

# George T. Snyder Trail

## Design Update

August 20<sup>th</sup>, 2020



# Project Objectives

- Provide a shared-use path from Chain Bridge Road (Route 123) to Draper Drive
- Improve regional trail connectivity.
- Provide a context-sensitive design solution that limits impacts to environmental resources, right-of-way, and utilities.

# Project Status

- Design is approaching 65%
  - Trail/Bridge/Retaining Wall Design
  - Hydrology and Hydraulics/Drainage Design
  - Stormwater Management
  - Lighting
  - Landscaping
  - Erosion and Sediment Control

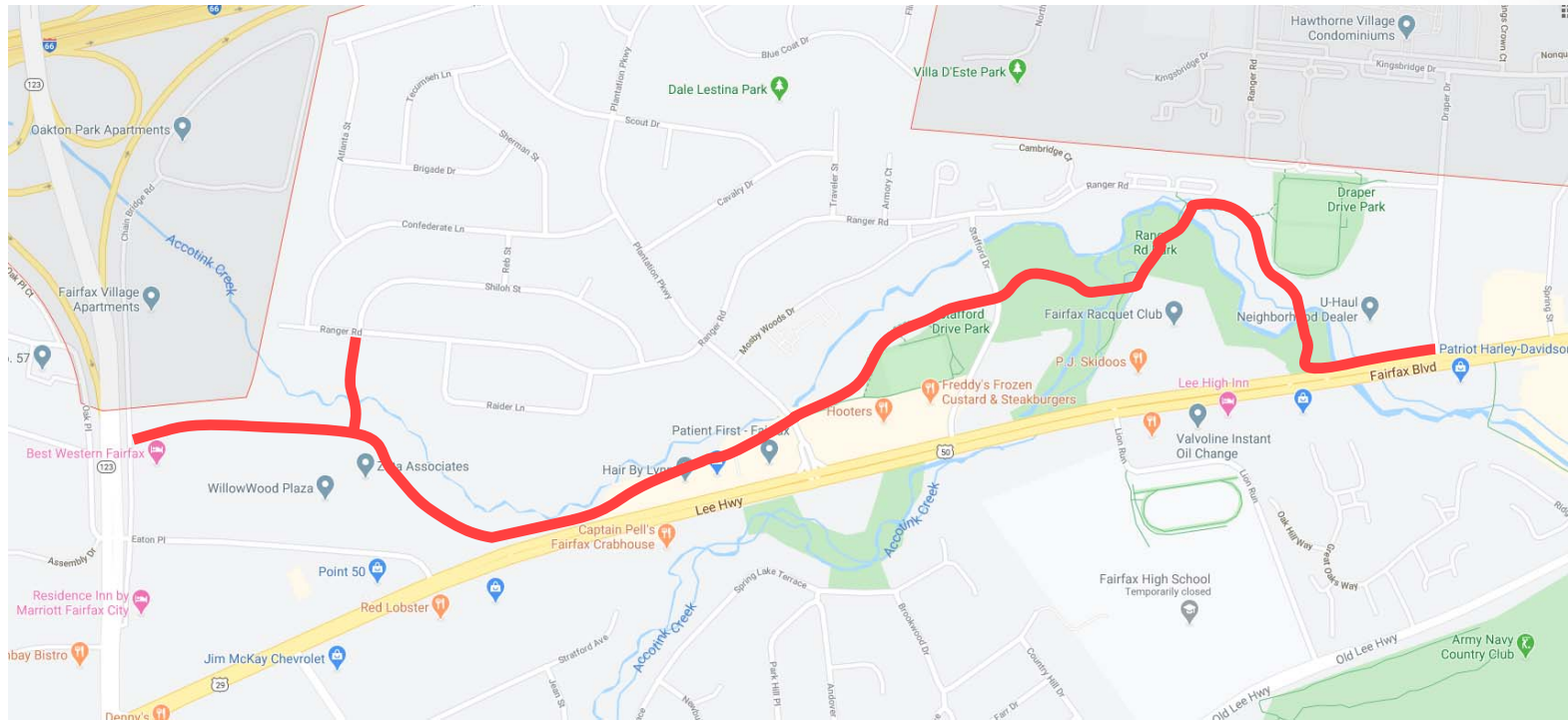
# Public Outreach

- Four Advisory Group Meetings
  - May 2019, August 2019, December 2019, August 2020
- City Staff Meetings with Stakeholders
  - Mosby Woods, Cambridge Station & Mosby Woods Condominium - August 2020
- Public Hearing – September 2020

# Preliminary Design Overview

- Trail
  - Trail width varies, 8-ft - 10-ft wide
- Five trail bridges
- Concrete Boardwalk
- Stormwater Management / Drainage Improvements
  - Swales and inlets
- Lighting
  - At intersections / connections

# Project Location



# Existing Conditions



Beginning of George Snyder Trail, looking east from Old Chain Bridge Road

# Existing Conditions



Existing foot trail, west of Stafford Drive



# Existing Conditions



Location of crossing near Accotink Creek confluence

# Existing Conditions



Looking north from US 50 crossing of Accotink Creek

# Preliminary Design Overview

- Bicycle/Pedestrian Bridges
  - Accotink Creek - Four crossings
  - Unnamed Tributary – One crossing
  - 14-ft clear width
  - Thru-truss design, weathering steel
  - Concrete decks



# Preliminary Design Overview

- Boardwalk
  - Bridge approaches within floodplain
  - Type and appearance



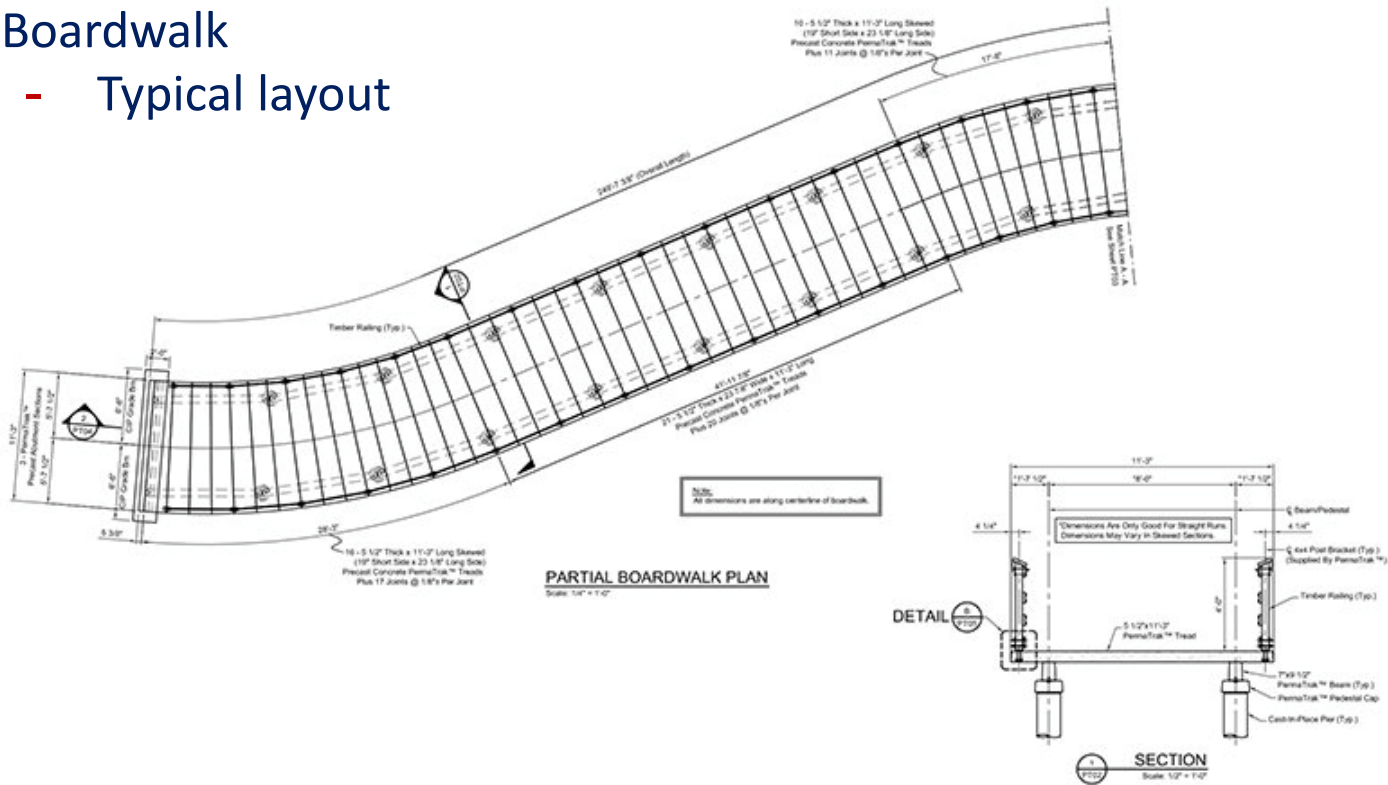
Site Context



Deck: Concrete planks, 14-ft clear width (left), savannah brown color (top right), wood texture (bottom right)

# Preliminary Design Overview

- Boardwalk
  - Typical layout



# Preliminary Design Overview

- Boardwalk
  - Railings

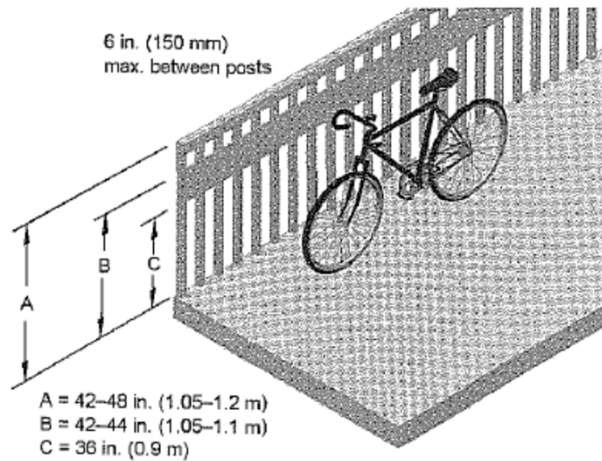


Figure 5-11. Bridge Railing

Source: AASHTO



Aluminum with mesh panels



Stainless Steel with tensioned cable

# Preliminary Design Overview

- Retaining Walls
  - Required between trail and private properties to minimize property impacts
  - Use to limit grading impacts to forested area
  - Segmental block walls
  - Variable Height (3' to 17')



# Preliminary Design Overview

- Lighting
  - Intersections and trail junctions
  - King K703/803 Solitaire w/ flat lense
  - Dark-sky Friendly





# Preliminary Design Overview

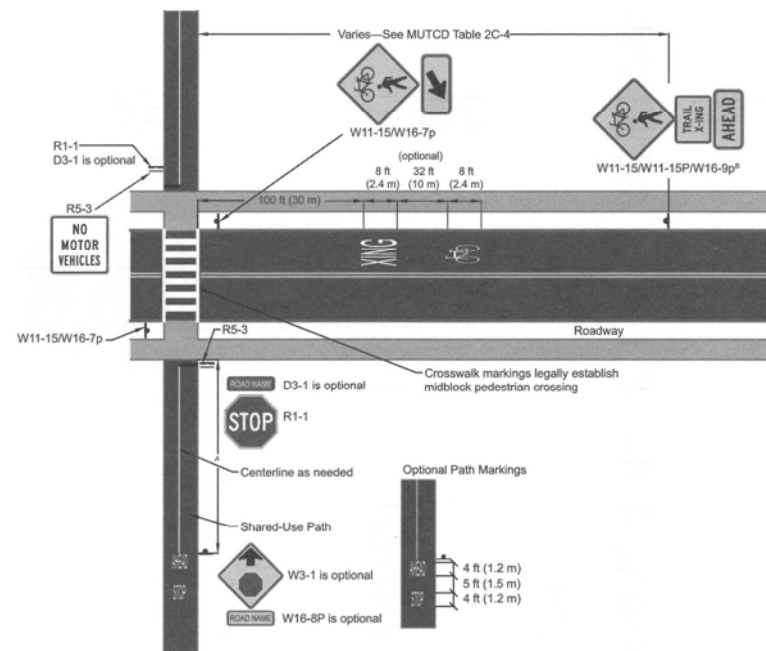
- Intersections



Example of raised crosswalk



Typical bollard layout, with center removable bollard



Notes:

- <sup>A</sup> Advance warning signs and solid centerline striping should be placed at the required stopping sight distance from the roadway edge, but not less than 50 ft (15 m).
- <sup>B</sup> W11 series sign is required, supplemental plaques are optional.

Figure 5-19. Example of Mid-Block Path—Roadway Intersection—Path is Stop Controlled for Bicyclists

# Preliminary Design Overview

- Safety Considerations
  - Safety railing on retaining walls
  - Use of Crime Prevention Through Environmental Design
    - Trail buffer
    - Line of sight
  - Intersection lighting
- Project Aesthetics
  - Treatment for retaining wall
  - Lighting
  - Landscaping

# Typical Plant Selection

- Native species
  - Grasses and Perennials
  - Evergreen Shrubs
  - Ornamental Shrubs
  - Small Flowering Trees
  - Large Shade Trees

Questions?