

# Proposed Intersections Improvements at

C.R.8A (Valley Drive/Locust Avenue) and  
C.R. 8B (Navesink Avenue) at Stone Church  
Township of Middletown

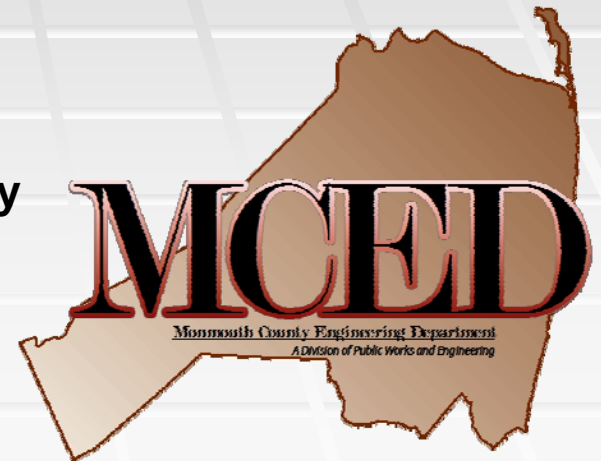
Date: July 15, 2010 (Stone Church)

**Presented by:**

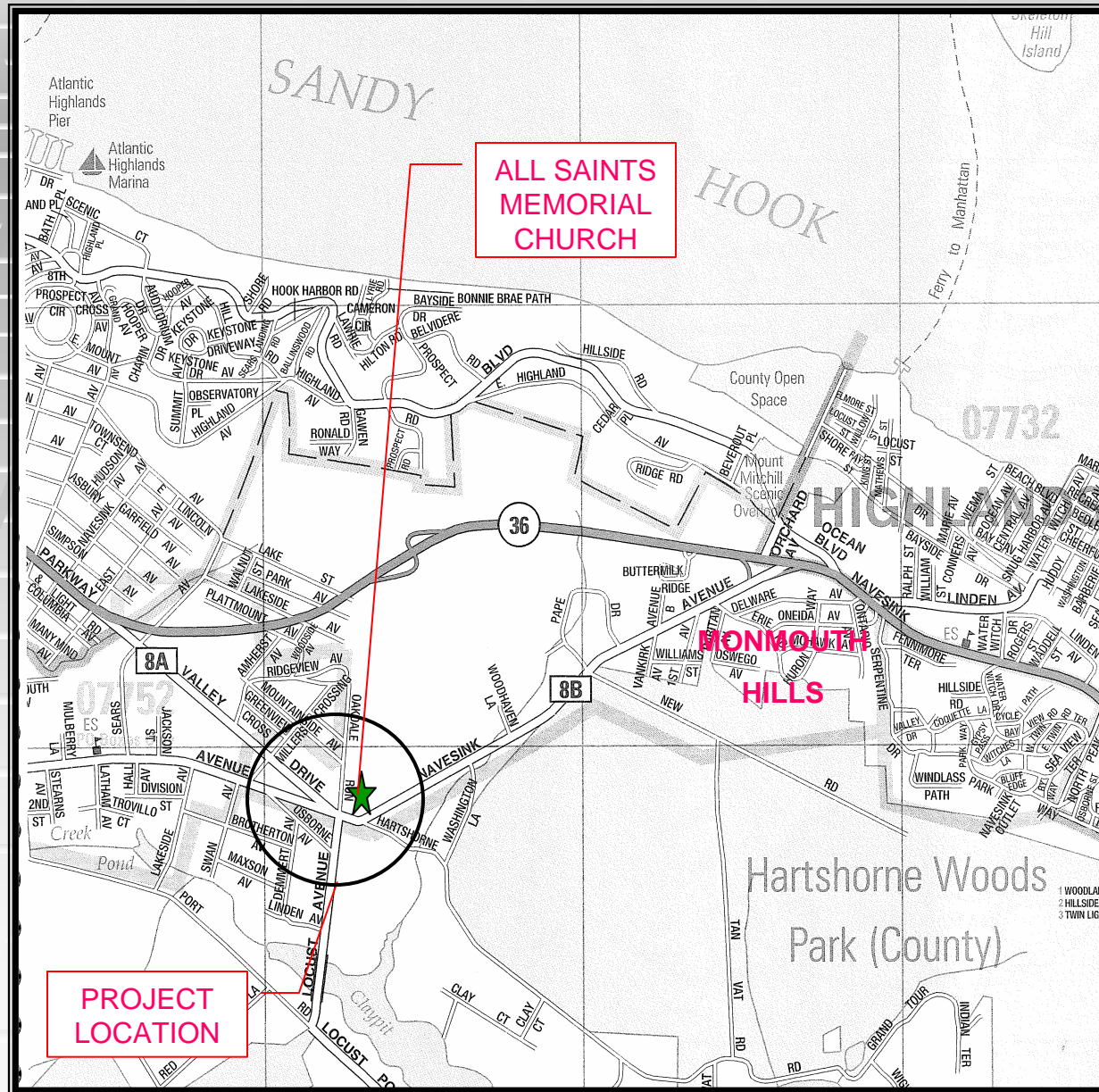
**Monmouth County Division of Engineering & Traffic Safety**

Joseph M. Ettore, P.E. – County Engineer

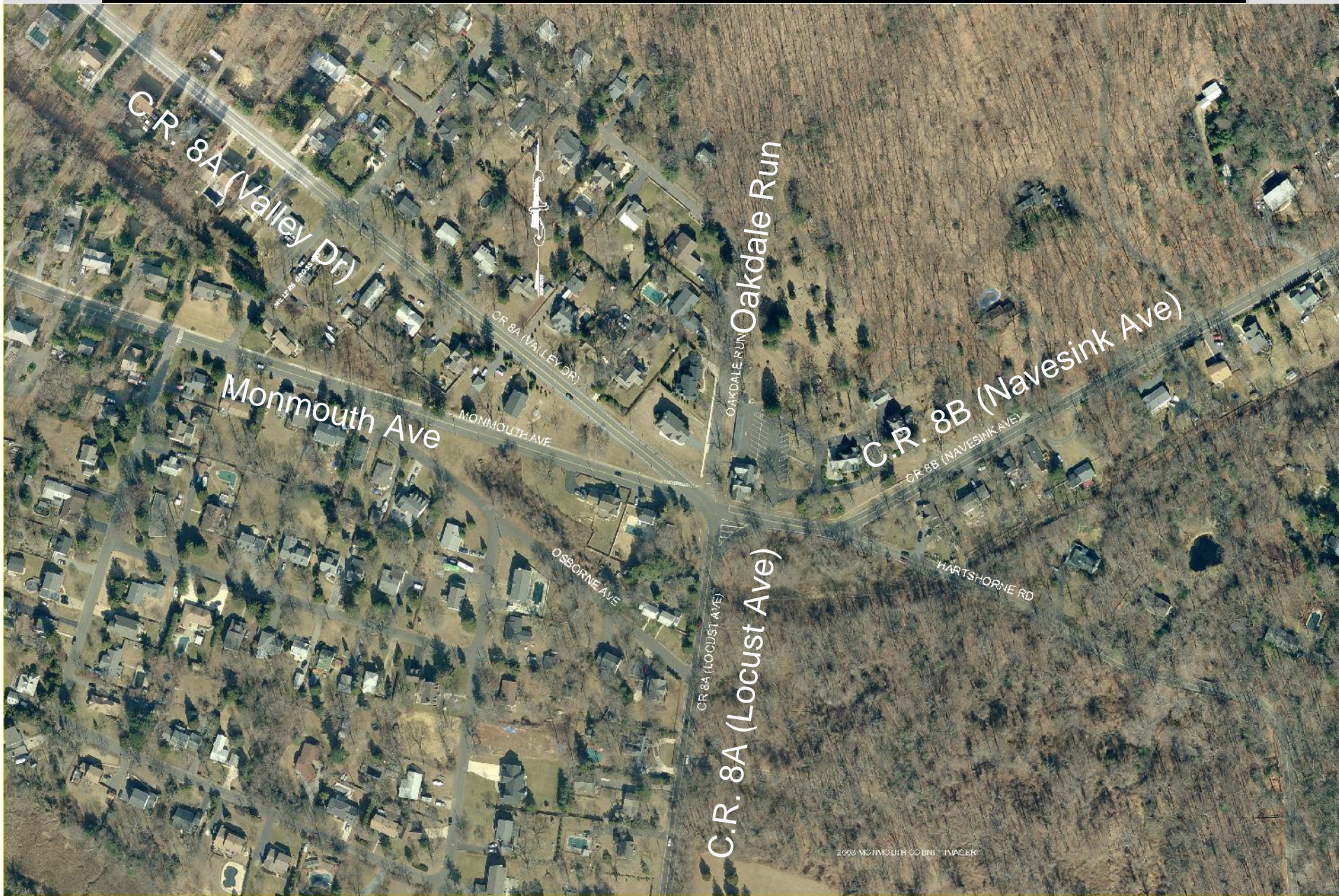
Vincent J. Cardone, P.E. – Principal Engineer, Traffic



# Location Map



# Existing Intersection Conditions



# Existing Intersection Conditions



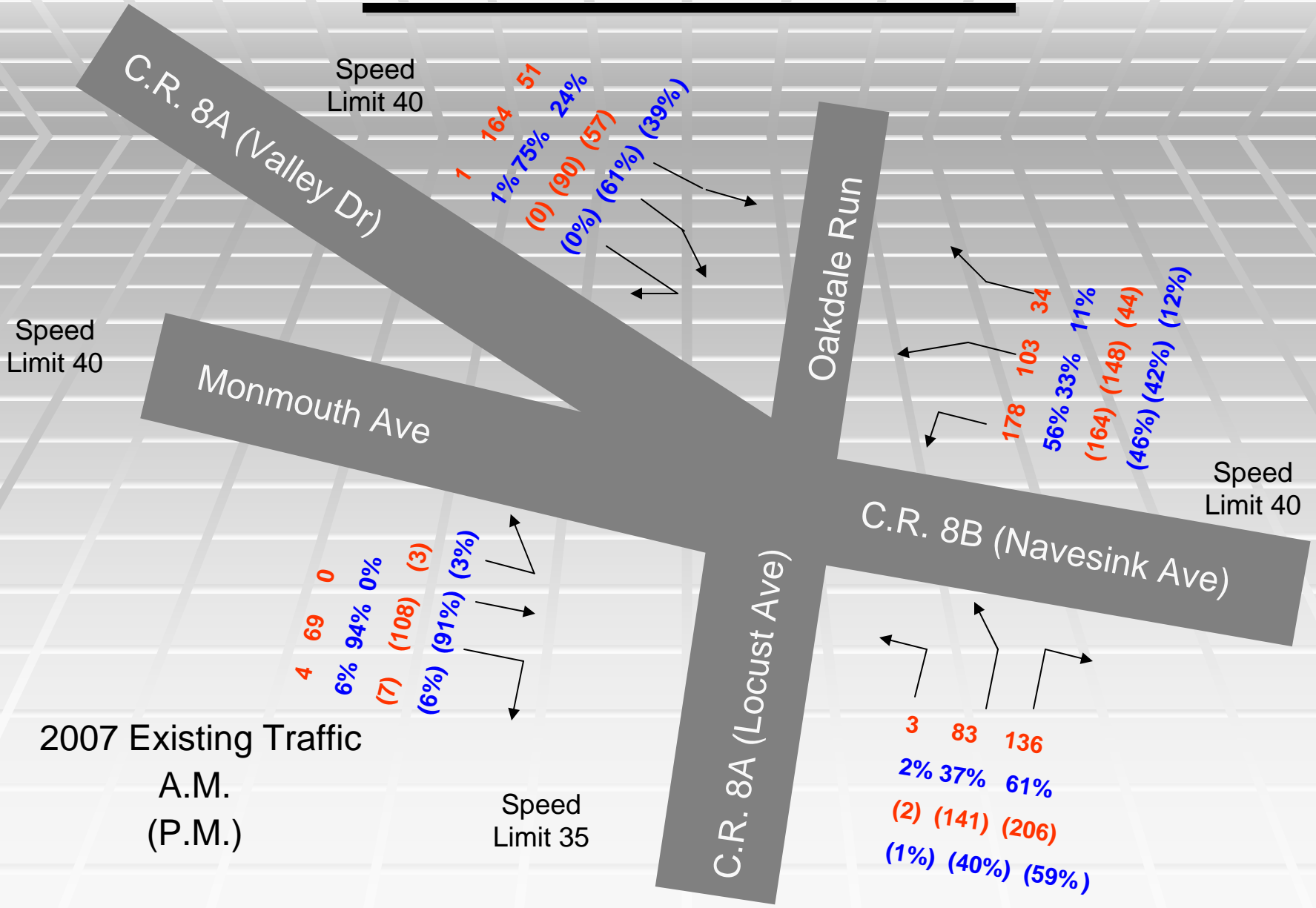
## ➤ **Existing Conditions**

- The roadways traversing the intersection serve as connections between State Route 36 to the north, the Oceanic Bridge and County Route 12A (Navesink River Road) to the south and State Route 35 to the west.

## ➤ **Problem Statement**

- The Intersection's primary movement (using 2007 traffic data) are the northbound to eastbound and conversely the westbound to southbound turning movements. The secondary major movement is the north/south through move. The unconventional geometry of the existing intersection contributes to the following:
  - 5 Legged Intersection
  - Confusion regarding which movement has the right of way
  - Largest volume movement does not have right of way (stop controlled)
  - Odd angles
  - Sight distance issues
  - Crash History (54 in 3 years)
    - \*23 Right Angle Crashes (42%)
  - Perceived speeding issues

# Traffic Volumes



# Alternative 1



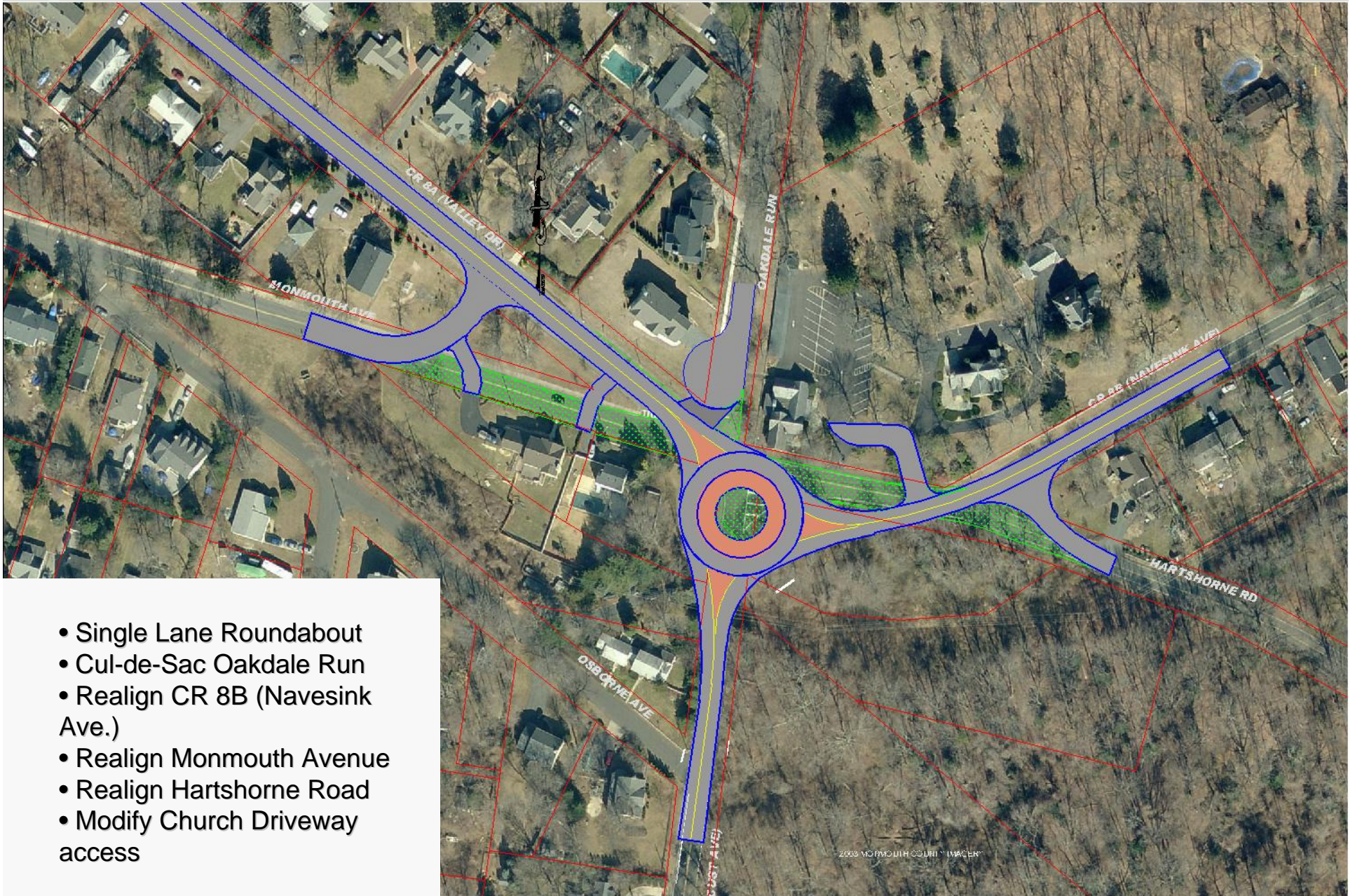
- Cul-de-sac Oakdale Run.
- Re-align Monmouth Avenue
- Re-align CR 8A (Valley Drive)
- Re-align CR 8A (Locust Ave) w/ CR 8B (Navesink Ave)
- Re-align Hartshorne Avenue
- Extend Church Driveway

# Alternative 2



- Cul-de-sac Oakdale Run.
- Re-align Monmouth Avenue
- Re-align CR 8A (Valley Drive/Locust Avenue)
- Re-align Hartshorne Avenue
- Extend Church Driveway

# Alternative 3



- Single Lane Roundabout
- Cul-de-Sac Oakdale Run
- Realign CR 8B (Navesink Ave.)
- Realign Monmouth Avenue
- Realign Hartshorne Road
- Modify Church Driveway access

# Alternative 3



- Single Lane Roundabout
- Cul-de-Sac Oakdale Run
- Realign CR 8B (Navesink Ave.)
- Realign Monmouth Avenue
- Realign Hartshorne Road
- Modify Church Driveway access

# Benefits of Proposed Roundabout

- Significantly reduced number of conflict points
- Slows Traffic on all approaches
- Each approach controlled by Yield Sign
- Improved Geometry & Sight Distance
- Enhanced Pedestrian Crossings
- Larger buffer along Stone Church frontage

# Roundabouts in Historic areas



## ROCHESTER HILLS, MI

- Gateway to Stony Creek Historic District (1st settled 1823)
- The first modern roundabout in Michigan
- Constructed 1996
- Plans to landscape center and splitter islands

# Roundabouts in Historic areas

Barton Mines "Green building"  
Constructed 1864  
Renovated in 2007

Building site played an important role in early local history, when a 1700's inn known as "Wing's Tavern" became the commercial heart of the pioneer settlement and provided the setting at the intersection of various trails north, east and south



Glens Falls, NY



- A.k.a "Centennial Circle"
- Opened May 2007
- Formerly a signalized intersection
- Part of commercial district revitalization project
- Heart of Three Squares Historic District

# Center Island Treatments

Brooklyn Center, MN



# Center Island Treatments

Muncie, IN



# Center Island Treatments

Pier Village, Long Branch, NJ



# Center Island Treatments

Pier Village, Long Branch, NJ



# Center Island Treatments

Middletown, NJ



# Center Island Treatments

Middletown, NJ



# Next Steps

## (Project Schedule)

- Plan endorsement from the Township – September 2010
- Commencement of preliminary design phase – Fall 2010
- Right of Way Acquisition Process – Winter 2011
- Securing Required State Approvals –Summer/Fall 2011
- Final Design – Fall 2011
- Bid and Award Project for Construction –Winter 2011/2012
- Construction Phase – Spring 2012

**Questions ?**