Project 11 – Prentice Drive

Project Description

This project consists of the construction of a shared-use path along the north side of Prentice Drive for the entire length of the project corridor. The project also includes the construction of sidewalk along the south side of Prentice Drive between Lockridge Road and the existing sidewalk west of Broderick Drive and also for the eastern most segment adjacent to Pacific Boulevard. The proposed path length is approximately 0.65 miles, and the proposed sidewalk segment lengths total approximately 0.50 miles. The infrastructure will provide a link in the connection between points north of Waxpool Road and the Loudoun Gateway Metrorail Station, in conjunction with other projects under consideration in this study. The project was identified for study in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study.

Project Elements

Path segments

This project consists of the following path segments:

(See Draft Conceptual Plan Sheets 11-1 and 11-2 for illustration of proposed improvement)

- From Lockridge Road to the existing sidewalk west of Broderick Drive: A 10' shared-use path will be constructed on the south side of Prentice Drive.
- From the AOL campus driveway to Pacific Boulevard: A 10' shared-use path will be constructed on the south side of Prentice Drive.
- From Lockridge Road to Pacific Boulevard: A 6' sidewalk will be constructed on the north side of Prentice Drive.

Cross sections

The typical sections for the infrastructure in this project will include the following:

Typical Cross Section A-A:

- 10' shared-use path
- 7.5' of clearance between path and back of curb
- 3' of clearance between path and edge of ROW

Typical Cross Section F-F:

- 6' sidewalk
- 4' clearance between path and back of curb
- 1' clearance between path and edge of ROW

Typical Cross Section H-H:

- 10' curbside shared-use path
- 4' of clearance between path and edge of ROW

Typical Cross Section J-J:

- 6' curbside sidewalk
- Little to no clearance between sidewalk and edge of ROW



Planned Developments by Others

Planned infrastructure development by others within the project limits include:

 Prentice Drive, a planned urban four-lane road with median in the Countywide Transportation Plan, will extend westward from its current terminus at Lockridge Road. Per plan guidelines, this road corridor will include one 10' shared-use path and one 6' sidewalk and will provide a connection to Project 1 and the Ashburn Metrorail Station.

Impacts on Existing Features

Following a study of existing plans and field reconnaisance, construction of the proposed shared-use path and sidewalk will need to consider the following existing features and associated potential conflicts:

- On both sides of Prentice Drive between Lockridge Road and Broderick Drive, existing guardrail occupies the proposed path and sidewalk rightof-way. This guardrail should be relocated to the outside of the proposed path and sidewalk improvements.
- Several handholes and hydrants exist within the shared-use path right-ofway to the north of Prentice Drive and may require relocation.
- Curb ramps at the intersections of Prentice Drive and Broderick Drive and Prentice Drive and the AOL Campus Driveway are currently not ADA compliant. These ramps should be upgraded as a part of this project.
- ADA noncompliant ramps exist within the project area at Ryan Center Way, Greenway Corporate Drive, the Home Depot Driveway, and Devin Shafron Drive. These ramps should be upgraded to meet ADA standards.
- One tree exists in the sidewalk right-of-way to the south of Prentice Drive between Randolph Drive and Broderick Drive. This tree will need to be removed.

Connectivity

Surrounding path/sidewalk network

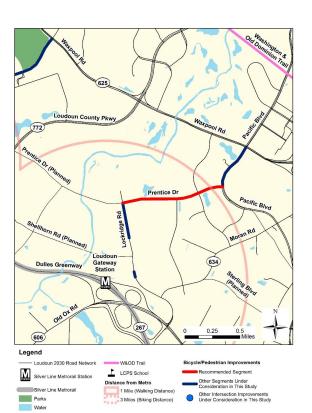
Existing sidewalks along Prentice Drive near Broderick Road will not be impacted. The only other existing public pedestrian or bicycle infrastructure intersecting the project corridor is a sidewalk along the west side of the Lifetime Fitness driveway entrance. This project will connect to Project 9 along Lockridge Road at the western end of the project corridor and to Project 12 along Pacific Boulevard at the eastern end of the project corridor.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the proposed project. These include:

- The Broad Run Business Center
- The Broad Run Technology Park
- The AOL corporate campus
- The Loudoun Gateway Metrorail Station, to which the project will connect via infrastructure proposed in Project 9

From Lockridge Road to Pacific Boulevard



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A planning-level opinion of probable cost was generated for this project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in **Attachment A**.

Total	\$1,130,000
Additional Construction Items	\$235,000
Preliminary Engineering	\$86,000
Utilities and Right-of-Way	\$323,000
Base Construction Costs	\$484,000

Project Status

This project was identified as a priority in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study and recommended for study by the Loudoun County Board of Supervisors. This project is currently in the planning phase.

Project Implementation

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:

- Identify and secure project funding
- Finalize project scope
- Initiate design of project
- Construct bicycle/pedestrian infrastructure project



Existing wetlands and culvert may impact placement of proposed sidewalk



Existing box culvert on south side of Prentice Drive

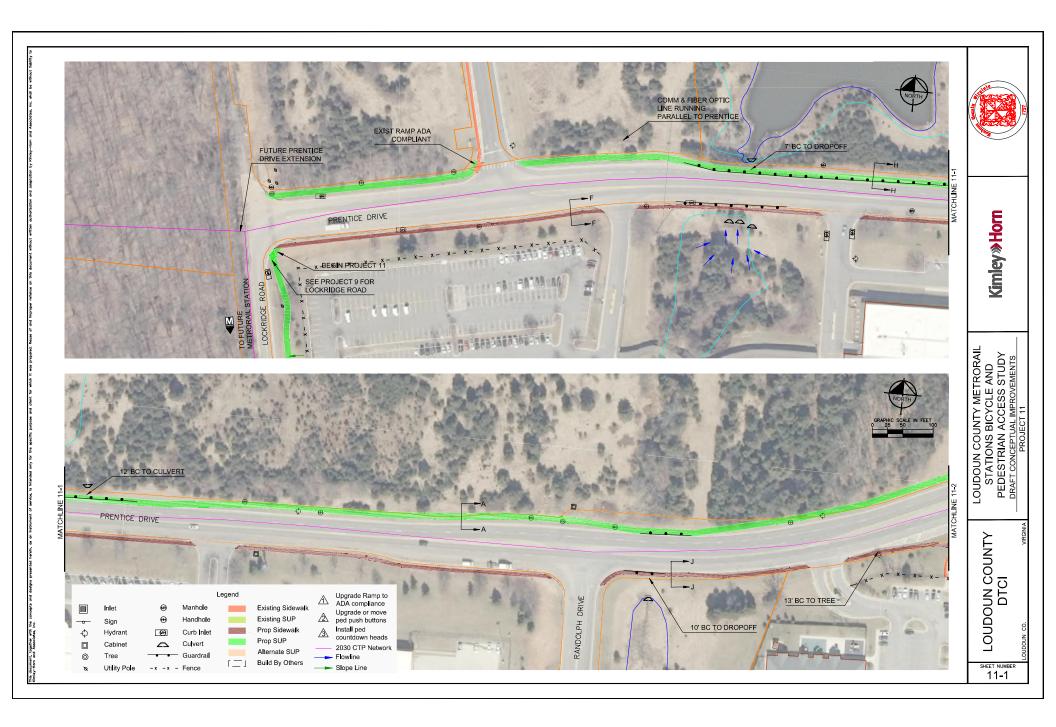


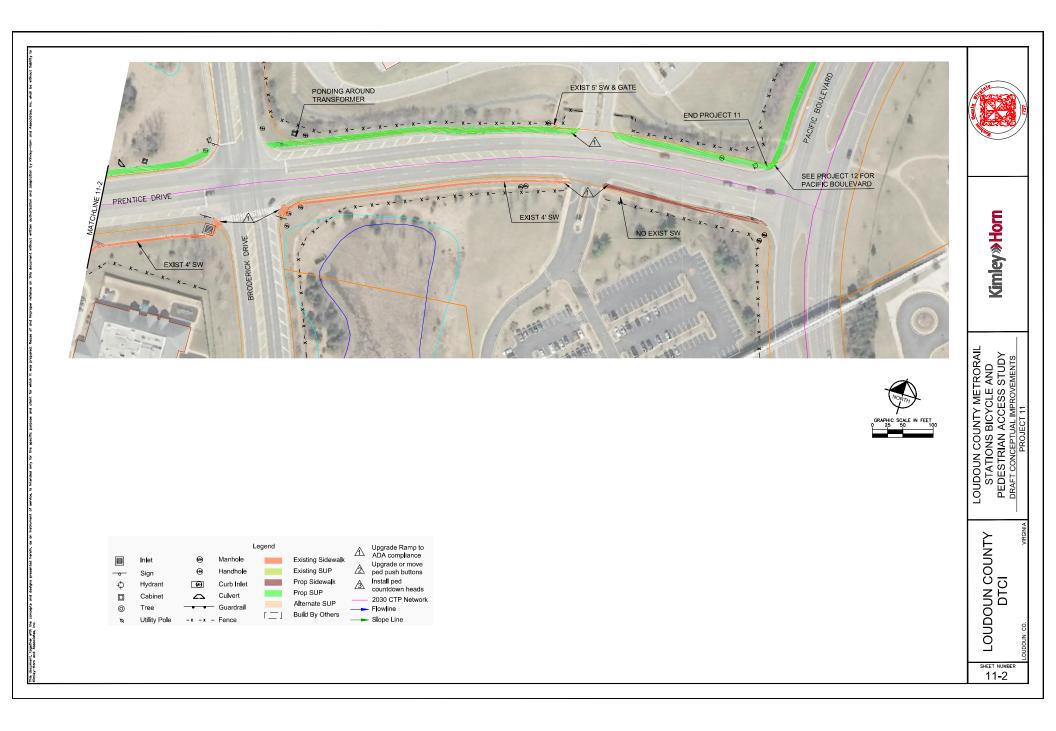
Ponding around a transformer near the proposed corridor for sidewalk on the north side of Prentice Drive



Guardrail in location of proposed path







Project 12 – Pacific Boulevard

Project Description

This project consists of the construction of a shared-use path along the west side of Pacific Boulevard between Prentice Drive and Waxpool Road. The proposed path has an approximate length of 0.30 miles. The path will will provide a link in the connection between points north of Waxpool Road and the Loudoun Gateway Metrorail Station, in conjunction with other projects on this effort. The project was identified for study in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study.

Project Elements

Path segments

This project consists of the following path segment:

(See Draft Conceptual Plan Sheet 12-1 for illustration of proposed improvement)

• From Prentice Drive to Waxpool Road: A 10' shared-use path will be constructed

Cross sections

The typical sections for the infrastructure in this project will include the following:

Typical Cross Section A-A:

- 10' shared-use path
- 7.5' of clearance between path and back of curb ٠
- 3' of clearance between path and edge of ROW

Planned Developments by Others

No planned developments by others exist within the project limits. However, plans for a development to the north of the project area include the construction of a 10' shared-use path along the west side of Pacific Boulevard to the north of Waxpool Road.

Impacts on Existing Features

Following a study of existing plans and field reconnaisance, construction of the proposed shared-use path will need to consider the following existing features and associated potential conflicts:

- ADA noncompliant ramps exist within the project area at the intersection of Pacific Boulevard with the AOL campus driveway and at Waxpool Road. These ramps should be upgraded to meet ADA standards.
- Many manholes and handholes exist within the proposed path right-of-٠ way. The highest concentrations of these features are immediately to the south of the Pacific Boulevard and Waxpool Drive intersection and immediately to the north of the Pacific Boulevard and AOL campus driveway intersection.
- Small segments of existing sidewalk near the AOL campus driveway will be removed and replaced with the proposed path.

Connectivity

Surrounding path/sidewalk network

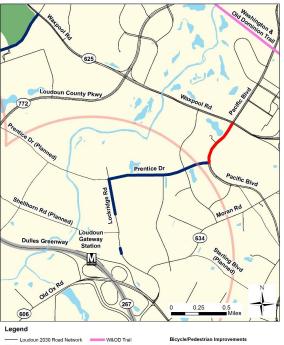
The existing sidewalk segment along the east side of Pacific Boulevard will not be impacted by this project. Small segments of existing sidewalk on the west side of Pacific Boulevard near the AOL campus driveway will be removed and replaced with the proposed infrastructure. An extensive sidewalk network is located within the AOL corporate campus, but this infrastructure fenced off from the public so it is not considered in this analysis. This project will connect to Project 11 along Prentice Drive at the southern end of the project corridor. The W&OD Trail runs approximately ½ mile north of the project corridor. While no pedestrian or bicycle infrastructure currently exists to provide access between the trail and the infrastructure proposed in Project 12, a planned development along the west side of Pacific Boulevard north of Waxpool Road will construct a 10' shared-use path along its property frontage on Pacific Boulevard as a part of the site development.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the proposed shared-use path. These include:

- The Broad Run Business Center
- The Dulles 28 Centre shopping and business center .
- The AOL corporate campus
- The W&OD Trail, approximately ½ mile north of the project corridor

From Prentice Drive to Waxpool Road





Parks

Water



A planning-level opinion of probable cost was generated for this project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in **Attachment A**.

Total	\$360,000
Additional Construction Items	\$0
Preliminary Engineering	\$30,000
Utilities and Right-of-Way	\$155,000
Base Construction Costs	\$166,000

Project Status

This project was identified as a priority in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study and recommended for study by the Loudoun County Board of Supervisors. This project is currently in the planning phase

Project Implementation

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:

- Identify and secure project funding
- Finalize project scope
- Initiate design of project
- Construct bicycle/pedestrian infrastructure project



The proposed shared-use path will pass under an existing pedestrian bridge



Fencing along private property may limit available rightof-way for path in some locations

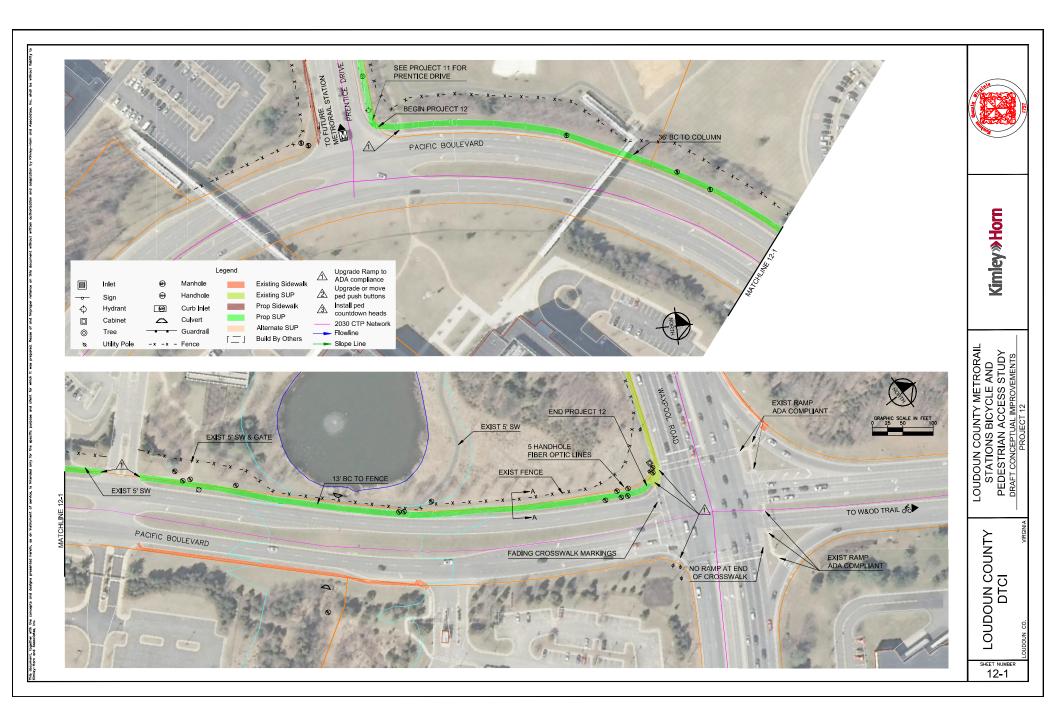


Several hand holes and utility boxes are located in the proposed path corridor



Hand holes are concentrated near the intersection of Waxpool Road and Pacific Boulevard





Project D-15 – Ryan Road

Project Description

This Proposed Project consists of the construction of a shared-use path along the south side of Ryan Road at the southwest corner of the intersection of Ryan Road and Claiborne Parkway. An Alternate Project proposal includes the construction of a shared-use path along the south side of Ryan Road between Claiborne Parkway and Airmont Hunt Drive. The Proposed Project has a total length of approximately 170 feet, and the Alternate Project has a total path length of 0.40 miles. The paths will fill in a gap of the existing path network, allowing for better connectivity along Ryan Road toward Loudoun County Parkway. The project was identified for study by the Dulles Community Outreach Study. Due to the uncertainty surrounding the pedestrian and bicycle improvements associated with the planned extension of Claiborne Parkway at the west end of the project corridor, it is recommended that only the Proposed Project be constructed.

Project Elements

Path segments

The Proposed Project consists of the following path segments:

(See Draft Conceptual Plan Sheet 15-1 for illustration of proposed improvement)

 Along the south side of Ryan Road near the Ryan Road and Claiborne Parkway intersection: A 10' shared-use path will be constructed.

The Alternate Project consists of the following path segments:

(See Draft Conceptual Plan Sheet 15-1 for illustration of proposed improvement)

• From Claiborne Parkway to Airmont Hunt Drive: A 10' shared-use path will be constructed.

Cross sections

The typical sections for the infrastructure in both the Proposed and the Alternate Projects will include the following:

Typical Cross Section I-I:

- 10' shared-use path
- Variable clearance between path and back of curb
- Variable clearance between path and edge of ROW

Planned Developments by Others

Planned infrastructure development by others within the project limits include:

- Claiborne Parkway, an urban four-lane road with median in the Countywide Transportation Plan, will eventually extend north from its existing terminus at Ryan Road. Per plan guidelines, this road corridor will include one 10' shared-use path and one 6' sidewalk.
- Ryan Road, currently a four lane road with median within the extents of the project corridor, is planned to be widened into an urban six-lane road with median according to the Countywide Transportation Plan. Per plan guidelines, this road corridor will include one 10' shared-use path and one 6' sidewalk.

Impacts on Existing Features

Following a study of existing plans and field reconnaisance, construction of the Proposed Project will not impact any existing features. Construction of the Alternate Project will need to consider the following existing features and associated potential conflicts:

- The path will need to cross an existing creek to the east of Claiborne Parkway.
- Several handholes, manholes, and storm inlets currently exist within the proposed path right-of-way.
- The path right-of-way crosses an existing pipe culvert approximately halfway between the two path termini.
- A small portion of an existing drainage ditch runs along the proposed path right-of-way near Airmont Hunt Drive.

Connectivity

Surrounding path/sidewalk network

Existing paths on either side of the project corridor and on the north side of Ryan Road will not be impacted. Shared-use paths currently exist on both sides of Ryan Road to the east and the west of the project corridor, and sidewalks also currently exist along both sides of Airmont Hunt Drive and Old Ryan Road at the eastern end of the project area. A well-developed sidewalk network already exists in the neighborhood to the south of the project area.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the project. These include:

- The Loudoun Valley Estates residential community
- The Park at Belle Terra residential community
- The Reserve at Belle Terra residential community
- The Forest Manor residential community
- Legacy Elementary School, approximately a mile southwest of the project area

From West of Claiborne Parkway to Airmont Hunt Drive





A planning-level opinion of probable cost was generated for the Proposed Project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in **Attachment A**.

Total	\$100,000
Additional Construction Items	\$20,000
Preliminary Engineering	\$5,000
Utilities and Right-of-Way	\$47,000
Base Construction Costs	\$28,000

A similar opinion of probable cost was also generated for the Alternate Project.

Base Construction Costs	\$172,000
Utilities and Right-of-Way	\$202,000
Preliminary Engineering	\$31,000
Additional Construction Items	\$72,000
Total	\$480,000

This project was identified as a priority in the Dulles Community Outreach Study and recommended for study by the Loudoun County Board of Supervisors. This

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:



The Proposed Project will navigate around a steep slope and culvert



The Alternate Project can make use of ample space between existing roadside and fences



A bridge crossing wetlands is proposed for the Alternate Project



Several underground utilities lie in the right-of-way of the Alternate Project



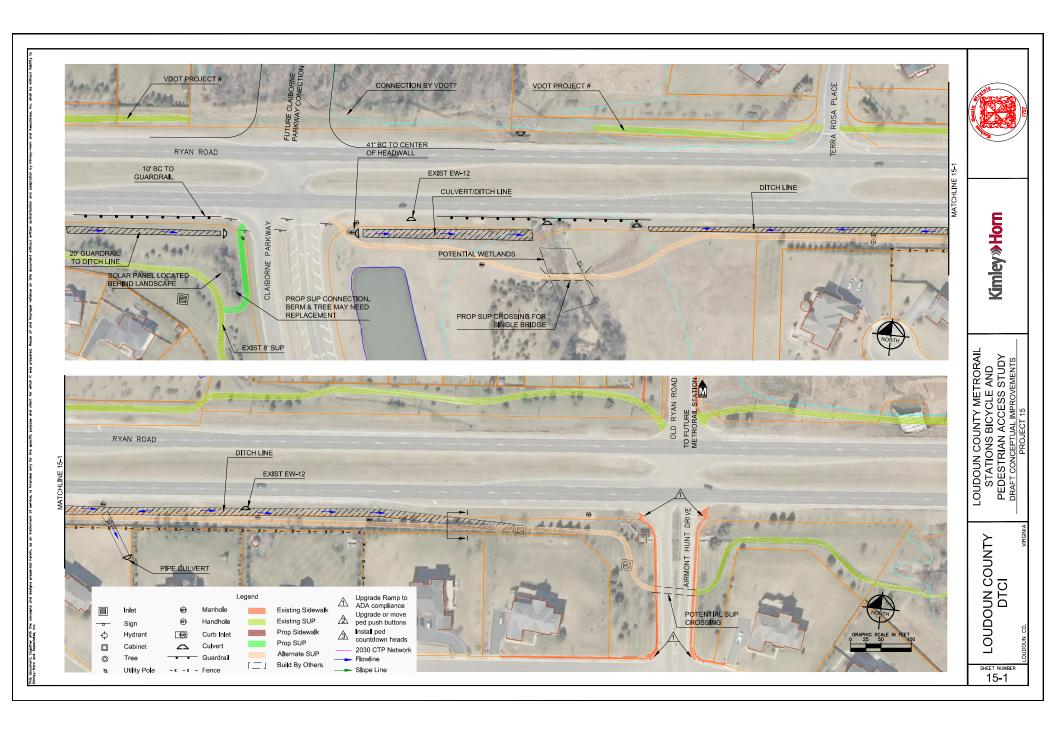
Project Status

project is currently in the planning phase. **Project Implementation**

Identify and secure project funding
Finalize project scope
Initiate design of project

Construct bicycle/pedestrian infrastructure project

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Intersection Project A – Ashburn Village Boulevard and Shellhorn Road

Project Description

This project consists of the installation of pedestrian push buttons and ADAcompliant curb ramps at the intersection of Ashburn Village Boulevard and Shellhorn Road. A 105-foot path is also proposed at the northwestern corner of the intersection to connect the existing curb ramp to the nearby existing shareduse path. The project was identified for study in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study.

Project Elements

Intersection upgrades

This project consists of the following improvements:

(See Draft Conceptual Plan Sheet A-1 for illustration of proposed improvement)

- At the northwest corner of the intersection: A 10' shared-use path will be constructed between the existing curb ramp and existing shared-use path.
- At the northeast corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements.
- At the southeast corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements. Existing pedestrian push button facilities will be upgraded.
- At the southwest corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements. Existing pedestrian push button facilities will be upgraded.

Planned Developments by Others

No planned infrastructure development by others exists within the project limits.

Impacts on Existing Features

Following a study of existing plans and field reconnaisance, the proposed intersection upgrades will need to consider the following existing features and associated potential conflicts:

- A handhole exists within the proposed curb ramp improvement extents at both the northeast and southwest corners of the intersection.
- Several handholes and a small lampost exist near or within the proposed path right-of-way at the northwest corner of the intersection.

Connectivity

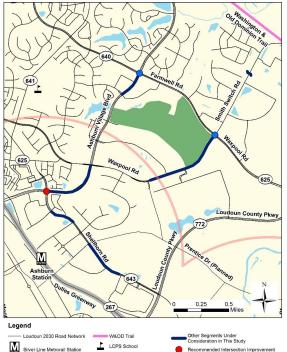
Surrounding path/sidewalk network

To the north of the intersection, a shared-use path runs along the west side of Shellhorn Road and a sidewalk runs along the east side of the road. Project 3 begins along the north side of Ashburn Village Boulevard to the east of the intersection. An existing shared-use path along the west side of Shellhorn Road south of the intersection connects to Project 1. Shared-use paths run along both sides of Ashburn Village Boulevard to the west of the intersection.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the proposed shared-use path. These include:

- The Shoppes at Ryan Park shopping center
- The Ryan Park Center residential community
- The Hearthside at Flynn's Crossing residential community
- The Atley on the Greenway residential community
- Hillside Park and Eagle Ridge Middle Schools and Broad Run High School are located to the north and west within a mile of the project area
- The Future Ashburn Metrorail Station, less than a mile south of the intersection





A planning-level opinion of probable cost was generated for this project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in **Attachment A**.

Total	\$90,000
Additional Construction Items	\$8,000
Preliminary Engineering	\$6,000
Utilities and Right-of-Way	\$35,000
Base Construction Costs	\$34,000

Project Status

This project was identified as a priority in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study and recommended for study by the Loudoun County Board of Supervisors. This project is currently in the planning phase. This intersection is within the project boundary of one submission that was part of a Fiscal Year 2016-2017 VDOT Highway Safety Improvement Program application for Bike and Pedestrian Safety Improvement projects. This program may represent one potential source of funding for the proposed infrastructure improvements.

Project Implementation

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:

- Identify and secure project funding
- Finalize project scope
- Initiate design of project
- Construct bicycle/pedestrian infrastructure project



Existing curb ramps at the intersection should be upgraded to meet ADA standards



Existing path connection at southwest corner of intersection

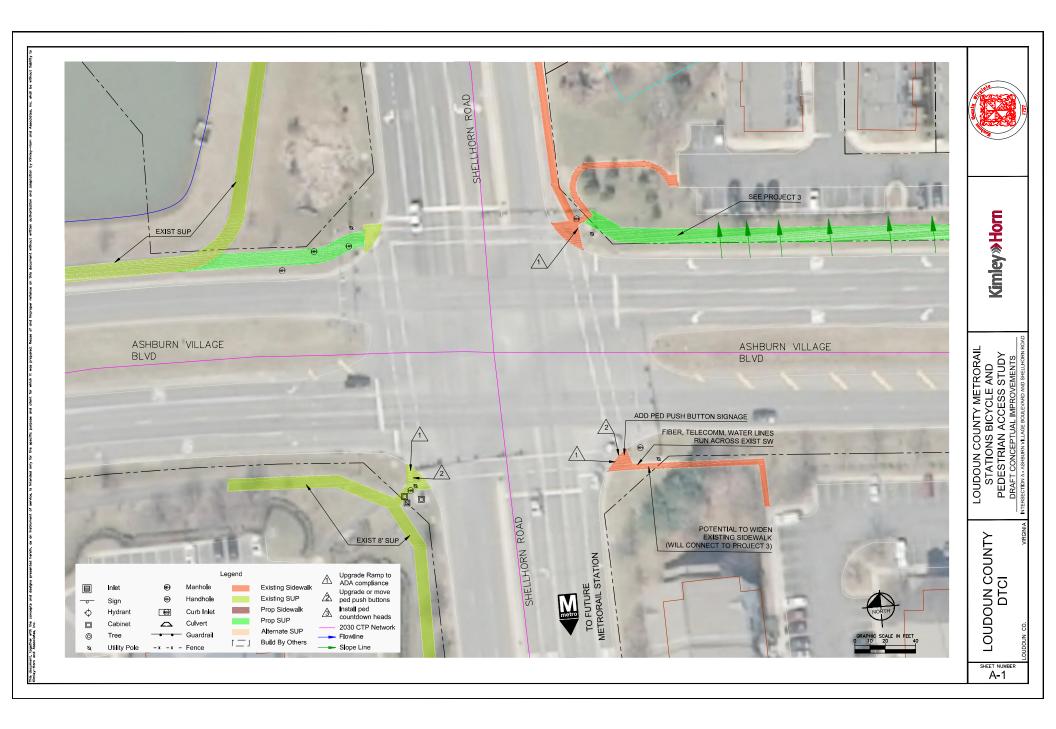


Existing obsolete pedestrian push-buttons



Northwest corner of intersection would benefit from connector to existing shared-use path





Intersection Project B – Ashburn Village Boulevard and Farmwell Road

Project Description

This project consists of the installation of ADA-compliant curb ramps and relocation of pedestrian push buttons at the intersection of Ashburn Village Boulevard and Farmwell Road. A 60-foot path is also proposed at the southeastern corner of the intersection to connect the existing curb ramp to the nearby existing shared-use path. The project was identified for study in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study.

Project Elements

Intersection upgrades

This project consists of the following improvements:

(See Draft Conceptual Plan Sheet B-1 for illustration of proposed improvement)

- At the northwest corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements. Existing pedestrian push button facilities will be relocated.
- At the northeast corner of the intersection: The existing curb ramps will be upgraded to comply with ADA requirements.
- At the southeast corner of the intersection: Existing pedestrian push button facilities will be relocated. A 10' shared-use path will be constructed between the existing curb ramp and existing shared-use path.
- At the southwest corner of the intersection: Existing pedestrian push button facilities will be relocated.

Planned Developments by Others

No planned infrastructure development by others exists within the project limits.

Impacts on Existing Features

No conflicts between existing features and proposed improvements were identified.

Connectivity

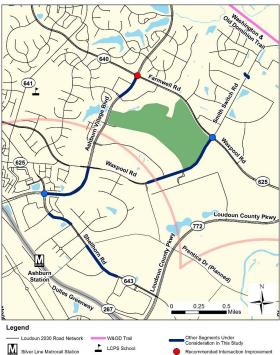
Surrounding path/sidewalk network

To the north of the intersection, sidewalk runs along both sides of Ashburn Village Boulevard. An existing shared-use path runs along the south side of Farmwell Road to the east of the intersection. An existing shared-use path along the east side of Ashburn Village Boulevard and Project 4 on the west side of the road extend south of the intersection. No existing pedestrian or bicycle infrastructure exists to the west of the intersection.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the proposed shared-use path. These include:

- The Ashburn Village residential community
- The Pipeline Plaza commercial development
- The Ashburn Town Square shopping center
- The Golden Pond School and Discovery Elementary School, within a mile
 of the project intersection
- Broad Run High School, within a mile of the project intersection and connected to the project intersection by existing and proposed shareduse paths
- The W&OD Trail, less than one mile north of the project intersection





Silver Line Metrora

Parks

Water

A planning-level opinion of probable cost was generated for this project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in **Attachment A**.

Total	\$40,000
Additional Construction Items	\$8,000
Preliminary Engineering	\$4,000
Utilities and Right-of-Way	\$5,000
Base Construction Costs	\$23,000

Project Status

This project was identified as a priority in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study and recommended for study by the Loudoun County Board of Supervisors. This project is currently in the planning phase.

Project Implementation

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:

- Identify and secure project funding
- Finalize project scope
- Initiate design of project
- Construct bicycle/pedestrian infrastructure project



Some existing ramps require upgrades



The southeast corner of the intersection lacks connectivity between existing path and curb ramp

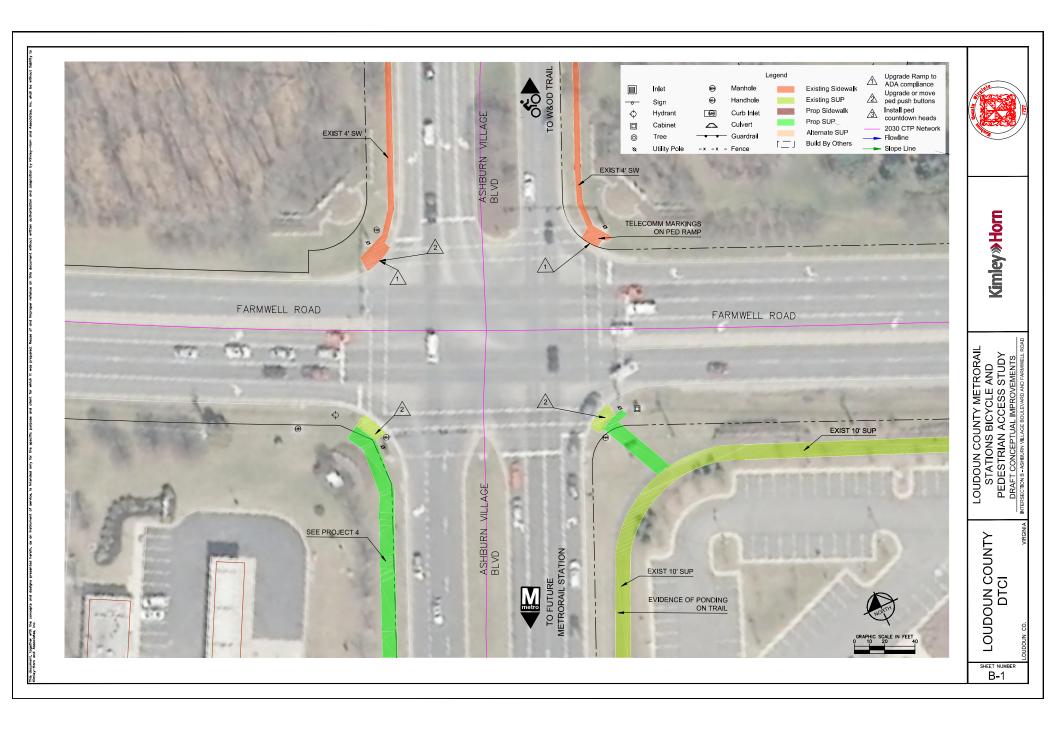


Several existing push button assemblies are not accessible from the intersection curb ramps



Proposed improvements in Project 4 will tie into the existing ramp at the southwest corner of the intersection





Intersection Project C – Waxpool Road and Farmwell Road/Smith Switch Road

Project Description

This project consists of the installation of ADA-compliant curb ramps, pedestrian push buttons, and countdown heads at the intersection of Waxpool Road and Farmwell Road/Smith Switch Road. A 70-foot path, curb section, and curb ramp is also proposed at the northern corner of the intersection to allow for access from the existing shared-use path across the intersection. The project was identified for study in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study.

Project Elements

Intersection upgrades

This project consists of the following improvements:

(See Draft Conceptual Plan Sheet C-1 for illustration of proposed improvement)

- At the northern corner of the intersection: A curb and gutter section and ADA-compliant curb ramp will be constructed, and a 10' shared-use path will be constructed from the existing shared-use path to the proposed curb ramp. Pedestrian push button facilities and countdown heads will be installed.
- At the eastern corner of the intersection: Pedestrian push button facilities and countdown heads will be installed.
- At the southern corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements. Pedestrian push button facilities and countdown heads will be installed.
- At the western corner of the intersection: The existing curb ramp will be upgraded to comply with ADA requirements. Pedestrian push button facilities and countdown heads will be installed.

Planned Developments by Others

No planned infrastructure development by others exists within the project limits.

Impacts on Existing Features

Following a study of existing plans and field reconnaisance, the proposed intersection upgrades will need to consider the following existing features and associated potential conflicts:

 Some regrading may be necessary in the northern corner of the intersection for the construction of curb, ramp, and path infrastructure there. Some evidence of ponding exists in the area.

Connectivity

Surrounding path/sidewalk network

To the northeast of the intersection, a shared-use path runs along both sides of Smith Switch Road toward Project 6. Project 5 runs along the northwest side of Waxpool Road to the southwest of the intersection. Existing shared-use paths diverger from the intersection to the northwest and southeast along Farmwell Road and Waxpool Road, respectively.

Surrounding trip generators

Several likely trip generators are located in the immediate vicinity of the proposed shared-use path. These include:

- The Cameron Chase Village Center shopping center
- Ashburn Technology Park
- Ashburn Business Park
- The Regency residential community
- The W&OD Trail, located less than a mile north of the project intersection and connected to the intersection via Project 6





Other Segments Under Consideration in This Study

- Recommended Intersection Improvement
- Other Intersection Improvements Under Consideration in This Study



A planning-level opinion of probable cost was generated for this project. These values are based on preliminary layouts and field review of the project area and are subject to change. Further cost break down is provided in Attachment A.

Base Construction Costs	\$31,000
Utilities and Right-of-Way	\$5,000
Preliminary Engineering	\$5,000
Additional Construction Items	\$5,000
Total	\$50,000

Project Status

This project was identified as a priority in the June 2014 Loudoun County Pedestrian and Bicycle Station Access Study and recommended for study by the Loudoun County Board of Supervisors. This project is currently in the planning phase.

Project Implementation

This project has been identified by Loudoun County and is currently in the planning stage. The next major implementation steps are as follows:

- Identify and secure project funding
- Finalize project scope
- Initiate design of project
- Construct bicycle/pedestrian infrastructure project



Existing path at northwest corner of intersection



The northwest corner of the intersection lacks a curb ramp and curb and gutter infrastructure



Some existing curb ramps will require upgrades, while others will remain



Utility lines cross the west side of the intersection



