

Pedestrian & Bicycle Consideration Review

City of Pembroke, KY Pembroke Connector Route

Prepared for:



Prepared by:
Troy Hearn
Division of Planning
Kentucky Transportation Cabinet
July 26, 2017

Bicycle and Pedestrian Review for District 2 Pembroke Connector Route

Project Overview:

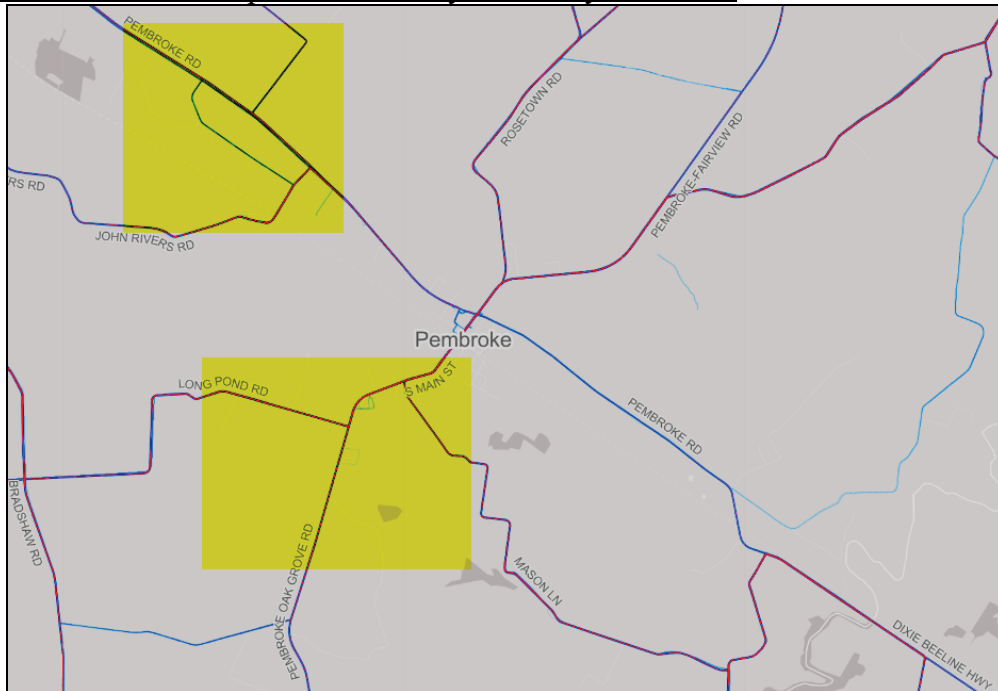
New construction for a connector route from US-41 (estimated at MP 3-4) to KY-115 (estimated MP 9.5-9.9) to re-route heavy truck traffic away from the downtown area of the City of Pembroke.

Local/regional Planning:

- There is no official local bicycle or pedestrian master plan or specific bike/ped planning efforts for the project area. The mayor of Pembroke has requested the consideration of bicycle and pedestrian facilities within any future planning and construction for this area.

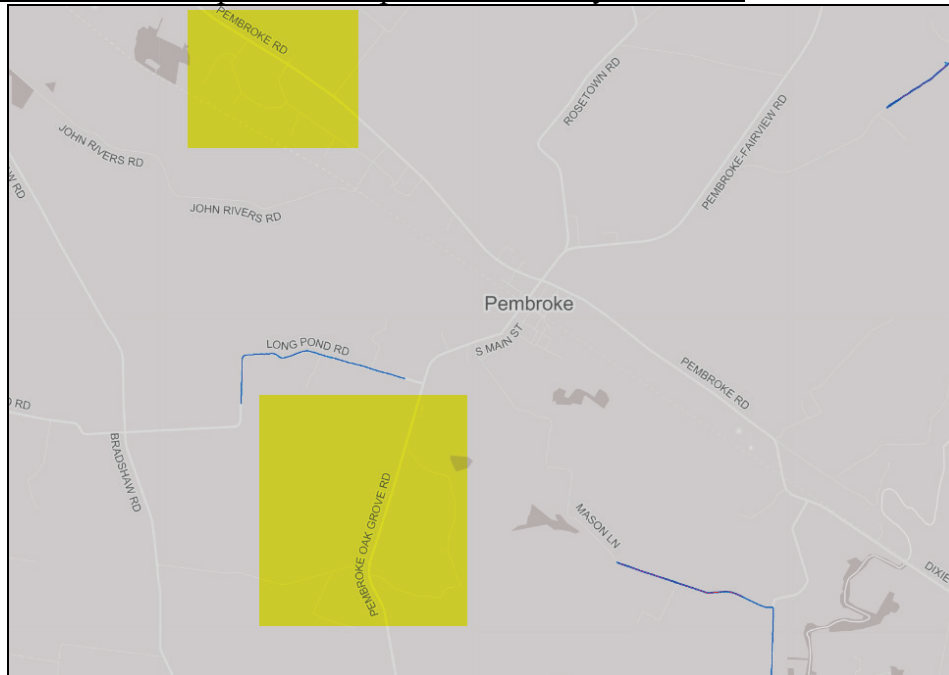
Existing conditions:

- Strava Global Heat Map for current bicycle activity in the area



Moderate to high use for on-road bicycling / <http://labs.strava.com/heatmap/#13/-87.33882/36.77925/gray/bike>

- Strava Global heat Map for current pedestrian activity in the area



No recorded pedestrian activity / <http://labs.strava.com/heatmap/#15/-87.35232/36.78019/gray/run>

- US-41 / MP 3-4
 - ADT is 6075
 - Posted speed limit is 55 MPH (MP 3.34-4.0) / 45 MPH (MP 3.16-3.344)
 - Paved shoulder width is less than 4 feet
 - Rural cross section design
 - The Bicycle Comfort Index (BCI) average rating is a level D
- KY-115 / MP 9.5-9.9
 - ADT is 2030
 - Posted speed limit is 45 MPH (MP 9.82-9.907) / 55 MPH (MP 9.5-9.82)
 - No paved shoulder
 - Rural cross section design
 - Narrow bridge at MP 9.905-9.918
 - Route used by and signed for horse and buggies use (Figure 1)
 - School located at MP 9.106
 - The Bicycle Comfort Index (BCI) average rating is a level C

KY-1027 / MP 6.0-6.392 and MP 6.464-6.827

- ADT is 140-180
- Posted speed limit is 45 MPH (MP 6.4-6.595) & 55 MPH (MP 6.595-11.8)
- No paved shoulders
- Rural cross section design
- Bicycle Comfort Index is C

Proposed Connector Route

- a. Anticipated ADT is 2,200 (through year 2040)
- b. Anticipated Heavy truck ADT is 40% (880 ADT)
- c. Design speed is 45MPH
- d. Proposed 8 foot paved shoulder
- e. Anticipated Bicycle Comfort Index would be level C

The KYTC Bicycle and Pedestrian program team recommendations are:

For Proposed New Route:

Consider construction of pedestrian facilities (sidewalks 5' or wider) or multi-use facilities (10' shared use path) along newly constructed roadways:

1. If within 300 feet connect to existing pedestrian-facilitites
2. In areas adjacent to residential development, public spaces (parks), or schools

Best: Construct a multi-use path along the eastern portion of the new roadway closest to residential development (or future planned development). Construct a seperated facility along the bridge crossing the railroad. Develop an agreement with the local government detailing the maintenance responsibilities of multi-use facility. Provide a break in the rumble strips in the paved shoulder space (10' gap every 50 feet / Figure 2) to better accommodate pedestrian and bicycle travel.

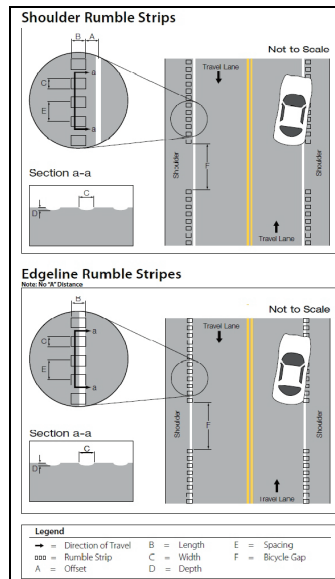
Good: Construct a seperated sidewalk (5 feet or wider) along the eastern portion of the new roadway closest to future residential devlopment (if any). Construct a seperated facility along the bridge crossing the railroad. Develop an agreement with the local government detailing the maintenance responsibilities of multi-use facility. Provide a break in the rumble strips in the paved shoulder space (10' gap every 50 feet / Figure 2) to better accommodate pedestrian and bicycle travel.

Fair: Construct a paved shoulder (8 feet or wider) on both sides of the new roadway to accommodate both bicycle and pedestrian travel. Provide a break in the rumble strips in the paved shoulder space (10' gap every 50 feet / Figure 2) to better accommodate pedestrian and bicycle travel.



(Figure 1) / KYTC Photo Van View /

<http://maps.kytc.ky.gov/photolog/?config=Photolog&x1=5114935.959483551&y1=3868453.589951066&x2=5427435.959483551&y2=3971969.214951066&MODE=PL>



(Figure 2) / https://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/t504039/

- 1 http://transportation.ky.gov/Bike-Walk/Documents/Bicycle%20Comfort%20Index%20Rating%20_%202014.pdf
- 2 KYTC Pedestrian and Bicycle Travel Policy: <http://transportation.ky.gov/Bike-Walk/Documents/KYTC%20Pedestrian%20and%20Bicycle%20Travel%20Policy%20%202002.pdf>

Prepared by:
Troy Hearn, Bicycle & Pedestrian Program Coordinator
 Division of Planning, www.transportation.ky.gov/Bike-Walk
 Kentucky Transportation Cabinet
 July 26, 2017