

**SR 0422 - Section 028
SR 422 and Ramona Road
Intersection Safety Improvement Project
Jackson Township, Lebanon County
MPMS No. 94397**

Project Information

The project is located along the eastbound and westbound approaches of State Route 422 (West Lincoln Avenue) to Ramona Road and includes the following intersections . . .

- SR 422 at Ramona Road;
- Ramona Road at West Main Avenue;
- SR 422 at West Main Avenue.

The purpose of this project is to improve safety at the intersection of SR 422 and Ramona Road. By conducting a study on the project area it was determined that following issues need to be addressed . . .

- Outdated traffic signal timings and hardware at the SR 422 and Ramona Road intersection;
- The average speed on SR 422 is higher within the project area than the sections to the east or west, contributing to the frequency and severity of crashes in the area;
- The crossing of westbound West Main Avenue traffic to westbound SR 422 across eastbound SR 422 traffic at the existing intersection is non-conventional and includes unanticipated conflict points;
- The convergence of multiple lanes of SR 422 in the westbound direction contributes to racing and/or speeding through the signalized intersection.

Safety Improvements

Engineers began the safety improvements project by developing potential alternatives and then compared these to a “no-build” scenario. Based on the alternatives analysis, the project team recommends the implementation of the following safety improvements . . .

- Elimination of the SR 422 westbound passing lane;
- New traffic signal at SR 422 and Ramona Road including pedestrian and bicycle accommodations;
- Include separate right-turn lanes on SR 422 at Ramona Road;
- Realign West Main Avenue to accommodate a left-turn lane on the Ramona Road northbound approach;
- Convert West Main Avenue at Ramona Road to a “T” intersection;
- Elimination of the SR 422 and West Main Avenue non-conventional roadway geometry and conflict points;
- Potential reduction of the SR 422 Speed Limit from 55 mph to 45 mph to be consistent with corridor east and west of the project.

Other alternatives evaluated, but *not* selected, include . . .

- Construction of a four-leg or five-leg roundabout with a circular or oval layout;
- Construction of a new connector road between SR 422 and West Main Avenue establishing a direct connection between the Jackson Elementary School and SR 422 combined with closure of West Main Avenue at Ramona Road.

The roundabout option fits the needs of this project, but the traffic signal improvements were determined to be more operationally efficient, and are expected to provide an equivalent or higher degree of safety compared to a roundabout.

Additional Information

- The project is expected to have minimal environmental impacts including minor loss of agricultural resources.
- The project is expected to have minor public utility impacts which would include valve and manhole cover adjustments and utility pole relocations.
- The project is expected to have two right-of-way claims for strip acquisitions along SR 422, Ramona Road and West Main Avenue.
- The project is anticipated to be bid in the fall of 2016 and construction to occur during spring/summer of 2017.
- The estimated construction cost is \$1.8 million.