BENEFITS AND OPERATIONAL INFORMATION

ROUNDABOUT AT SALEM FOUR CORNERS

ROUTES 82 & 85

TOWN OF SALEM
**Why Construct a Roundabout at Salem Four Corners?**
The purpose of the roundabout is to improve safety. A high frequency of head-on turning accidents exists at both the intersection of Route 82 and Route 85 and at the driveway to the gas station on Route 85. A reduction in these types of accidents is anticipated in addition to an overall safety improvement of the entire intersection.

Although, at some locations, roundabouts can improve the flow of traffic, it is important to understand that congestion relief is not the primary goal of this project. Some reduction in delay will be experienced during off-peak hours. However, during rush hour and busy weekend traffic patterns, the intersection will still experience congestion.

The proposed roundabout is a modified single lane roundabout, incorporating the use of auxiliary lanes on both the Route 85 northbound and the Route 82 eastbound approaches. Two lane approaches on those legs are necessary to accommodate the heavy volumes of traffic to and from the nearby terminus of Route 11. The lane configuration is similar to that of the existing intersection.

**What is a Roundabout?**
A roundabout is a circular intersection that utilizes slow operating speeds and reduces the number of conflict points found at traditional intersections by eliminating left turns. Although often confused with the older traffic circles, modern roundabouts are considerably smaller and use yield on approach as opposed to yielding within the circle. There is also no need to weave across traffic to exit a roundabout, as occurred with some traffic circles. Drivers approaching the roundabout choose their appropriate lane and remain in the lane through their exit. Drivers approaching the roundabout yield to traffic in the roundabout. Traffic in the roundabout has the right of way.

A reduction of the crossing conflicts (as opposed to a conventional intersection) in addition to low operating speeds, achieved through curved travel paths, can have significant safety benefits. Low speeds allow drivers more time to react to one another, resulting in fewer and less severe traffic accidents. Raised islands (splitter islands) on the approach roadways help to slow vehicles before entering the roundabout and guide traffic in a counterclockwise direction. Studies have shown roundabouts that have replaced signalized intersections had a 76% reduction in severe crashes and a 35% reduction in overall crashes.

Other safety features include sidewalks for pedestrians, crosswalks on each approach, and improved roadway lighting for better night time visibility of the intersection.

**How do trucks and other large vehicles drive a Roundabout?**
Roundabouts are designed with a “truck apron” on the inside of the circulatory roadway. The apron is slightly raised above the pavement to discourage travel by passenger cars (keeping speeds low) and is intended to accommodate the rear wheels of large vehicles and long trailers as they navigate the turns required at the intersection. The raised curb along the truck apron does not create an obstacle for large vehicles.

**How do pedestrians use a Roundabout?**
Pedestrians should use the sidewalks and crosswalks to navigate their way through the intersection. Crosswalks are provided at each leg of the roundabout along with sidewalks around the perimeter of the intersection. The raised islands on each approach leg of the roundabout provide a refuge area. Pedestrians only need to have a gap in one direction of traffic at a time to cross. Pedestrians can wait in the refuge area for a safe gap in the other direction of traffic. Pedestrians should never cross to the center island of the roundabout. The truck apron is intended for use by the rear wheels of trucks or long trailers to travel as they navigate the roundabout, which could conflict with pedestrians trying to utilize the same area.

**How do bicyclists use a Roundabout?**
Experienced bicyclists may travel through the roundabout utilizing the travel lanes in the same fashion as an automobile. The lower vehicular speed associated with a roundabout is generally within the ability of an experienced bicyclist to ride with traffic. Less proficient bicyclists and children should exit the roadway at the crosswalk and walk their bicycles along the sidewalk in the same manner as a pedestrian.
DRIVING A ROUNDABOUT

⇒ Reduce speed and select the appropriate lane as you approach the roundabout.

⇒ Yield to traffic in the roundabout. Vehicles in the roundabout have the right of way.

⇒ Look to your left, when there is a safe gap in traffic, proceed into the roundabout.

⇒ Remain in your lane. Display your right-turn signal prior to your desired exit and turn right to exit the roundabout.

⇒ Only right turns occur within a roundabout.

⇒ Traffic circulation is counterclockwise
CONTACTS & PROJECT INFORMATION
(Please reference State Project No. 120-86)

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**SCHEDULE:**
Anticipated Beginning of Construction - Spring 2012
Anticipated Completion of Roadway Construction — Fall 2012
Completed Landscaping — Spring 2013

**ADDITIONAL ROUNDBOUGHT INFORMATION:**
Connecticut Department of Transportation — http://www.ct.gov/dot/roundabouts
Town of Salem Webpage — http://www.salemct.gov/pages/FV1-00035A77/FV1-00037D64/rb1