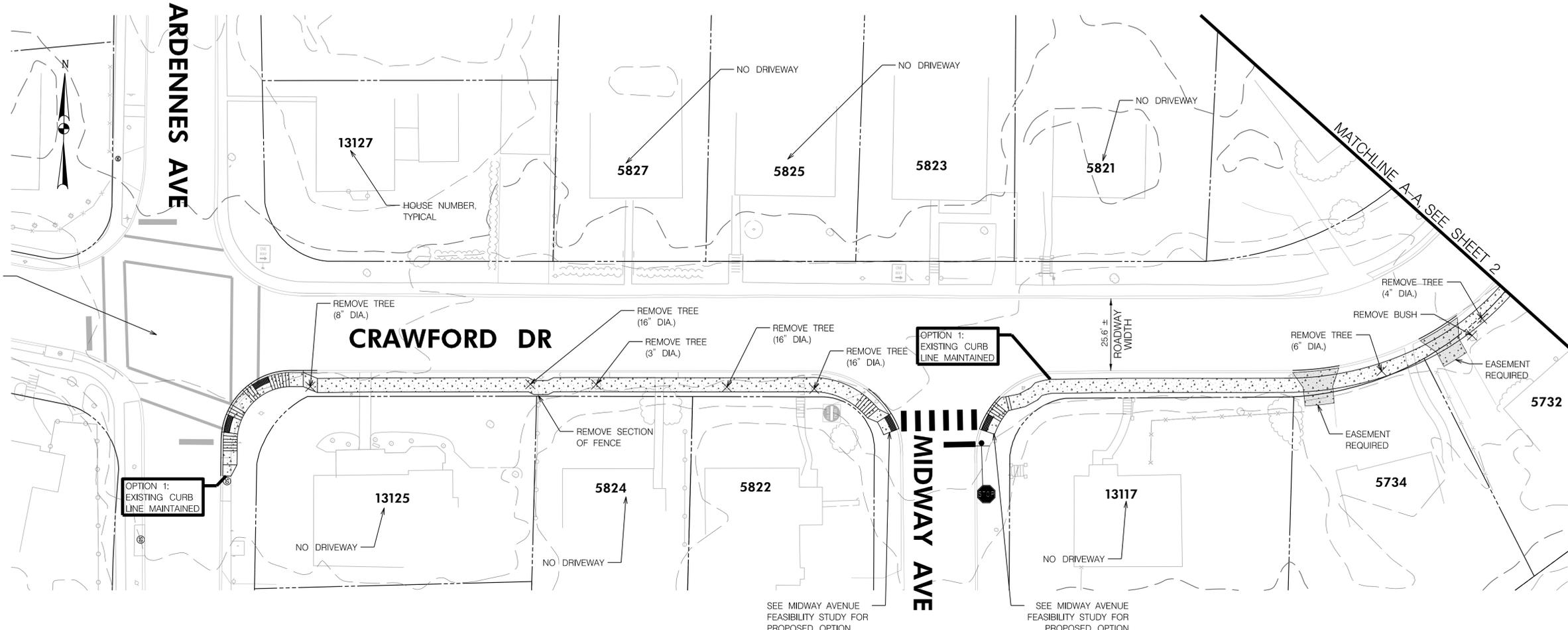
Construction of the sidewalk on Crawford Drive is not recommended.

Option 1 requires 382 linear feet of a knee wall due to the steep slopes behind the proposed sidewalk. This option also requires removal of most trees and bushes along the proposed south side of Crawford Avenue. The residents showed much opposition due to the tree removal and required knee wall. Many residents did not believe a sidewalk was necessary on the south side of Crawford since there is already an existing sidewalk present on the north side.

Option 2 would require eliminating on-street parking throughout most of Crawford Drive. Although this option eliminated the need for extensive tree removal and proposed knee wall, many residents oppose eliminating on street parking.

# APPENDIX A:

PLAN SHEET(S) AND ESTIMATE



SEE INTERSECTION PLANS FOR ADDITIONAL IMPROVEMENTS

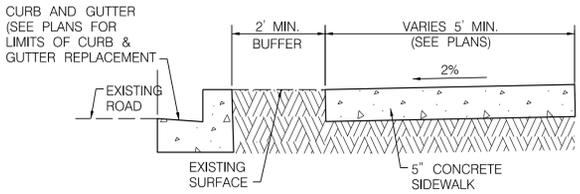
MATCHLINE A-A SEE SHEET 2

OPTION 1: EXISTING CURB LINE MAINTAINED

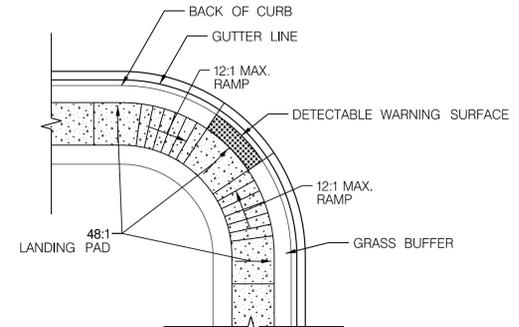
OPTION 1: EXISTING CURB LINE MAINTAINED

SEE MIDWAY AVENUE FEASIBILITY STUDY FOR PROPOSED OPTION

SEE MIDWAY AVENUE FEASIBILITY STUDY FOR PROPOSED OPTION



DETAIL FOR SIDEWALK CONSTRUCTION  
NOT TO SCALE



NOTES:

1. DIRECTION OF 2% CROSS SLOPE WILL BE CONSISTENT WITH EXISTING DRAINAGE CONDITIONS.
2. A CURB SHALL BE ADDED TO THE BACK OF THE SIDEWALK WHERE NEEDED TO PROTECT EXISTING LANDSCAPE AND WHERE THE SLOPE BEHIND THE SIDEWALK IS GREATER THAN 10 PERCENT.
3. EXISTING MULCH BEDS SHALL RETURN TO MULCH BEDS IF DISTURBED.

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

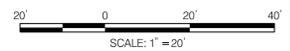
OPTION 1 NOTES:

1. TREES TO BE REMOVED: 21
2. BUSHES/HEDGES TO BE REMOVED: 16
3. KNEE WALL LENGTH (LF): 382
4. DRIVEWAYS IMPACTED: 18



DEPARTMENT OF PUBLIC WORKS  
CITY OF  
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NOTE: TOPOGRAPHY BASED ON MOBILE LIDAR SCAN

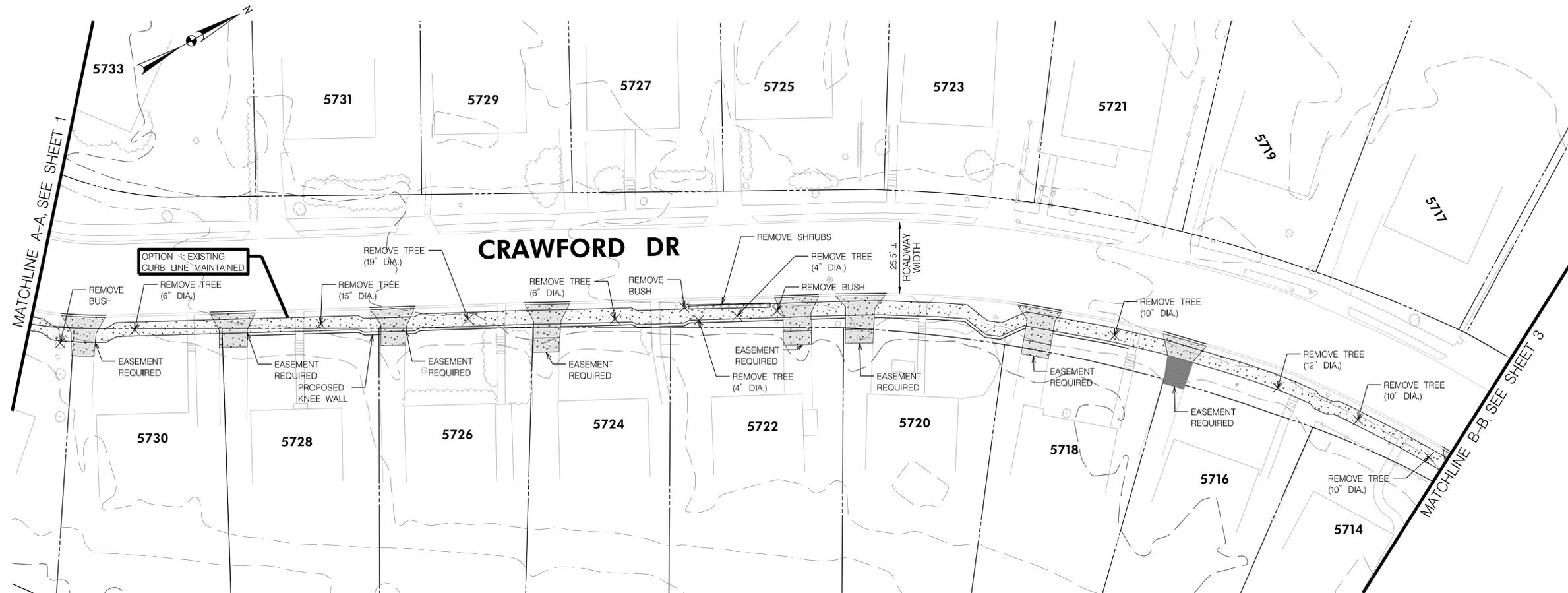


SIDEWALK GAP PLANS  
CRAWFORD DR FROM ARDENNES AVE  
TO ATLANTIC AVE - OPTION 1

TWINBROOK SAFE ROUTES TO SCHOOL AND TRANSIT  
ACCESS FEASIBILITY STUDIES

DATE SUBMITTED: 10/07/2024	SCALE 1"=20'	SHEET NO. 1 OF 3
CONTRACT NO. BCS 2017-01H	City of Rockville, Maryland	

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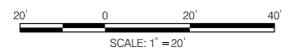
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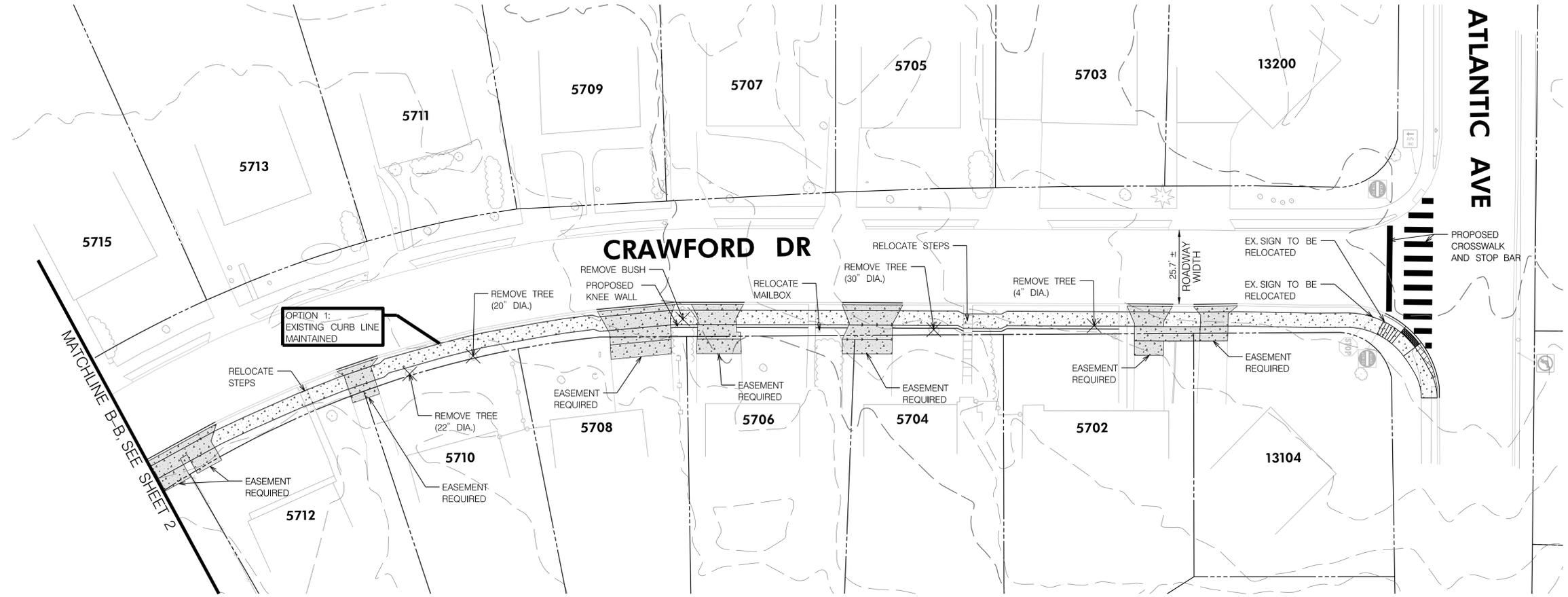
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BCS 2017-01H

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NO. 2  
OF 3

City of Rockville, Maryland

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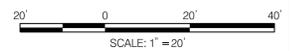
**LEGEND**

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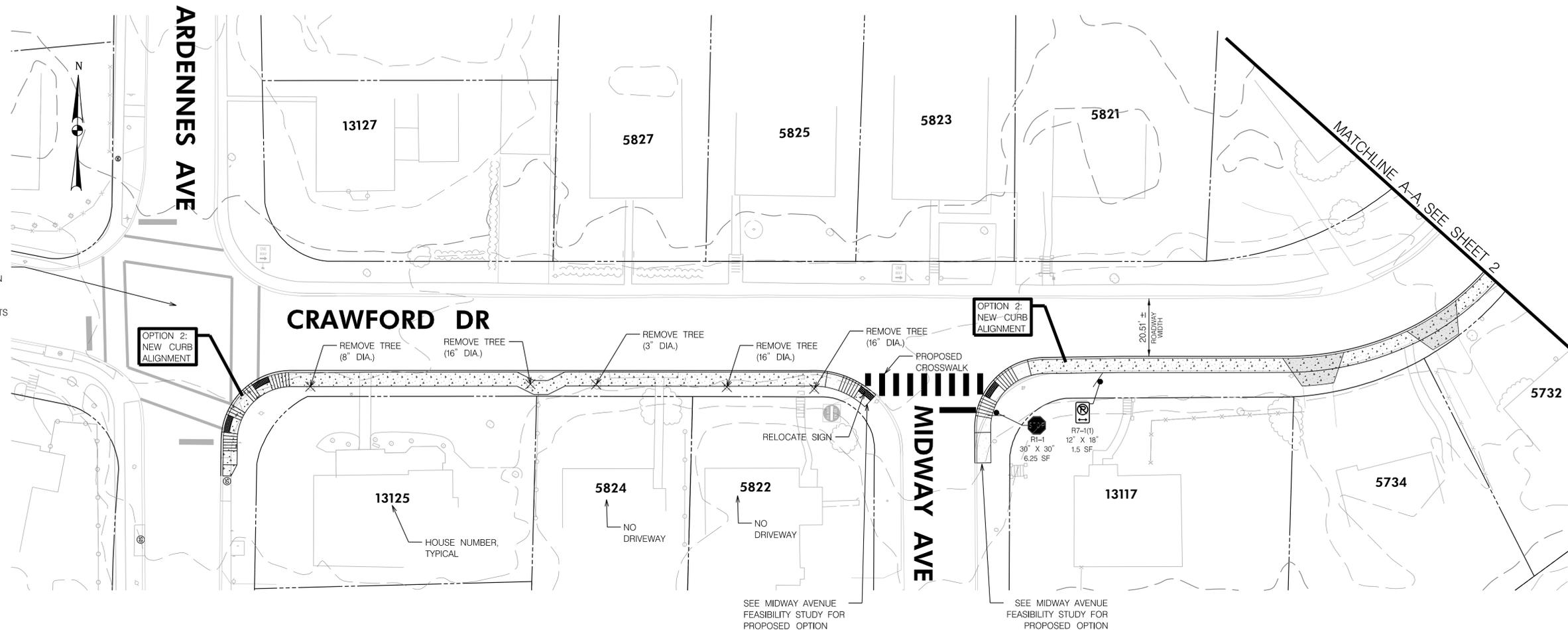
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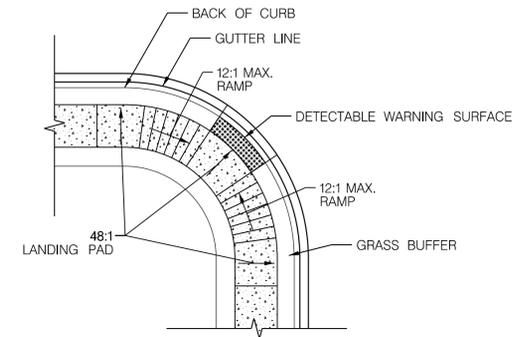
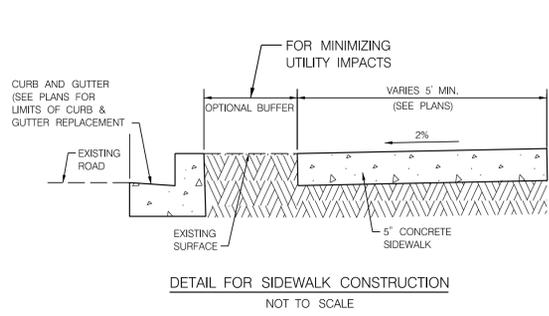


SEE INTERSECTION PLANS FOR ADDITIONAL IMPROVEMENTS

OPTION 2: NEW CURB ALIGNMENT

OPTION 2: NEW CURB ALIGNMENT

MATCHLINE A-A SEE SHEET 2



- NOTES:**
1. DIRECTION OF 2% CROSS SLOPE WILL BE CONSISTENT WITH EXISTING DRAINAGE CONDITIONS.
  2. A CURB SHALL BE ADDED TO THE BACK OF THE SIDEWALK WHERE NEEDED TO PROTECT EXISTING LANDSCAPE AND WHERE THE SLOPE BEHIND THE SIDEWALK IS GREATER THAN 10 PERCENT.
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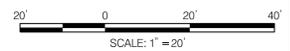
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  - 8 INCH ASPHALT DRIVEWAY
  - DETECTABLE WARNING SURFACE
  - NEW CURB
  - APPROX. RIGHT OF WAY
  - ADA RAMP

- OPTION 2 NOTES:**
1. TREES TO BE REMOVED: 5
  2. BUSHES/HEDGES TO BE REMOVED: 0
  3. KNEE WALL LENGTH (LF): 0
  4. DRIVEWAYS IMPACTED: 18
  5. UTILITY RELOCATION: 1



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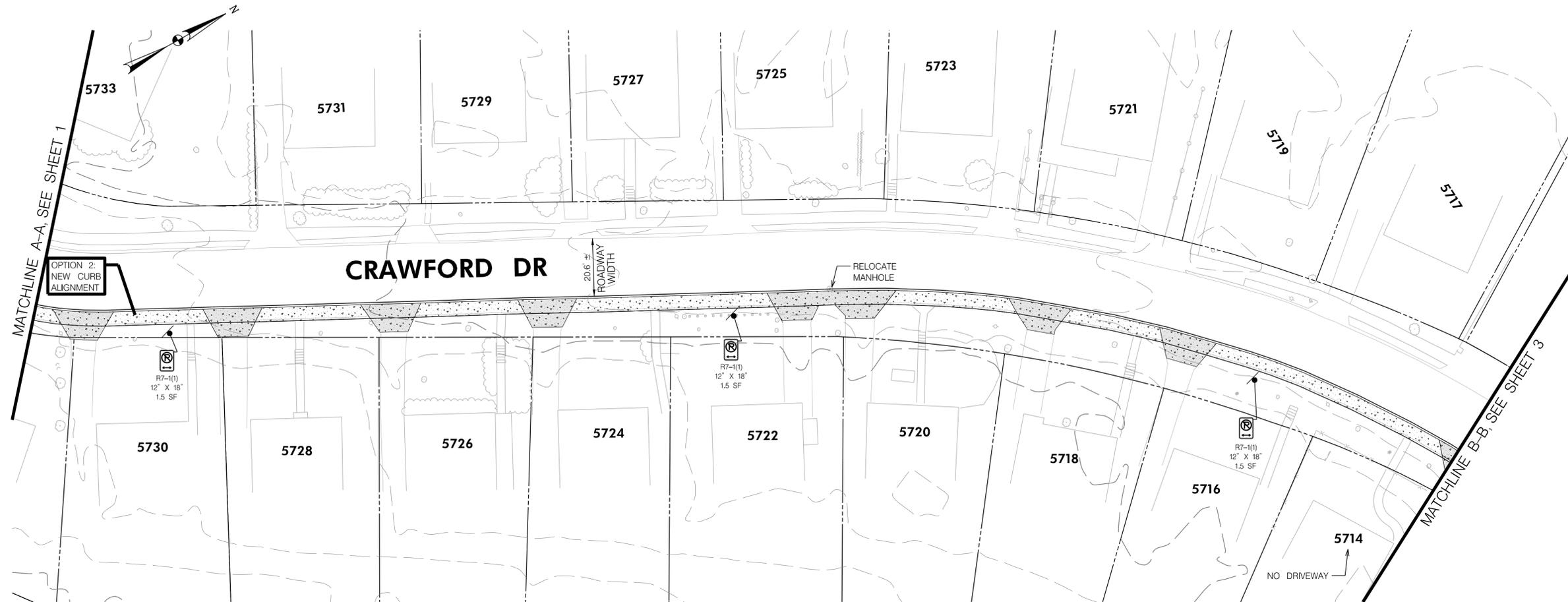


SIDEWALK GAP PLANS  
CRAWFORD DR FROM ARDENNES AVE  
TO ATLANTIC AVE - OPTION 2

TWINBROOK SAFE ROUTES TO SCHOOL AND TRANSIT  
ACCESS FEASIBILITY STUDIES

DATE SUBMITTED: 10/07/2024	SCALE 1"=20'	SHEET NO. 1 OF 3
CONTRACT NO. BCS 2017-01H	City of Rockville, Maryland	

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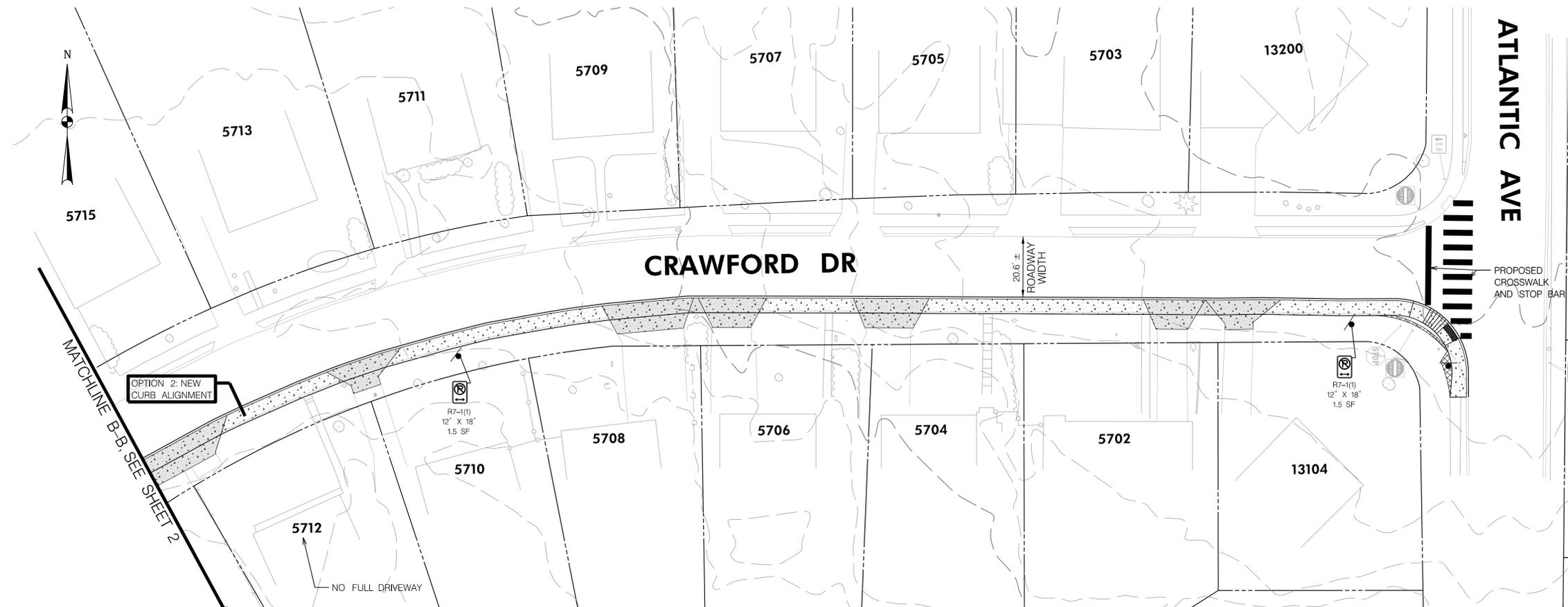
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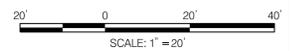
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### Engineer's Cost Estimate

Contract No. BCS 2017-01H  
 Twinbrook Safe Routes to School and  
 Transit Access Feasibility Studies  
 Crawford Drive - Option 1  
 December 30, 2024

ITEM NO.	CATEGORY CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
<b>CATEGORY 1</b>						
		TREE REMOVAL	EA	21	\$1,000.00	21,000.00
		BUSH REMOVAL	EA	16	\$250.00	4,000.00
<b>CATEGORY 1 TOTAL</b>						<b>\$25,000.00</b>
<b>CATEGORY 2</b>						
		CLASS 1 EXCAVATION	CY	170	\$60.00	\$10,200.00
<b>CATEGORY 2 TOTAL</b>						<b>\$10,200.00</b>
<b>CATEGORY 3</b>						
		STEPS OR PATH RELOCATION (SET)	EA	15	\$500.00	\$7,500.00
		KNEE WALL	LF	382	\$350.00	\$133,700.00
<b>CATEGORY 3 TOTAL</b>						<b>\$141,200.00</b>
<b>CATEGORY 4</b>						
<b>CATEGORY 4 TOTAL</b>						<b>\$0.00</b>
<b>CATEGORY 5</b>						
		HOT ASPHALT MIX FOR DRIVEWAY	TON	2	\$175.00	\$350.00
		PAVEMENT MARKINGS FOR CROSSWALK	LF	135	\$5.00	\$675.00
		PAVEMENT MARKINGS FOR STOP BAR	LF	42	\$5.00	\$210.00
<b>CATEGORY 5 TOTAL</b>						<b>\$1,235.00</b>
<b>CATEGORY 6</b>						
		5 INCH CONCRETE FOR SIDEWALK	CY	96	\$1,000.00	\$96,000.00
		7 INCH CONCRETE FOR DRIVEWAY	CY	70	\$1,500.00	\$105,000.00
		TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	LF	446	\$150.00	\$66,900.00
<b>CATEGORY 6 TOTAL</b>						<b>\$267,900.00</b>
<b>CATEGORY 7</b>						
<b>CATEGORY 7 TOTAL</b>						<b>\$0.00</b>
<b>CATEGORY 8</b>						
		SHEET ALUMINUM SIGN	SF	7	\$45.00	315.00
<b>CATEGORY 8 TOTAL</b>						<b>\$315.00</b>
<b>SUBTOTAL</b>						<b>\$445,850.00</b>
<b>40% CONTINGENCY</b>						<b>\$178,340.00</b>
<b>TOTAL</b>						<b>\$624,190.00</b>



### Engineer's Cost Estimate

Contract No. BCS 2017-01H  
 Twinbrook Safe Routes to School and  
 Transit Access Feasibility Studies  
 Crawford Drive - Option 2  
 December 30, 2024

ITEM NO.	CATEGORY CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
<b>CATEGORY 1</b>						
		TREE REMOVAL	EA	5	\$1,000.00	5,000.00
<b>CATEGORY 1 TOTAL</b>						<b>\$5,000.00</b>
<b>CATEGORY 2</b>						
		CLASS 1 EXCAVATION	CY	154	\$60.00	\$9,240.00
<b>CATEGORY 2 TOTAL</b>						<b>\$9,240.00</b>
<b>CATEGORY 3</b>						
		STEPS OR PATH RELOCATION (SET)	EA	4	\$500.00	\$2,000.00
<b>CATEGORY 3 TOTAL</b>						<b>\$2,000.00</b>
<b>CATEGORY 4</b>						
<b>CATEGORY 4 TOTAL</b>						<b>\$0.00</b>
<b>CATEGORY 5</b>						
		PAVEMENT MARKINGS FOR CROSSWALK	LF	135	\$5.00	\$675.00
		PAVEMENT MARKINGS FOR STOP BAR	LF	43	\$5.00	\$215.00
<b>CATEGORY 5 TOTAL</b>						<b>\$890.00</b>
<b>CATEGORY 6</b>						
		5 INCH CONCRETE FOR SIDEWALK	CY	85	\$1,000.00	\$85,000.00
		7 INCH CONCRETE FOR DRIVEWAY	CY	68	\$1,500.00	\$102,000.00
		TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	LF	1221	\$150.00	\$183,150.00
<b>CATEGORY 6 TOTAL</b>						<b>\$370,150.00</b>
<b>CATEGORY 7</b>						
<b>CATEGORY 7 TOTAL</b>						<b>\$0.00</b>
<b>CATEGORY 8</b>						
		UTILITY RELOCATION	EA	1	\$15,000.00	15,000.00
		SHEET ALUMINUM SIGN	SF	16	\$45.00	720.00
<b>CATEGORY 8 TOTAL</b>						<b>\$720.00</b>
<b>SUBTOTAL</b>						<b>\$388,000.00</b>
<b>40% CONTINGENCY</b>						<b>\$155,200.00</b>
<b>TOTAL</b>						<b>\$543,200.00</b>

# APPENDIX B:

## SITE PHOTOS



Crawford Drive – Looking East from Ardennes Avenue



Crawford Drive – Looking West toward Ardennes Avenue



Crawford Drive – Looking East toward Midway Avenue



Crawford Drive – Looking West toward Midway Avenue



Crawford Drive – Looking East toward Proposed Knee Wall



Crawford Drive – Looking East toward Proposed Knee Wall



Crawford Drive – Looking East toward Atlantic Avenue



Crawford Drive – Looking Northwest from Atlantic Avenue

# APPENDIX C:

## CRASH DATA REPORT

Location: CRAWFORD DR~ARDENNES AVE - ATLANTIC AVE  
 County: Montgomery, D3 Period: January 01, 2018 To December 31, 2022

Logmiles: From 0.72 To 1 Length: 0.28  
 Note:

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

Comments:

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Location: CRAWFORD DR~ARDENNES AVE - ATLANTIC AVE Logmiles: From 0.72 To 1 Length: 0.28  
 County: Montgomery, D3 Period: January 1, 2018 To December 31, 2022 Note:

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL	DAY OF THE WEEK																			
Accidents		1		1	SUN	MON	TUE	WED	THU	FRI	SAT	UNK												
Veh Occ		1					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	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT										
AM:														1	2	3	4	5	6+	UNK	TOTAL			
PM:							1							1							1			
VEHICLE TYPE				SURFACE			MOVEMENTS																	
Motorcycle/Moped	Tractor Trailer			Wet			NORTH			SOUTH			EAST			WEST								
2 Passenger Vehicle	Passenger Bus			1 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																	
PROBABLE CAUSES													COLLISION TYPES				FATAL	INJURY	PROP	TOTAL				
Influence of Drugs				Improper Lane Change									Opposite Dir		Related:									
Influence of Alcohol				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:											
1	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:				1	1				
Fail to Obey Other Control				Vision Obstruction									UnRelated:											
Fail to Keep Right of Center				Vehicle Defect									Other Collision		Related:									
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										Embankment	06									
Improper Turn				Other or Unknown									O	Fence	07									
													B	Light Pole	08									
													J	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																			
1	Clear / Cloudy	1 Day			18-22			1																
	Foggy	Dawn/Dusk																						
	Raining	Dark - Lights On																						
	Snow / Sleet	Dark - No Lights																						
	Other	Other																						

Location: CRAWFORD DR~ARDENNES AVE - ATLANTIC AVE

Logmiles: From 0.72 To 1 Length: 0.28

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	
MU802												
0.750		09212021	1 Injured	06P	Day	Dry			PARKD	ES	EP	Fail to give full attention

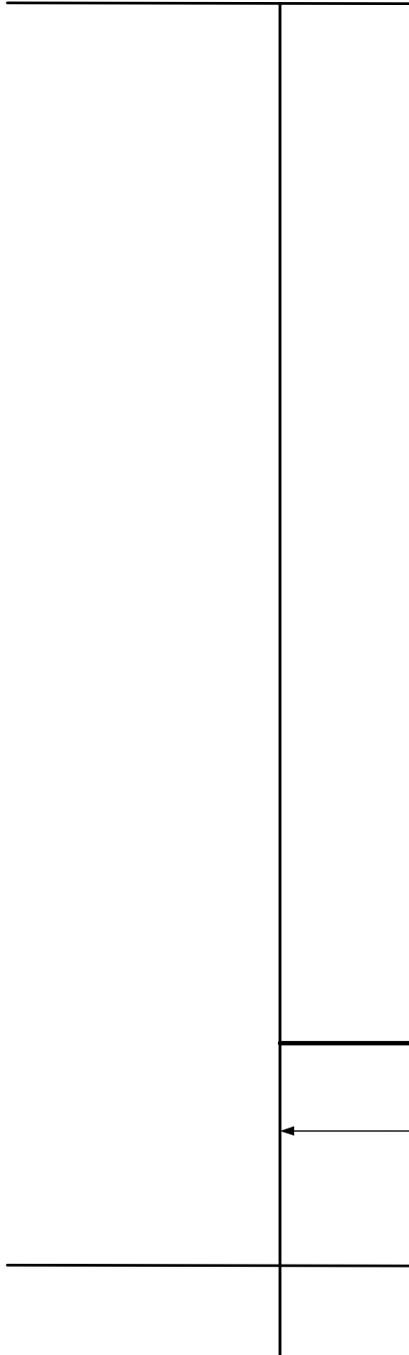
Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence  
 08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator



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

Location: Crawford Dr - Ardennes Ave to Atlantic Ave  
 County: MONTGOMERY  
 Study Period: 01/01/2018 to 12/31/2022  
 Analyst: Robert L. Booker, Jr. Date: 04/19/2024

LM 1.00 MU 180 ATLANTIC AVE



LM .77 MU 2122 MIDWAY AVE

LM .75-PARKD-09/21/2021-11-6P-D

LM .72 MU 140 ARDENNES AVE

KEY: LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 12-14-23

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

# APPENDIX D:

## RESIDENT COMMENTS

## Resident Comment 1:

I spoke with you on the phone previously to voice my objection to the City putting a sidewalk on our side of the street because it would severely impact my property in my opinion. About 7 years ago, I put in a new walkway which extends to the gutter. I got the City's permit for the project at that time. I choose aggregated stone because I think it looks nicer. If the City removes the lower portion of my walkway and tries to match it up that would be devastating to me. It would not be possible to remove a portion and maintain the integrity of my property. The City replanted a Cherry Tree in front of my house about 5 years ago and it is finally looking really lovely and healthy. With the City's help I have been able to maintain it and it looks absolutely lovely and well shaped. If the City cut down this tree it would be very traumatic for me. I am 75 years old and have been pretty much on lockdown since Covid. My yard and our street in its present state bring me a lot of comfort and enjoyment. I have lived in my house for over 30 years and know the pedestrian traffic on this block very well because I look out frequently all day. If I hear voices, I look out, etc. There are very few people using our block. It's very quiet and I would like for it to stay that way. Please let me know if this email is sufficient for you to present to the City my official objection. I went to the website listed on the postcard I received but it was not clear how to voice my objection to our specific project on Crawford Dr. If I need to do anything further to voice my objection, please send me the link. Thank you in advance! (See photos attached)

## Resident Comment 2:

Good afternoon,

I live at XXXX Crawford Drive, and I have serious concerns about the sidewalk project that you presented to us last week.

Although I understand and support the objective to improve accessibility and safety for walkers, I am concerned about the limited benefit of adding a second walkway in a one way street with relatively low passage compared to its ecological impact.

Indeed, this project will increase the artificialization of soil in an already flood susceptible area, and plans the removal of nearly all the trees on this side of the street (19 in total). You mentioned that the city of Rockville would replace these trees, but most houses on the street are like mine: a flat part where the trees currently are and will be removed from, a "hill", and a flat part where the house is. No trees will be placed so close to the house, and neither will they in the "hill" part. So let's be honest, most of these trees will NOT be replaced, and the few that will be replaced will change decades old trees for tiny ones. This is very contradictory with the city of Rockville Climate Action Plan which includes a Tree Protection Ordinance.

Accessibility and safety for walkers would be greatly improved by fixing the already existing sidewalk, improving the lighting for dawn/night time, placing speed bumps and improving the signalling to avoid cars taking this one-way street the wrong way. This could be done at much lower cost and would be much more environmentally friendly than the current ecological non-sense project.

Hoping that you will consider these points,  
Best regards,

## Resident Comment 3:

To whom it may concern,

I am writing to express my concern regarding the proposed installation of a sidewalk on Crawford Drive. As a resident of this street, I believe that this project is both unnecessary and potentially harmful for several reasons, which I would like to outline below.

Firstly, Crawford Drive currently enjoys a low volume of pedestrian traffic. The existing road infrastructure adequately supports the needs of our community without the addition of a sidewalk. Residents have adapted well to the current setup, and there have been no significant safety issues reported that would necessitate such a change.

Secondly, the installation of a sidewalk would inevitably lead to the removal of several mature trees along Crawford Drive. These trees are not only aesthetically pleasing, adding to the beauty and character of our neighborhood, but they also provide significant environmental benefits. They offer shade, help reduce air pollution, and support local wildlife. Destroying these trees would have a detrimental impact on the local ecosystem and reduce the natural appeal of our street.

Moreover, the construction process itself would be highly inconvenient for residents. It would likely result in noise pollution, traffic disruptions, and restricted access to our homes for an extended period. This inconvenience would be particularly burdensome for families with young children, elderly residents, and those who work from home.

Additionally, the maintenance of a new sidewalk would require ongoing attention and resources. In winter, residents would need to ensure that the sidewalk is kept clear of snow and ice, which adds to the financial and logistical burden on our community. Also, where current residents park may also be negatively affected by the addition of a sidewalk.

In light of these points, I respectfully request that the city reconsider the plans to install a sidewalk on Crawford Drive. I also do not grant the use of my personal property for the future use of the aforementioned sidewalk. I also do not grant usage of my property for related construction processes. The current road setup meets the needs of our residents without the proposed changes, and preserving our trees and minimizing disruption should be a priority.

Thank you for considering my concerns. I would be happy to discuss this matter further or provide additional information if needed.

Sincerely,

#### Resident Comment 4:

Thank you again for coming down to Crawford Drive to speak with the neighborhood about the sidewalk feasibility study. I very much appreciate the patience and grace you displayed answering our questions and critiques.

In solidarity with the rest of the neighborhood, I wanted to provide written feedback regarding the feasibility study. While I appreciate the idea of promoting inclusivity and safety with the construction of a second sidewalk on the south side of Crawford Drive between Ardennes and Atlantic, there is no tangible benefit to doing so for myself or members of my family. I am also not aware of any other neighbors who would benefit from or desire to have a second sidewalk along Crawford Drive. I see no demand from our block or the larger neighborhood for a second sidewalk along this section of the road. It would seem to bring no tangible benefit to the neighborhood, or to those walking through it, and would result in the destruction of trees and bushes, including the beautiful cherry blossoms along the road. The gardens and trees of Twinbrook are doubtlessly amongst the most attractive features of the neighborhood, and destroying them to build a second sidewalk seems bureaucratically frivolous, wasteful, and tone-deaf to the wishes of Rockville's constituents. There are certainly a number of more pressing needs in improving public safety than a second sidewalk on Crawford Drive. I hope that a decision made in City Hall does not become a blanket policy across unique neighborhoods that pushes aside voters' wishes and common sense.

I would also like to note that our household includes two children and an elderly family member who is dealing with deteriorating vision and hearing and walks with a cane. I feel safer, and my aforementioned family members do as well, crossing the street to a sidewalk which provides a safer walking environment, then a sidewalk on our side of the street would, which curves into oncoming traffic up the street.

As the homeowner at XXXX Crawford Drive, I believe that we would also be asked to provide an easement for the construction of the sidewalk which we would not be willing to provide.

Thank you again to you, and to the city, for facilitating an inclusive process that takes resident's voices into account. I sincerely hope that plans for construction will not move forward, and I will continue to stand in solidarity with my neighbors against any such plans.

Best regards,