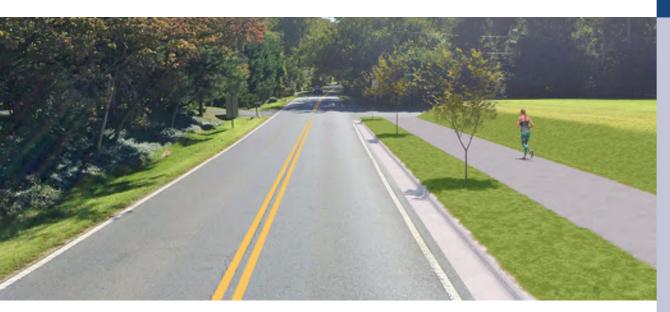


SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH CITY OF ROCKVILLE FEASIBILITY STUDY

CONTRACT NO,: FMIS #J2B2600008

PROJECT NO.: MO025B11



City of Rockville December 22, 2023







Scott Drive and Veirs Drive Shared Use Path, City of Rockville Feasibility Study

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I. BACKGROUND AND PURPOSE OF STUDY

The City of Rockville Bikeway Master Plan (April 2017) identifies a continuous shared use path (SUP) along Veirs Drive / Scott Drive from Wootton Parkway to Glen Mill Road, as part of the "Crosstown Bicycle Route". The purpose of this project was to complete a feasibility study to construct 1.2 miles of SUP along Scott Drive and Veirs Drive, between Wootton Parkway and Glen Mill Road connecting the City of Rockville to the North Potomac area of Montgomery County. The shared use path will connect to the Carl Henn Millennium Trail, located on the east side of Wootton Parkway and part of the Montgomery County Department of Transportation bikeway system. The City of Rockville was awarded a Transportation Alternatives (TA) grant to develop this feasibility study. This feasibility study evaluated potential impacts to right of way, environmental features, utilities and coordinated the concept level design with stakeholders, including City of Rockville DPW, Montgomery County DOT, Maryland-National Capital Park and Planning Commission (M-NCPPC) and the public. This report summarizes design considerations and steps undertaken to complete the study.

II. EXISTING CONDITIONS

A. KEY FEATURES

The project corridor along Scott Drive and Veirs Drive is characterized by several key features. The key features are listed and described below. A map of the project area is shown in Figure 1.

- EXISTING PATH / TRAIL: At the eastern limits of the project the Carl Henn Millennium Trail runs parallel along Wootton Parkway.
- EXISTING SIDEWALK: Existing sidewalk runs along the north side of Veirs Drive / Scott Drive for approximately 5,500 linear feet between Glen Mill Road and the entrance to the Robert Frost Middle School (9201 Scott Drive). The sidewalk then crosses to the south side of Scott Drive at the intersection with Overlea Drive where it continues east to the intersection with Wootton Parkway.
- WATERWAY: Watts Branch Creek is located on the eastern limit of the project and is a flow to the Potomac River. Watts Branch crosses Scotts drive under bridge MR-06.
- BRIDGE No. MR-06 OVER WATTS BRANCH: Scott Drive crosses Watts Branch (Bridge No. MR-06) approximately 650 feet west of the intersection with Wootton Parkway.
- ROBERT FROST MIDDLE SCHOOL: The middle school is located along the north side of Scott
 Drive. The entrance to the school is on the north side of the Scott Drive / Overlea Drive
 intersection.
- THE VILLAGE AT ROCKVILLE: The Lutheran Community retirement housing development is located along the north side of Veirs Drive from approximately 550 feet east of the intersection with Glen Mill Road extending east to the Veirs Drive / Westcott Place / Scott Drive intersection.
- GOLF COURSE: Lakewood Country Club is adjacent to the north side of Veirs Drive from Glen Mill Road extending east for approximately 550 feet along Veirs Drive.

ROCKSHIRE

Robert Frost
Middle School

Right Solved

Right

FIGURE 1: PROJECT AREA MAP

B. Intersections, Driveway Entrances

There are eight (8) intersections located within the project limits as follows:

- 1. Scott Drive and Wootton Parkway (signalized)
- 2. Scott Drive and Carriage Court (stop-control on minor road)
- 3. Scott Drive and Overlea Drive / Robert Frost Middle School (4-way stop control)
- 4. Scott Drive and Wescott Place (stop-control on minor road)
- 5. Veirs Drive and Foxden Drive (stop-control on minor road)
- 6. Veirs Drive and Southwood Drive (stop-control on minor road)
- 7. Veirs Drive and Oakwood Drive (stop-control on minor road)
- 8. Veirs Drive and Glen Mill Road (4-way stop control)

There are nine (9) driveway entrances along Veirs Drive, including seven (7) residential entrances and two (2) entrances to The Village at Rockville Retirement Community. There are seventeen (17) residential driveway entrances along Scott Drive.

C. NATURAL / CULTURAL RESOURCES

RK&K conducted a desktop investigation of mapped information as part of the Rockville Trail Feasibility Study. The desktop investigation of the available mapped information identified site topography; hydric

and highly erodible soils; non-tidal waters and wetlands and their associated buffers; and 100-year floodplain. Mapped resources reviewed for this project included:

- Montgomery County Topographic Geographic Information System (GIS) data (2-foot contours)
- The United States Department of Agriculture, Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey (WSS) for Montgomery County, Maryland
- Maryland Department of Natural Resources (MDNR) Wetlands, Waters, and Forest Interior Dwelling Species (FIDS) habitat GIS data
- National Wetlands Inventory (NWI) GIS data
- Federal Emergency Management Agency (FEMA) GIS data
- Montgomery County 100-year floodplain GIS data

Letters requesting database review for rare, threatened, and endangered (RTE) species, and cultural resources were sent to the following agencies:

- MDNR Wildlife and Heritage Section (MDNR-WH)
- Maryland Historical Trust (MHT)

Online screening tools were used to review for the presence of RTE species, through the following agencies:

- MDDNR Aquatic Resources Pre-Screening Tool
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC)

Desktop investigation results are summarized below:

GEOLOGY AND TOPOGRAPHY

The project study area is located in the Eastern Mountains and Piedmont Physiographic Province which is comprised of hard, crystalline igneous and metamorphic rocks that extend from the inner edge of the Coastal Plain Physiographic Province westward to the Blue Ridge Physiographic Province. Bedrock in the eastern part of the Piedmont consists of schist, gneiss, gabbro, and other highly metamorphosed sedimentary and igneous rocks. Elevations within the project study area range from approximately 290 to 456 feet above mean sea level.

SOILS

The USDA-NRCS Web Soil Survey for Montgomery County identified nine mapped soil units within the project study area, including one hydric soil (**Table 1**). Six mapped soils are classified as highly erodible soils.

Table 1: Mapped Soils

Symbol	Soil Type and Slope Category	K- Factor*	Hydric Rating**	Drainage Class
1B	Gaila silt loam, 3 to 8 percent slopes	0.43	5	Well drained
1C	Gaila silt loam, 8 to 15 percent slopes	0.43	5	Well drained
2B	Glenelg silt loam, 3 to 8 percent slopes	0.37	0	Well drained
16D	Brinklow-Blocktown channery silt loams, 15 to 25 percent slopes	0.24	5	Well drained
25B	Legore silt loam, 3 to 8 percent slopes		0	Well drained
54A	Hatboro silt loam, 0 to 3 percent slopes, frequently flooded		100	Poorly drained
65B	Wheaton silt loam, 0 to 8 percent slopes	0.43	0	Well drained
66UB	Wheaton-Urban land complex, 0 to 8 percent slopes	0.43	5	Well drained
66UC	Wheaton-Urban land complex, 8 to 15 percent slopes	0.43	5	Well drained

^{*}Erodibility Coefficient – Value assigned to soil types by NRCS. K > 0.35 are considered to be highly erodible soils

WETLANDS AND WATERS OF THE UNITED STATES

The project is located within the Potomac River Montgomery County Watershed (MDE 8-digit: 02140202) and waterways within the project study area are designated as Use Class I-P, Water Contact Recreation, Protection of Aquatic Life and Public Water Supply. Maryland DNR identified Watts Branch (R2UBH), and a broad-leaved deciduous palustrine forested/temporarily flooded wetland (PFO1A) within the project study area. There are no USFWS NWI mapped wetlands or waterways within the project study area.

^{**}Hydric Rating — Value is based on the percentage of hydric soils within the soil type. Non-hydric soils have a value of 0, predominantly non-hydric soils have a value between 0 and 33, partially hydric soils have a value between 33 and 66, predominantly hydric soils have a value between 66 and 99, and hydric soils have a value of 100.

100 YEAR FLOODPLAIN

The 100-year floodplain is a flood event that has a one percent probability of occurring in any given year. The eastern portion of the project study area is within the FEMA mapped 100-year floodplain, as shown in the GIS data for Montgomery County.

FOREST INTERIOR DWELLING SPECIES

A portion of the project study area is considered FIDS habitat, according to Maryland Department of Natural Resources (MDNR) GIS data. Forest Interior Dwelling Species habitat includes large, contiguous tracts of forest that provides habitat for a group of breeding birds that require habitat conditions in the interior of large forests. Forest Interior Dwelling Species habitat is defined as a forest tract that is greater than 50 acres in size and containing at least 10 acres of forest interior habitat (forest greater than 300 feet from the nearest forest edge); and riparian forest that are at least 300 feet in total width and greater than 50 acres in total forest area.

RARE, THREATENED, AND ENDANGERED SPECIES

A letter requesting information on the presence of RTE species was sent to MDNR-WH on June 1, 2023. The MDDNR Aquatic Resources Pre-Screening Tool was queried on June 1, 2023, which indicated there are no aquatic resources of concern within the project study area. The USFWS IPaC online database confirmed on June 5, 2023 a determination of "No Effect" on the northern long-eared bat (*Myotis septentrionalis*).

CULTURAL RESOURCES

A letter requesting information on historic resources was sent to the Maryland Historical Trust (MHT) on October 31, 2018, and a response was received on November 5, 2018 indicating no historic properties will be affected by the proposed project.

D. BASE MAP

The base map used for the concept design was developed in May 2023 with available aerial mapping, GIS data and record roadway and subdivision plans provided by the City of Rockville. The GIS mapping included the following features: road edges, streets, curb/gutter, sidewalks, fences, driveway entrances, streams, 100-year flood plain, bridge structures, pipe culverts, right of way and parcel boundary lines. Prior to detailed design, topographic, property surveys, detailed tree condition inventory and impact analysis and utility designation will be performed for the project corridor.

E. UTILITIES

A Miss Utility Ticket was filed, and utility records requested from utility companies. A utility composite Quality Level D (QL-D) was developed based on available record information provided by City of Rockville

and utility companies and referenced on the base map. The following records were received and used to develop the utility composite.

- a. City of Rockville Water and Sewer
- b. Columbia Gas
- c. Comcast
- d. Century Link / Lumen Fiber
- e. Montgomery County Fiber
- f. Pepco
- g. Verizon
- h. Williams Gas
- i. Washington Suburban Sanitary Commission (WSSC)

Two (2) existing utilities within the study corridor were identified by the City and Columbia Gas as critical infrastructure that cannot be taken out of service. The following utilities were identified as critical infrastructure, sensitive to impacts:

- 24-inch PCCP (Prestressed Concrete Cylinder Pipe) located near Bridge No. MR-06 over Watts Branch
- 24-inch gas transmission main that crosses Veirs Drive approximately 20 feet from the Glen Mill Road intersection with approximately 4 feet of cover

Any proposed structures shall maintain 15 feet offset distance from the 24-inch gas transmission main. During detailed design, every effort should be made to avoid impacts to these major utilities. Prior to detailed design, a utility designation Quality Level B (QL-B) will be performed for the project corridor.

III. SHARED USE PATH CONCEPT DESIGN

I. DESIGN APPROACH

The shared use path (SUP) design criteria were established based on City of Rockville, Montgomery County and SHA design guidelines and standards. The Maryland State Highway Administration (SHA) Bicycle Policy & Design Guidelines, SHA Accessibility Policy & Guidelines for Pedestrian Facilities along State Highways, Maryland Manual on Uniform Traffic Control Devices (MdMUTCD), AASHTO Guide for the Development of Bicycle Facilities (2012, 4th Edition) and the City of Rockville Complete Streets Policy, was consulted for development of the concept design.

Based on the referenced guidelines and standards, a shared use path's (SUP) preferred width is 10 feet with a buffer width of 5 feet wide measured from back of curb. A 2 feet wide (minimum) clear width with 2% maximum cross-slope is recommended on the back side of the SUP prior to any grading or retaining walls. The SUP can be reduced to 8 feet wide (minimum) with 2-foot-wide buffer (minimum) and 1-foot-wide clear width (minimum) to avoid impacts to right of way, utilities or other sensitive features. Maryland State Highway Administrations MD 580.08 Driveways and Bike Path Pavement

Sections – Flexible Pavement Section is the SUP pavement section standard used in the study and estimate.

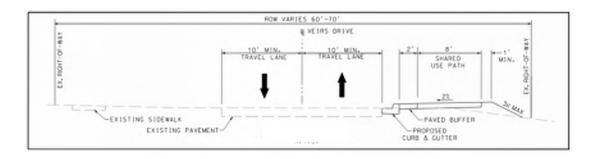
Two (2) design alternatives were developed to maintain the existing roadway geometry and travel lanes and to construct a 10 feet wide SUP with 6 feet wide (preferred) buffer. However, the SUP was reduced to 8 feet (minimum) with reduced buffers where necessary to retrofit the SUP and associated grading and/or retaining walls within existing right of way or to avoid / minimize impacts to sensitive environmental features and existing utilities. See Appendix C for the Alternative 1 concept design plans. See Appendix D for the Alternative 2 concept design plans.

II. CONCEPT DESIGN

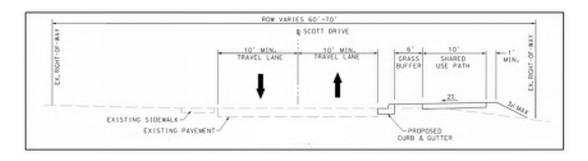
ALTERNATIVE 1

Alternative 1 proposes a continuous shared use path along the south side of Veirs Drive and Scott Drive. The design would alter the open drainage system and require a closed drainage system with curb and gutter along the south side of Veirs Drive / Scott Drive. A variable width buffer is provided between the back of proposed curb and the shared use path to provide separation from vehicular traffic. A 6 feet wide grass buffer with 10 feet wide SUP is provided where existing right of way is available. A 2 feet wide paved buffer (typical) with an 8-to-10 feet wide SUP is provided where the right of way is limited and/or to avoid potential impacts to utilities, environmental features or private property features. Paving the 2 feet wide buffers with a material that is distinguishable from the asphalt SUP, such as stamped / colored concrete or pavers, in lieu of grass, is recommended to reduce maintenance requirements for narrow buffer areas. City of Rockville Forestry team requires a buffer width of at least 7 feet to accommodate the planting of street trees. Therefore, the 4 feet to 6 feet wide buffer areas can be grass and supplemented with low-profile aesthetic landscaping. A 1foot wide (minimum) clear width with 2% maximum cross-slope is provided at the back side of the SUP with 3:1 slope grading to existing ground. Along Scott Drive starting approximately 150 feet west of Watts Branch to the intersection of Wootton Parkway and Scott Drive the shared use path typical section was reduced to 8 feet wide with no buffer adjacent to the road. A 1-foot-wide clear width at the back of the SUP is provided to avoid/minimize impacts to environmental and private property features. The 8 feet wide SUP with no roadside buffer and 1-foot-wide clear width at the back of SUP will minimize the impacts and minimize the size of the proposed retaining wall adjacent to the properties at 5, 6 and 7 Starlight Court and at 9 Royal Oak Court.

Alternative 1 will maintain an unsignalized midblock crossing of Veirs Drive at Oakwood Drive and considered enhanced signing and pavement markings for this unsignalized crossing. An all-way stop controlled condition with marked crosswalks at all 3 legs of the intersection is proposed at the Veirs Drive /Wescott Place / Scott Drive intersection. The intersections of Veirs Drive and Glen Mill Road as well as Scott Drive and Overlea Drive / Robert Frost Middle School entrance will remain all-way stop controlled. Crosswalk signing and markings will be upgraded to current MdMUTCD standards for enhanced visibility. A new crosswalk is proposed on the south leg of Wootton Parkway at the Scott Drive / Wootton Parkway intersection to connect the proposed SUP to the Carl Henn Millenium Trail. The typical section and horizontal / vertical geometry of the SUP connection on the east side of Wootton Parkway connecting to the Millenium Trail will need to be evaluated during detailed design.

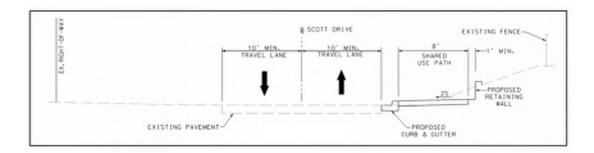


ALTERNATIVE 1 TYPICAL SECTION
8 FOOT WIDE PATH WITH REDUCED BUFFER



ALTERNATIVE 1 TYPICAL SECTION

10 FOOT WIDE PATH WITH 6 FOOT WIDE BUFFER



ALTERNATIVE 1 TYPICAL SECTION 8 FOOT WIDE PATH WITH NO BUFFER

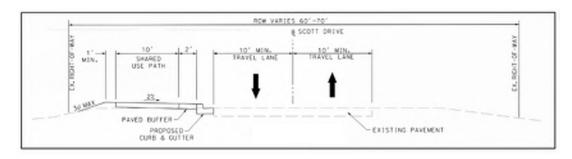
Alternative 1 may require replacement of the existing utility pole at the intersection of Veirs Drive, Scott Drive and Westcott Place (STA. 39+00, RT). Coordination with PEPCO may be required during detailed design. To reduce property impacts at 9504 Veirs Drive and the parcel at the southwest corner of Veirs Drive / Foxden Drive a 4-foot-high retaining wall is proposed from approximately STA. 31+75 RT and STA. 32+75 RT. To reduce property impacts to the parcel at the southeast corner of Veirs Drive / Foxden Drive a maximum 4-foot-high retaining wall is proposed from STA. 36+70 RT to STA. 37+60 RT. A retaining wall is proposed on the south side of Scott Drive adjacent to the

properties at 5, 6 and 7 Starlight Court and at 9 Royal Oak Court (STA. 80+90 to STA. 84+10 RT). The maximum proposed wall height is 4 feet. There is approximately 590 linear feet of retaining wall proposed in Alternative 1

ALTERNATIVE 2:

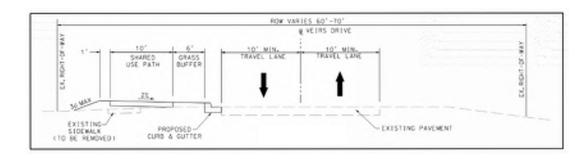
Alternative 2 proposes a shared use path along the north side of Veirs Drive and Scott Drive up to Overlea Drive. The path then crosses Scott Drive and runs along the southside of Scott Drive as in Alternative 1. The design would alter the open drainage system and require a closed drainage system with curb and gutter along the north side of Veirs Drive. The closed drainage system will run along the north side of Scott drive until Overlea Drive and then along the south side of Scott Drive from Overlea Drive to Wootton Parkway. A variable width buffer is provided between the back of proposed curb and the shared use path to provide separation from vehicular traffic. A 6 feet wide grass buffer with 10 feet wide SUP is provided where existing right of way is available. A 2 feet wide paved buffer with an 8-to-10 feet wide SUP is provided where the right of way is limited and/or to avoid potential impacts to utilities, environmental features or private property features. Paving the 2 feet wide buffers with a material that is distinguishable from the asphalt SUP, such as stamped / colored concrete or pavers, in lieu of grass, is recommended to reduce maintenance requirements for narrow buffer areas. City of Rockville Forestry team requires a buffer width of at least 7 feet to accommodate the planting of street trees. Therefore, the 4 feet to 6 feet wide buffer areas can be grass and supplemented with low-profile aesthetic landscaping. A 1-foot wide (minimum) clear width with 2% maximum cross-slope is provided at the back side of the SUP with 3:1 slope grading to existing ground. As in Alternative 1, along Scott Drive starting approximately 150 feet west of Watts Branch to the intersection of Wootton Parkway and Scott Drive the shared use path typical section was reduced to 8 feet wide with no buffer adjacent to the road. A 1-foot-wide clear width at the back of the SUP is provided to avoid/minimize impacts to environmental and private property features. The 8 feet wide SUP with no roadside buffer and 1-foot-wide clear width at the back of SUP will minimize the impacts and minimize the height of the proposed retaining wall adjacent to the properties at 5, 6 and 7 Starlight Court and at 9 Royal Oak Court.

Alternative 2 will maintain an unsignalized midblock crossing of Veirs Drive at Oakwood Drive. An all-way stop controlled condition at the intersection is proposed at the Veirs Drive /Wescott Place / Scott Drive intersection. A marked crosswalk at Westcott Place is proposed. The intersections of Veirs Drive and Glen Mill Road as well as Scott Drive and Overlea Drive / Robert Frost Middle School entrance will remain all-way stop controlled. Crosswalk signing and markings will be upgraded to current MdMUTCD standards for enhanced visibility. A new crosswalk is proposed on the south leg of Wootton Parkway at the Scott Drive / Wootton Parkway intersection to connect the proposed SUP to the Carl Henn Millenium Trail. The typical section and horizontal / vertical geometry of the SUP connection on the east side of Wootton Parkway connecting to the Millenium Trail will need to be evaluated during detailed design.



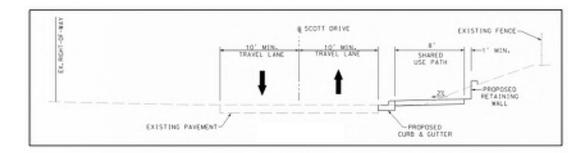
ALTERNATIVE 2 TYPICAL SECTION

10 FOOT WIDE PATH WITH REDUCED BUFFER



ALTERNATIVE 2 TYPICAL SECTION

10 FOOT WIDE PATH WITH 6 FOOT WIDE BUFFER



ALTERNATIVE 2 TYPICAL SECTION 8 FOOT WIDE PATH WITH NO BUFFER

Alternative 2 will have property impacts. Fill grading is proposed along 9217 Scott Drive for impacting approximately 0.02 acres. As in Alternative 1 a retaining wall on the south side of Scott Drive adjacent to the properties at 5, 6 and 7 Starlight Court and at 9 Royal Oak Court (STA. 80+90 to STA. 84+10 RT) is proposed to reduce property impacts. The maximum proposed wall height is 4 feet. There is approximately 324 linear feet of retaining wall proposed in Alternative 2. Utility impacts on Scott Drive are reduced by shifting the path to the south side of Scott Drive from Overlea Drive to Wootton Parkway. Alternative 2 follows the existing sidewalks on Scotts Drive. Existing utility Poles are place behind the existing sidewalks from Veirs Drive to Overlea Drive. Utility poles are closer to the edge of rood from approximately 400 linear feet east of Carriage Court to Wootton

Parkway. Providing a grass buffer for the utility pole would impact the environmental feature near Watts Branch with the shared use path behind the buffer. Providing the shared use path in front of the utility poles would not allow for a curb and gutter with a minimum 8 feet wide shared use path. From Carriage Court to Wootton Parkway the south side of Scott Drive accommodates the path best with minimal impacts. Due to Carriage Court not being a stopped controlled intersection and to improve pedestrian safety the crossing was proposed at the nearest existing stop controlled intersection at Overlea Drive, approximately 500 linear feet west of Carriage Court.

IV. STAKEHOLDER & PUBLIC OUTREACH

During development of the Feasibility Study, City staff and the Consultant team conducted meetings with agency stakeholders and the public to obtain feedback as the alternative designs were developed. The following meetings were conducted during this project.

Kickoff Meeting – April 24, 2023

Concept Design Alternative Review Meeting – October 11,2023

Public Meeting - November 8, 2023

Alternative Selection – December 2023

Agency review comments from the City of Rockville, Montgomery County DOT and M-NCPPC are included in Appendix A. Marked up landscape division comments for each alternative are included in the Appendix A. The community comments received during the November 8, 2023 Public Meeting and comments received subsequent the meeting are including in Appendix B.

V. PREFERRED ALTERNATIVE SELECTION

The two design concepts were presented to the City of Rockville, Montgomery County DOT, and M-NCPPC for review and comments. Those comments and responses are included in Appendix A. Design alternatives were presented at a Public Meeting on November 8, 2023. The community asked questions at the virtual meeting and emailed comments or questions received by November 28, 2023 were collected and documented. The community comments and questions are presented in Appendix B. Prior to selecting a preferred alternative, a meeting with the City was held to review all comments. Alternative 2 is recommended as the preferred alternative for detailed design because it will minimize impacts to adjacent properties, reduce impact to identified healthy landscape, no utility impacts, and a reduction of retaining wall length.

VI. Cost

The preferred alternative for the Scott Drive and Veirs Drive shared use path, based on the concept design of Alternative 2, has an estimated cost of approximately \$3.5 million. A 30 % contingency was asset in the estimate. A major quantities construction cost estimate is included in Appendix E.

VII. CONSIDERATIONS FOR THE NEXT PHASE OF DESIGN

As the City pursues future phases of design, the following items should be evaluated.

A. AGENCY COORDINATION

Coordination will be required with City of Rockville, Montgomery County, M-NCPPC, environmental agencies and utility owners. The study corridor is along the boundary limits of the City of Rockville and Mongomery County, approximately 1900 linear feet is within the county limits, maintenance and agency ownership will be determined in the next phase of the project. Required City, County and State agency reviews, and permits / approvals will be identified at detailed design.

B. PATH DESIGN

A closer evaluation of the connections to the millennium trail should be completed with surveyed information. A geometric layout should be included in the next phase of the project, which will allow for bicycles to enter and transition onto the millennium trail. The geometric layout should meet recommended standards for trail widths and grades. There is a vertical grade drop from the edge of pavement along Wootton Parkway to the trail in the area.

The recommended pavement material for the path should be included in the next phase of the project. MD 580.08 Driveway and Bike Paths Pavement Sections – Flexible Pavement Section was considered for the alternatives. Flexipave, or equivalent, is recommended in areas as a tree protection measure.

C. DRAINAGE

Evaluation of the drainage near the Watts Branch crossing should be included in the project moving forward. The current structure was identified as being under sized. It was noted that Scott Drive frequently floods between STA. 76+00 to STA. 86+00. Following the drainage analysis consideration for a new stand-alone structure or modifying the existing structure should be evaluated. The current selected alternative design does not call for the redesign or the widening of the current structure that crosses Watts Branch. Measures to improve the flooding and drainage should be evaluated during the next phase of design.

Coordination with MDE and permitting approvals will be required for all improvements that impact Watts Branch crossing.

D. PEDESTRIAN LIGHTING

Pedestrian level / trail lighting may be desired in the future, to accommodate access during non-daylight hours, or for improved safety and comfort. This will be discussed with the City during detailed design.

E. STREET TREES AND LANDSCAPING

Opportunities to install street trees along the shared use path will be evaluated. During future phases of design, reviews to ensure compliance with Maryland's Roadside Tree Law and tree preservation criteria will be required.

Forestry guidelines will be used in evaluating potential locations for street trees. During this concept level design, City of Rockville Forestry team provided review comments for both alternatives. Review comments

and landscape division plan markups are provided in Appendix A. The following were identified as existing priority tree/landscaping and efforts should be made to preserve them.

- <u>Sta. 53+50, RT:</u> Priority retention of a Healthy Betula Nigra tree on private property. *This vegetation is within the limits of Alternative 1.*
- <u>STA. 56+00 to STA. 58+00 RT:</u> Priority retention of mature healthy trees along right of way line. This vegetation is within the limits of Alternative 1.
- <u>STA. 39+40 LT.</u>: Priority retention of a grove of Pinus Strobus near *This vegetation is within the limits of Alternative 2*.
- <u>STA. 65+75 RT:</u> High retention of a Large mature Acer Saccharinum. *This vegetation is within the limits of Alternative 1 and 2.*
- <u>STA. 70+50 to STA. 72+00 RT:</u> Healthy trees in good condition including healthy Ginkgo Biloba, Platanus Occidentails and Juglans Nigra. *This vegetation is within the limits of Alternative 1 and 2.*
- <u>STA. 79+50 RT:</u> Priority retention of a healthy Platanus tree. *This vegetation is within the limits of Alternative 1 and 2.*

Tree preservation options will be evaluated during detailed design to include eliminating the SUP buffer, root pruning and use of a porous / flexible material for the path.

F. SIGNAL AND PAVEMENT MARKINGS

A traffic study is recommended at the intersection of Wootton Parkway and Scott Drive to collect pedestrian and turning movement data. Signal timing adjustments maybe needed to address the additional pedestrian / bicycle movement for the east to west crossing of Wootton Parkway

The annual average daily traffic volumes along Scott Drive and Veirs Drive provided by Maryland Department of Transportation's State Highway Administration exceeds 6,000 vehicles per day. Maryland Manual on Uniform Traffic Control Devices (MUTCD) recommends a double yellow line on collector roadways with average annual daily traffic volumes above 6,000 vehicles per day. Urban collector roadway pavement is recommended to be a minimum of 20 feet wide, 18 feet wide for rural collectors, to accommodate two travel lanes and center pavement markings. Existing pavement widths should be evaluated with field survey to verify adequate widths.

Roadway signing assessment should be conducted to evaluate the need for upgraded signs. Traffic counts should be completed to evaluate the need for signal or signs at unsignalized crossings.

VIII. ATTACHMENTS

APPENDIX A: STAKEHOLDER MEETING SUMMARIES

APPENDIX B: PUBLIC MEETING COMMENTS

APPENDIX C: ALTERNATIVE 1 CONCEPT DESIGN PLANS

APPENDIX D: ALTERNATIVE 2 CONCEPT DESIGN PLANS

APPENDIX E: ALTERNATIVE 2 PREFERRED CONCEPT COST ESTIMATE

APPENDIX A STAKEHOLDER MEETING SUMMARIES

700 East Pratt Street, Suite 500 Baltimore, MD 21202 Phone 410.728.2900 www.rkk.com

Meeting Minutes

Project: City of Rockville Scott Drive and Veirs Drive Share Use Path Feasibility Study

Subject: Concept Plan Review Meeting

Date / Time: October 11, 2023 / 11:00am - 12:00pm

Location: TEAM Meeting Virtual

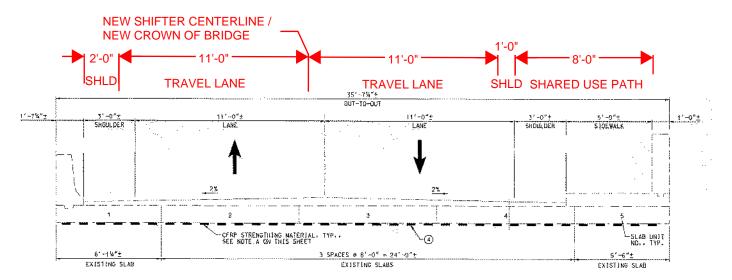
Attendees:

Name	Company	Email Address	Contact number
Jennifer Wang	City of Rockville	jwang@rockvillemd.gov	
Andrew Luetkemeier	City of Rockville		
Rob Gillespie	RK&K	rgillespie@rkk.com	410-462-9359
Makeda Drake	RK&K	mdrake@rkk.com	410-462-9454

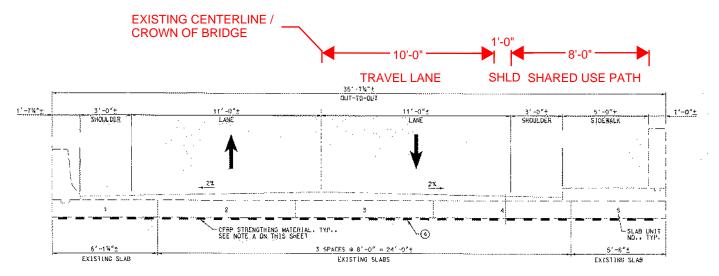
- 1) Introductions
 - a) Each person introduced themselves
- 2) Comment response
 - a) All comments were excepted with one being asked to be revised.
 - Streetlights will not be included in the feasibility study stage of the project.
- 3) Additional topics discussed
 - a) Use of the existing bridge to retrofit the SUP.
 - i) Two options were discussed. Maintaining the crown for the existing travel lanes was the selected option to be used on both alternatives. (Typical options are shown below)
 - (1) Option one was to maintain equal lane widths and shift the crown of the travel lanes
 - (a) Roadway widening would be required for both approaches to the bridge on the westbound side of the roadway.
 - (2) Option two was to maintain the crown of the travel lanes and provide an 11-foot lane for the westbound and 10-foot lane for the eastbound.
 - b) Forestry tree markup plans will be forwarded to the engineering team to include comments in the final report.
 - i) Tree removal identification will be included in future design phase of the project. Identify trees to remain will not be included at this time on the alternatives.
 - c) Plat showing water main right of way will be used on the alternatives as the limits of the right of way. Alternatives will be updated to show the new right of way limit.
 - d) Additional topics discussed to be included in the feasibility report
 - Traffic study for the intersection of Scotts Drive and Wotton Parkway is recommended to determine the right turn volumes from Scott Drive to southbound on Wotton Parkway. A signal modification design may be required. Crossing on Scott Drive then crossing on Wootton Parkway are alternative intersection options that will require future evaluations.
 - (1) City has a concern with considering adding a lead pedestrian interval from EB to SB from Scott Drive to Wooton Parkway because it may result in more stacking / longer delays for vehicles
 - ii) Feasibility report will include a cost estimate for the preferred alternative only. The preferred alternative will be determined after the public meeting input is included and considered.
 - iii) City and public comments will be included in the Feasibility report

- iv) Appendix will include plans for both alternatives
- e) Public meeting
 - i) Both alternatives will be shared with the public
 - ii) Will send Jennifer the power point presentation in the draft state for her to make corrections or additions to the presentation.
- 4) Comment / responses / revisions chart are attached to these minutes.

RETROFIT BRIDGE TYPICAL OPTIONS



BRIDGE RETROFIT TYPICAL SECTION - OPTION 1



BRIDGE RETROFIT TYPICAL SECTION - OPTION 2

Question	Name	Document Name	Page	Comment	Response	Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
			l	Rockville (Transportation) Veirs Drive/Glen Mill Rd – there needs to be a pedestrian crossing on the east leg, regardless of which	For Alternative 1, we will add a crosswalk to the the east leg of the Veirs Drive / Glen	
1	BBW	General		option is selected.	Mill Rd intersection. For Alternative 2, a crosswalk / pedestrian crossing is not required because there is no receiving sidewalk or shared use path to connect to.	
2	BBW	General		I like adding the stop sign on Veirs at Wescott. However this alternative also shows removing asphalt from the corners, wouldn't this widen the turning radius and therefore increase the possible speeds of motorists turning?	Stop signs are proposed at both the eastbound Veirs Drive approach to Wescott Place and the westbound Scott Drive approach to Wescott Place. Removing the pavement at the corners of the intersection as shown in the concept plan would tighten up the pavement and turning radius, thereby reducing right-turning movement speeds onto and out of Wescott Place.	
2	BBW	General		I like adding the crosswalk crossing Veirs Dr at Oakwood for both alternatives.	The crosswalk on Veirs Drive at Oakwood Drive is an existing condition that is proposed to stay on both alternatives. Both alternatives provide a complaint receiving ADA ramp on the south side of Veirs Drive. The crosswalk marking may be upgraded to a high visibility Continental style crosswalk.	
4	BBW	General		For both alternatives, the path fluctuates between 10' and 8'. It is usually 8' where sewer line or retaining wall is needed. In general, 10' is the minimum width we should be seeking. Are there opportunities to push back retaining walls or build closer to the sewer? It looks like there are places where the trail could be 9' wide instead of 8'.	The approach used when developing the two (2) concept alternatives was to avoid / minimize costly impacts to utilities, private property and sensitive environmental features. Alternative 1: the path varies between 8' and 10' as necessary to avoid impacts to utilities and to avoid grading impacts onto private property. Retaining walls shown are required to maintain proposed grading impacts within the existing right of way. Further widening of the path width and/or shifting retaining walls back with Alternative 1 would result in grading impacts onto private property and would require impacts / relocations to utility poles. Alternative 2: the path is 10' for most of the project limits, but reduces to 8' through the Watts Branch stream corridor and continues at 8' wide extending east to the Wootton Parkway intersection. The 8' wide path east of the Watts Branch stream corridor on the south side of Scott Drive (consistent layout between both alternatives) is to minimize grading impacts to adjacent private property.	
5	BBW	Alternative 2		For Alternative 2, we should still consider stop signs on Veirs at Westcott, there will be vehicles turning onto Wescott without stopping and may not be looking for pedestrians/bicyclists crossing Wescott.	Stop signs will be added for Alternative 2	

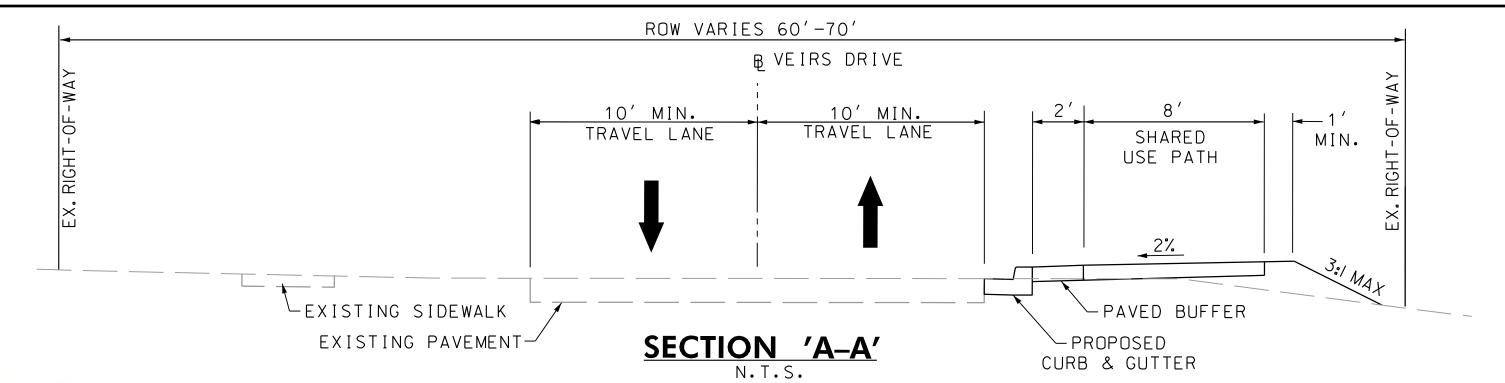
					Response	
Question	Name	Document Name	Page	Comment		Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
6	BBW	General		Marked crosswalks should be added at all intersections where the path crosses the cross streets (e.g. Carriage court).	We will provide continental crosswalks at all side street crossings	
7	BBW	General		Crosswalk crossing Scott Drive at Wootton Pkwy should be continental (re do existing crosswalk).	Crosswalk will be updates for both alternatives.	
8	FM	General		Submitted plans for some segments along Veirs and Scott where ROW is limited an 8' wide shared use path separated from with a 2' paved buffer from curb. Is possible to have regular 2' buffer since 8' shared use path is also acceptable.	Use of a paved buffer with differing paved material than that of the shared use path is recommended when the buffer space is less than 2' wide. Experience has shown that 2' is not wide enough to establish / maintain grass. Per Forestry comment 35 below, any buffer less than 4' wide shall be paved.	
9	FM	Alternative 1		If possible, I suggest the project also show realigning the existing path north of Oakwood Drive, slightly south to match with proposed new cross walk on Veirs Drive and just south of oakwood.	Is this comment requesting that the existing sidewalk on the north side of the Oakwood Drive intersection be realigned south closer to the road to connect with the crosswalk? Please clarify.	This comment was determined by the author to need no changes to the plans at this stag of the design. This comment will not be
10	FM	General		Would this project include any street lighting for illuminating the proposed trail along Veirs and Scott.	If desired by the City, pedestrian oriented path lighting may be considered. For purposes of this concept level design scope, we would assume a standard spacing for path lighting and use that to develop associated lighting costs. The spacing and associated costs would be included in the feasibility report for the selected alternative. Please confirm if path lighting is desired by the City and we will provide in the feasibility study report.	Path lighting will not be included in this stage of the design. The alternative will not altered to show lighting and lighting will not be included in the estimate or in the finial feasibility report.
11	XJW	General		Add the city limit line to clarify the ROW between the city and county.	Will add the line to existing features for both alternatives	
12	xıw	General		Check the grading between sta 85 to connect to the Carl Henn Millenium Trail to make sure there is no major impact on Wotton Pkwy due to the SUP crossing Wotton Pkwy due to the grade drop.	The grade of the shared use path connection from the east side of Wootton Pkwy to the Carl Henn Millenium Trail will be evaluated during detailed design when field survey is available. The path alignment and connection can be altered as necessary to achieve the 5% maximum profile grade and ADA compliant 2% max landing area without impacting Wootton Parkway. This will be discussed in the feasibility study report for consideration at the next stage of design.	
13	xJW	General		Compare SUP crossing Wotton Pkwy on west side of intersection of Wotton Pkwy & Scott Dr. if it is not feasible to cross on the east side of the intersection.	The grade of the shared use path connection from the east side of Wootton Pkwy to the Carl Henn Millenium Trail will be evaluated during detailed design when survey is available. The path alignment and connection can be altered as necessary to achieve the 5% maximum profile grade and ADA compliant 2% max landing area without impacting Wootton Parkway. This will be discussed in the feasibility study report for consideration at the next stage of design. For both alternatives, the path is on the south side of Scott Drive and therefore, crossing the "east" side of the intersection with Wootton Pkwy is preferred instead of the "west" side.	
13			ı	Rockville (Engineering)		
14	GA	General		Project requires MDE permitting for Watts Branch crossing	Comment acknowledged. This will be identified in the Feasibility study report.	

		Response				
Question	Name	Document Name	Page	Comment		Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
15	GA	General		Between sta. 76+00 and 86+00 roadway experiences frequent flooding. Any plan to mitigate this flooding?	The frequent flooding identified by the City will be identified in the Feasibility Study report including that potential mitigation measures should be considered / evaluated during detailed design.	
16	GA	General		Current Watts Branch crossing is undersized. Would a stand alone structure be considered as opposed to widening the existing bridge?	A stand-alone structure or widening the existing bridge over Watts Branch will be identified in the feasibility report as potential options for further consideration during detailed design.	
17	GA	General		Need to show stormdrain structures and pipes	Layout of the existing storm drain system (storm pipes and structures) and proposed storm drain modifications are beyond this concept level scope of services. The MDOT SHA cost estimating manual will be used to assess associated drainage costs for the selected alternative as a percentage of the major quantities estimate items.	
18	GA	General		24" PCCP (Prestressed Concrete Cylinder Pipeline) is critical infrastructure for City and cannot be taken out of service and because of its material engineering is sensitive to impacts/loading	Comment acknowledged. The sensitive nature of the 24" PCCP water main and that every effort should be made to avoid impacts with the SUP design will be noted in the feasibility study report.	
19	GA	General		In the vicinity of 65+00 there are water mains missing	Water main is shown on the plans, including in the vicinity of Sta. 65+00. Please clarify or provide a plan markup of the missing water main and we can update accordingly.	Water main sketch was provided and will be included on the alternative plans
20	GA	General		Utilities within grass buffer would prevent tree planting	Comment acknowledged. Available right of way is limited with existing utilities while trying to retrofit in a buffer separated SUP.	
21	GA	General		Need to look at stormwater treatment for additional impervious area	SWM requirements will be assessed during the next stage of design.	
22	GA	General		What roadway classification/section is being proposed and is it in accordance with City code. If not per a standard section, will a road code waver be needed and approved by the Council?	The existing road classification is a Primary Residential with a posted speed of 25 MPH. The shared use path retrofit will not affect the existing roadway section. Please clarify comment.	With no changes to the roadway the classification will not change. This will be confirmed and documented by the city in the next phase of the design of the project.
23	GA	General		Are any street lights being proposed?	lighting and / or pedestrian oriented path lighting is desired by the City, we can assume a standard spacing for supplemental street / path lighting and use that to develop associated lighting costs. The spacing and associated costs would be included	Path lighting will not be included in this stage of the design. The alternatives will not be modified to show lighting and lighting will not be included in the estimate or in the finial feasibility report.

					Response	
Question	Name	Document Name	Page	Comment		Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
24	GA	General		Are any street trees being proposed?	Once an alternative is selected, we will assess potential street tree locations during the preliminary (30%) design phase using the guidelines provided by Forestry in comment 35.	
25	GA	General		How is new stormwater conveyance (stormdrain) being addressed?	Stormdrain design / stormwater conveyance assessment is beyond the concept design scope of services. Drainage modifications / improvements will be assessed during the preliminary (30%) design phase.	
	GA	General		It appears that part of the path/roadway are outside of the City limits. What approvals/coordination	This will be noted in the design report including that County review / approvals are	
26	GA	General		from/with the County are needed? It is typical for asphalt trails/paths within the ROW to be owned and maintained by Parks & Rec. Are you soliciting comments from P&R and will they own/maintain this infrastructure after construction?	required at the next stage of design. Ownership and maintenance responsibilities for the shared use path needs to be discussed and coordinated by the City Project Manager. We can add notes to the report as directed or this can be determined during the next stage of design.	
	GA	General		Excavation near gas transmission mains will require special approvals.	Comment acknowledged.	
29	GA	General		Between sta. 80+00 and 85+00 project has significant ROW and private property impacts. What is the plan for ROW acquisition/easements /agreements to construct path and retaining wall?	The impact requirements to construct the path within these limits are understood and will be documented in the report. It is recommended that the City start discussions with affected property owners after public outreach and a preferred alterative is selected for detailed design. Meeting with individual property owners and developing a plan for property acquisitions is outside of this concept level design scope of services.	
30	GA	General		Construction of bridge (either widening or new structure) appears very close to the City's 24" PCCP. This will require special attention/design.	Comment acknowledged. This will be noted in the design report, including that impacts to utilities will need to be assessed during the next phase of design when detailed surveys, utility designation and test holes are performed.	
31	GA	General		Engineering recommends no structure be within 15' of 24" transmission main	Comment acknowledged.	
32	GA	Alt 1		Driveways and houses on south side are downhill from road so installing path on that side may require grading on private property to tie in to existing grade	Comment acknowledged. Approximate grading / tie-in limits are shown on the concept plans. Further details about grading / tie-ins will be assessed at the next stage of design.	
33	GA	Alt 2		Do not object to path being put over 24" transmission main, but engineering would need to evaluate impacts	Comment acknowledged.	
34	GA			Installing curb and gutter would require installation of new SD system that might impact 24" transmission main	Comment acknowledged. During the next stage of design, the stormdrain design / layout can be evaluated to try to avoid impacts to 24" transmission main, such as placing stormdrain structures and trunk line in the road.	
				Rockville (Forestry)		
35	SM	General		General Notes: - Further inspection will be required once an alternative is selected to determine impacts to existing trees. - Flexipave will likely be a recommended material for the shared use path in order to protect tree roots where needed. - Where overhead lines are present, planting of any trees is not recommended - If a 7' or larger buffer cannot be achieved, there would not be enough room for street trees.		Forestry notes will be included in the final report only for this stage of the project
36		Alt 1	Page 4	Row of evergreen trees on county property between sta 26+50 to sta 27+50. Some in good condition. Further inspection required if there are proposed impacts.		Forestry notes will be included in the final report only for this stage of the project

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Question	Name	Document Name	Page	Comment	Response	Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
37	SM	Alt 1	Page 5	ROW is roughly where power lines near sta 34+00. ROW goes through overgrown area with invasive plants.	Comment acknowledged.	
38	SM	Alt 1	Page 7	Healthy Betula nigra tree on private property- priority retention between sta 53+50 to sta 58+00	We will document this tree information and the potential impact in the feasibility report and offer potential tree save options to consider during detailed design including reducing / eliminating buffer space and using flexipave.	
39	SM	Alt 1	Page 8	Fenceline is on ROW line near sta 60+50 to 62+00	Comment acknowledged. Proposed grading tie-in is within the existing ROW / fence line.	
40	SM	Alt 1& Alt 2	Page 9	Large, mature Acer saccharinum near sta 65+75	We will document this tree and the potential impact in the feasibility report and offer potential tree save options to consider during detailed design including reducing / eliminating buffer space and using flexipave.	
41	SM	Alt 1& Alt 2	Page 10	Many invasive overgrown plants between sta 70+50 to sta 72+00, but some trees in good condition. Some healthy Ginkgo biloba, Platanus occidentalis, and Juglans nigra trees	We will document this and the potential impacts in the feasibility report and offer potential tree save options to consider during detailed design including reducing / eliminating buffer space and using flexipave.	
42	SM	Alt 1& Alt 2	Page 10	There is room for the path to curve away from the road sta 72+50 to 73+50 and make room for potential street trees in an 11' wide panel. Four Acer rubrum trees between sta 72+50 to sta 73+50 in decline. Removal will probably be necessary	If the path is shifted south away from the road between Sta. 72+50 and 73+50, RT, this will require grading impacts outside the existing right of way. There is also an existing water main in the proposed 4' wide greenspace and there are limitations as to how close to plant street trees next to utility mains.	
43	SM	Alt 1& Alt 2	Page 11	Healthy Platanus occidentalis tree near sta 79+50. Priority retention. Flexipave recommended here to protect tree roots as much as possible.	We will document this tree location, the priority retention requirement and use of flexipave for this segment of SUP in the final concept plan and in the feasibility report.	
44	SM	Alt 1& Alt 2	Page 12	Mature Liriodendron tulipifera tree near sta 84+50 would have CRZ impacts	Comment acknowledged. Impacts to this tree are unavoidable with SUP on south side of Scott Drive.	
45	SM	Alt 1& Alt 2	Page 12	Mature Prunus spp. Tree at sta 84+75- priority retention	Cut slope impacts are required to install an 8' wide SUP and therefore, we are unsure how this tree (Sta. 84+75, RT) can be saved due to CRZ proximity. We do not anticipate that a retaining wall and flexipave will mitigate the tree impact.	
46	SM	Alt 2	Page 1	Large Morus spp. tree near sta 13+00 growing around Pepco utility pole. Removal recommended.	Comment acknowledged.	
47	SM	Alt 2		The tree near sta 26+50 is dead	Comment acknowledged.	
	SM	Alt 2	Page 4	Many declining Quercus palustris trees along the National Lutheran Home property. Could potentially be removed and replaced with significant tree replacement requirements.	Comment acknowledged.	
49	SM	Alt 2		Significant hill near sta 30+70- avoid excavating to protect critical root zones of nearby trees	Comment acknowledged. The design is holding the back edge of existing sidewalk as the back edge of proposed shared use path to avoid / minimize excavating into the slope and adjacent trees / root zones.	
50	SM	Alt 2	page 5	Dying tree near sta 32+40.	Comment acknowledged.	
51	SM	Alt 2	page 6	Grove of Pinus strobus near sta 35+40 on National Lutheran Home property- priority retention	We will document this tree location and the priority retention requirement in the final concept plan and in the feasibility report. Note that the back of proposed SUP lines up with the front edge of the existing sidewalk. Therefore, we do not anticipate impacts to this priority retention tree.	
	CM	Alt 2	2222	Many overgrown invasive plants near sta 50+50 to 52+00: Lonicera japonica, Ampelopsis	Comment acknowledged.	
52	SM	Alt 2	page 6	brevipedunculata. Some Ilex crenata present		<u> </u>
53	SM	Alt 2	page 7	County property between sta 53+60 to sta 58+00	The county / city line will be shown as an existing feature. The feasibility report will note the required coordination with the County within these limits of the project.	
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Question	Name	Document Name	Page	Comment	Response	Meeting Minute Comments
					Green highlights will be addressed as noted in the response. Yellow highlights require further clarification from the City. Responses with no highlights, we anticipate no further action to address the comment for the current scope of work (concept design / feasibility study).	
54	SM	Alt 2	page 8	County property between sta 58+00 to 63+00	The county / city line will be shown as an existing feature. The feasibility report will note the required coordination with the County within these limits of the project.	
				M-NCPPC (eli.glazier@montgomeryplanning.org)		
	EG	Alternative 1	1	Encourage directional curb ramps to direct pedestrians along the southern and eastern legs of the Veirs Dr/Glen Mill Rd/Bald Cypress Dr intersection.	leg of the Veirs Drive / Glen Mill Rd intersection.	
55	EG	Alternative 1	1,4	What constraints limit this to an 8' SUP? On curves, you'd likely want a wider SUP than not given the speed of turning bicyclists.	The 8 foot SUP avoids impacts to utility poles and right of way impacts in these areas.	
56	EG	Alternative 1	9	Encourage directional curb ramps to direct pedestrians along the southern and eastern legs of the Scott Drive/Overlea Drive intersection.	(north and south side) for the eastern-most crosswalk.	
57	EG	General		Preference for Alternative 1 because it provides additional connectivity to homes without ped/bike access.	Comment acknowledged. However, there are limitations on SUP width in order to avoid impacts to utility poles and grading impacts onto private property.	
				Montgomery DOT (Matt.Johnson@montgomerycountymd.gov)		
58	MJ	Alternative 1	Page 7	At STA 54+40, the shared use path shifts to the south, but while the south side of the path tapers, the north side of the path continues straight and ends at a right angle. I would recommend shifting (tapering) the entire path to avoid abrupt right angle corners like that.	We will revise the layout to show a SUP taper to eliminate the blunt right angle. The extra sliver of pavement will be shaded brown to denote paved buffer space instead of part of the effective SUP.	
59	МЈ	Alternative 1	Page 9	On the NE corner of the intersection of Scott Drive & Overlea Drive, the east sidewalk continues across Scott Drive as a crosswalk, but the crosswalk does not wrap far enough around the corner to provide a direct ramp to the crosswalk. This is not an ADA best-practice, and I recommend that this corner be reconstructed to improve accessibility.	This will be updated for Alternative 1	
60	МЈ	Alternative 1	Page 12	At the intersection of the new path and the Carl Henn Millennium Trail, I recommend rounded corners. Bikes don't make 90-degree turns, so just like roadway intersections, the intersection with other trails should have a corner radius, not a right-angle.	Comment acknowledged. The profile grade of the tie-in as well as the horizontal geometry of the SUP will also need to be assessed during detailed design. Once a preferred alternative is selected by the City, we will update the preferred concept plan to show the rounded corners / smoother tie-in and include with the feasibility report.	
61	MJ	Alternative 2	Page 12	At the intersection of the new path and the Carl Henn Millennium Trail, I recommend rounded corners. Bikes don't make 90-degree turns, so just like roadway intersections, the intersection with other trails should have a corner radius, not a right-angle.	Comment acknowledged. The profile grade of the tie-in as well as the horizontal geometry of the SUP will also need to be assessed during detailed design. Once a preferred alternative is selected by the City, we will update the preferred concept plan to show the rounded corners / smoother tie-in and include with the feasibility report.	
62	MJ	General		In general, I would prefer Alternative 1 as it does not require users to change sides of the street as Alternative 2 does. Additionally, Alternative 1 adds a pedestrian facility on the south side, where one does not exist today, where much of Alternative 2 simply widens existing north side sidewalks, leaving no pedestrian alternative on the south side.	Comment acknowledged.	



- Further inspection will be required once an alternative is selected to determine impacts to existing trees.

Flexipave will likely be a recommended material for the shared use path in order to protect tree roots where needed.
Where overhead lines are present, planting of any trees is not recommended
If a 7' or larger buffer cannot be achieved, there would not be enough room for street trees.
Any buffer that is narrower than 4' should be paved for maintenance purposes



<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

EXISTING UTILITY POLE

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

— — w — – EX. WATER — — SAN — EX. SEWER — — FO — - EX. FIBER OPTIC

1. INSTALL CURB EXTENSION TO REDUCE PEDESTRIAN CROSSING AND ENCOURAGE TRAFFIC CALMING OF NORTHBOUND TO EASTBOUND VEHICLES.

2. FIBER OPTIC AND WATER MAIN IMPACTS ANTICIPATED. COVER WILL NEED TO BE VERIFIED DURING DETAILED

3. NO OVERHEAD UTILITY POLE IMPACTS ARE ANTICIPATED ON THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

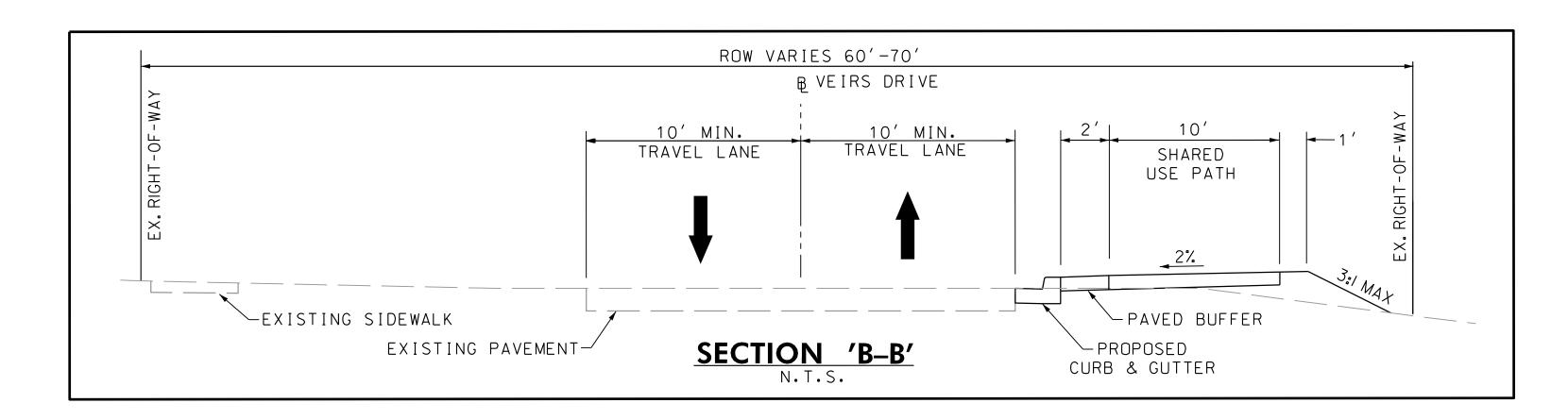
ALTERNATE 1

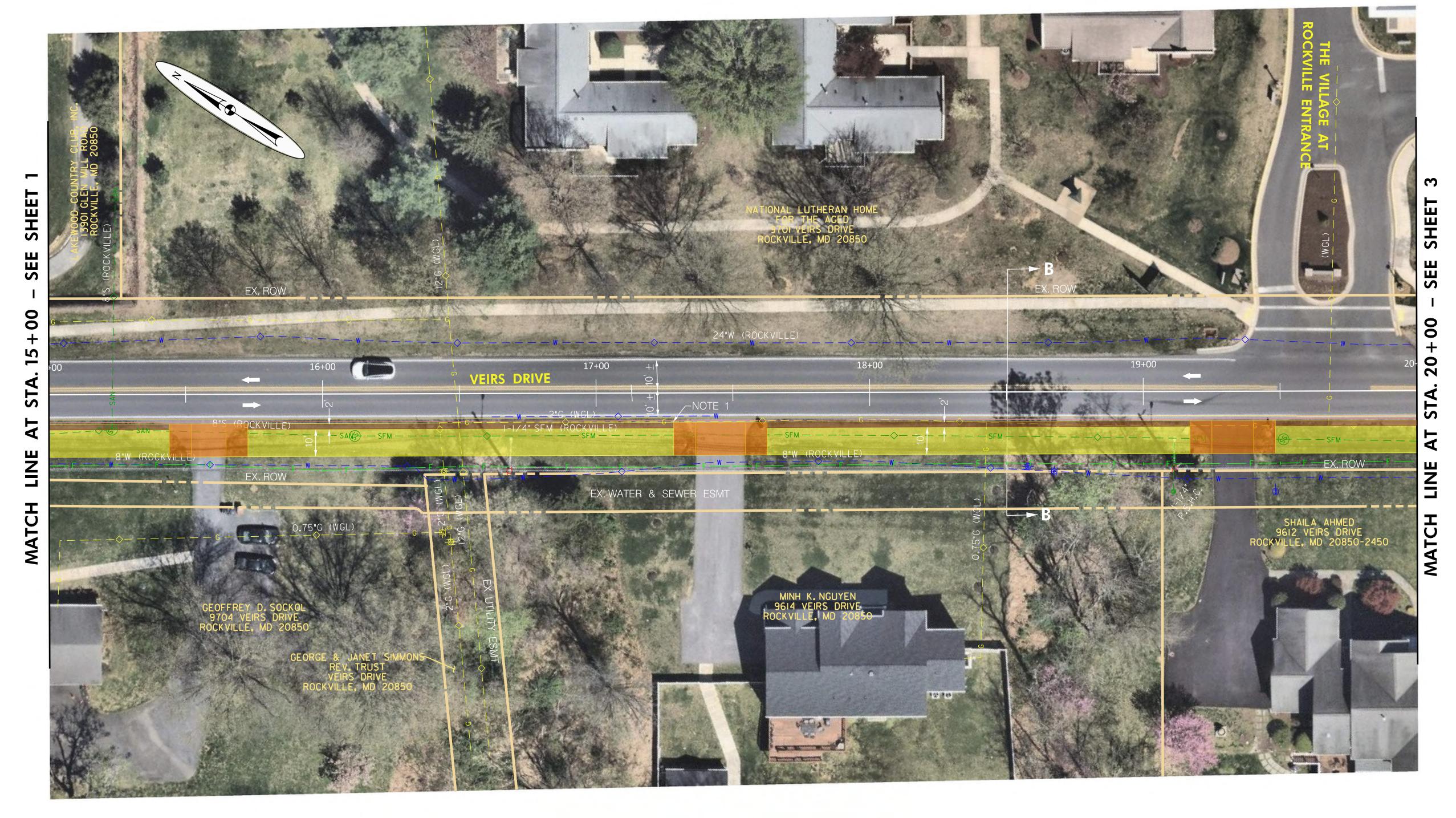


CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

PH: (410) 728-2900 700 E PRATT ST | SUITE 500 | BALTIMORE, MD 21202 I OF 12 Responsive People | Creative Solutions



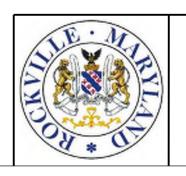


NOTES:

1. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

2. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET. 3. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH **AUGUST 2023**

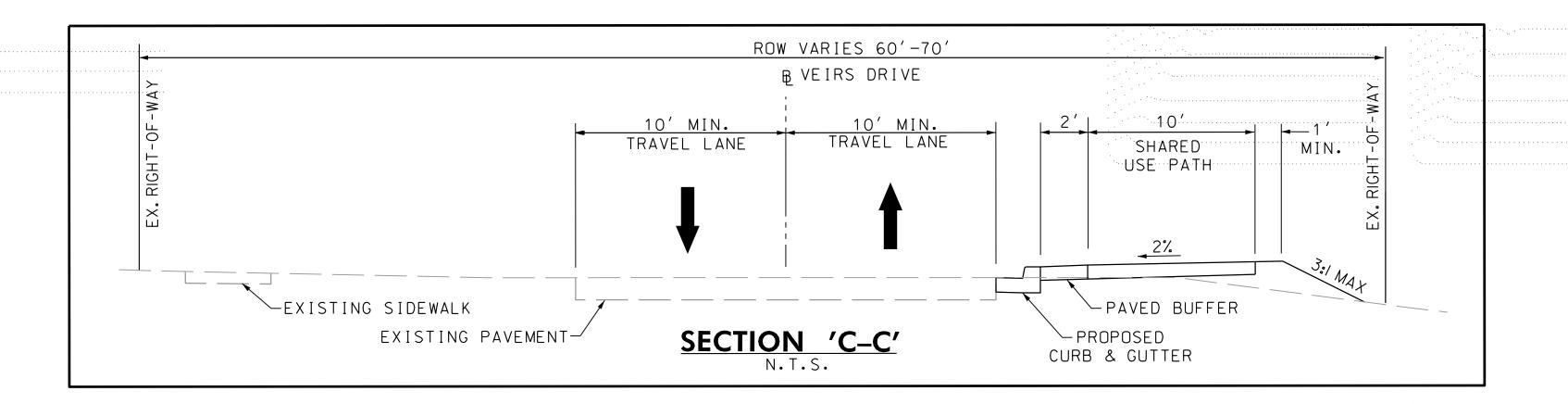
SCALE I"=20'

RKK PH: (410) 728-2900 700 E PRATT ST | SUITE 500 | BALTIMORE, MD 21202 2 OF 12 Responsive People | Creative Solutions

<u>LEGEND</u> ASPHALT SHARED USE PATH — — w — – EX. WATER STREAMS/WATERS OF THE U.S. CONCRETE ADA RAMP/DRIVEWAY — — SAN — EX. SEWER HIGH VISIBILITY CROSSWALK MARKINGS <u> — с</u> — – EX. GAS

EXISTING UTILITY POLE

— — FO — - EX. FIBER OPTIC





<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

EXISTING UTILITY POLE

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

— — W — − EX. WATER — — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

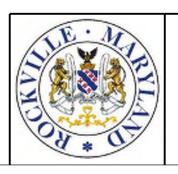
SCALE: 1" = 20'

NOTES:

1. FIBER OPTIC IMPACTS ANTICIPATED COVER WILL NEED TO BE VERIFIED DURING DETAILED DESIGN. 2. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS. 3. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

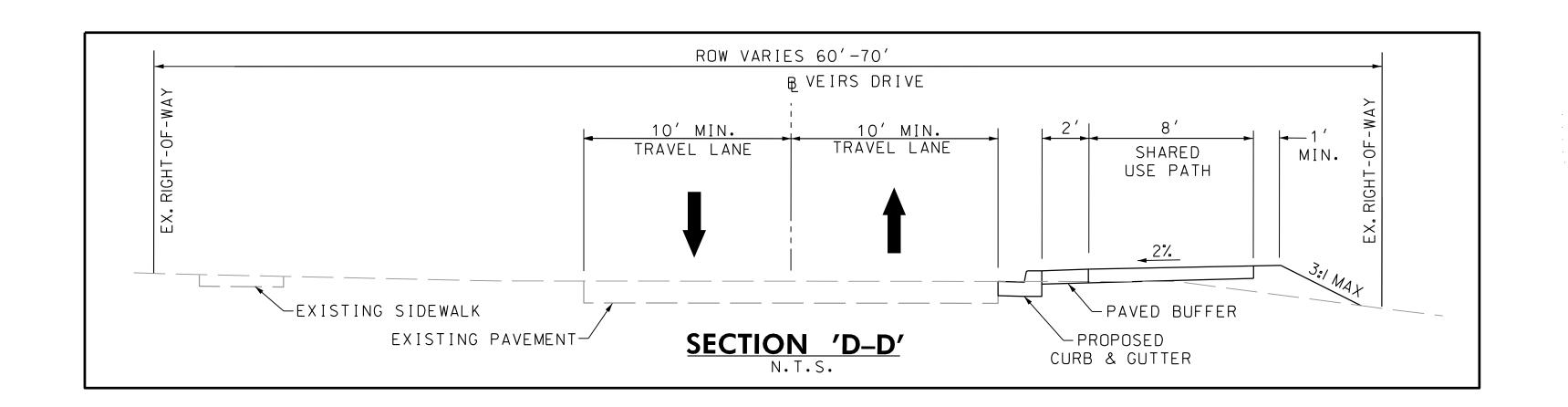
ALTERNATE 1



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

SCALE I"=20' SHEET NO. 3 OF 12 PH: (410) 728-2900 700 E PRATT ST | SUITE 500 | BALTIMORE, MD 21202 Engineers | Construction Managers | Planners | Scientists Responsive People | Creative Solutions



CITY OF ROCKVILLE

SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH

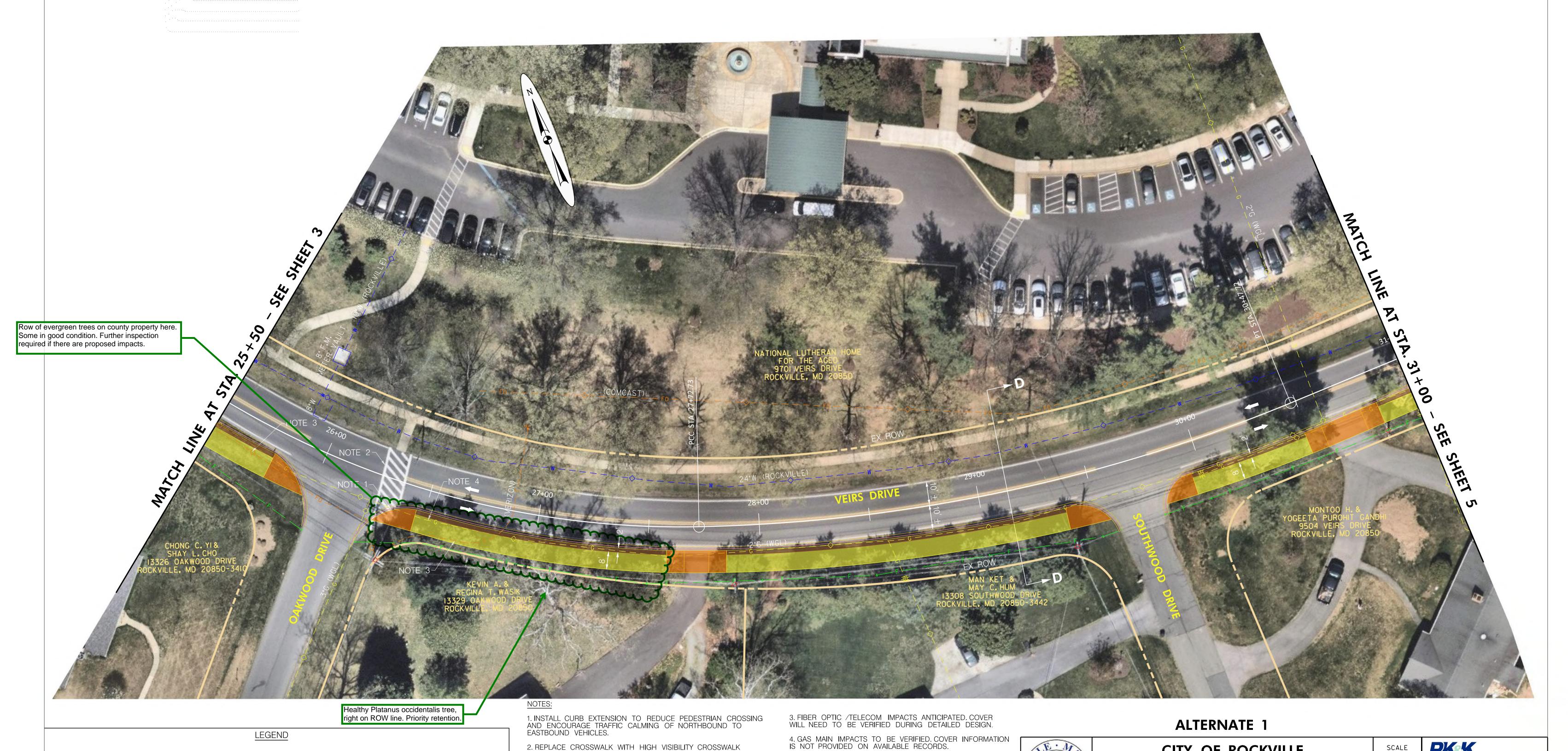
AUGUST 2023

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4 OF 12

Engineers | Construction Managers | Planners | Scientists



5. NO UTILITY POLE IMPACTS ARE ANTICIPATED THIS

6. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

2. REPLACE CROSSWALK WITH HIGH VISIBILITY CROSSWALK

— — W — – EX. WATER

— — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

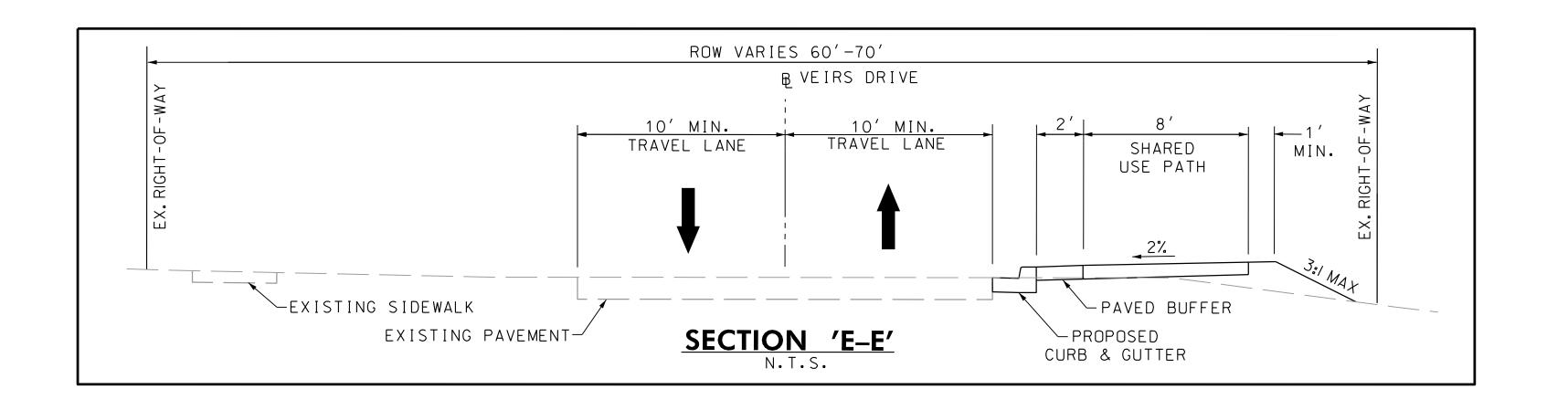
STREAMS/WATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

ASPHALT SHARED USE PATH

CONCRETE ADA RAMP/DRIVEWAY



CITY OF ROCKVILLE

SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH

AUGUST 2023

PH: (410) 728-2900 700 E PRATT ST | SUITE 500 | BALTIMORE, MD 21202

Responsive People | Creative Solutions

5 OF 12

Engineers | Construction Managers | Planners | Scientists



3. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

STREAMS/WATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

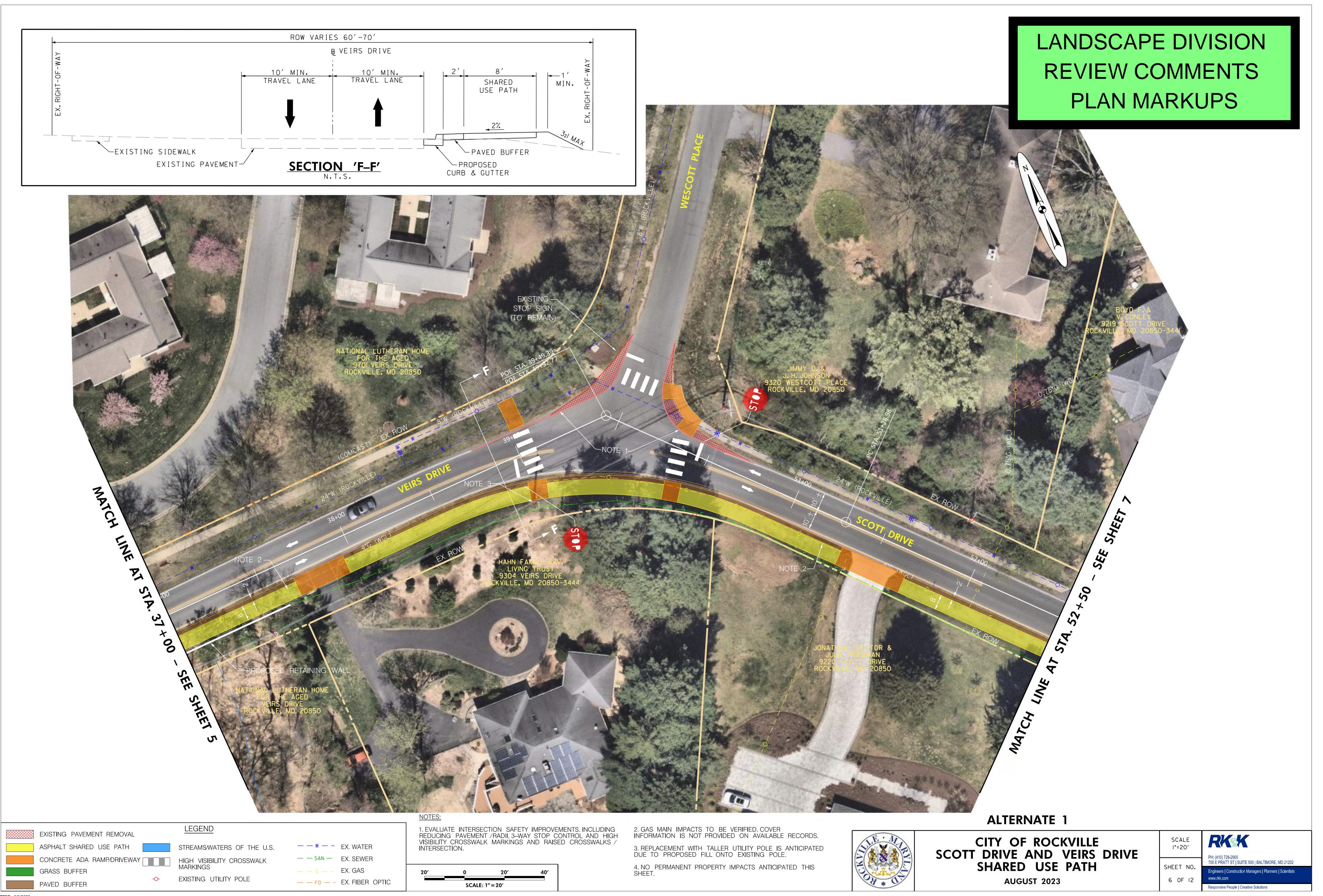
— — W — – EX. WATER

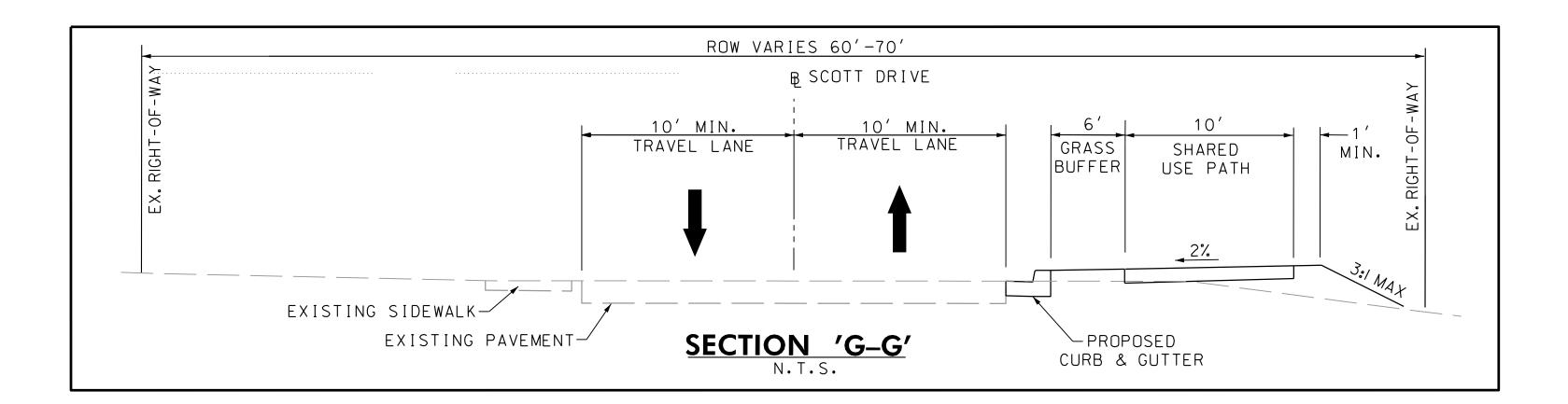
— — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

ASPHALT SHARED USE PATH

CONCRETE ADA RAMP/DRIVEWAY



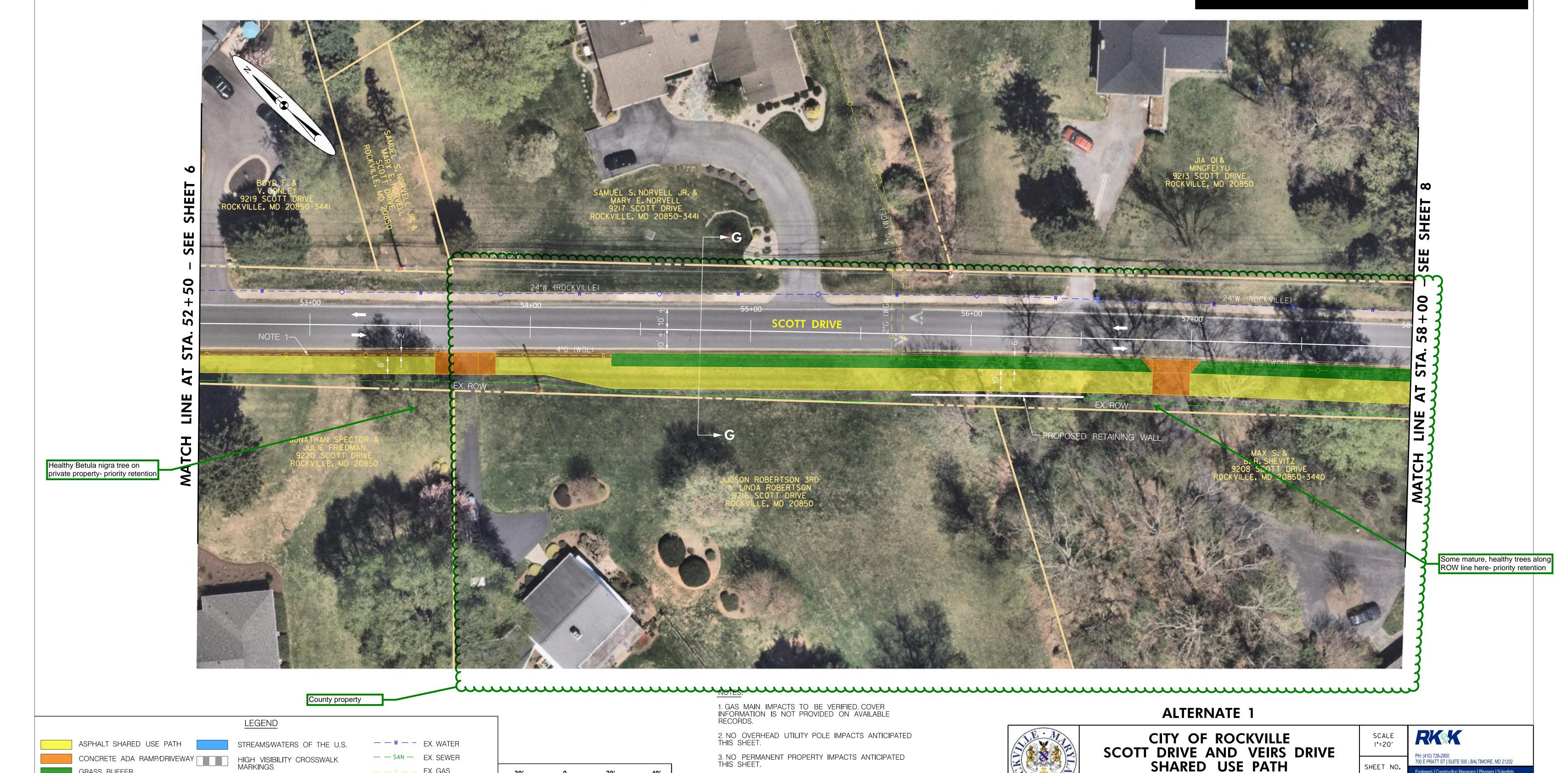


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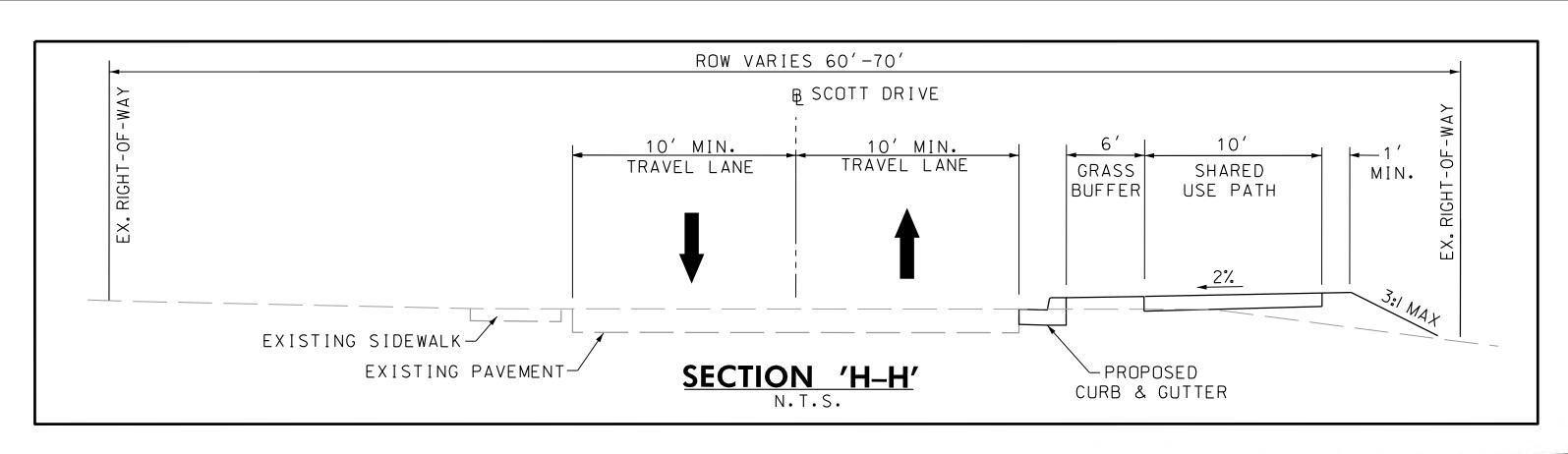
7 OF 12

AUGUST 2023



EXISTING UTILITY POLE

— — FO — - EX. FIBER OPTIC



This portion is outside of city boundaries



1. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION NOT PROVIDED ON AVAILABLE RECORDS. 2. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

Fenceline is on ROW line here

3. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

ALTERNATE 1

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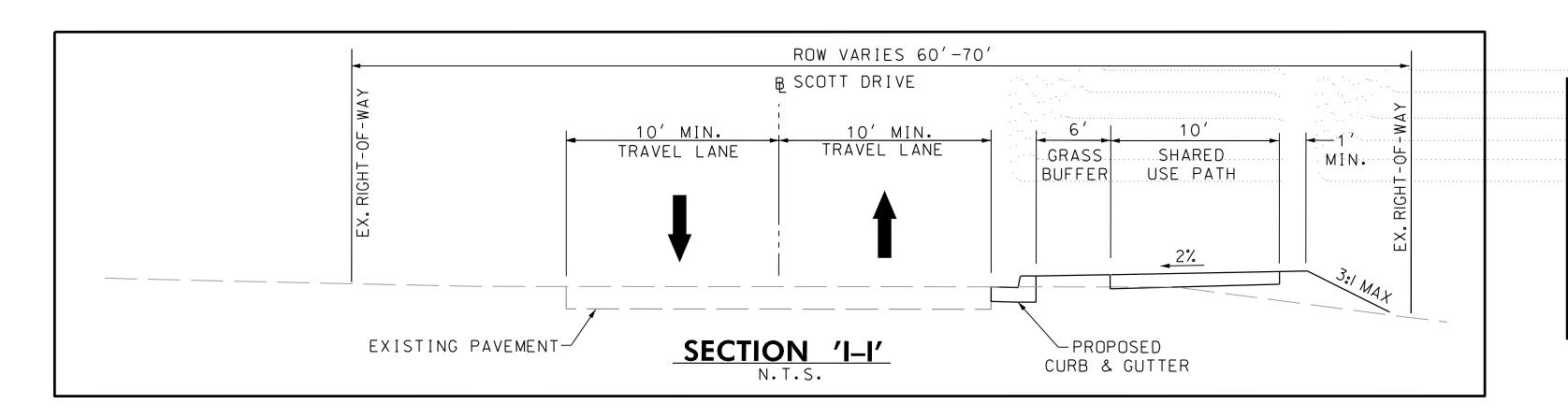
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<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS EXISTING UTILITY POLE

— — w — – EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS — — FO — - EX. FIBER OPTIC



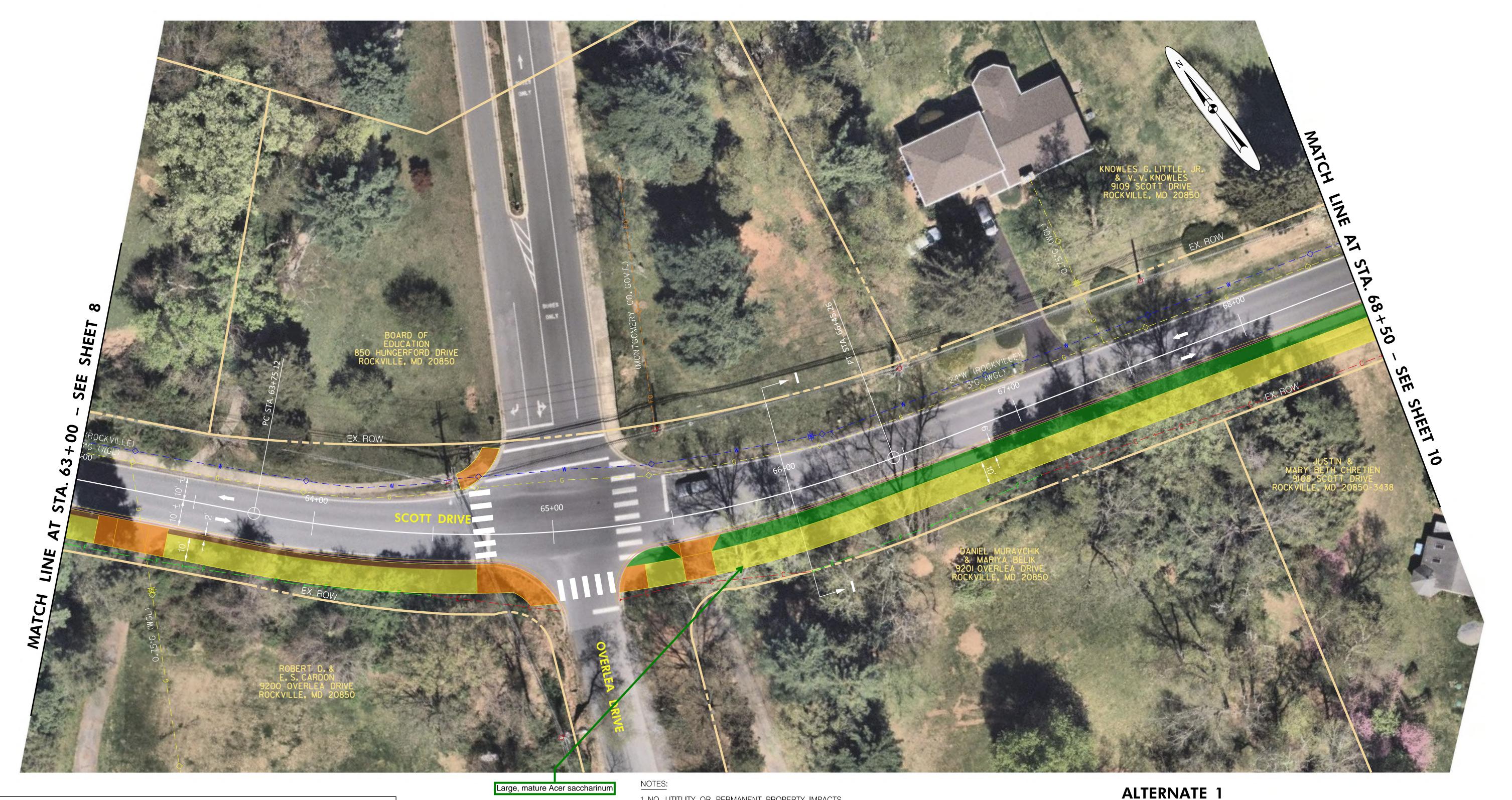
CITY OF ROCKVILLE

SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH

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AUGUST 2023



1. NO UTITLITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ASPHALT SHARED USE PATH

<u>LEGEND</u>

STREAMS/WATERS OF THE U.S.

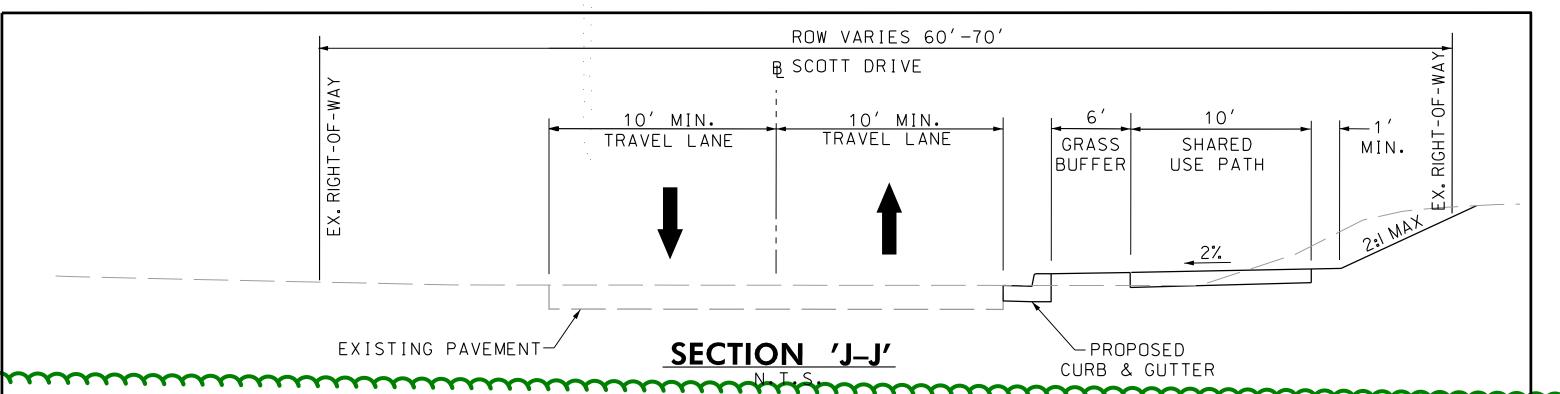
HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

— — W — – EX. WATER

— — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC



This is city property

SEE

<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS EXISTING UTILITY POLE

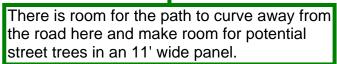
— — w — – EX. WATER — — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

Many invasive overgrown plants here, but some trees in good condition. Some healthy Ginkgo biloba, Platanus occidentalis, and Juglans nigra trees

1. CUT LINE IS SHOWN WITH 2:1 SLOPE BEYOND HINGE POINT FROM STA. 68 + 50 TO STA. 69 + 50. RETAINING WALL MAY BE CONSIDERED TO AVOID PROPERTY IMPACTS

2. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.



ALTERNATE 1

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

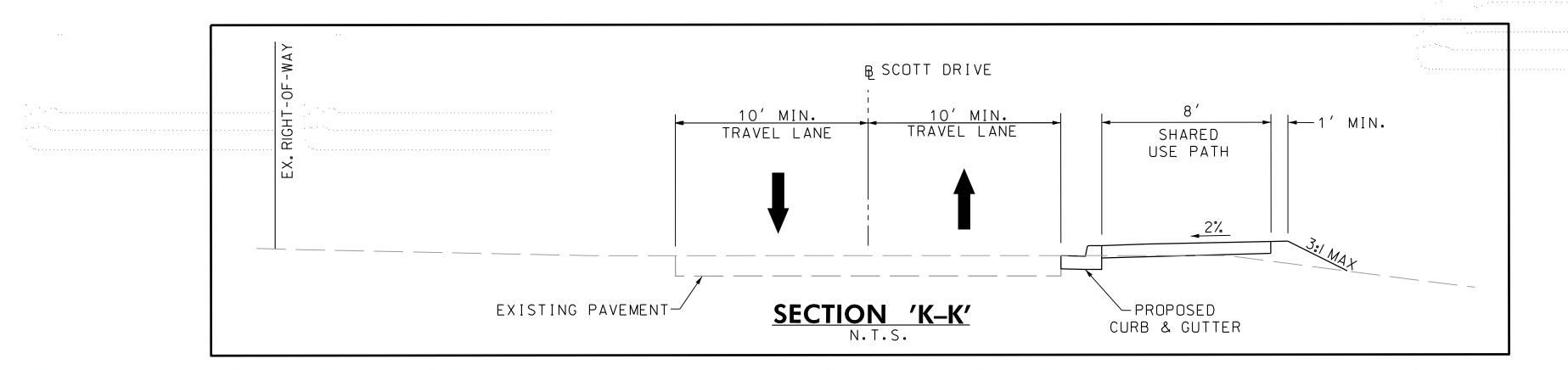
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Four Acer rubrum trees here in decline.
Removal will probably

be necessary

PLOTTED: 8/3/2023
FILE: \\ad.rkk.com\fs\Cloud\Projects\2022\22017_OPPE202001\Task 12 - Rockville Trail Feasibility Study\CADD\Plans\TMB working\pHD-P1010_RockvilleTrail.dgn





Healthy Juglans nigra tree located here, would need to be removed under current plans but would like to prioritize retention as possible.

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS EXISTING UTILITY POLE

<u>LEGEND</u>

— — W — − EX. WATER — — SAN — EX. SEWER — FO — - EX. FIBER OPTIC

NOTES: 1. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT.

2. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1

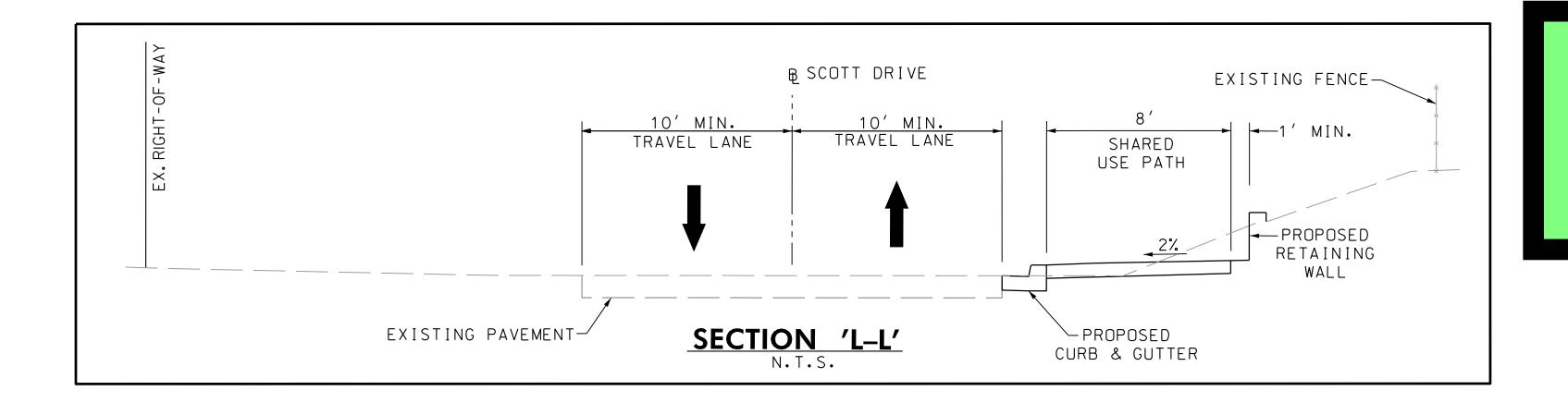


CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

II OF 12

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Mature Prunus spp. tree- priority retention

Mature Liriodendron tulipifera tree in this area would have CRZ impacts

1. PROVIDE SHARED USE PATH CONNECTION TO EXISTING CARL HENN MILLENIUM TRAIL.

2. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT.

3. INSTALL PROPOSED WOOTTON PARKWAY CROSSWALK, INCLUDING APS/CPS SIGNAL UPGRADES.

4. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

ALTERNATE 1

AUGUST 2023

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ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

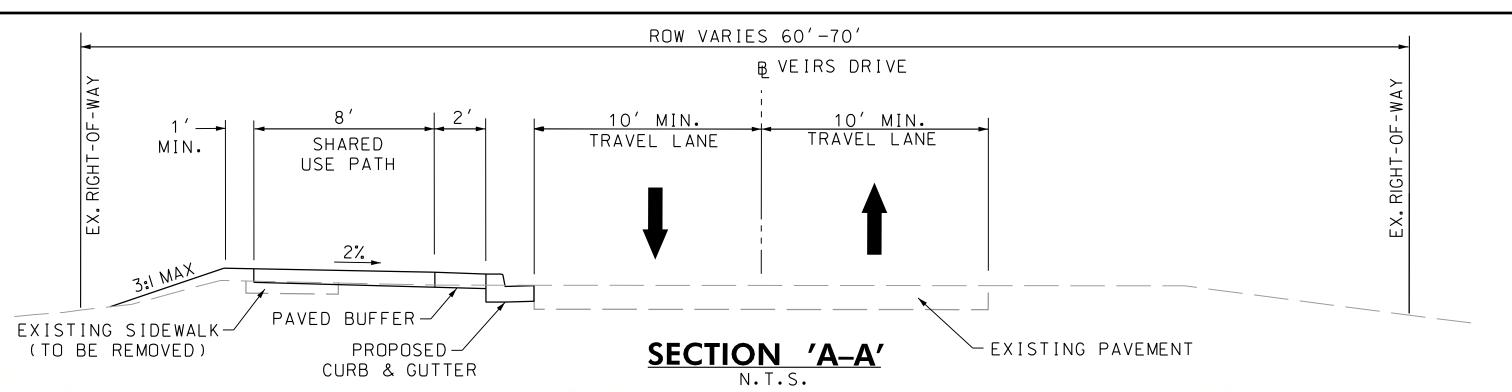
EXISTING UTILITY POLE

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

— — w — − EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS

— — FO — - EX. FIBER OPTIC

<u>LEGEND</u>



- Further inspection will be required once an alternative is selected to determine impacts to existing trees.

Flexipave will likely be a recommended material for the shared use path in order to protect tree roots where needed.
Where overhead lines are present, planting of any trees is not recommended
If a 7' or larger buffer cannot be achieved, there would not be enough room for street trees.
Any buffer that is narrower than 4' should be paved for maintenance purposes

Large Morus spp. tree here growing around Pepco utility pole. Removal recommended.

<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

EXISTING UTILITY POLE

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

— — w — − EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS

— FO — - EX. FIBER OPTIC

1. INSTALL CURB EXTENSION TO REDUCE PEDESTRIAN CROSSING AND ENCOURAGE TRAFFIC CALMING.

2. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.



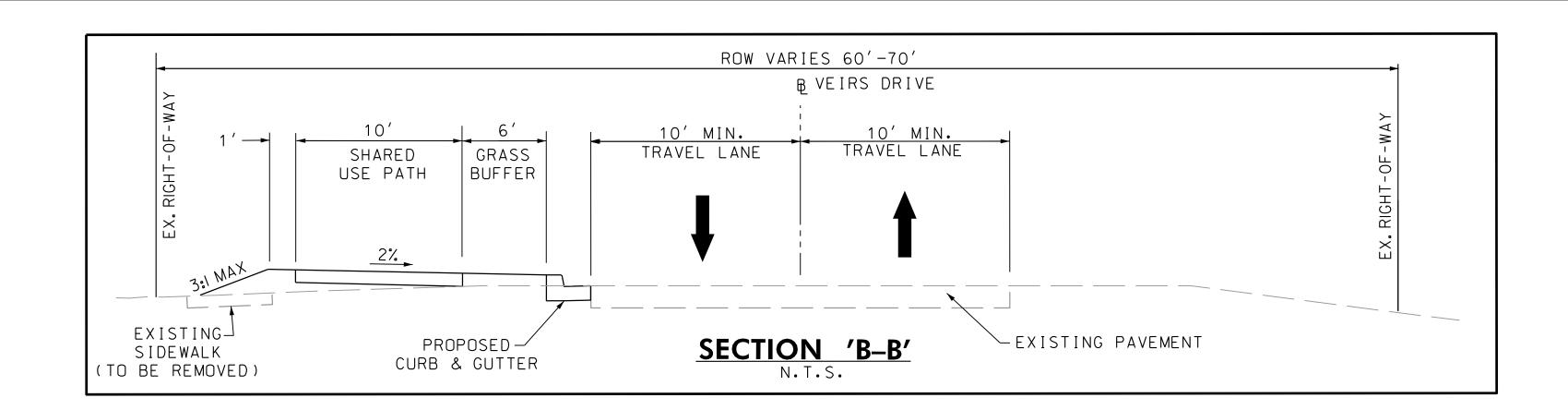
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

ALTERNATE 2

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AUGUST 2023





NOTES:

1. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER.

2. NO UTILITY OR PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 2

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH AUGUST 2023

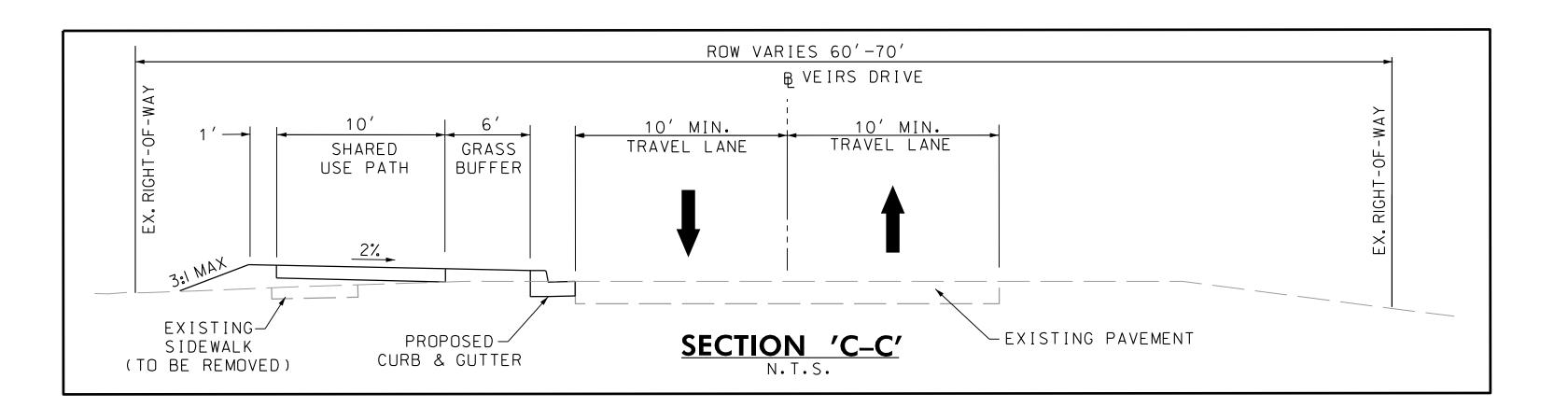
SCALE
I"=20'

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ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

EXISTING UTILITY POLE

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

<u>LEGEND</u>

— — w — – EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS

— — FO — - EX. FIBER OPTIC SCALE: 1" = 20'

NOTES:

1. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER.

2. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 2

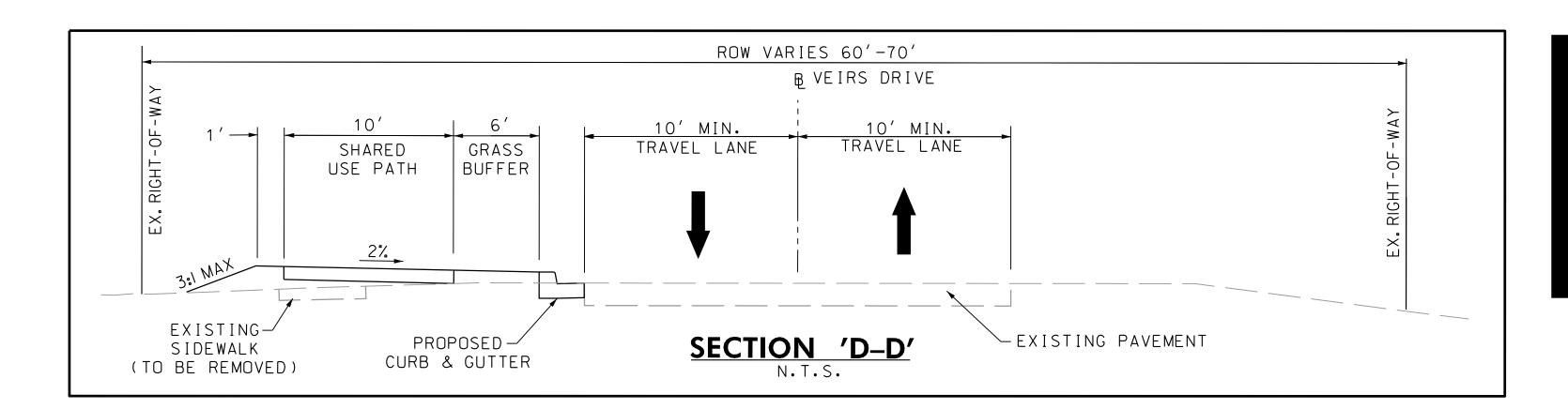
AUGUST 2023



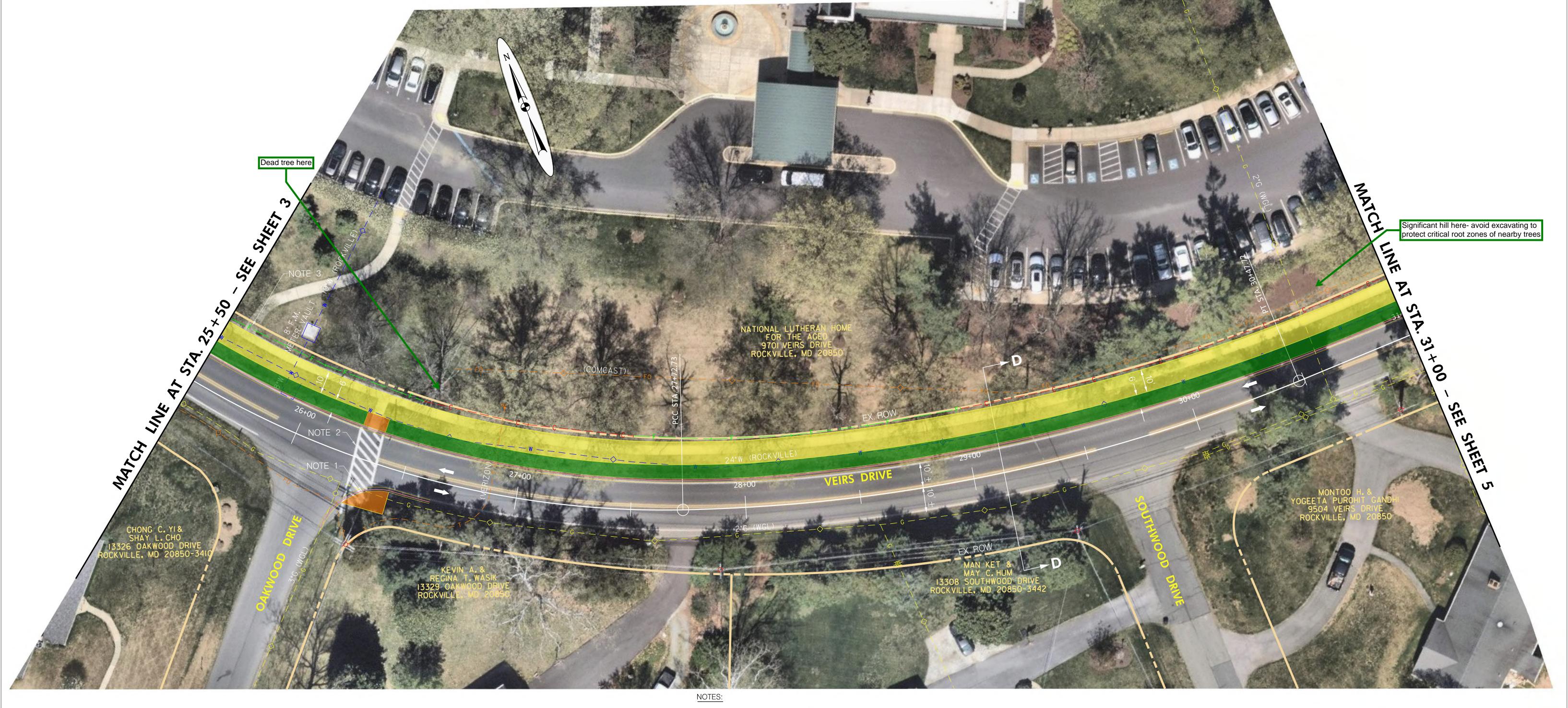
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

SCALE I"=20' SHEET NO. 3 OF 12

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Many declining Quercus palustris trees along the National Lutheran Home property. Could potentially be removed and replaced with significant tree replacement requirements.



PLOTTED: 8/3/2023
FILE: \\ad.rkk.com\fs\Cloud\Projects\2022\22017_OPPE202001\Task 12 - Rockville Trail Feasibility Study\CADD\Plans\TMB working\pHD-P2004_RockvilleTrail.dgn

ASPHALT SHARED USE PATH

CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

— — W — – EX. WATER

— — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

<u>LEGEND</u>

1. INSTALL CURB EXTENSION TO REDUCE PEDESTRIAN CROSSING AND ENCOURAGE TRAFFIC CALMING OF NORTHBOUND TO EASTBOUND VEHICLES. 2. REPLACE CROSSWALK WITH HIGH VISIBILITY CROSSWALK MARKINGS.

3. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER.

4. NO UTILITY OR PERMANENT PROPERTY IMPACTS ALTERNATE 2
ANTICIPATED THIS SHEET.

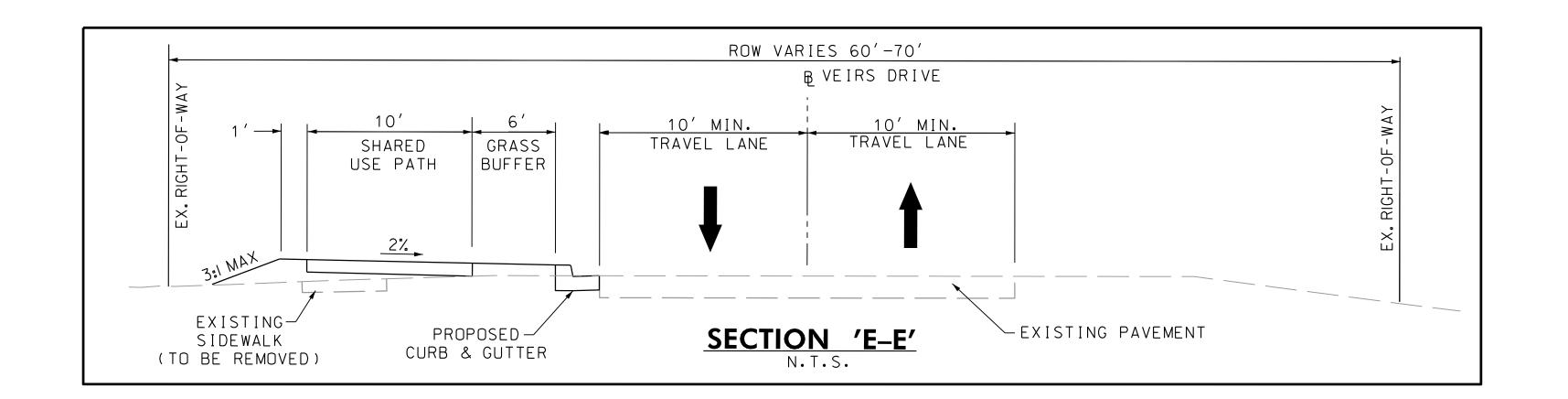


CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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AUGUST 2023





EXISTING UTILITY POLE — — FO — - EX. FIBER OPTIC

ASPHALT SHARED USE PATH

NOTES: 1. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 2



5 OF 12 Responsive People | Creative Solutions

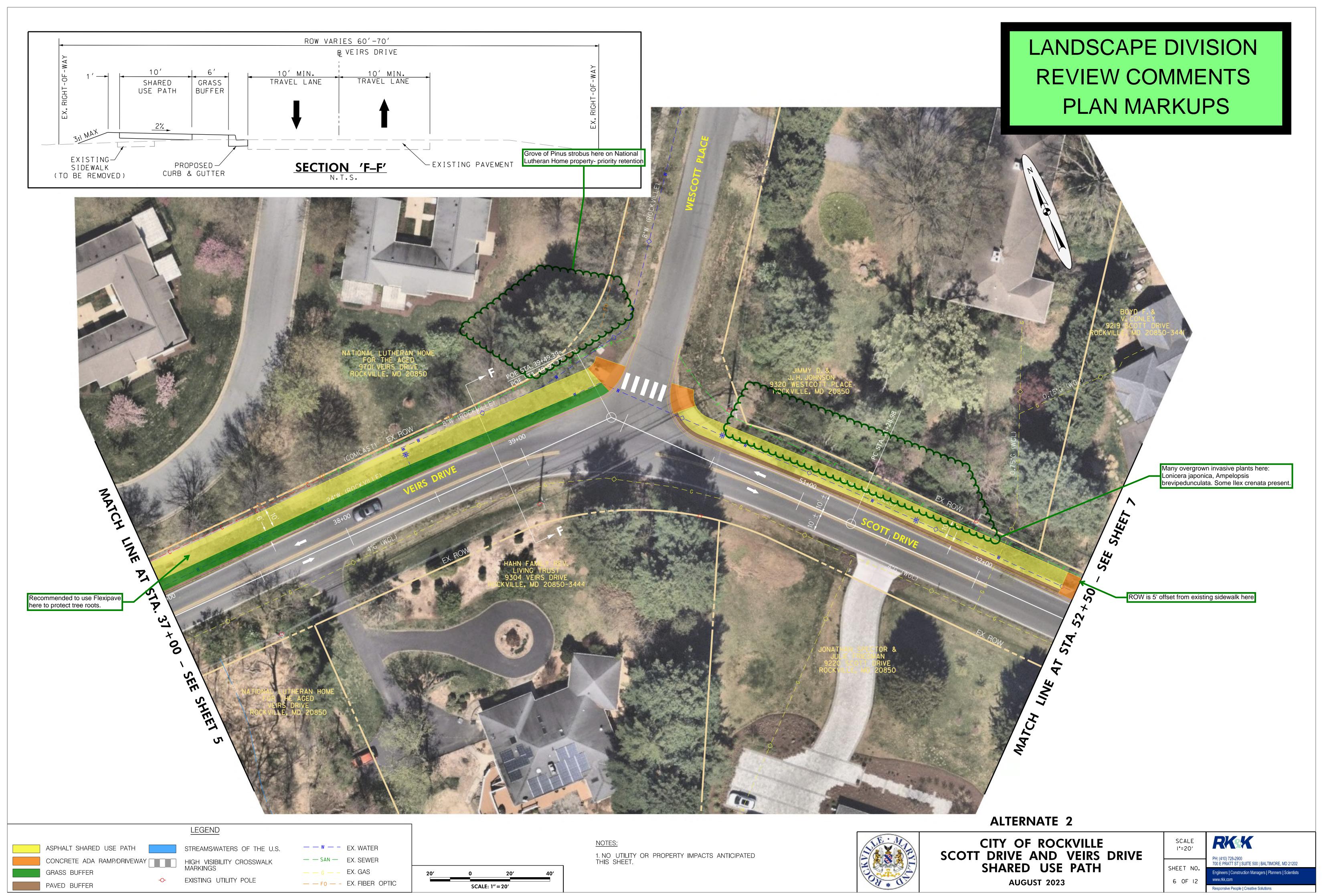
CONCRETE ADA RAMP/DRIVEWAY HIGH VISIBILITY CROSSWALK MARKINGS

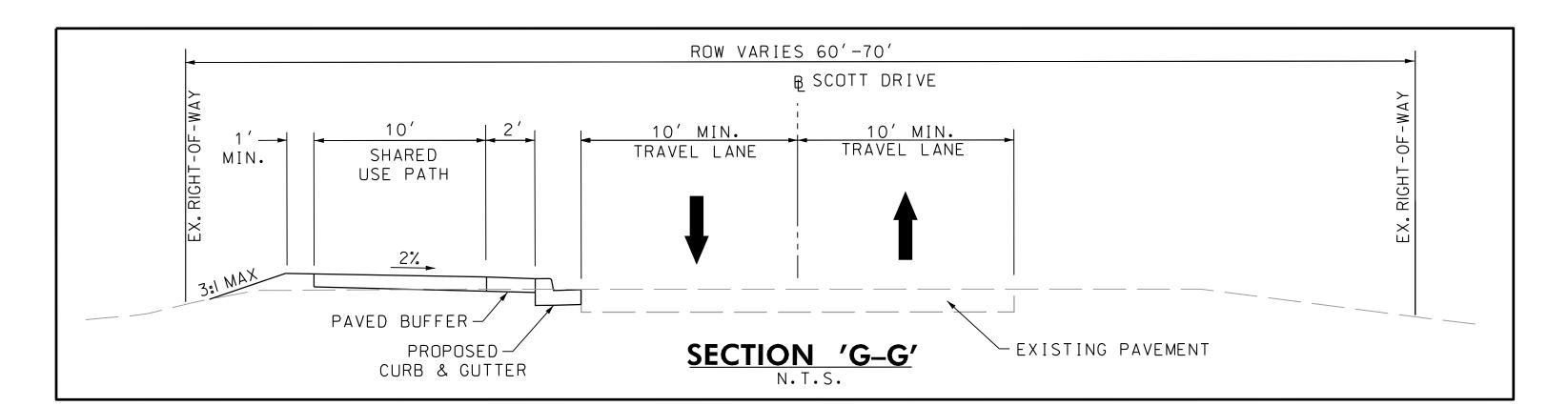
<u>LEGEND</u>

STREAMS/WATERS OF THE U.S.

— — W — – EX. WATER

— — SAN — EX. SEWER





SCOTT DRIVE AND VEIRS DRIVE

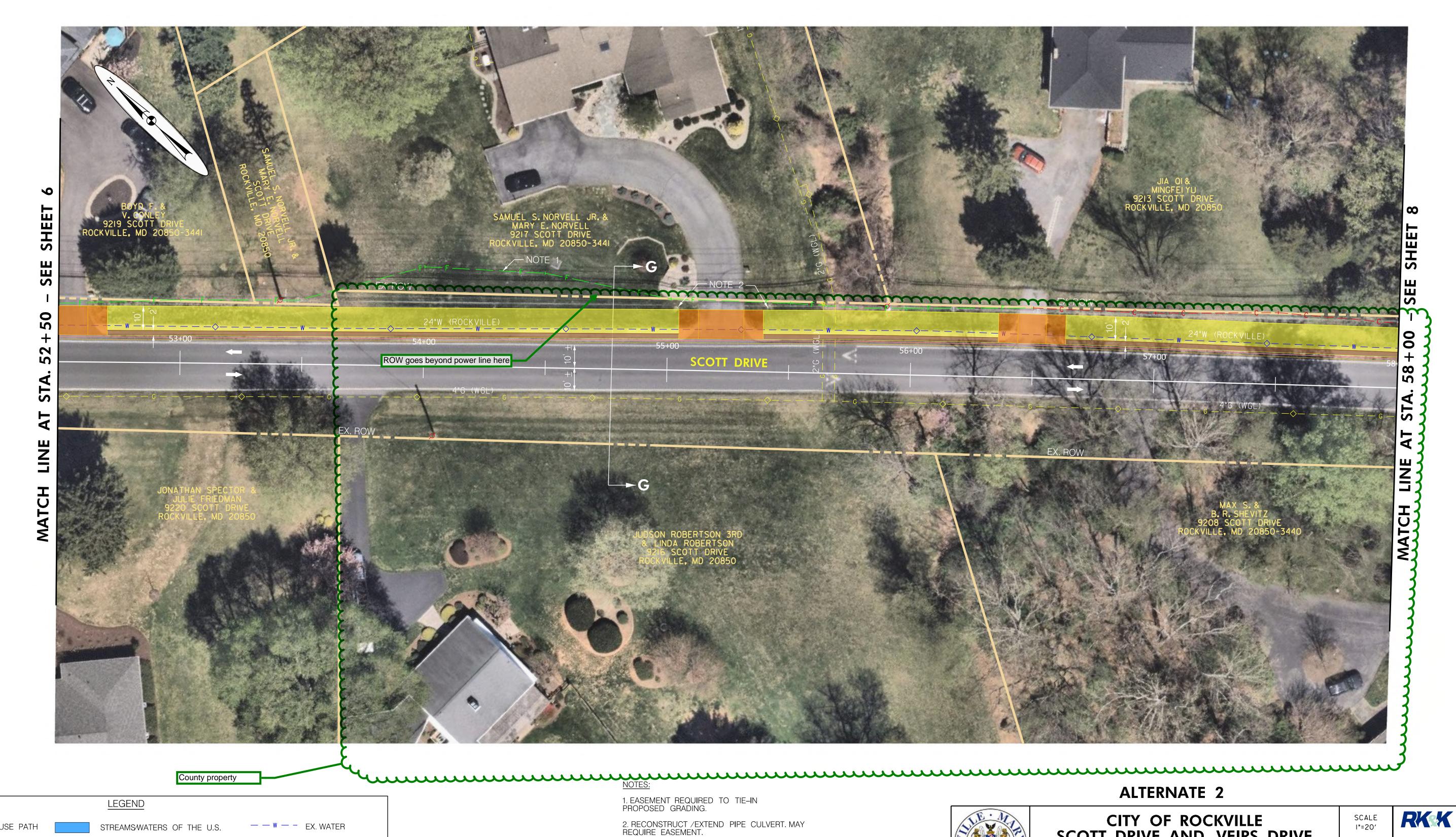
SHARED USE PATH

AUGUST 2023

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7 OF 12



3. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

PLOTTED: 8/3/2023
FILE: \\ad.rkk.com\fs\Cloud\Projects\2022\22017_OPPE202001\Task 12 - Rockville Trail Feasibility Study\CADD\Plans\TMB working\pHD-P2007_RockvilleTrail.dgn

STREAMS/WATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

— — w — – EX. WATER

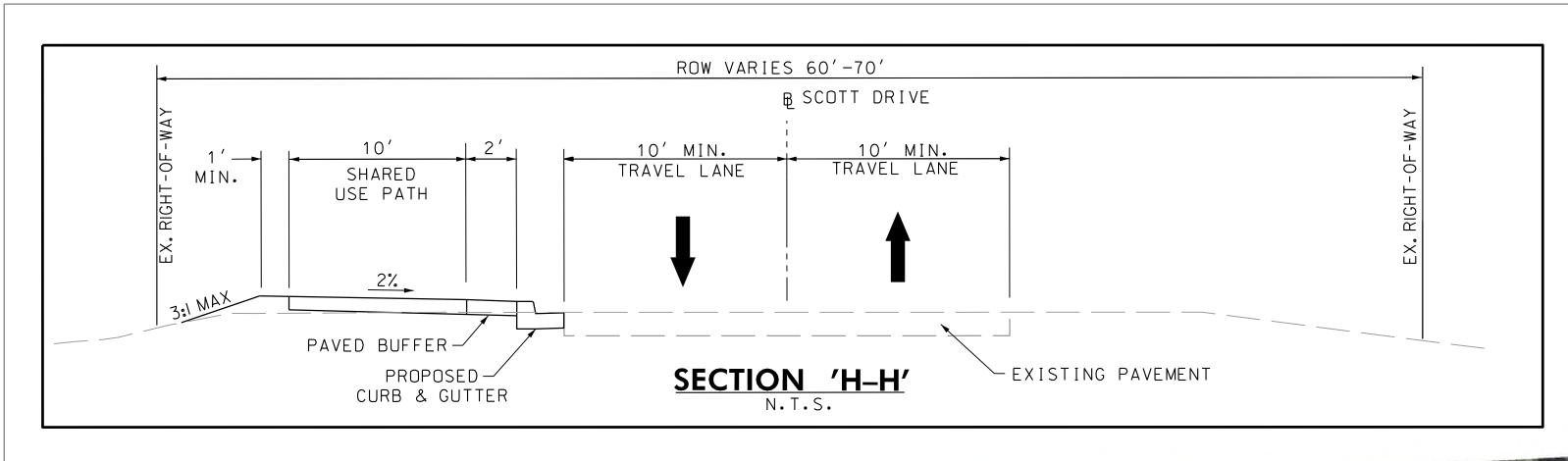
— — SAN — EX. SEWER

— — FO — - EX. FIBER OPTIC

<u> — с</u> — – EX. GAS

ASPHALT SHARED USE PATH

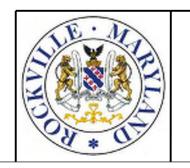
CONCRETE ADA RAMP/DRIVEWAY



This portion is outside of city boundaries



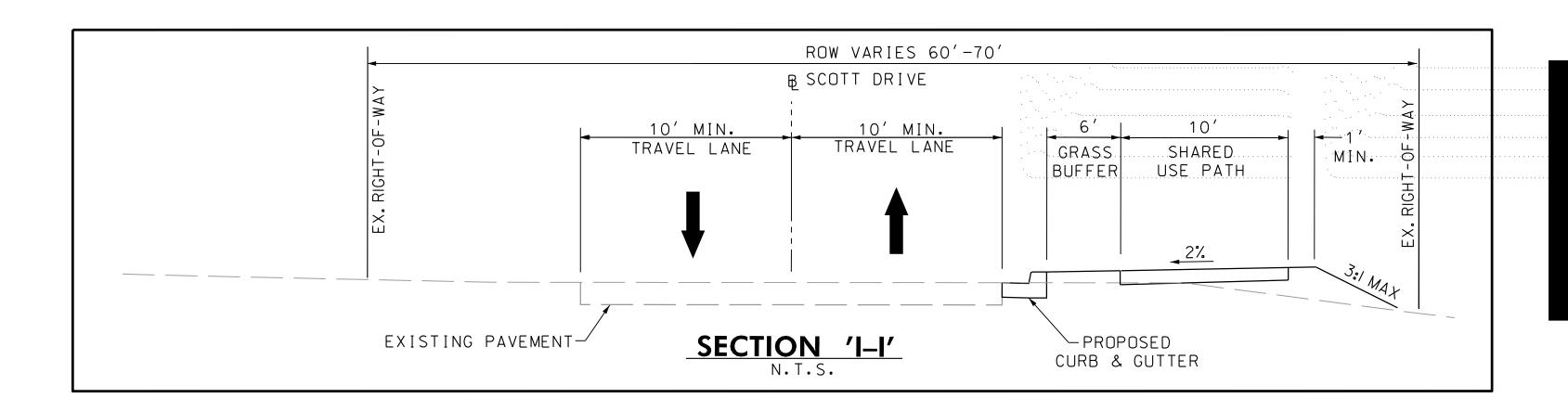
ALTERNATE 2



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH **AUGUST 2023**

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— — w — – EX. WATER — — SAN — EX. SEWER — — FO — - EX. FIBER OPTIC





EXISTING UTILITY POLE — — FO — - EX. FIBER OPTIC

ASPHALT SHARED USE PATH

CONCRETE ADA RAMP/DRIVEWAY

<u>LEGEND</u>

STREAMS/WATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

— — W — – EX. WATER

— — SAN — EX. SEWER

1. NO UTILITY OR PERMANENT PROPERTY IMPACTS ARE ANTICIPATED THIS SHEET.

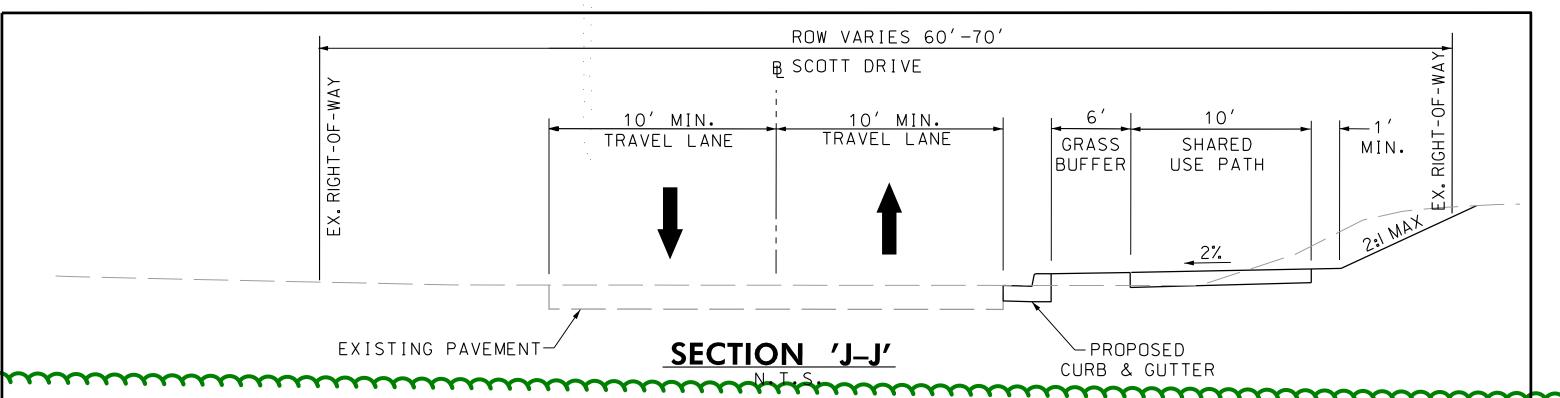


CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

AUGUST 2023

9 OF 12

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This is city property

SEE There is room for the path to curve away from

<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS EXISTING UTILITY POLE

— — w — − EX. WATER — — SAN — EX. SEWER — — FO — - EX. FIBER OPTIC Many invasive overgrown plants here, but some trees in good condition. Some healthy Ginkgo biloba, Platanus occidentalis, and Juglans nigra trees

1. CUT LINE IS SHOWN WITH 2:1 SLOPE BEYOND HINGE POINT FROM STA. 68 + 50 TO STA. 69 + 50. RETAINING WALL MAY BE CONSIDERED TO AVOID PROPERTY IMPACTS

2. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

the road here and make room for potential street trees in an 11' wide panel.

ALTERNATE 2

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

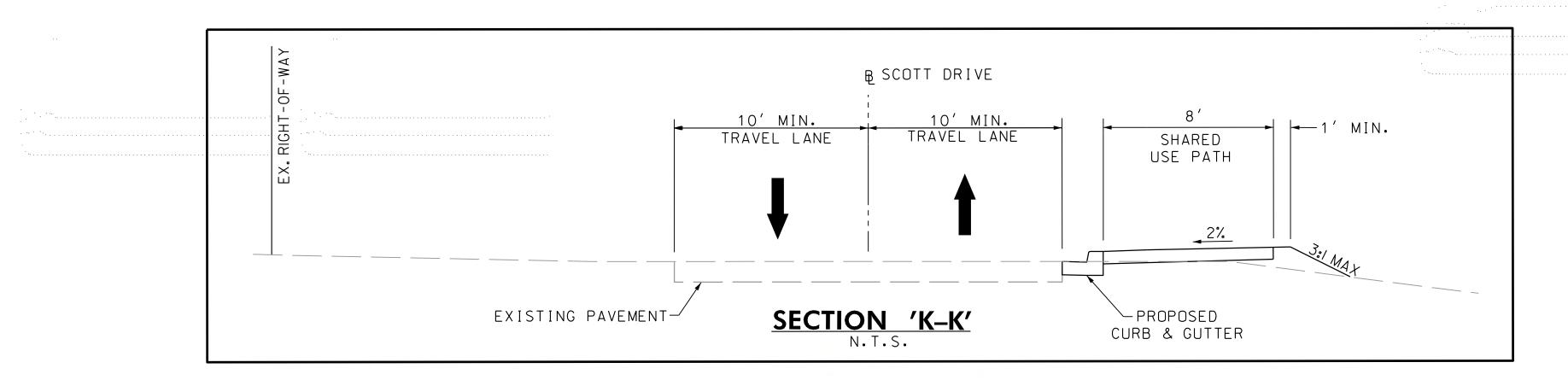
AUGUST 2023

10 OF 12

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Four Acer rubrum trees here in decline.
Removal will probably

be necessary





ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

would need to be removed under

EXISTING UTILITY POLE

<u>LEGEND</u> STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

— — w — − EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS — FO — - EX. FIBER OPTIC

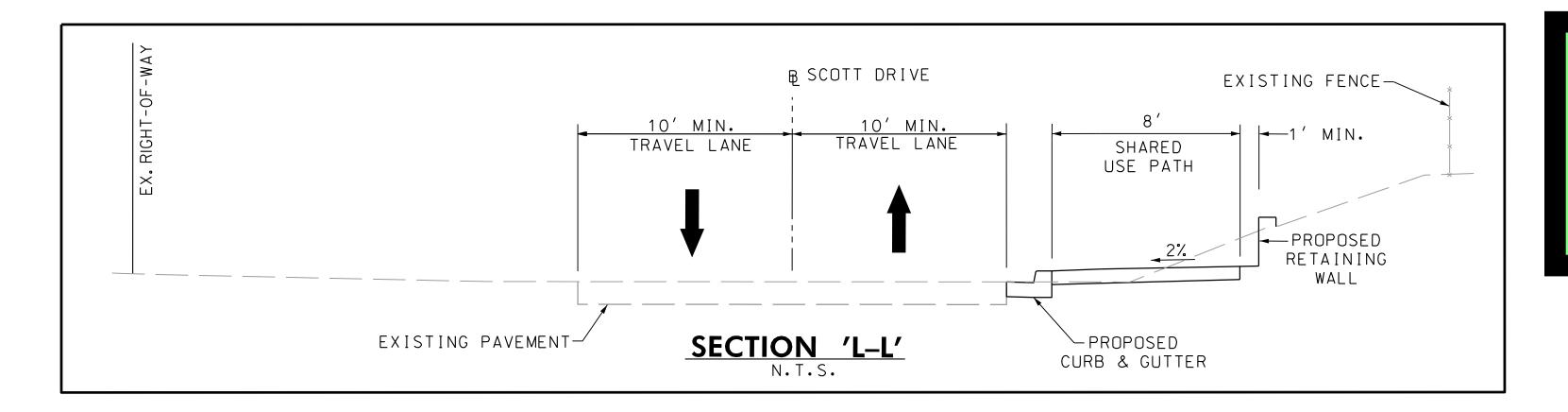
NOTES: 1. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT. 2. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

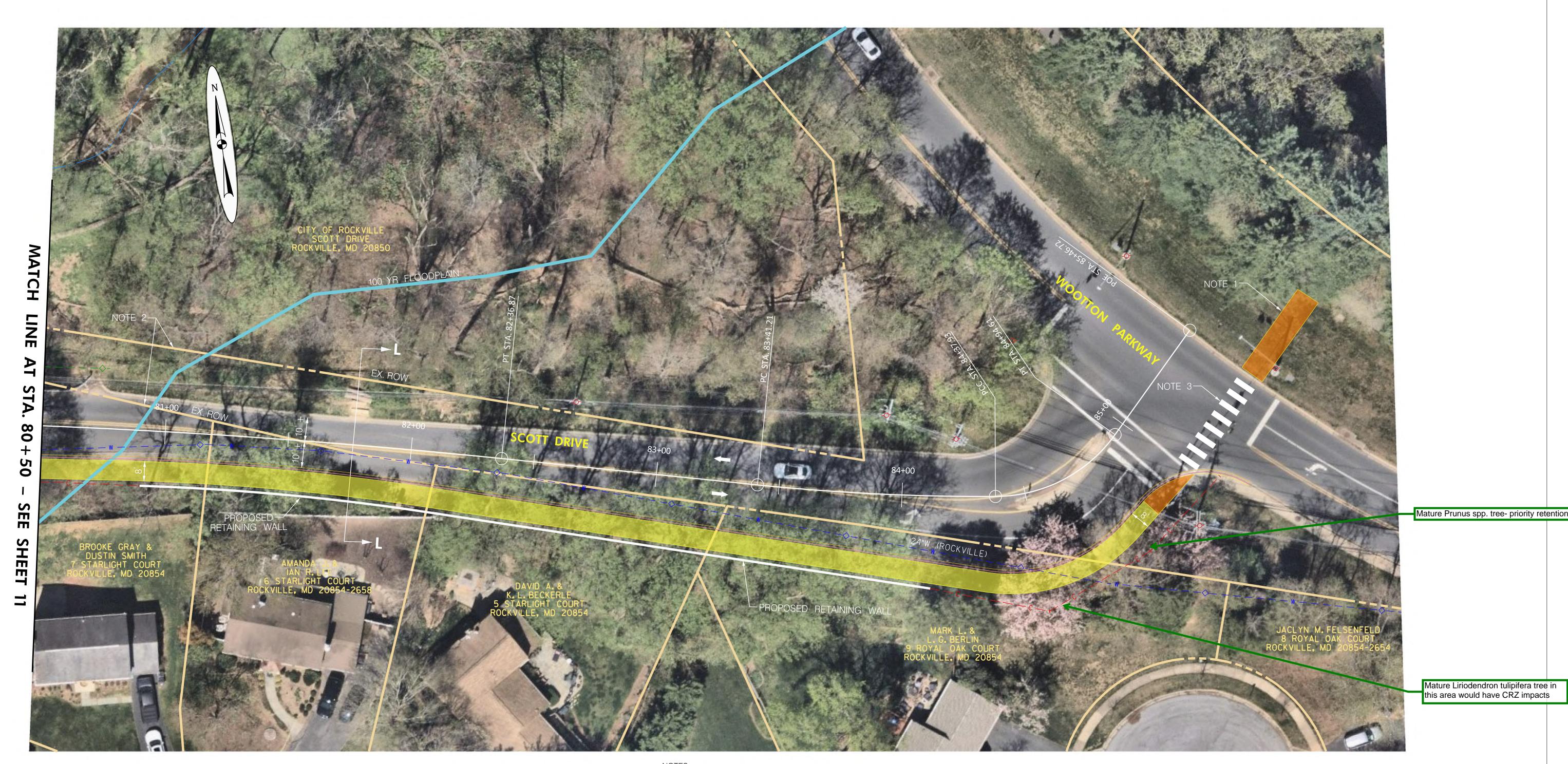
ALTERNATE 2

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH **AUGUST 2023**

SCALE I"=20' II OF 12

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2. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT. CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH **AUGUST 2023**

ALTERNATE 2

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Mature Liriodendron tulipifera tree in this area would have CRZ impacts

<u>LEGEND</u>

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMS/WATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

— — W — – EX. WATER — — SAN — EX. SEWER <u> — с</u> — – EX. GAS — — FO — - EX. FIBER OPTIC

3. INSTALL PROPOSED WOOTTON PARKWAY CROSSWALK, INCLUDING APS/CPS SIGNAL UPGRADES.

4. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.

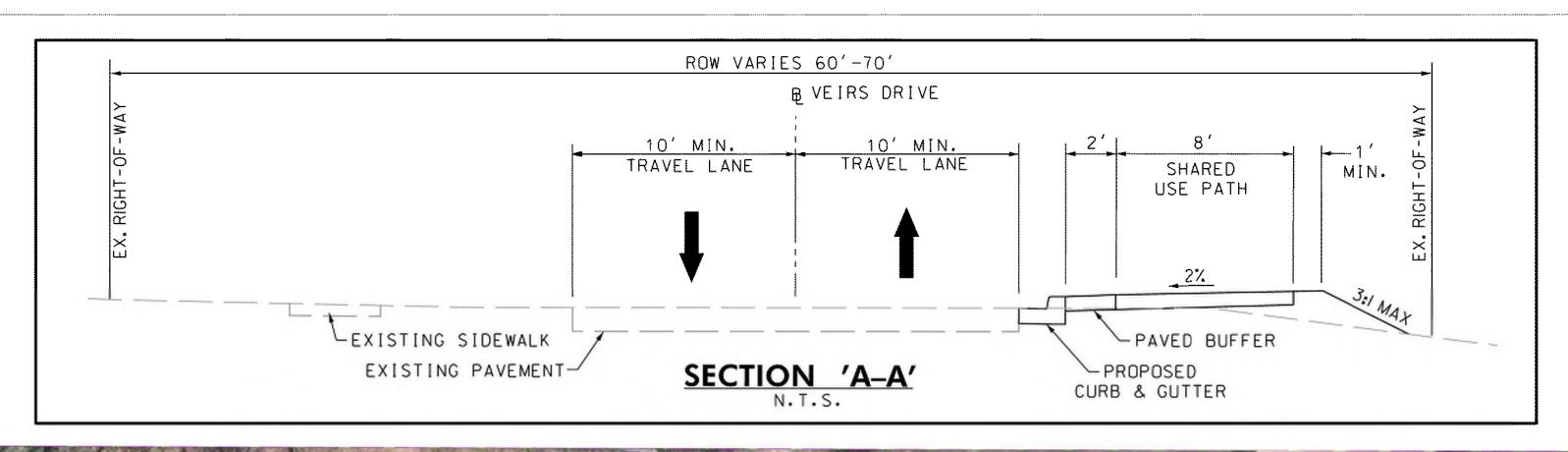
1. PROVIDE SHARED USE PATH CONNECTION TO EXISTING CARL HENN MILLENIUM TRAIL.

APPENDIX B PUBLIC MEETING COMMENTS

Public Meeting Comments and Responses							
	Questions / Comment	Responses					
Meeting Comment	What happens to the drainage swale with the improvements (closed-section, curb, SUP)?	Closed drainage system would be assessed for storm drainage conveyance					
Meeting Comment	Speeding is a problem; building SUP will make speeding worse? Will more speed humps be considered?	The study look at the measurements to reduce traffic speed. In the study, we proposed some measurements to slow people down at at that particular intersection. Exisiting speed humps will be maintained, addition speed hump will be considered if it meets the criterian of city neiborhood traffic calming guideline.					
Meeting Comment	Why is path not on north side for entirety of project?	Proposed path alongs the northside of Scott Dr, would result in major environmental impacts on Watts branch and over head utility pole impacts.					
Meeting Comment	Raking leaves on sidewalk. City not clearing leaves so sidewalk is not useable. Is City going to be more diligent with leaf removal?	City Forester will be notified od concern and question.					
Meeting Comment	To what extent will trees have to be cut down to incorporate these improvements?	A more detailed tree inventory and assessment will be conducted during the next phase of design. Every effort will be made by the City to preserve existing healthy trees. The size of the trees and conditions are all the items that will be consider. Design considertions that can be considered to preserve tree would include reducing the path from 10 feet to 8 feet, installing retaining wall or different sidewalk material to preserve trees roots.					
Meeting Comment	Alt. 1 requires impacts to Montgomery County right of way. How does that work?	MCDOT will work with the City to support the project improvements and facilitate the design and construction of this project.					
Meeting Comment	Area around the bridge over Watts Branch is prone to flooding.	During design phase, the flood zone will be evaluate to determine if additional drainage system is necessary to capture the water or the best way to address flooding.					
Meeting Comment	What happened to existing structure (columns) within 16' of the road?	Detailed surveys will be performed and impacts / avoidance to these features will be evaluated. We will evaluate more specifically about some certain and specific areas, such as a decorative gate that is very close to their property line. The shared use path will be built within the public Right-of-Way. We don't anticipate impacts or will have very little impact to private property.					
Meeting Comment	Is City requiring residents to maintain 10' SUP due to snow events? County?	County law requires for residents to clear 5' wide sidewalks. Vision Zero is a priority. Snow is rare these days. [City requirements not discussed].					

Public Meeting Comments and Responses						
	Questions / Comment	Responses Cost considerations, drainage improvements; would be more of a major roadway improvement to make both sides closed section. For now, City will focus on one side. We will propose the curb only along the side with shared use path installed. We will propose the curb on both sides when we have the roadway improvement project				
Meeting Comment	Has City evaluated placing curb on both sides?					
Meeting Comment	What happened to existing bridge structure?	The existing bridge structure will be remaining				
Email	Here are my comments about the two Alternatives: a. Whether this project is undertaken or not, the 3-way stop sign at the intersection of Veirs, Scott and Wescott is a great idea. I also support the					
Email	Would it be possible to get a copy of the presentation and the meeting recording so I can refer to it? In addition, one of the slides mentioned that collecting public comments is th next step in this process. Where and when do I get to enter comments for this project?					
Email	Thank you for your description of the project a couple of evenings ago. I have a couple of concerns. My house is at the corner of Wootton Parkway and Scott Drive, at the end of the proposed project. At the very end of the project we have a two-rail split rail fence that is 16 feet from the street. Further up we have a 6-foot stockad privacy fence that is about 25 feet from the street. The current situation is that there are lots of trees on both sides of Scott Drive and in the fall there are a lot of leaves on the sidewalk and street. It seems that I'm always out there raking and blowing and collecting the leaves, but the problem is that the speed of the cars on Scott Drive creates a kind of wind tunnel that pulls all of the leaves toward Wootton Parkway. And the City of	e e,				
Email	I reviewed them and my concern with Alternative 1 is that it only has 2 feet o tolerance separating the walkway from Veirs Drive for majority of the 1.2-mile construction. There are cars constantly speeding on Veirs Dr which makes Alternative 1 a less safe option. Alternative 2 which plans to construct on the North side of Veirs Drive has more tolerance (around 6 feet of separation) separating the walkway from the road for majority of the 1.2-mile construction making it a safer choice for shared use path.	е				

APPENDIX C ALTERNATIVE 1 CONCEPT DESIGN PLANS





STREAMSWATERS OF THE U.S.

LEGEND

EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS - - FO - - EX. FIBER OPTIC

1. INSTALL CURB EXTENSION TO REDUCE PEDESTRIAN CROSSING AND ENCOURAGE TRAFFIC CALMING OF NORTHBOUND TO EASTBOUND VEHICLES.

2. FIBER OPTIC AND WATER MAIN IMPACTS ANTICIPATED. COVER WILL NEED TO BE VERIFIED DURING DETAILED DESIGN.

3. NO OVERHEAD UTILITY POLE IMPACTS ARE ANTICIPATED ON THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1

CITY OF ROCKVILLE

SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

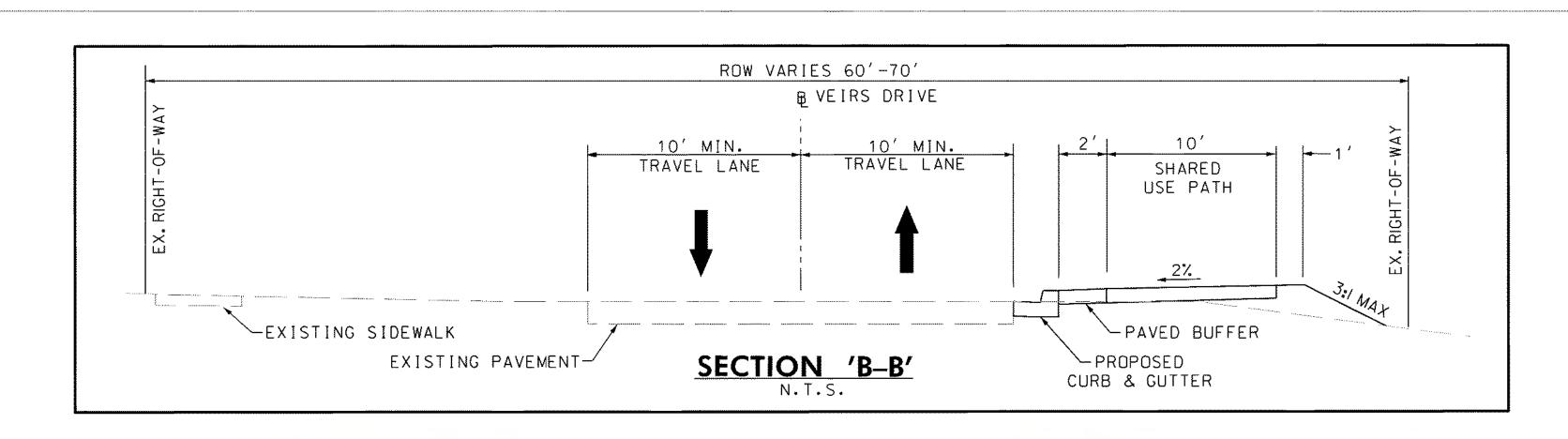
DECEMBER 2023

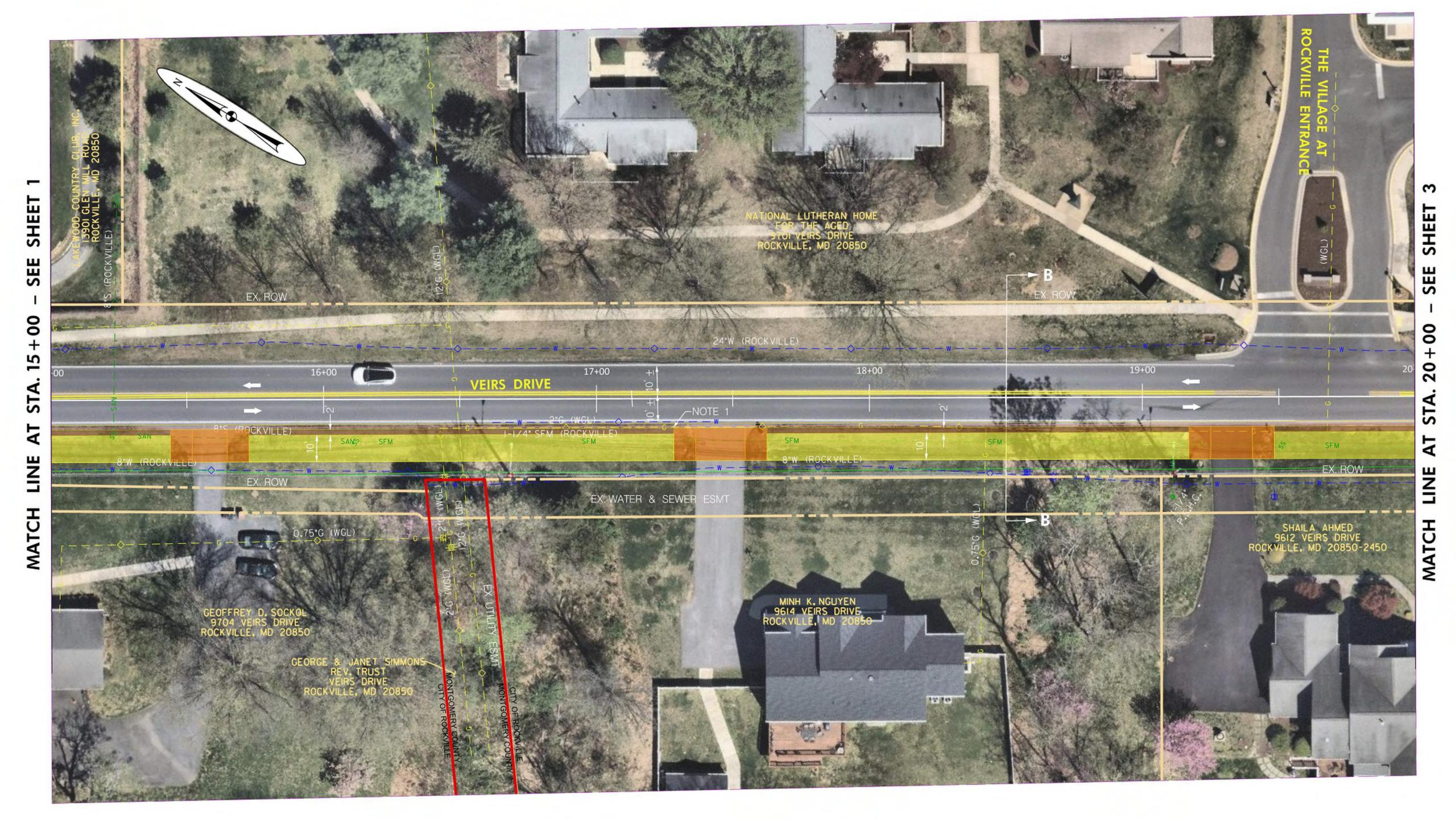
I OF 12

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NOTES:

1. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

2. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET. 3. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

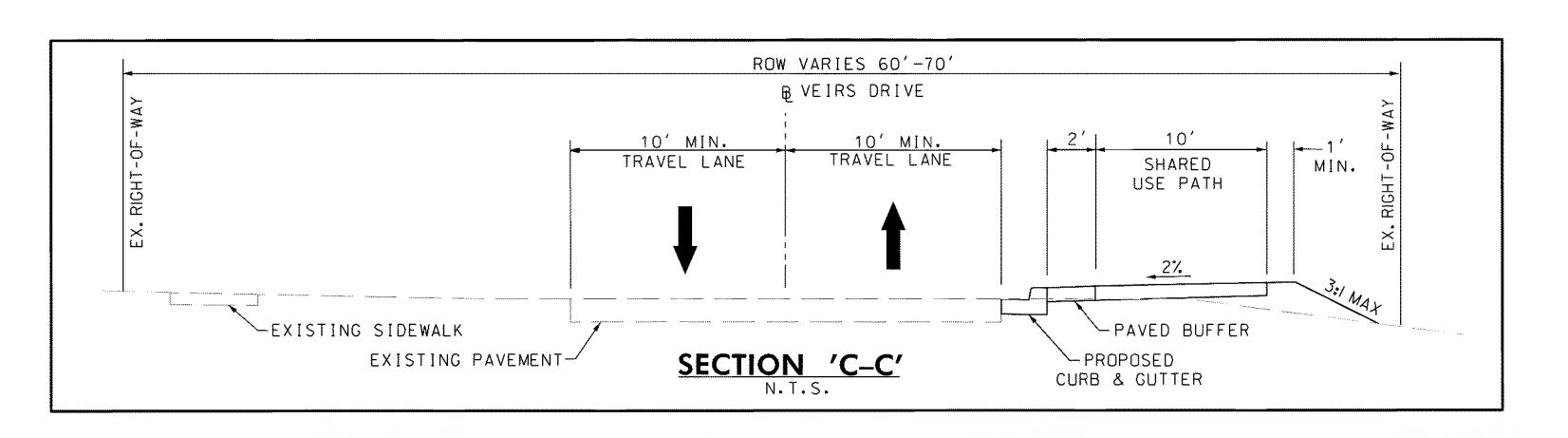
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<u>LEGEND</u> ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY HIGH VISIBILITY CROSSWALK MARKINGS — — w — − EX. WATER - - SAN - EX. SEWER EXISTING PROPERTY LINE — — C — — EX. GAS CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC STREAMS/WATERS OF THE U.S.





ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMSWATERS OF THE U.S.

LEGEND

HIGH VISIBILITY CROSSWALK MARKINGS EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS

- - FO - - EX. FIBER OPTIC

SCALE: 1" = 20'

NOTES:

FIBER OPTIC IMPACTS ANTICIPATED COVER WILL NEED TO BE VERIFIED DURING DETAILED DESIGN.

2. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

3. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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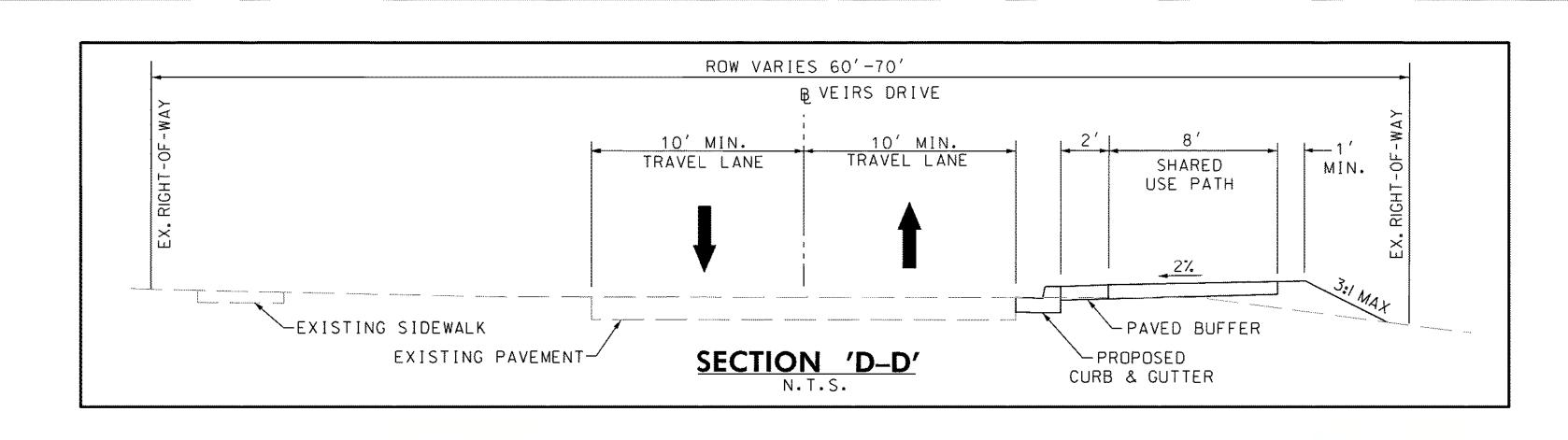
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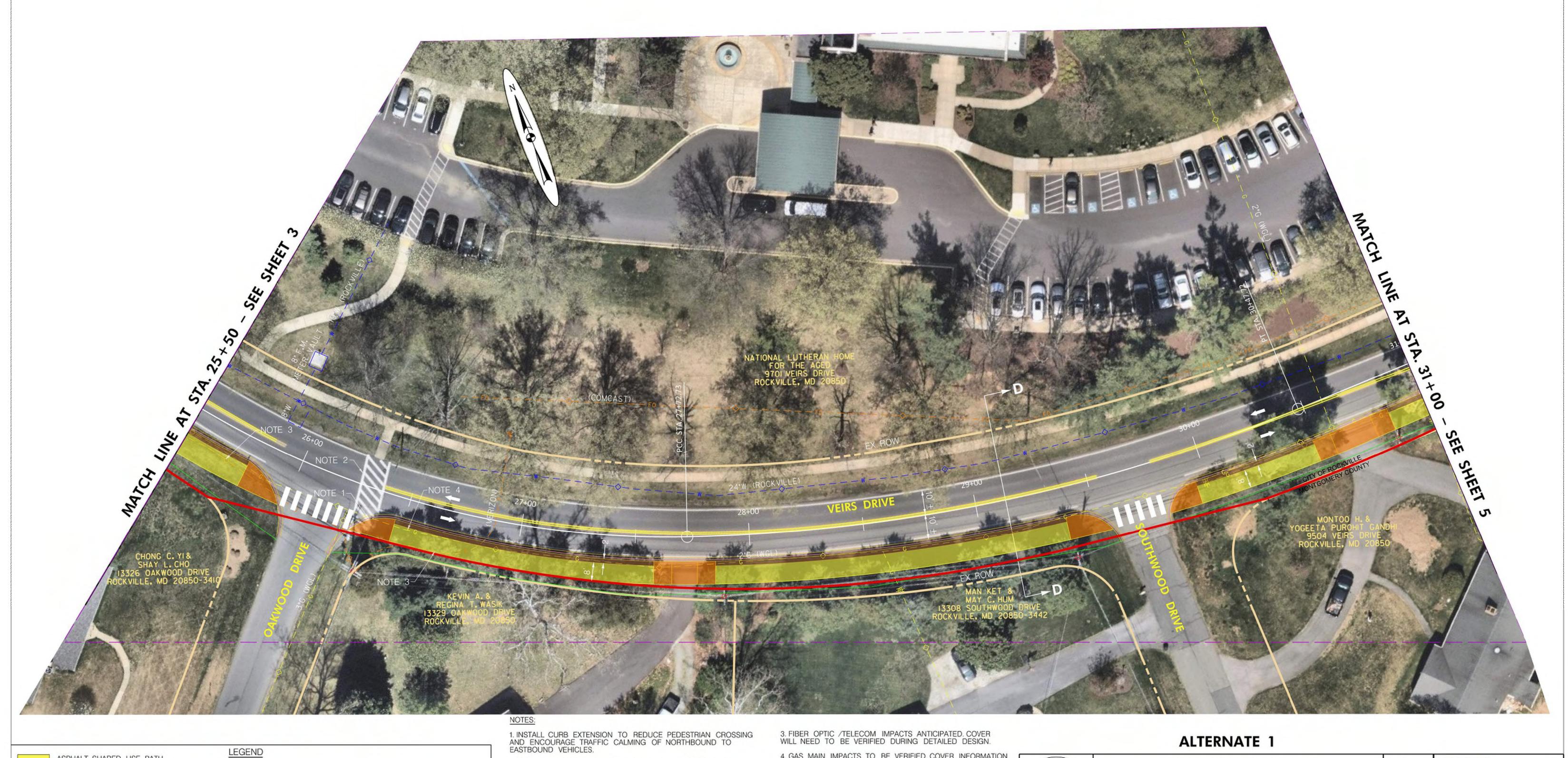
3 OF 12

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2. REPLACE CROSSWALK WITH HIGH VISIBILITY CROSSWALK

4. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

5. NO UTILITY POLE IMPACTS ARE ANTICIPATED THIS SHEET.

6. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

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SCALE I*=20'

SHEET NO.

4 OF 12

CITY OF ROCKVILLE

SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH

DECEMBER 2023

EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC STREAMSWATERS OF THE U.S. PLOTTED: 12/5/2023 FILE: \\ad.rkk.com\fs\Cloud\Projects\2022\22017_OPPE202001\Task 12 - Rockville Trail Feasibility Study\CADD\Plans\TMB working\pHD-P1004_RockvilleTrail.dgn

CONCRETE ADA RAMP/DRIVEWAY HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING PROPERTY LINE

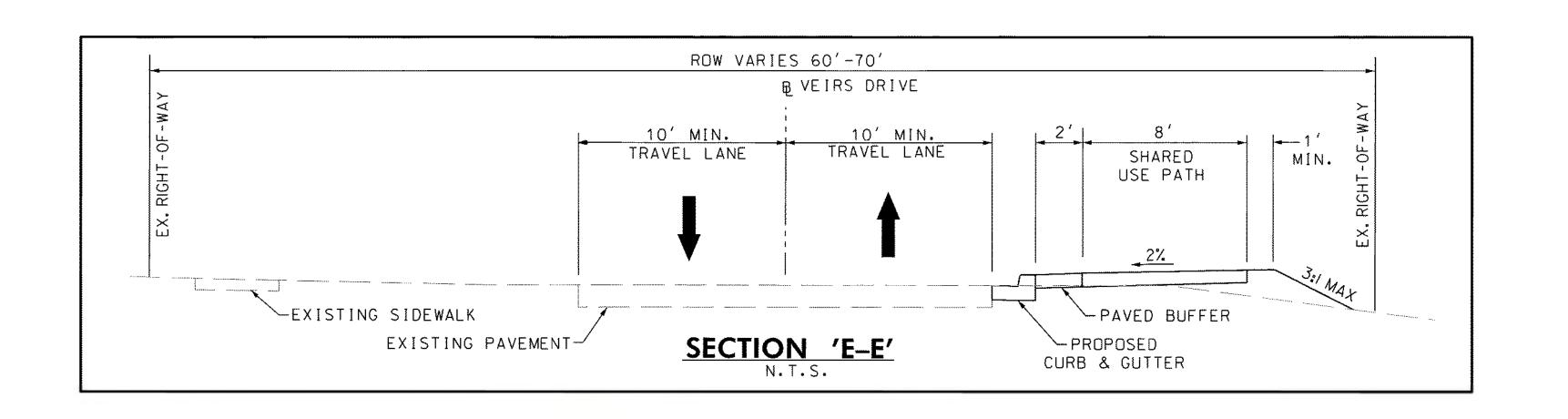
---- CITY/COUNTY LINE OF DIVISION

— — w — − EX. WATER

- - SAN - EX. SEWER

— — C — — EX. GAS

ASPHALT SHARED USE PATH





STREAMSWATERS OF THE U.S.

LEGEND

EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION

— — w — − EX. WATER - - SAN - EX. SEWER — — c — — EX. GAS - - FO - - EX. FIBER OPTIC EXISTING UTILITY POLE

NOTES:

1. REMOVE / RELOCATE SPEED CAMERA.

2. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

3. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

4. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1



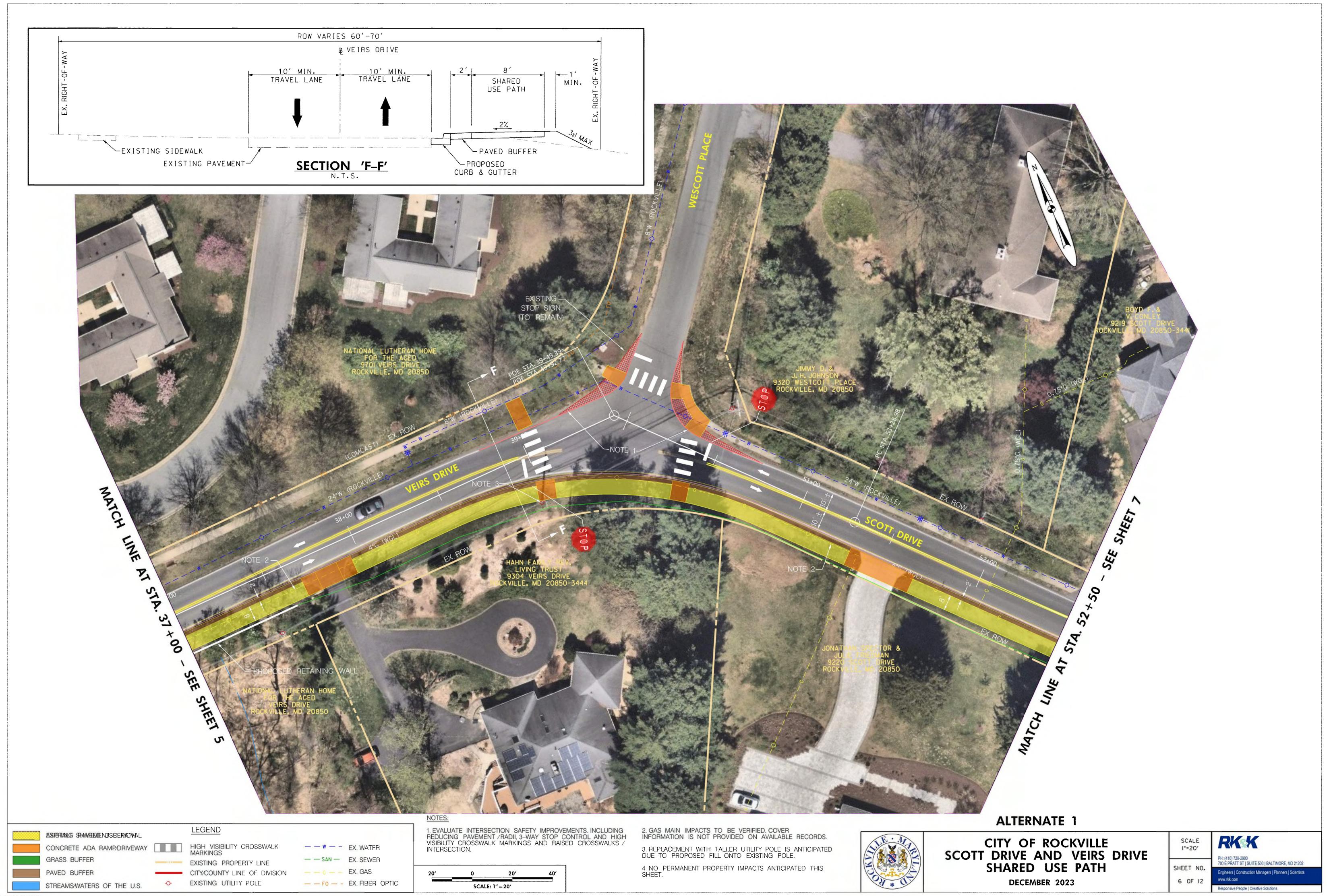
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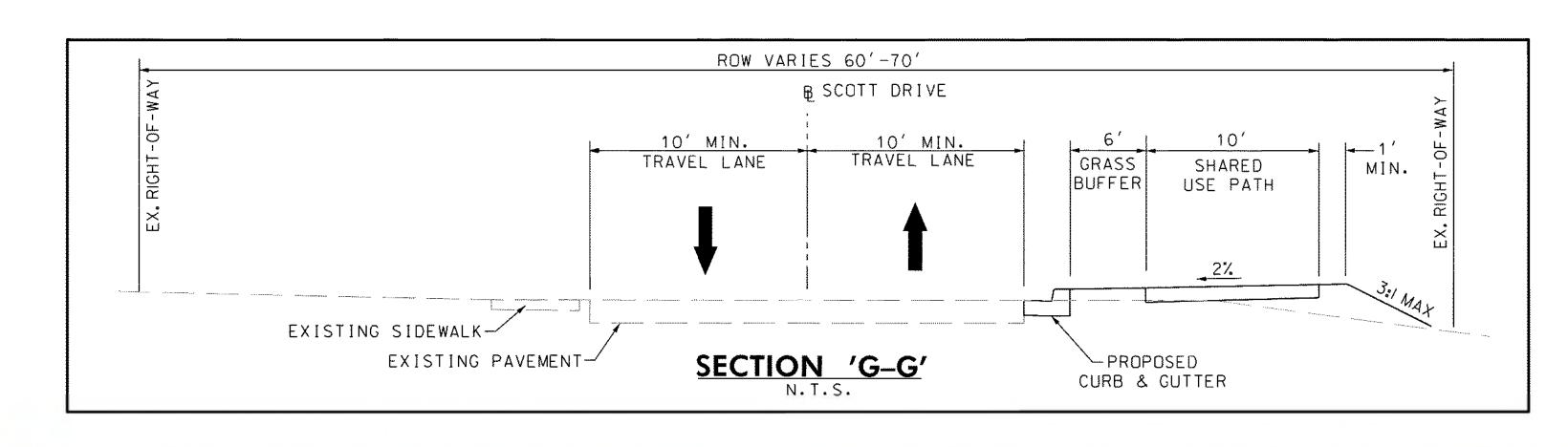
5 OF 12

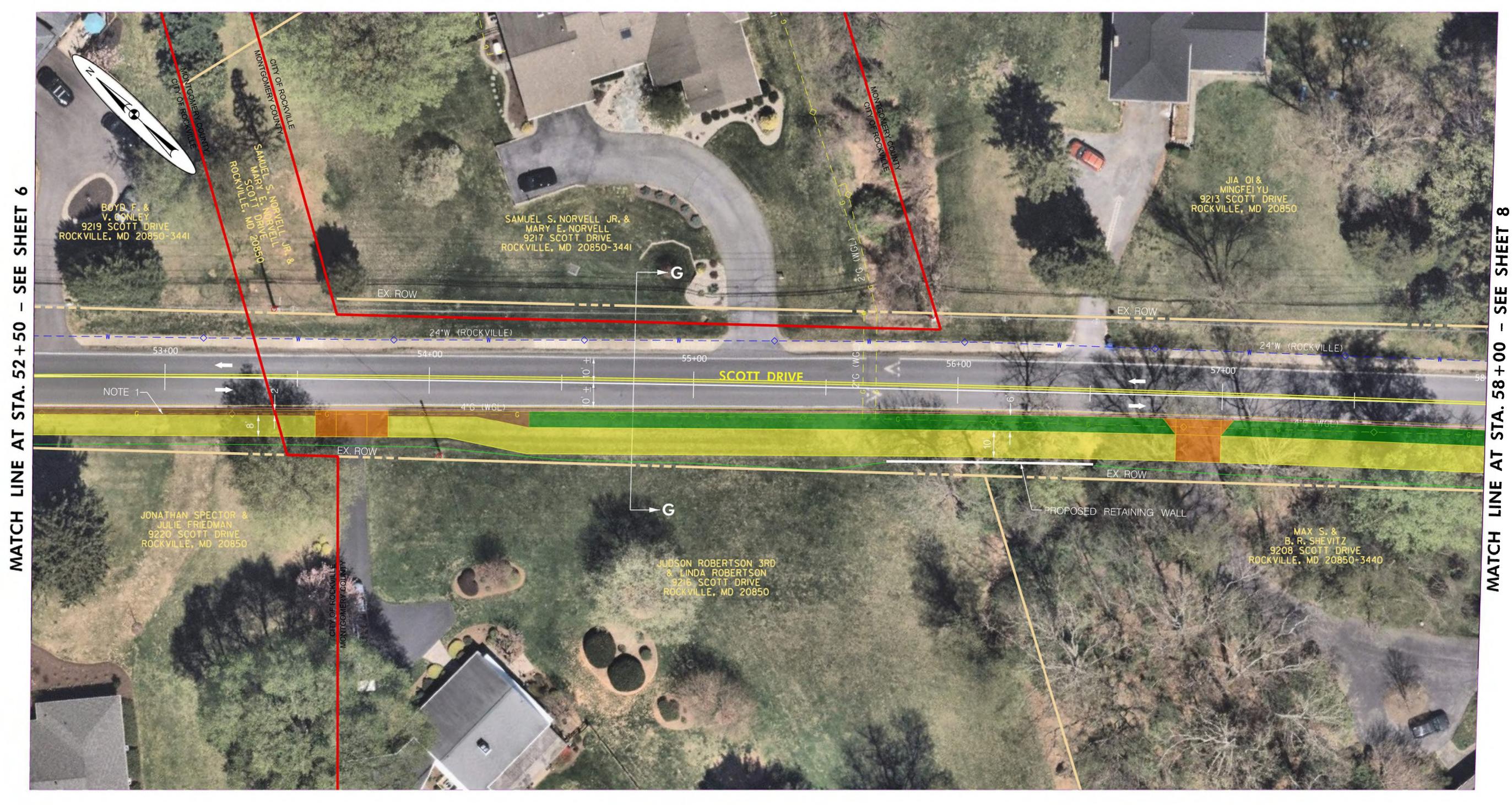
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STREAMSWATERS OF THE U.S.

<u>LEGEND</u>

EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS - - FO - - EX. FIBER OPTIC

NOTES:

1. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION IS NOT PROVIDED ON AVAILABLE RECORDS.

2. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

3. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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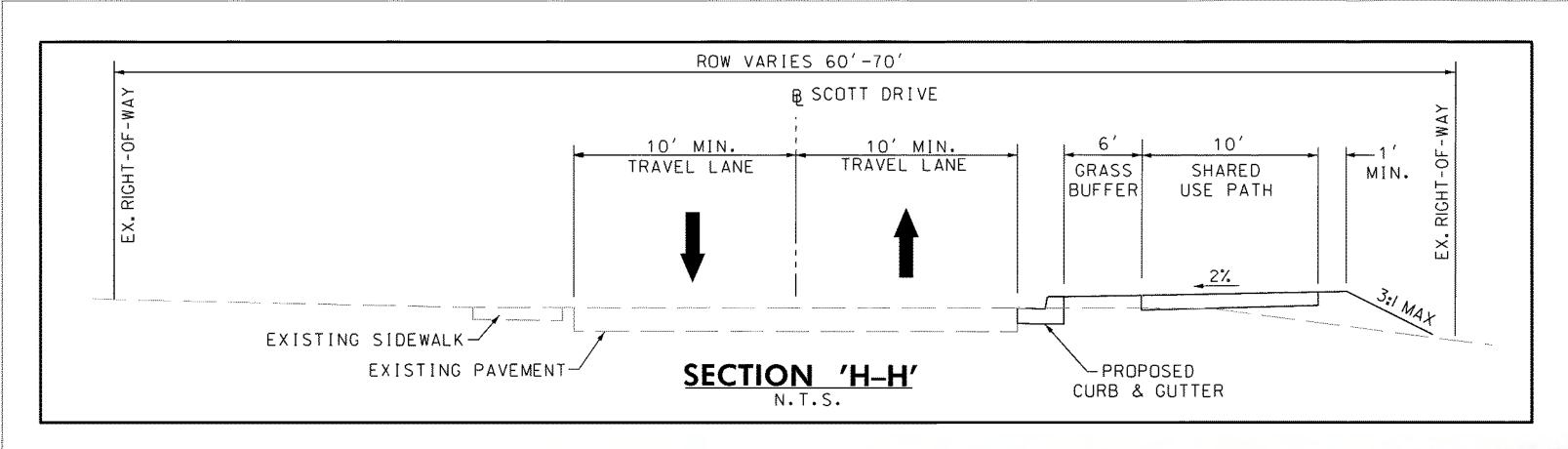
SHEET NO.

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STREAMSWATERS OF THE U.S.

LEGEND

EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS - - FO - - EX. FIBER OPTIC

NOTES:

1. GAS MAIN IMPACTS TO BE VERIFIED. COVER INFORMATION NOT PROVIDED ON AVAILABLE RECORDS. 2. NO OVERHEAD UTILITY POLE IMPACTS ANTICIPATED THIS SHEET.

3. NO PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 1



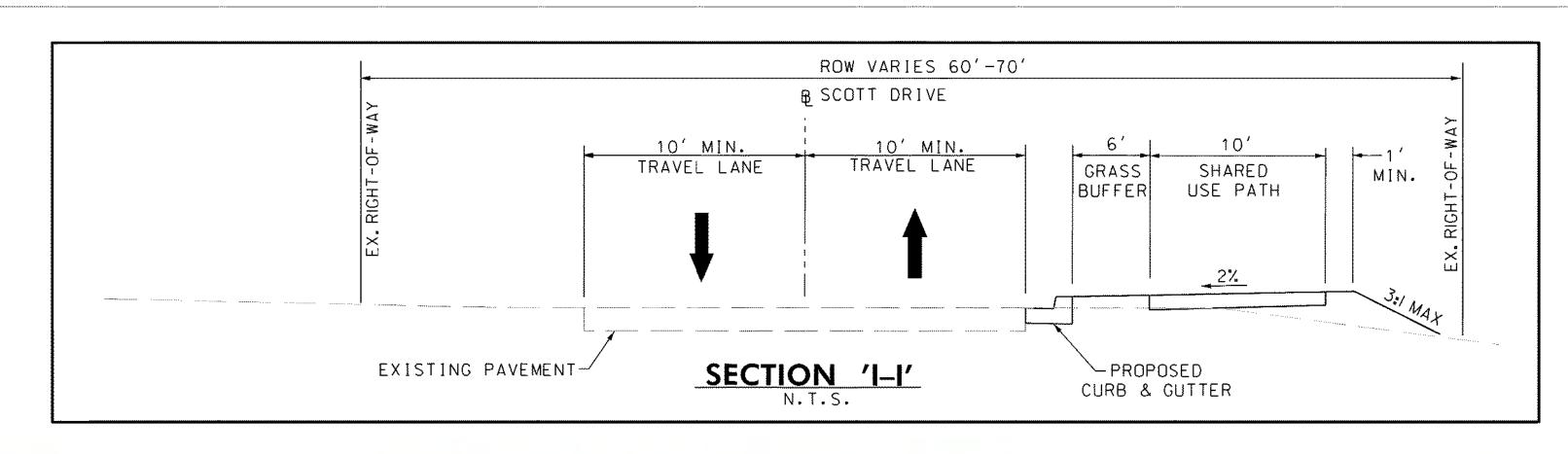
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

DECEMBER 2023

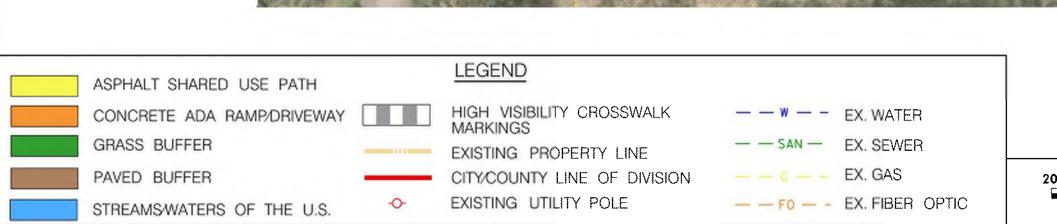
SHEET NO.

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NOTES: 1. NO UTITLITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.



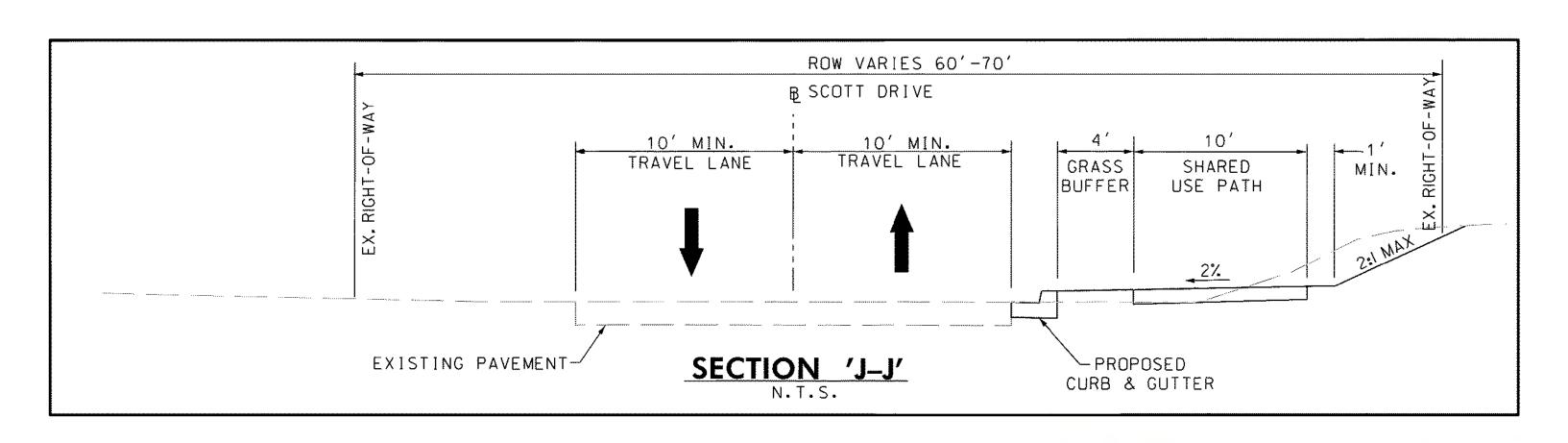
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CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH DECEMBER 2023

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STREAMSWATERS OF THE U.S.

LEGEND

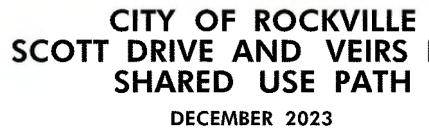
EXISTING PROPERTY LINE

— — w — − EX. WATER - - SAN - EX. SEWER — — G — — EX. GAS - CITY/COUNTY LINE OF DIVISION EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC

1. CUT LINE IS SHOWN WITH 2:1 SLOPE BEYOND HINGE POINT FROM STA. 68+50 TO STA. 69+50. RETAINING WALL MAY BE CONSIDERED TO AVOID PROPERTY IMPACTS

2. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.

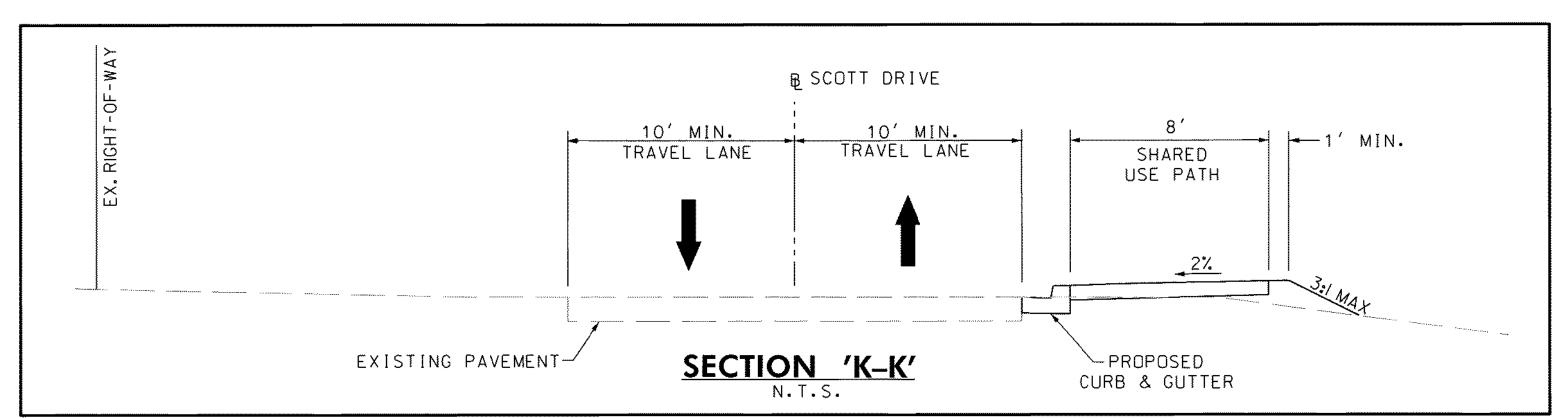
ALTERNATE 1



SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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STREAMSWATERS OF THE U.S.

LEGEND

EXISTING UTILITY POLE

EXISTING PROPERTY LINE

- CITY/COUNTY LINE OF DIVISION

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS - - FO - - EX. FIBER OPTIC

NOTES:

1. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY / PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT.

2. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.

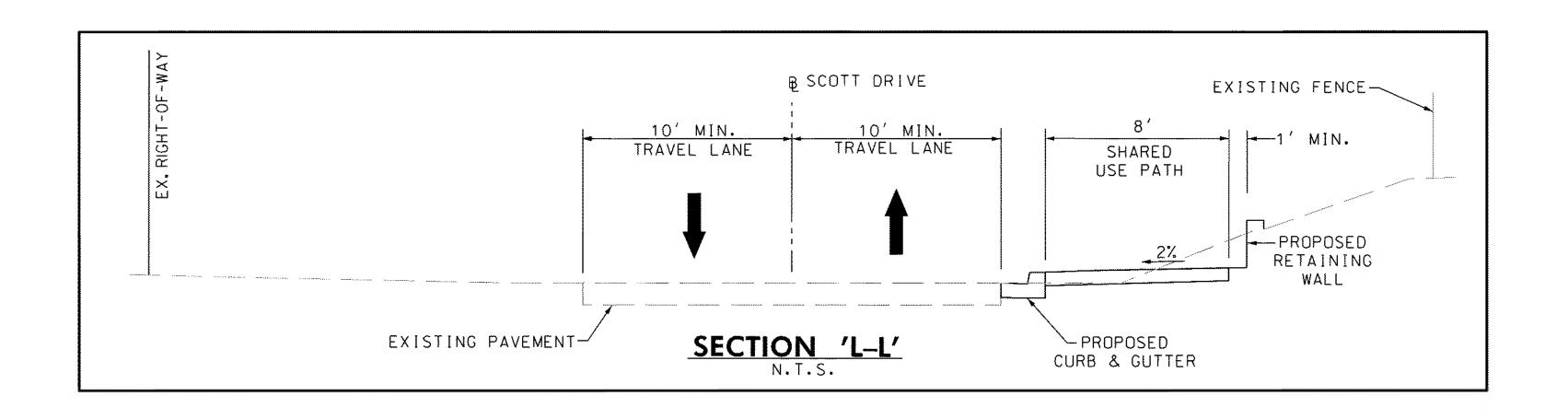
ALTERNATE 1

CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH DECEMBER 2023

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LEGEND

EXISTING UTILITY POLE

EXISTING PROPERTY LINE CITY/COUNTY LINE OF DIVISION

— — w — − EX. WATER - - SAN - EX. SEWER — — _C — — EX. GAS - - FO - - EX. FIBER OPTIC

PROVIDE SHARED USE PATH CONNECTION TO EXISTING CARL HENN MILLENIUM TRAIL.

2. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT.

3. INSTALL PROPOSED WOOTTON PARKWAY CROSSWALK, INCLUDING APS/CPS SIGNAL UPGRADES. 4. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

ALTERNATE 1

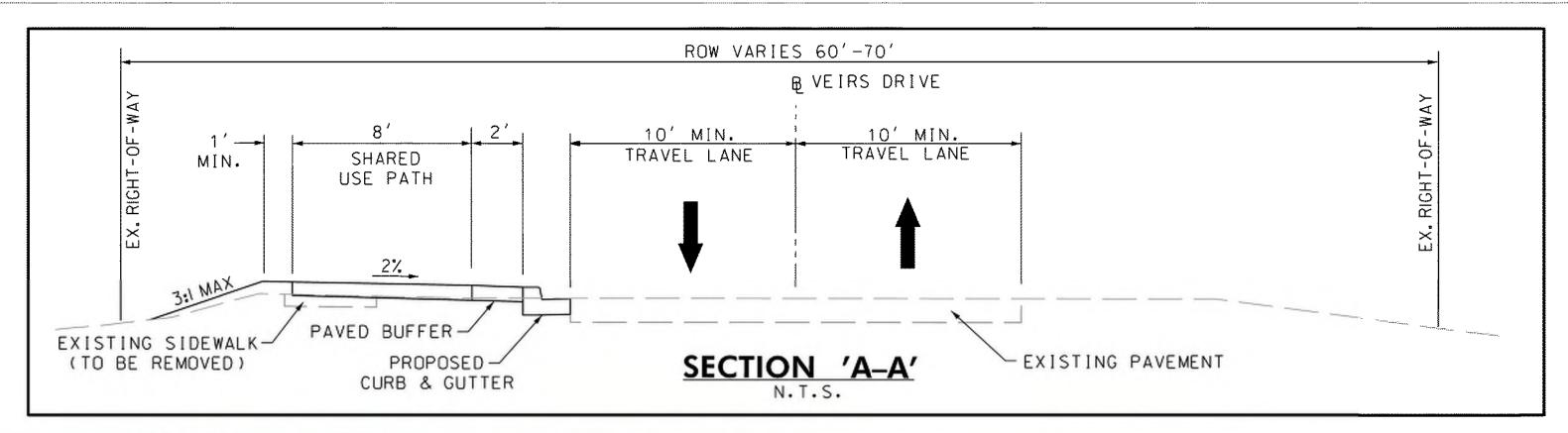
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

DECEMBER 2023

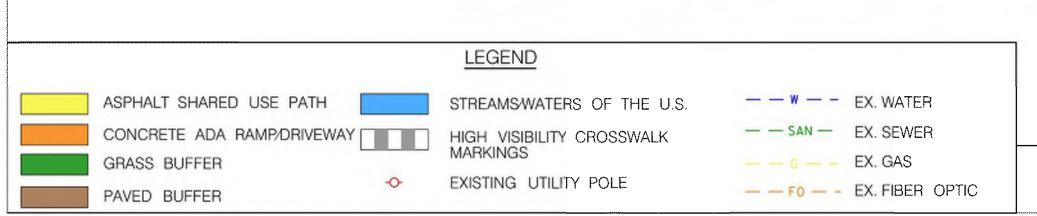
SCALE I*=20' SHEET NO.

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APPENDIX D ALTERNATIVE 2 CONCEPT DESIGN PLANS







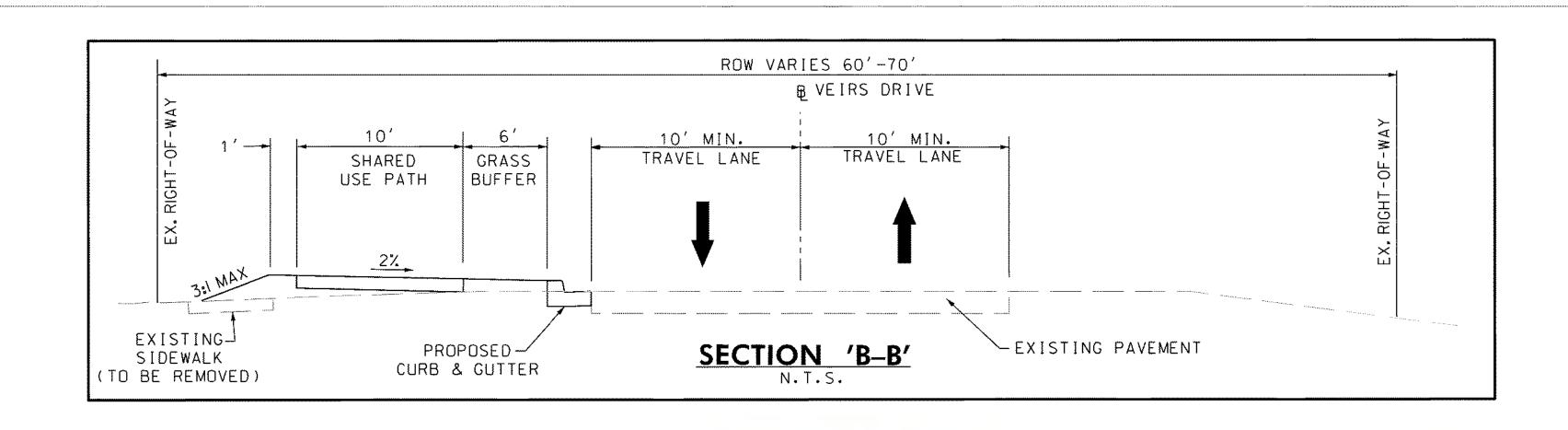
1. INSTALL CURB EXTENSION TO REDUCE PEDESTRIAN CROSSING AND ENCOURAGE TRAFFIC CALMING. 2. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

CITY OF ROCKVILLE

ALTERNATE 2

SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH DECEMBER 2023

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<u>LEGEND</u> — — W — − EX. WATER ASPHALT SHARED USE PATH STREAMSWATERS OF THE U.S. CONCRETE ADA RAMP/DRIVEWAY - - SAN - EX. SEWER HIGH VISIBILITY CROSSWALK MARKINGS — — 6 — — EX. GAS EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC

NOTES: 1. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER. 2. NO UTILITY OR PROPERTY IMPACTS ANTICIPATED THIS SHEET.

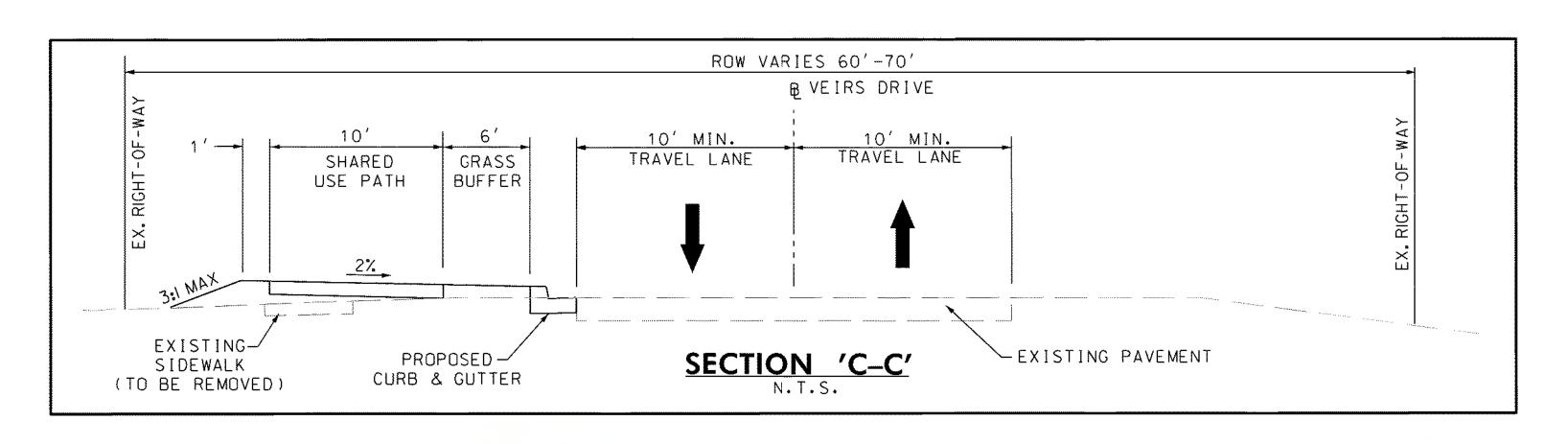
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

DECEMBER 2023

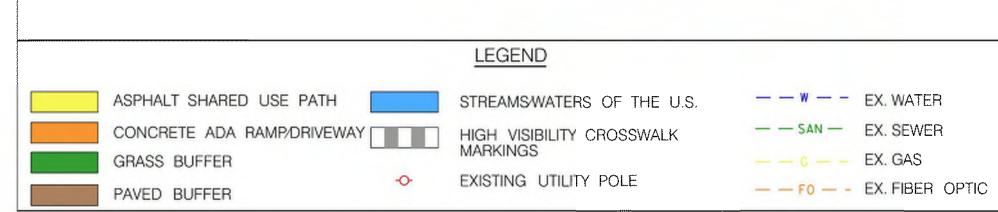
ALTERNATE 2

SCALE I*=20' SHEET NO.

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NOTES:

SCALE: 1" = 20'

1. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER.

2. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 2

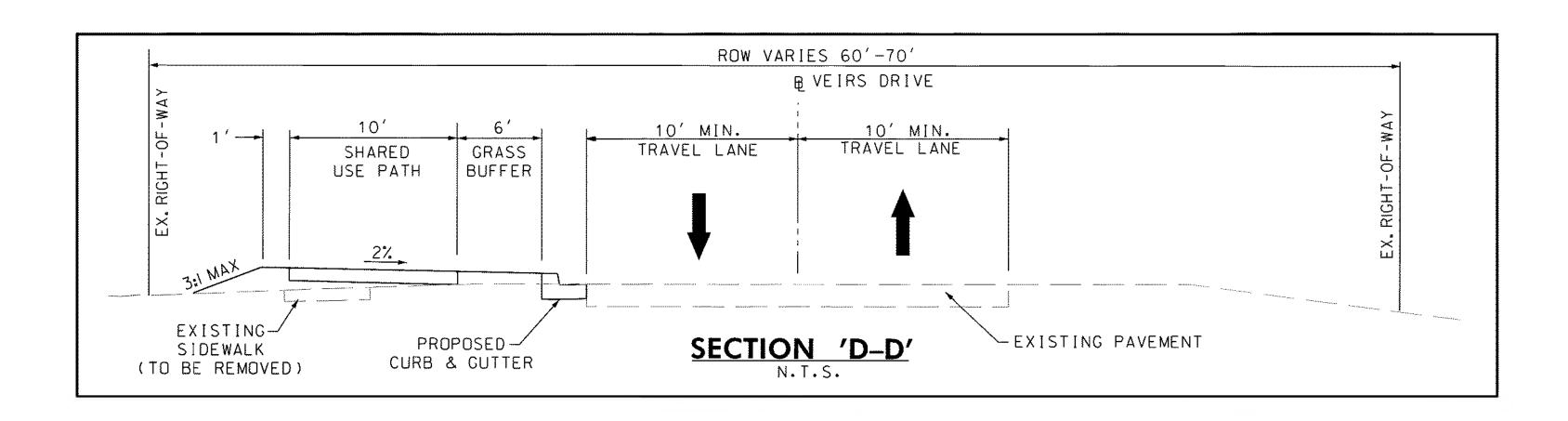


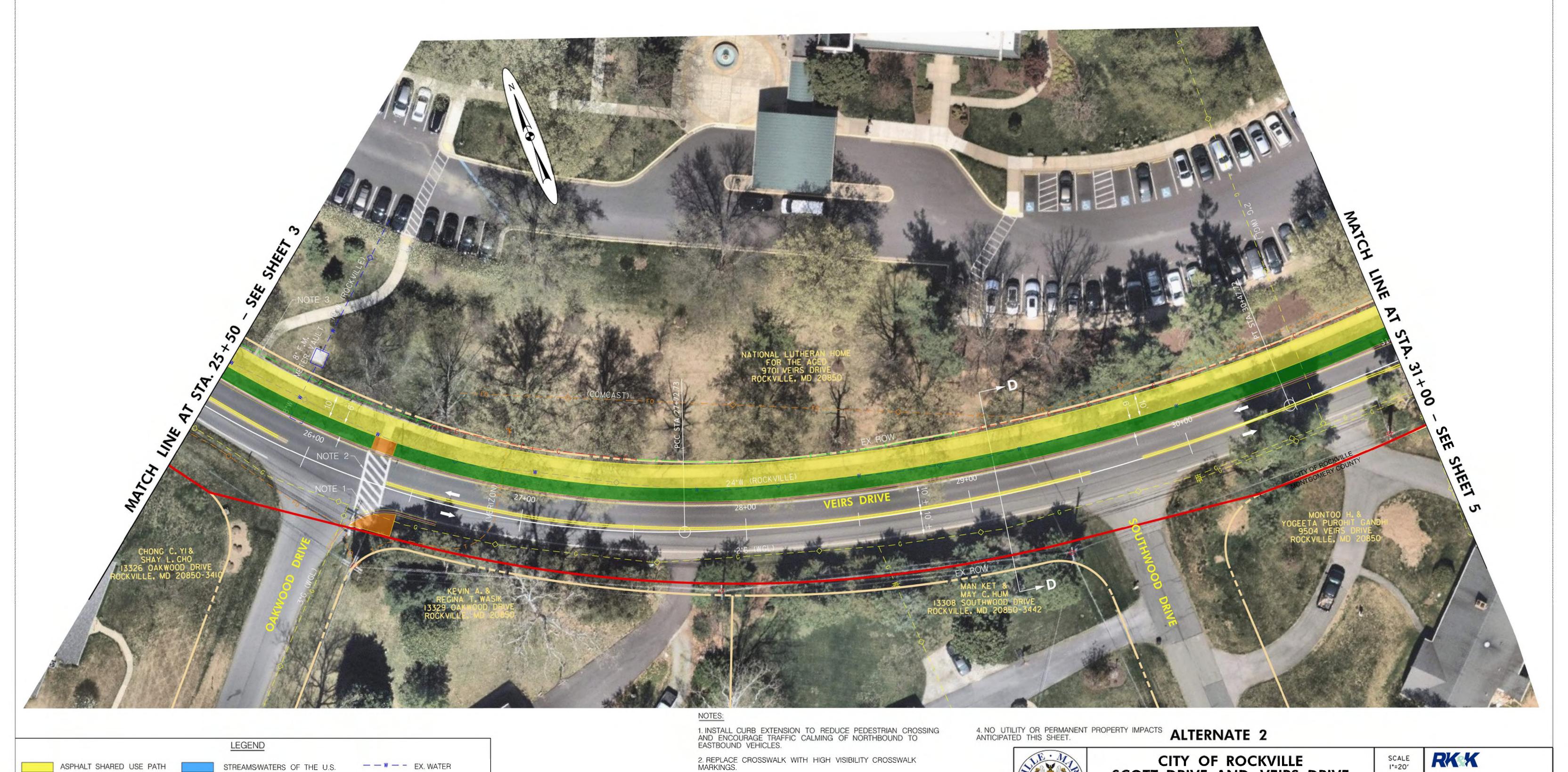
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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3. RECONSTRUCT ADA COMPLIANT SIDEWALK CONNECTION TO PROPOSED SHARED USE PATH. MAY REQUIRE TEMPORARY EASEMENT FROM PROPERTY OWNER.

SCOTT DRIVE AND VEIRS DRIVE

SHARED USE PATH

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STREAMSWATERS OF THE U.S.

HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

ASPHALT SHARED USE PATH

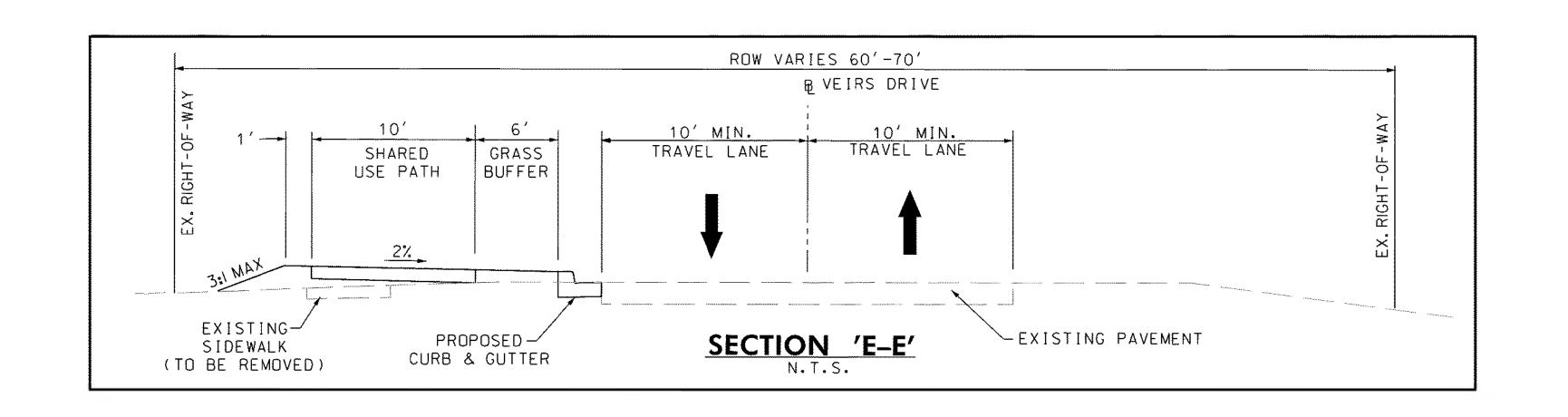
CONCRETE ADA RAMP/DRIVEWAY

— — w — − EX. WATER

- - SAN - EX. SEWER

- - FO - - EX. FIBER OPTIC

— — C — — EX. GAS





<u>LEGEND</u> — — w — − EX. WATER ASPHALT SHARED USE PATH STREAMSWATERS OF THE U.S. -- SAN -- EX. SEWER CONCRETE ADA RAMP/DRIVEWAY HIGH VISIBILITY CROSSWALK MARKINGS — — G — — EX. GAS EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC

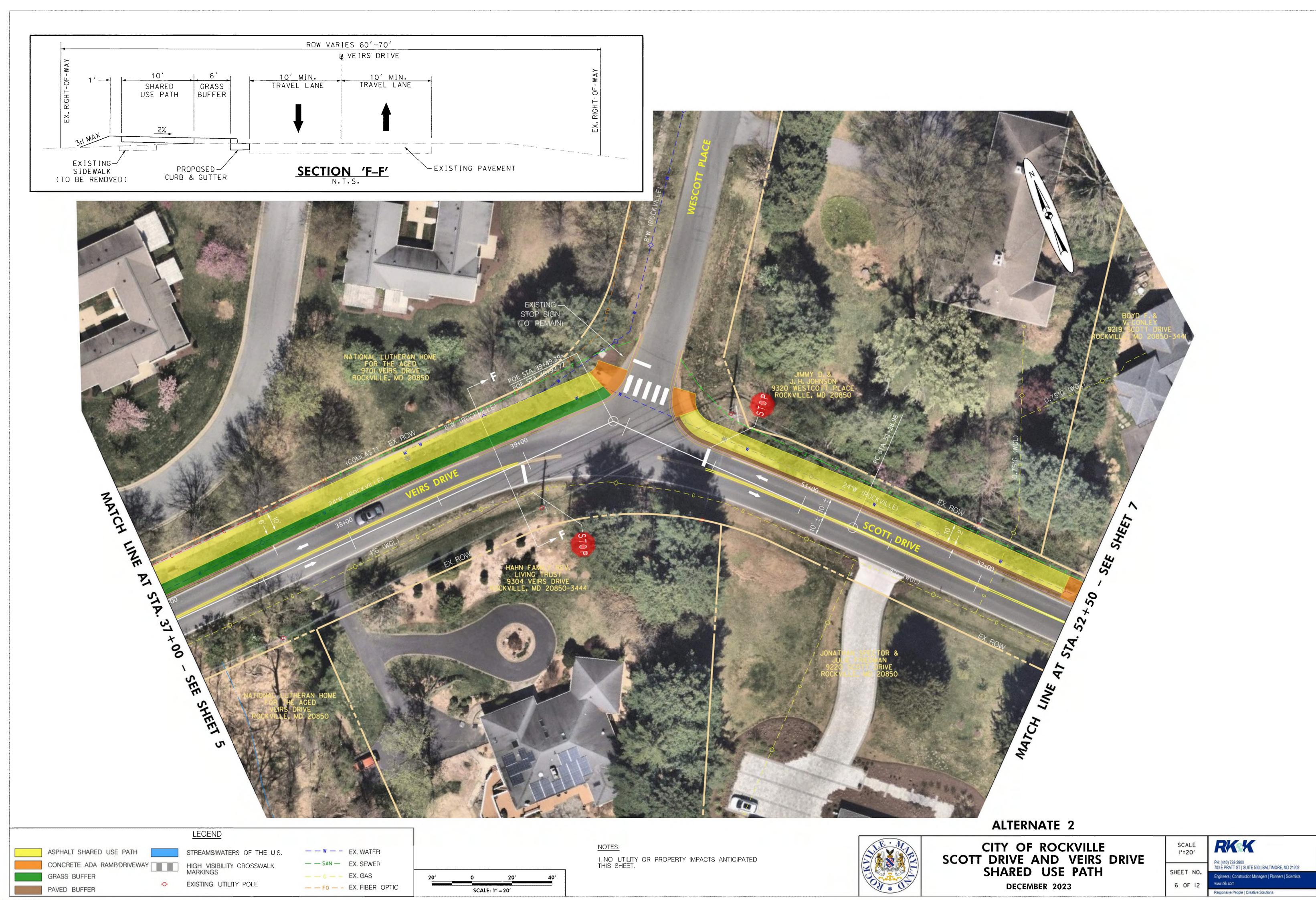
NOTES: 1. NO UTILITY OR PERMANENT PROPERTY IMPACTS ANTICIPATED THIS SHEET.

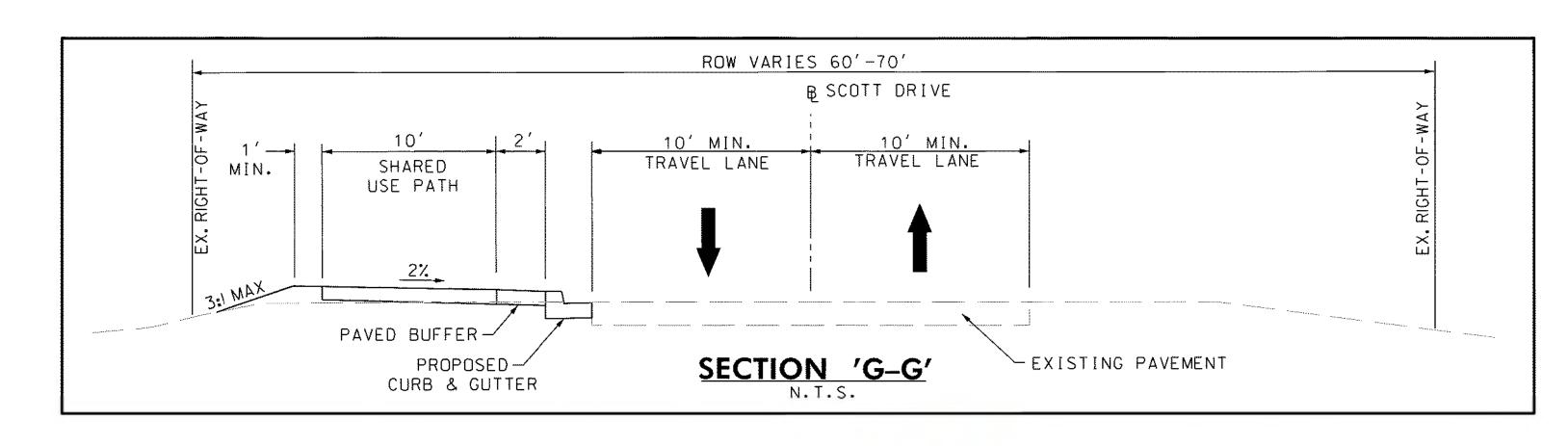
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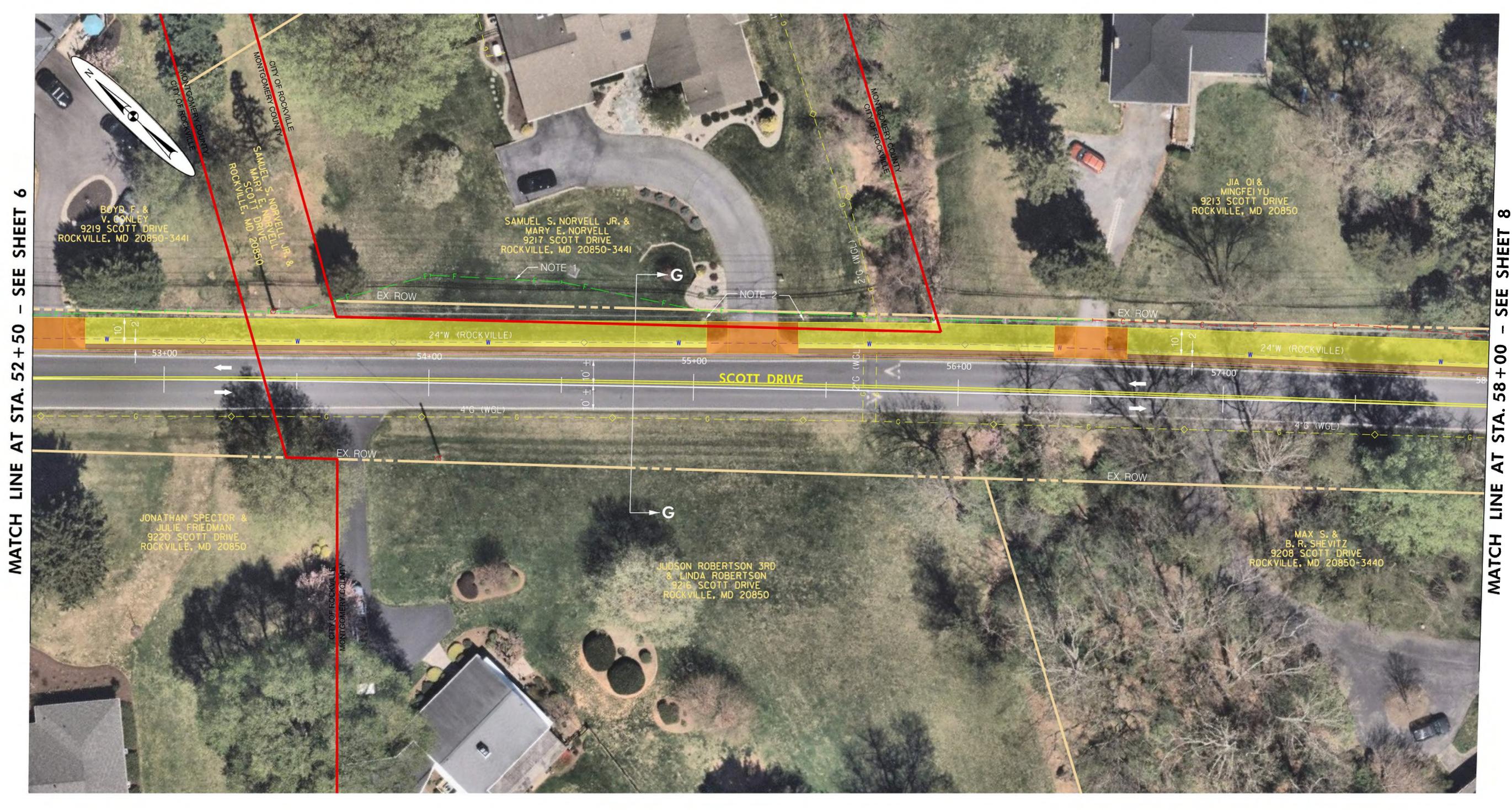
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH DECEMBER 2023

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 NOTES:

1. EASEMENT REQUIRED TO TIE-IN PROPOSED GRADING.

2. RECONSTRUCT /EXTEND PIPE CULVERT. MAY REQUIRE EASEMENT.

3. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

ALTERNATE 2

DECEMBER 2023



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

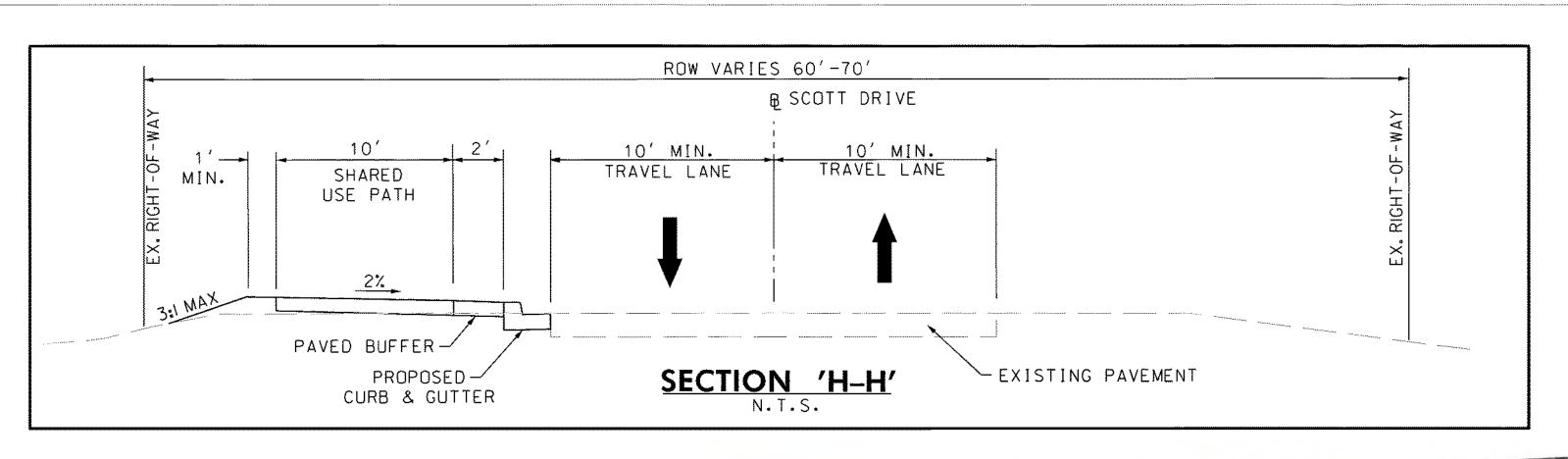
SCALE I*=20' SHEET NO. 7 OF 12

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— — w — − EX. WATER

-- SAN -- EX. SEWER

- - FO - - EX. FIBER OPTIC

— — G — — EX. GAS

NOTES:

1. NO UTILITY OR PROPERTY IMPACTS ANTICIPATED THIS SHEET.



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

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ALTERNATE 2

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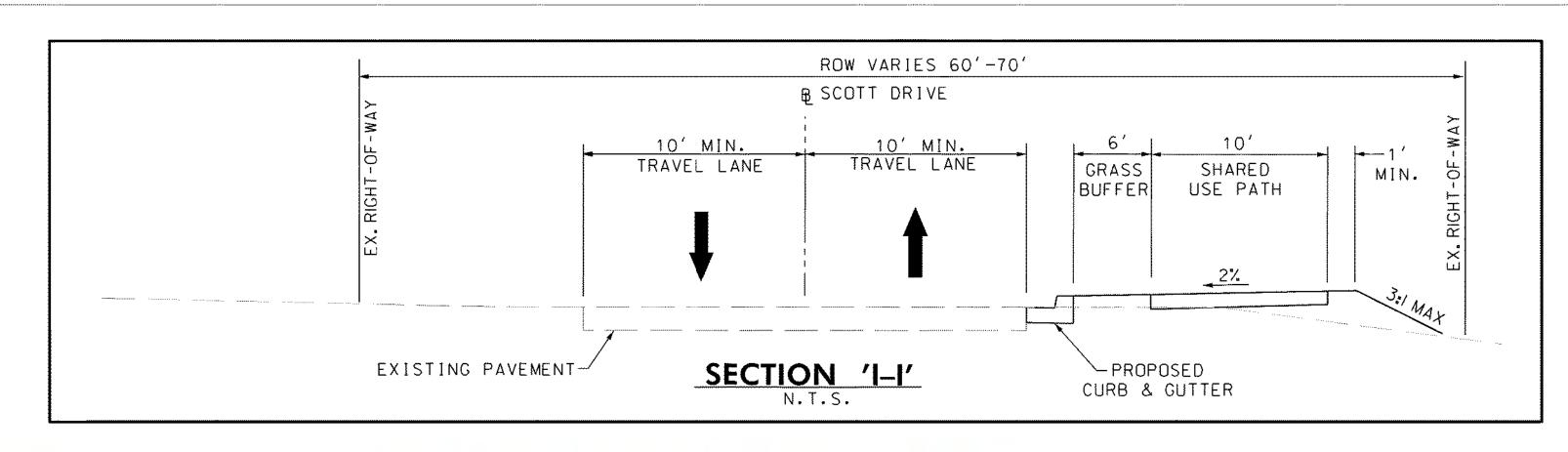
CONCRETE ADA RAMP/DRIVEWAY HIGH VISIBILITY CROSSWALK MARKINGS

ASPHALT SHARED USE PATH

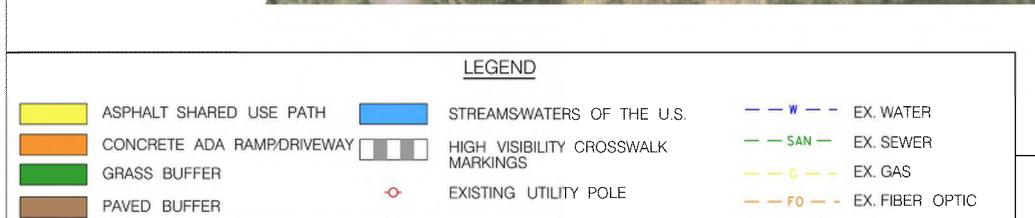
<u>LEGEND</u>

EXISTING UTILITY POLE

STREAMSWATERS OF THE U.S.







1. NO UTILITY OR PERMANENT PROPERTY IMPACTS ARE ANTICIPATED THIS SHEET.



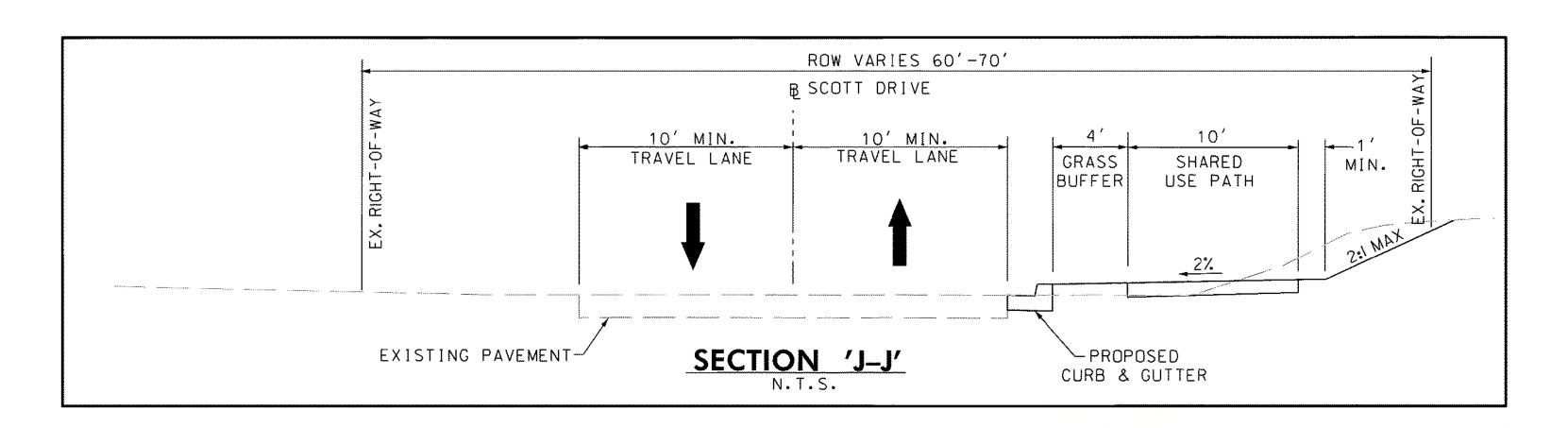
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

DECEMBER 2023

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LEGEND ASPHALT SHARED USE PATH STREAMSWATERS OF THE U.S. — — w — − EX. WATER CONCRETE ADA RAMP/DRIVEWAY - - SAN - EX. SEWER HIGH VISIBILITY CROSSWALK MARKINGS — — c — — EX. GAS EXISTING UTILITY POLE - - FO - - EX. FIBER OPTIC

1. CUT LINE IS SHOWN WITH 2:1 SLOPE BEYOND HINGE POINT FROM STA. 68 + 50 TO STA. 69 + 50. RETAINING WALL MAY BE CONSIDERED TO AVOID PROPERTY IMPACTS

2. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

ALTERNATE 2

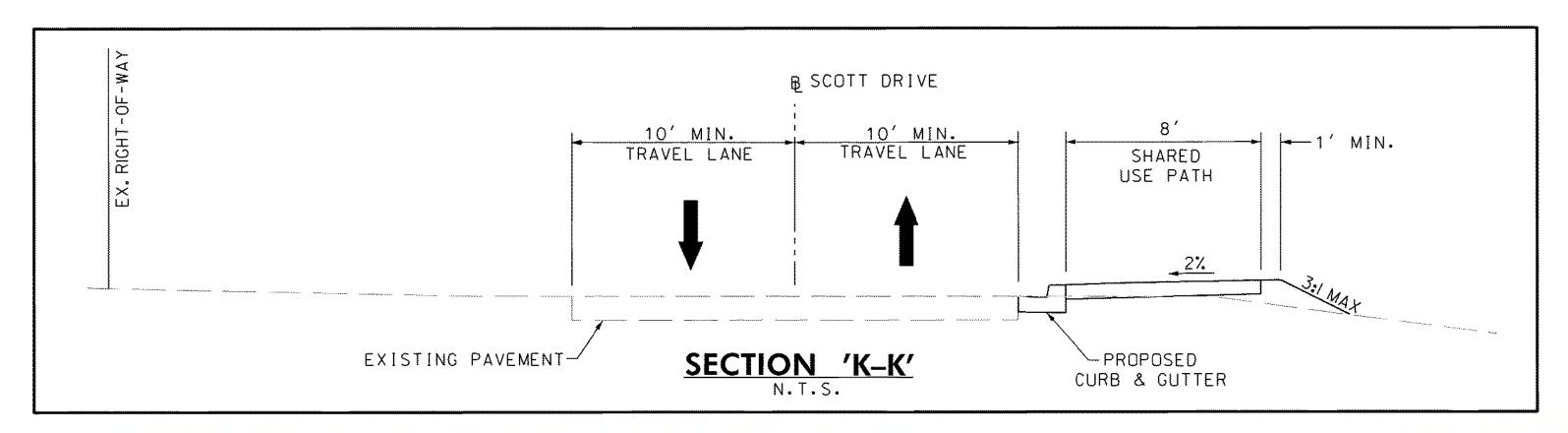


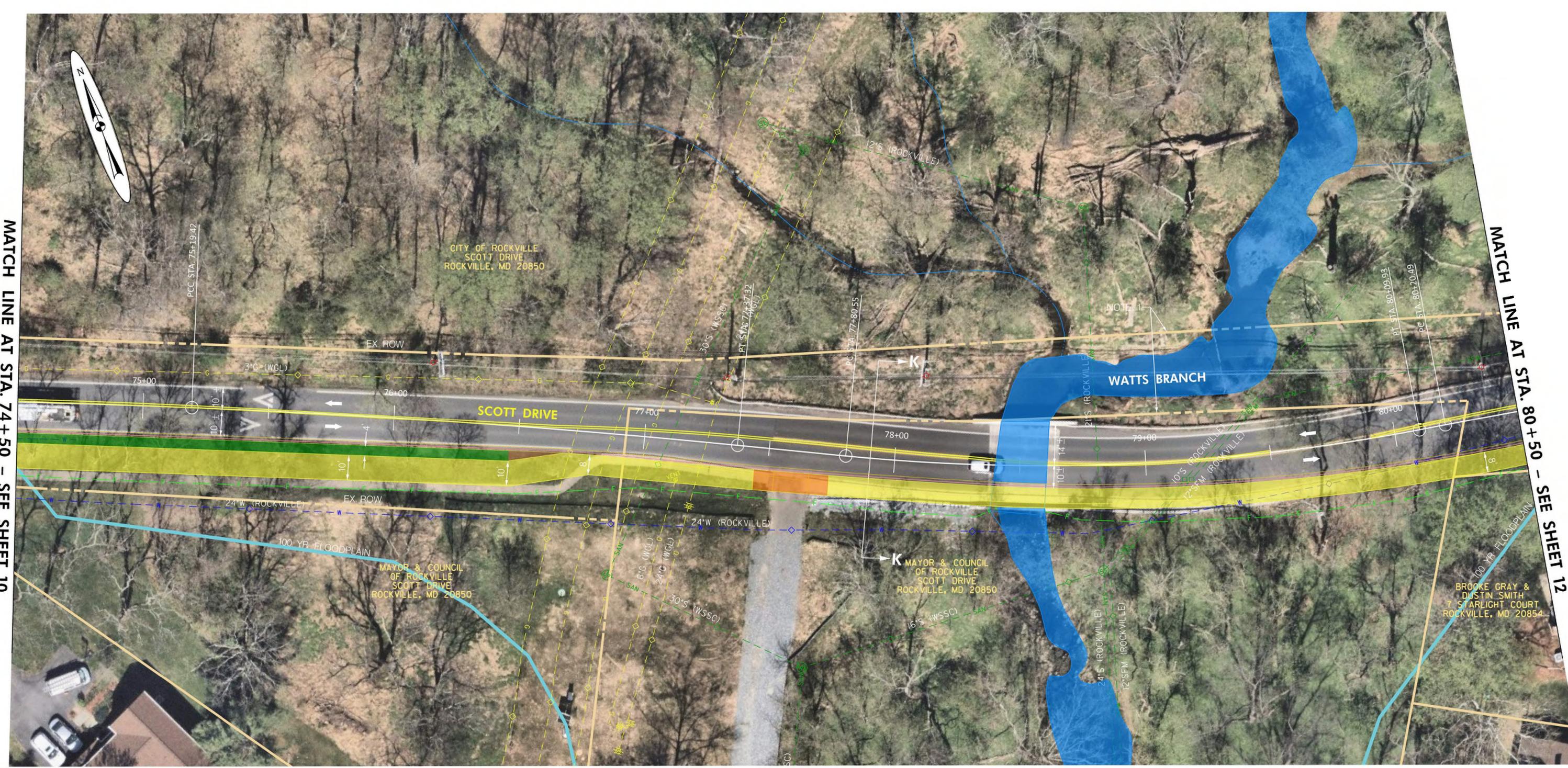
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

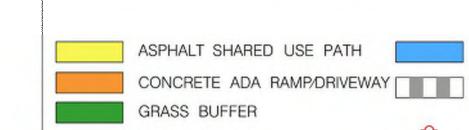
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EXISTING UTILITY POLE

STREAMSWATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

LEGEND

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS - - FO - - EX. FIBER OPTIC

NOTES:

1. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT. 2. NO UTILITY IMPACTS ARE ANTICIPATED THIS SHEET.

ALTERNATE 2

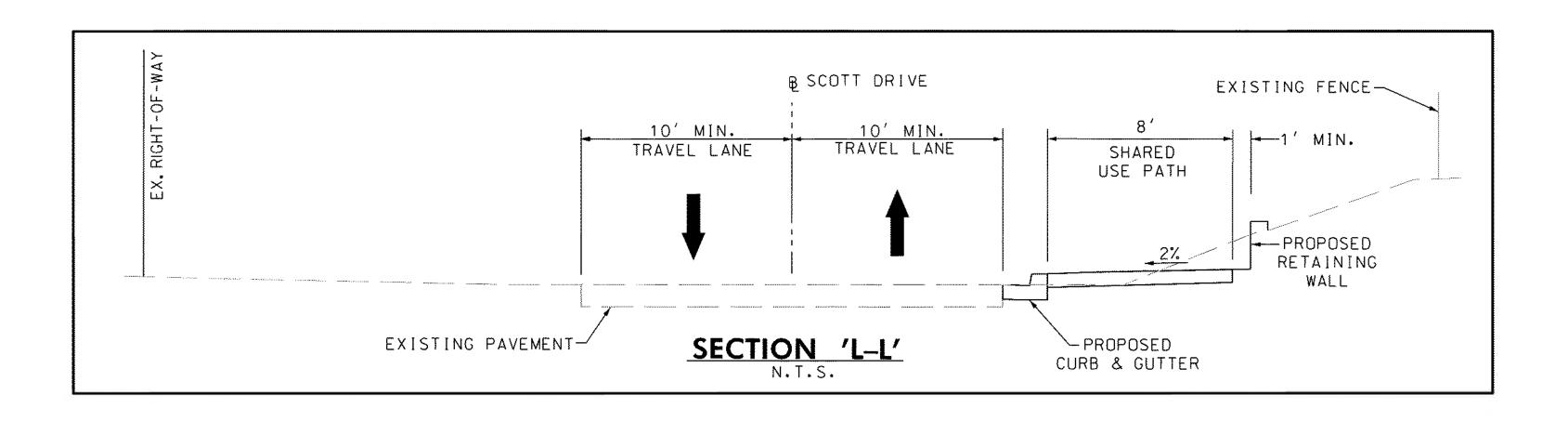
CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

DECEMBER 2023

SHEET NO.

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LEGEND

ASPHALT SHARED USE PATH CONCRETE ADA RAMP/DRIVEWAY

STREAMSWATERS OF THE U.S. HIGH VISIBILITY CROSSWALK MARKINGS

EXISTING UTILITY POLE

— — w — − EX. WATER - - SAN - EX. SEWER — — C — — EX. GAS

- - FO - - EX. FIBER OPTIC

1. PROVIDE SHARED USE PATH CONNECTION TO EXISTING CARL HENN MILLENIUM TRAIL.

2. CITY OF ROCKVILLE TO CONFIRM EXISTING RIGHT OF WAY /PROVIDE AS-BUILT INFORMATION FOR WATTS BRANCH BRIDGE REPLACEMENT.

3. INSTALL PROPOSED WOOTTON PARKWAY CROSSWALK, INCLUDING APS/CPS SIGNAL UPGRADES.

4. NO UTILITY IMPACTS ANTICIPATED THIS SHEET.

ALTERNATE 2

DECEMBER 2023



CITY OF ROCKVILLE SCOTT DRIVE AND VEIRS DRIVE SHARED USE PATH

SCALE I*=20' SHEET NO.

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PLOTTED: 12/6/2023
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APPENDIX E ALTERNATIVE 2 PREFERRED CONCEPT COST ESTIMATE



Project: Scott Drive and Veirs Drive Shared Use Path

\$3,461,906.50

Grand Total:

City of Rockville Feasibility Study

	MAJOR QUANTITIES COST ESTIMATE FOR CONCEPT ALTERNATIVE 2								
Item	Category		Unit						
No.	No. Description	Unit	Cost	Quantity	Extension				
	y 1 - Preliminary								
1001	TYPE B ENGINEERS OFFICE	LS	\$30,000.00	1	\$30,000.00				
1002	MAINTENANCE OF TRAFFIC	LS	\$127,253.60	1	\$127,253.60				
1003	MOBILIZATION	LS	\$159,067.00	1	\$159,067.00				
1004	CLEARING AND GRUBBING	LS	\$6,000.00	1	\$6,000.00				
1005	CONSTRUCTION STAKEOUT	LS	\$31,813.40	1	\$31,813.40				
			Category 1	Subtotal:	\$354,134.00				
	y 2 - Grading								
2001	CLASS 1 EXCAVATION	CY	\$35.00	1410	\$49,350.00				
2002	COMMON BORROW	CY	\$50.00	540	\$27,000.00				
			Category 2	Subtotal:	\$76,350.00				
Categor	y 3 - Drainage								
3001	DRAINAGE	LS	\$159,067.00	1	\$159,067.00				
3002	EROSION AND SEDIMENT CONTROL	LS	\$79,533.50	1	\$79,533.50				
3003	STORMWATER MANAGEMENT	LS	\$79,533.50	1	\$79,533.50				
			Category 3 Subtotal:		\$318,134.00				
Categor	y 4 - Structure								
4001	RETAINING WALL (STA. 80+20 to STA. 84+20 RT)	LS	\$390,000.00	1	\$390,000.00				
					\$0.00				
			Category 4	Subtotal:	\$390,000.00				
	y 5 - Paving								
5001	SUPERPAVE ASPHALT MIX 9.5MM FOR SURFACE, F	TON	\$90.00	525	\$47,250.00				
5002	SUPERPAVE ASPHALT MIX 19.0MM FOR BASE, PG 6	TON	\$140.00	875	\$122,500.00				
5003	4 INCH GRADED AGGREGATE BASE	SY	\$35.00	5945	\$208,075.00				
5004	FLEXPAVE	SF	\$35.00	2825	\$98,875.00				
5005	CONCRETE DRIVEWAYS	SY	\$200.00	76	\$15,200.00				
5006	CONCRETE ADA RAMPS	SF	\$20.00	2045	\$40,900.00				
5007	CONCRETE SIDEWALK	SF	\$20.00	391	\$7,820.00				
5008	YELLOW PAVEMENT MARKINGS	LF	\$0.75	12500	\$9,375.00				
5009	5 INCH STAMPED CONCRETE BUFFER	SF	\$45.00	3785	\$170,325.00				
0.1	0.0111		Category 5	Subtotal:	\$720,320.00				
•	y 6 - Shoulders	. –		2222	****				
6001	COMBINATION CURB AND GUTTER	LF	\$60.00	6600	\$396,000.00				
6002	DETECTABLE WARNING SURFACE	SF	\$50.00	160	\$8,000.00				
0-4			Category 6	Subtotai:	\$404,000.00				
	y 7 - Landscaping		0.450.007.00	4	4450.007.00				
7001	LANDSCAPING	LS	\$159,067.00	1	\$159,067.00				
			Category 7	Subtotali —	\$159,067.00				
Catagor	y 9 - Traffic		Category 1	Subtotal:	\$159,067.00				
9001	SIGNAL MODIFICATION	LS	\$240,000.00	1	\$240,000.00				
9001	TRAFFIC SIGNS	EA	\$500.00	1 2	\$1,000.00				
9002	TRAFFIC SIGNS	EA	•						
			Category 9	Subtotal:	\$241,000.00				
Cub Tatal Carta									
	Sub-Total Costs				\$2,663,005.00				
Cantle			2001		Φ 7 00 004 7 0				
Conting	encies		30%		\$798,901.50				

^{*}Utilities relocations are not anticipated and are excluded from estimate.

^{*}Property acquisitions will be assed in future detailed design and are excluded from this estimate