



CRAWFORD ROAD ROUNDBABOUT

CHALLENGE

WHEN THE CREATION OF A RESIDENTIAL COMMUNITY CREATED A DANGEROUS INTERSECTION, ONE PENNSYLVANIA COMMUNITY NEEDED A SOLUTION TO CONTROL SPEED AND INCREASE SAFETY, WHILE ALSO BEING EASY TO INSTALL AND MAINTAIN.

SERVICES

- Roundabout Design

CRAWFORD ROAD ROUNDBABOUT

In Allegheny County, Pennsylvania, The Meritage Group developed a residential neighborhood (Cobblestone) adjacent to Crawford Road in Ohio Township. A 90-degree turn on Crawford was to be modified to create a 4-way or plus intersection when the additional two legs of the intersection were added as part of the residential development. Stop signs would have to be added to two or more approaches so that this configuration would operate properly.

As an alternative, ms consultants suggested that Ohio Township and The Meritage Group consider the installation of a modern roundabout for this location.

The township agreed because the design of a modern roundabout inherently controls speeds and improves safety without requiring police enforcement. Roundabouts also present a reduced maintenance cost when compared with traffic signals in that equipment maintenance and power costs are eliminated.

A ROUNDABOUT'S SUCCESS

The developer was pleased as it created an aesthetic gateway to their residential development.

The Ohio Township Volunteer Fire Department was satisfied that the roundabout design would not significantly impact response times and could, in fact, reduce the number of accident calls at that location.

Similarly, the local public works department was satisfied that the design would not impede efficient snow removal.

With a consensus reached, the project moved forward and Crawford Road now has a roundabout where a dangerous curve used to be.

WHY ROUNDABOUTS?

Despite actor Chevy Chase's comic scene in the 1985 film "European Vacation" in which his character becomes trapped in a London roundabout and drives around in circles for hours without being able to exit, modern roundabouts are, in fact, a successful and economical way to reduce traffic speeds and accidents.

Research has indicated that a roundabout can reduce crashes 40-60 percent due primarily to two factors – reducing the number of conflict points and reducing the speeds of vehicles. Traffic within the roundabout has the right of way and each approach is controlled through the use of a yield sign so becoming "trapped in the circle" is not possible.

To avoid roadway realignments, roundabouts may also be placed in areas in which sight distance is restricted. Additionally, the placement of a roundabout can mitigate issues involved with installing a lengthy turn

lane in which procuring right of way or releases from property owners in which left turns into and out of their driveways would be restricted. All right of way impacts are concentrated at the intersection so the number of parcels impacted is reduced and any turns made out of adjacent parcels do not have to be restricted.

Roundabouts have been used successfully for years throughout Europe and Australia and more recently in the United States. Colorado, Florida, Indiana, Maryland, New York and Ohio are just some of the states that have successfully incorporated roundabouts into their traffic systems.