

Relocation of South 22nd Street over Quittapahilla Creek Project

Project Description:

Lebanon County in partnership with PennDOT District 8-0 and North Cornwall Township is proposing to realign South 22nd Street at the Chestnut Street intersection, and to construct a new South 22nd Street bridge, downstream in North Cornwall, North Lebanon, and West Lebanon Townships, Lebanon County. The new bridge will be located downstream approximately 150-feet and will include a 10-foot wide pedestrian access for connection to the US 422 corridor and the Lebanon Valley Rail Trail.

It is Lebanon County's intent to reach out to the emergency responders, the school district, municipal officials, and the general public that utilize the roadway to gather feedback on the project.

Please use the attached form to provide the team with your comments and/or concerns related to the proposed project. Your time to complete the survey is greatly appreciated.

Project Schedule:

- 2026** Construction Begins
- 2028** Construction Completion

Project Purpose:

The purpose of this project is to improve safe movements at the intersection of South 22nd Street and Chestnut Street as well as to increase pedestrian connectivity along South 22nd Street. In addition, this project (LVRT Phase 6C) will seek to lengthen the LVRT Network and eliminate the periodic closure of South 22nd Street which is caused by the flooding of the Quittapahilla Creek over the roadway.

Project Need:

1) Safety

A) High Crash Rate: Crash rates at the intersection of South 22nd Street and Chestnut Street are higher (1.25 crashes per million vehicle miles traveled) than the statewide average (1.12 crashes per million vehicle miles traveled) on roadways with similar widths and Average Daily Traffic (ADT). The higher-than-average crash rates can be attributed to facility deficiencies at the intersection including limited sight distance and geometric deficiencies as described below.

B) Limited Sight Distance: The existing intersection sight distance (ISD) at Chestnut Street and South 22nd Street is less than the required distances for passenger vehicles as stated in the AASHTO Green Book.

- The ISD for the left turn (southbound lane of 22nd Street onto eastbound lane of Chestnut Street) is 300 feet. This is less than the minimum ISD of 356 feet (This requirement is an assumption based on a passenger car on 11% slope with 25 MPH intersecting roadway).

- The ISD for the right turn (southbound lane of 22nd Street onto westbound lane of Chestnut Street) is 250 feet. This is less than the minimum ISD of 279 feet (This requirement is an assumption based on a passenger car on 11% slope with 25 MPH intersecting roadway).

C) Geometric Deficiencies: South 22nd Street does not have sufficient access for trucks due to narrow lanes and small curb return radii. Trucks routinely enter other travel lanes in order to make turns onto Chestnut Street from South 22nd Street.

2) System Linkage

A) Pedestrian Accommodations: Narrow corridor widths limit mobility for bicyclists and pedestrians, including Environmental Justice populations, due to lack of sufficiently wide shoulders and lack of crosswalks/sidewalks between residential areas and commercial districts. The closest viable pedestrian crossing of the Quittapahilla Creek is South 16th Street, approximately 0.75-mile to the east.

B) Lebanon Valley Rail Trail (LVRT) Network Gap: There is currently a 0.75-mile gap between the recently constructed termini of LVRT Phase 6B (intersection of 22nd Street and Chestnut Street) and the existing termini of LVRT Phase 7 (N 25th Street Trailhead). As such, trail users are unable to easily travel between the existing trail termini without this project (Phase 6C) and a future project (Phase 6D).

3) Flooding

A) The existing bridge currently experiences major flooding issues from the Quittapahilla Creek when it overtops the existing roadway. Flooding debris blocks the roadway and requires temporary road closures during and shortly after these events.

B) A hydraulic analysis of the existing conditions shows that the existing roadway overtops between the 2-year and 10-year storm events. The bridge is overtopping 2-4 times per year according to North Cornwall Township documented observations.



New Alignment: ————

Pedestrian Detour: - - - - -

Vehicular Detour: - - - - -

The detour (1.25 miles) will use SR 422 (Cumberland Street), 16th Street and Chestnut Street.

