Detailed Trail Recommendations
THE VALLEY FORGE SEGMENT

Trail Route

The 1.5-mile Valley Forge Segment is entirely within Tredyffrin Township. Looking from south to north, the proposed trail route begins at the point where the Chester Valley Trail intersects Chesterbrook Boulevard. It then follows Chesterbrook Boulevard northward over Route 202 and through the intersection of Chesterbrook Boulevard & Lee Road. The Valley Forge Segment continues along Chesterbrook Boulevard in a northeasterly direction to Wilson Road.

At Wilson Road, the Valley Forge Segment turns due north and follows right-of-way that is restricted to Township vehicles only. Vehicle traffic on Wilson Road ends on the southern side of a pedestrian underpass beneath the Pennsylvania Turnpike. Trail users emerging on the opposite (northern) side of that underpass are now within the boundaries of Valley Forge National Historical Park. Within the National Park, the Valley Forge Segment follows Wilson Road again. It crosses over Valley Creek and connects with the National Park’s extensive bike trail and pedestrian path system.
VALLEY FORGE SEGMENT SUBSECTIONS

Because the Valley Forge Segment passes through a variety of settings, the nature of the trail will vary along different parts of the route. Dividing the Valley Forge Segment into the following two subsections permits a closer look at these conditions:

- Chester Valley Trail to Chesterbrook Boulevard Subsection
- Wilson Road and Valley Forge Park Subsection
VALLEY FORGE SEGMENT:
CHESTER VALLEY TRAIL to
CHESTERBROOK BOULEVARD SUBSECTION

Trail Alignment, Type and Use

The Valley Forge Segment of the Patriots Path system begins in Tredyffrin Township at the point where the Chester Valley Trail right-of-way crosses Chesterbrook Boulevard. That crossing is on the south side of the Route 202 interchange with Chesterbrook Boulevard, adjacent to a medical office building now being built.

The University of Pennsylvania, the developer of this medical office building, is constructing the short segment of the Chester Valley Trail that runs adjacent to their property. They are constructing the junction between Chester Valley Trail and the Valley Forge Segment. They are also building a portion of the Valley Forge Segment.
As shown on the accompanying graphic, this will entail crossing from the new medical office building on the west side of Chesterbrook Boulevard to the east side of Chesterbrook Boulevard. From there, the trail will go northward along the east side of Chesterbrook Boulevard across Route 202 to Lee Road. Along this route, the trail must:

- Cross a drive way that provides ingress/egress to the office complex containing Nationwide Insurance Company;
- Cross the exit ramp from southbound Route 202 to Chesterbrook Boulevard;
- Pass in front of two driveways the provide ingress/egress to a hotel that fronts on Chesterbrook Boulevard;
- Continue to Lee Road.

Because of traffic volumes at the Route 202 Chesterbrook Boulevard interchange, this short stretch of trail will be among the most congested parts of the Patriots Path system. The trail through this section will have to accommodate pedestrians on the existing sidewalks and rely on shared use markings to denote that bicyclists need to utilize the road cartway.

From Lee Road to Wilson Road, the Valley Forge Segment encompasses part of the route along which Tredyffrin Township proposes to establish an on-road bike lane. Township plans call for a bike lane on each side of Chesterbrook Boulevard – one lane for eastbound bike riders and one lane for westbound bike riders. Accommodations for pedestrians on this part of the trail will be built only on the north side of Chesterbrook Boulevard – the side that connects to Wilson Road. That pedestrian path can be built within Chesterbrook Boulevard right-of-way adjacent to the proposed bike lane. It should be separated from the on-road bike lane by the existing roadside curb and by a minimum 3’-wide grass strip for signs and lights.

**Road Crossings**

Decorative crosswalks, similar to the crosswalk that exists now at the intersection of Lee Road & Chesterbrook Boulevard, will be constructed in each location where the trail crosses intersecting roads. Strict compliance with the latest Americans With Disabilities Act (ADA) regulations will require that the curb ramps from existing sidewalks be realigned and reconstructed. This will also involve installing detectable warnings at each curb ramp. In turn, current road markings for crosswalks and stop bars may need to be repositioned.
Along the north side of Chesterbrook Boulevard, crosswalks will be installed across:

- Two Route 202 ramps
- Two hotel driveways
- Lee Road
- Bradford Road
- Jefferson Lane
- Wilson Road
- Adams Drive

Along the south side of Chesterbrook Boulevard, crosswalks will be installed across:

- Lee Road
- Flintlock Lane
- Chester Valley Shopping Center (two driveways)
- Andover Court
- Elan Lane
- Heyward Road

A crosswalks is also needed to get between the north and south sides of Chesterbrook Boulevard at the western driveway of the Chesterbrook Village Shopping Center. This crosswalk will need to be built across the median that runs down the center of Chesterbrook Boulevard.
Trail Links to Adjacent Locations

A short link between the intersection of Lee Road & Chesterbrook Boulevard and the Lee Road entrance to Wilson Farm Park already exists to connect the trail to Tredyffrin’s newest major recreation site.

Special Design Problems

The need to confine parts of this trail subsection to sidewalks and the need to reconstruct existing curb ramps (both discussed above) are each design constraints. To ensure sidewalk width is adequate on the east side of Chesterbrook Boulevard between the office complex and the exit ramp from Route 202, the wooden guide rail there should be moved back further from the road. There is also a sign with the hotel name on it that fronts on Chesterbrook Boulevard. That sign would need to be relocated to ensure there is room to widen the sidewalk across this frontage.

Another special design consideration along this subsection involves the need to relocate certain signage and landscaping that exists along the north side of Chesterbrook Boulevard between Lee Road and Wilson Road.

Consideration for effective buffering of private residential properties from the Path, effective storm water management for construction and maintenance of the Path, and appropriate hours of usage shall be addressed during the subsequent engineering design phase.

Determination of Path width and surfacing materials will be addressed during the subsequent engineering design phase.
Trail Specifications

In accordance with approved plans for the medical office building, the trail will be carried by 4’ to 5’ concrete sidewalk south of Route 202 and 4’ to 5’ bituminous sidewalk north of Route 202/Duportail Road. Between Duportail Road and Lee Road, a 5’ to 6’ bituminous sidewalk should be built. Between Lee Road and Wilson road, the following specifications should apply:

- The pedestrian path: 5’ wide with a bituminous surface.
- The on-road bike lanes: 6’ wide markings on existing cartway
- The grass strip separating the bike lane and pedestrian path: 3’ wide.

Typical Section of Chesterbrook Boulevard
(North of Lee Road Looking North)
Trail Support Facilities

The following sign types should be installed:

- Directional/Wayfinding: to Chesterbrook Village Shopping Center, Wilson Farm Park, the Chester Valley Trail, and Valley Forge National Historic Park
- Road Crossing: At each of the road crossings identified
- Trail Name: Valley Forge Segment
VALLEY FORGE SEGMENT: WILSON ROAD
and VALLEY FORGE PARK SUBSECTION

Trail Alignment, Type and Use

This is the northernmost part of the Patriots Path. Its purpose is to link the Patriots Path with Valley Forge National Historic Park’s extensive system of internal roadways, bikeways and hiking trails. In doing so, it will bring the Patriots Path to two logical termination points:

- A small National Park gravel parking lot on Yellow Springs Road that serves as a trailhead for the regional Horseshoe Trail, and
- A large National Park paved parking lot on Valley Creek Road that marks the end of one of the National Park’s internal bike trails.
This subsection of the Valley Forge Segment begins at the intersection of Chesterbrook Boulevard and Wilson Road. It proceeds north on Wilson Road for slightly more than one-quarter mile to a pedestrian and bike underpass that carries Wilson Road beneath the Pennsylvania Turnpike. From Chesterbrook Boulevard to this pedestrian and bike underpass, Wilson Road is restricted to Township vehicles only. The entrance to the Turnpike underpass is blocked with bollards that permit only bicyclists and pedestrians to pass. People using the underpass emerge on the opposite side of the Turnpike on to the grounds of Valley Forge Historic National Park.

Wilson Road is paved through this subsection of the trail. While most of it is in good shape, some small areas may need resurfacing. The immediate approach to the underpass and the surface within the underpass is currently deteriorated bituminous paving, crushed stone and packed dirt. It will need to be paved for public trail use.

The recommendations that follow refer to constructing a trail and trail support facilities within the National Park, which is federal property. Chester County and the three municipalities planning the Patriots Path look forward to cooperating with the National Park Service on the future construction and operation of this trail. Their goal is to incorporate the Patriots Path into the National Park’s management plan and capital programming. However, everyone associated with the Patriots Path needs to understand that the National Park Service makes all final decisions on trail matters within National Park boundaries.

Shortly after Wilson Road emerges from the pedestrian and bike underpass beneath the Pennsylvania Turnpike, the trail crosses a bridge over Valley Creek. At that point, the trail should leave Wilson Road to avoid a section of that roadway that is steep and hindered by inadequate sight distance due to curves. Instead, the trail should follow Valley Creek eastward along the remnants an old wagon path that exists there, cross a grass meadow, and connect to a second, existing bridge (a non-vehicular bridge) that crosses Valley Creek between the former General Maxwell Quarters and the former Henry Knox Quarters.
The accompanying trail route graphic indicates that this section of trail should be multi-use, a trail suitable for both pedestrians and bike riders. However, because Valley Creek is a State-designated Exceptional Value Waterway, particular care should be given to protecting the stream against runoff from adjacent impervious surfaces. The trail surface here should be: a) narrowed to 8’ instead of 12’; and b) constructed of crushed stone rather than bituminous paving. The distance between the trail and Valley Creek should be maximized to maintain the widest vegetative buffer possible.

After crossing the existing non-vehicular bridge, this section of trail should be extended to the large National Park parking lot located adjacent to Valley Creek Road. This will require building a short section of improved stone trail with steps to connect the non-vehicular bridge with the site of the former Henry Knox Quarters. From that point, an existing, paved National Park driveway plus a very short section of new paved trail can be utilized to get the trail to the Valley Creek Road parking lot.

As shown on the accompanying trail route graphic, the proposed trail splits in the grass meadow behind the former General Maxwell Quarters. The recommended path of the eastern fork is described above. The western fork should start with a short, crushed stone connection that extends from the grass meadow to Library Lane. The paved surface of Library Lane can carry the trail to the former General Maxwell Quarters and then Yellow Springs Road. A decorative crossing can then be established to carry the trail across Yellow Springs Road to the parking lot that serves as a trailhead for the Horseshoe Trail.

**Road Crossings**

The crossing of Yellow Springs Road at Library Lane identified immediately above is the only road crossing in this subsection of the trail.
Special Design Problems

Municipal workers use the section of Wilson Road proposed for this portion of the trail to go to and from a pumping station. Even though this traffic is infrequent, warning signs should be installed to alert trail users to these vehicles. The accompanying trail cross section graphic illustrates how to build the trail near Valley Creek in a way that respects that stream’s critical riparian buffer.

Section of Trail Adjacent to Valley Creek

Trail Links to Adjacent Locations

A narrow band of mature hardwood forest lines each side of Wilson Road through this part of the trail route. These woods will continue to separate the trail from the residential developments situated on adjacent properties to both the east and west. However, there are established paths through these woods that connect Wilson Road to both of these neighborhoods – in one case via a substantial footbridge over a tributary. These short links are ideal examples of how to connect the trail to adjacent residential areas and, where applicable, to these neighborhoods’ internal trail systems.
Near the proposed northern terminus of the trail, there are two proposed forks. Each of the two forks leads directly to another trail: one to Horseshoe Trail and one to an existing National Park bikeway. In addition, this section of trail will be adjacent to or in the direct vicinity of several National Park attractions, including:

- Lafayette’s Quarters
- The General Maxwell Quarters
- Henry Knox Quarters
- The covered bridge over Yellow Springs Road

**Trail Specifications**

From the intersection of Chesterbrook Boulevard and Wilson Road to the Valley Forge National Historic Park side of the underpass, the trail route is wide enough throughout to accommodate a full 12' multi-use trail. The walls and ceiling of the underpass are plenty high but need to be cleaned and painted. The trail surface should be bituminous paving designed to handle Township maintenance vehicles as well as trail users.

Within Valley Forge National Historic Park, specifications for trail surface and trail width will vary. An 8' crushed stone trail should be constructed where the trail passes close to Valley Creek. The segments of the trail carried by Wilson Road and Library Lane will utilize the paved cartways of these two existing roads. In each case, the road surface should be marked to indicate shared use by both vehicles and trail users.
Trail Support Facilities

- A sign at Chesterbrook Boulevard and Wilson Road to Chester Valley Trail
- A sign warning trail users about municipal vehicles on Wilson Road
- A sign announcing that the underpass beneath the Turnpike leads to Valley Forge National Historic Park
- A sign for people emerging from the pedestrian underpass beneath the Pennsylvania Turnpike that they are now entering the Valley Forge National Historic Park
- Signs regarding the several National Park attractions are nearby (as named above)
- A sign noting that Valley Creek is designated as an Exceptional Value Waterway by the Pennsylvania Department of Environmental Protection (DEP)
- An interpretive sign explaining Valley Creek, the meaning of its Exceptional Value designation, and the importance of riparian buffers would be an excellent in-the-field environmental education device.
THE CEDAR HOLLOW SEGMENT
(PLUS A CONNECTION TO THE VALLEY CREEK SEGMENT)

Trail Alignment, Type and Use

The Cedar Hollow Segment is an abandoned freight rail spur corridor that once connected Warner Quarry in northwest Tredyffrin Township and northeast East Whiteland Township with the railroad line that is now Chester Valley Trail. This corridor’s former life as a rail spur provides key advantages for local trail planners. Like most rail to trail projects, the Cedar Hollow Segment has no steep grades and only gradual curves. In addition, all railroad tracks and railroad ties have been removed.

The junction of the Cedar Hollow Spur (which runs north-south) and the Chester Valley Trail portion of the Patriots Path (which runs east-west) is in Tredyffrin Township’s 24.1-acre Cedar Hollow Road Park. This park is just south of Route 202 and just east of Cedar Hollow Road. The entire Cedar Hollow Segment is in Tredyffrin Township.
The accompanying trail route graphic illustrates how the vicinity where the Cedar Hollow Segment meets the Chester Valley Trail could accommodate a small trailhead. This trailhead could also feature a seating node with wayfinding and interpretive signage at the point where the Cedar Hollow Segment veers northward away from the Chester Valley Trail. From the junction of these two trails, the paved Cedar Hollow Segment will head due north over a thickly wooded ravine formed by the Little Valley Creek to a bridge that once carried the railroad over Route 202.

Chester Valley Trail near junction with Cedar Hollow Spur

Old railroad bridge over Route 202
In association with the widening of Route 202, PennDOT is elevating this bridge 2’ and installing new support structures. The bridge will also be cleaned and painted. Current plans call for chain link fence to be installed on the sides (knee walls) of the bridge. To enhance safety of users and avoid debris being thrown on traffic below, a full enclosure could be constructed, as shown on the accompanying graphic.

Former Railroad Bridge over Route 202
Improved for Trail Use

The accompanying trail graphic also shows a second route to reach this same bridge. This second route, in the form of a crushed stone walking path, would begin at the Cedar Hollow Road Park’s parking lot where a portable toilet is set up. From the parking lot, this walking path would:

- Run between the existing sand volleyball court and the existing softball/soccer field;
- Skirt the Route 202 side of that sports field;
- Cross into the wooded ravine; and
- Go up the side of the ravine to the former railroad bridge over Route 202.
From the railroad bridge all the way northward to the end of the segment at St. John’s Road and Church Road, the trail will follow the old railroad right-of-way. It will be constructed as a full width 12’ paved trail for this entire length. The actual termination point of the Cedar Hollow Segment after crossing St. John’s Road will be the Church Road side of the Forcine Concrete property. An easement where the former rail spur ran along the edge of that property will accommodate this trail segment to its end point at Church Road. Road crossings, design challenges and other special features (both existing and proposed) along this multi-use trail are identified in the following paragraphs.

Road Crossings

From south to north, the Cedar Hollow Segment will cross the following four roadways:

- Route 202
- Swedesford Road
- Indian Run Road
- St. John’s Road

The suitability of the former railroad bridge to carry the trail over Route 202 is described above. Continuing northward, Swedesford Road is the next crossing encountered. The former bridge that carried the rail spur over Swedesford Road has been removed. A new pedestrian and bike bridge will have to built. The steep grade cuts on each side of Swedesford Road and the high volume of traffic that the road carries would make an at-grade crossing inconvenient and unsafe.

The old railroad bridge over Indian Run Road is also now gone. However, the slopes from the former rail bed down to the cartway of Indian Run can accommodate an at-grade crossing provided the high points on each side of the road can be moderated with the proper grading. Vehicular traffic is not an issue because Indian Run Road is a cul-de-sac that serves only a small number of single-family detached homes. St. John’s Road is the final road encountered along the route of the Cedar Hollow Segment. The former rail spur crossed this road at-grade. The trail crossing will also be at-grade.
Trail Links to Adjacent Locations

Most property on each side of the Cedar Hollow Segment is in larger lot, single-family detached residential development. Exceptions include three Open Land Conservancy nature preserves. The Cool Valley Preserve, which is located between Indian Run Road and Swedesford Road, sits directly adjacent to the west side of the trail at the same grade as the trail. A simple sign and opening that can be cut into the minor brush that exists there alongside the trail will provide an easy and very low cost connection between the trail and that preserve. Two more Open Land Conservancy sites, Cedar Hollow Preserve and Miller Preserve, are situated at the northern end of the Cedar Hollow Segment near the intersection of St. John’s Road and Church Road. These two adjacent sites and their internal walking paths can be easily accessed from the trail on foot. The Open Land Conservancy does not encourage bike riding on its walking paths.

Special Design Problems

Trail designers will need to address certain key issues to build the Cedar Hollow Segment as proposed:

- It would be prudent to conduct a structural analysis of the former railroad bridge over Route 202. Presumably, the bridge can easily carry the weight of a paved trail since it once carried a freight line. However, there has been no up to date analysis of that old bridge’s current structural condition.

- The proposed pedestrian and bike bridge over Swedesford Road will be crucial to establishing a continuous trail along the entire length of the Cedar Hollow Segment. Further engineering will be required to determine if the top of the road banks on each side of Swedesford Road are high enough to allow adequate clearance between the bottom of the new bridge and the surface of the road. If not, grading will be needed to build up the height of the bank on each side of the road.

- Consideration for effective buffering of private residential properties from the Path, effective storm water management for construction and maintenance of the Path, and appropriate hours of usage shall be addressed during the subsequent engineering design phase.