

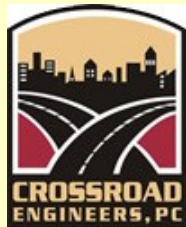
# City of Greenwood

## Smith Valley & Madison Project



Trent Newport, PE, LS

Mark Beck, PE





Johnson is IBJ's editorial cartoonist. He began drawing for IBJ in 2011. You can follow him on Twitter @ShaneJohnson.

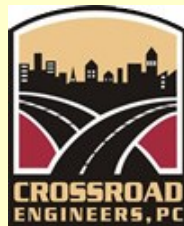
✖ CLOSE

# City of Greenwood

## Smith Valley & Madison Project

Why a project in this location?

- Congestion in multiple locations during rush hours
- Short length lane shifts
- Pedestrian safety





# City of Greenwood

## Smith Valley & Madison Project

And why this solution?

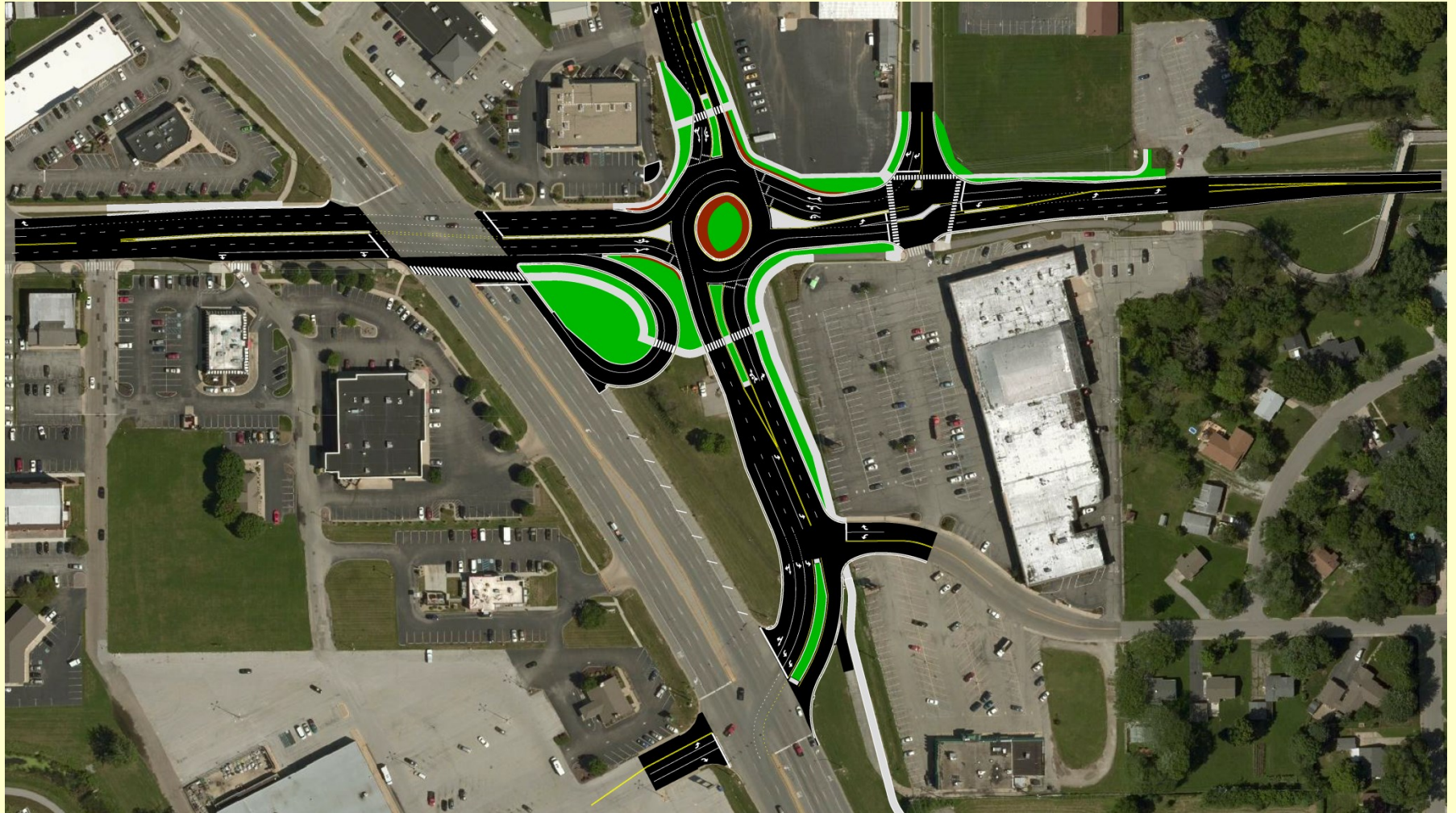
- Maximize efficiency/reduce congestion with roundabout at Madison and signal at Meridian with metering as needed
- Increase thru east/ west green time by removing left turns from SMV to US 31 & from Meridian to SMV
- Above improvements and added lanes to reduce delay by 45%!!
- Increase Pedestrian safety





# City of Greenwood

## Smith Valley & Madison Project





# So Why a Roundabout?



# Roundabouts are Safer

## US DOT Federal Highway Administration Statistics

### Traditional intersections account for:

- 45% of all crashes - *FHWA*
- 33% of all traffic fatalities - *FHWA*

### Compared to traditional intersections roundabouts:

- Reduce fatalities and injuries by 82% - *FHWA*
- Reduce total crashes by 44% - *FHWA*
- Require vehicles to travel at lower speeds



# Roundabouts are Safer

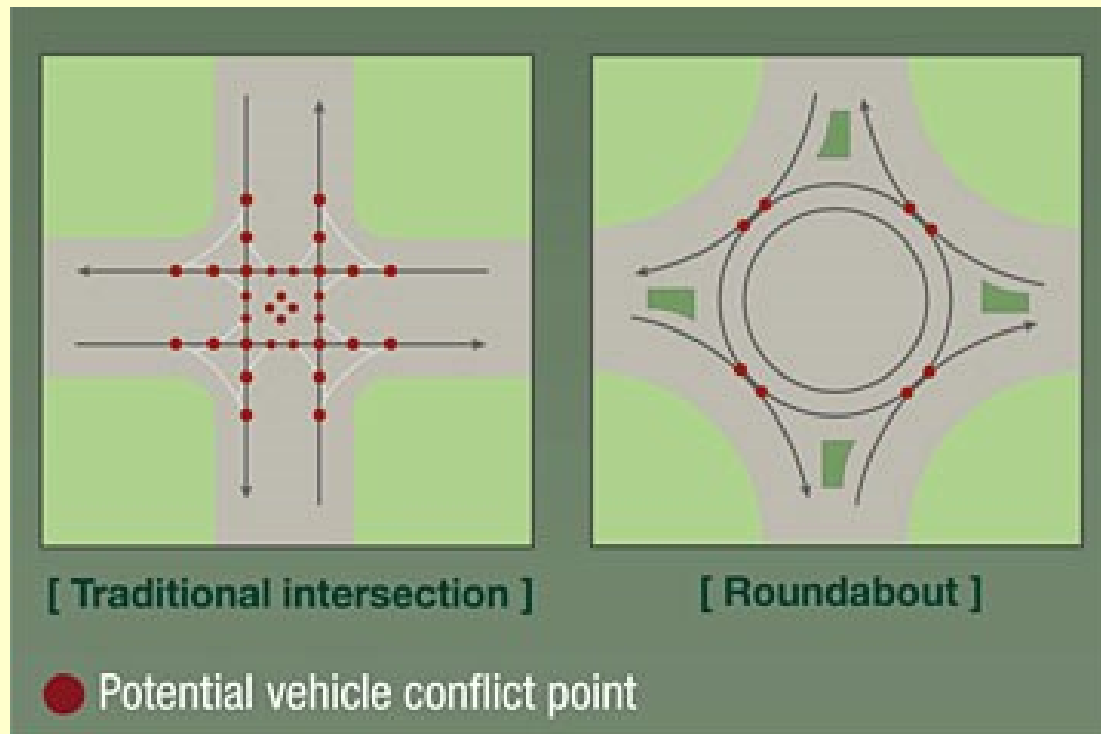
Collisions at traditional intersections are severe because:

- High Speed
- Angle of Impact





# Roundabouts are Safer



(32)

(8)

Conflict points are dramatically reduced because all vehicles travel in the same direction.

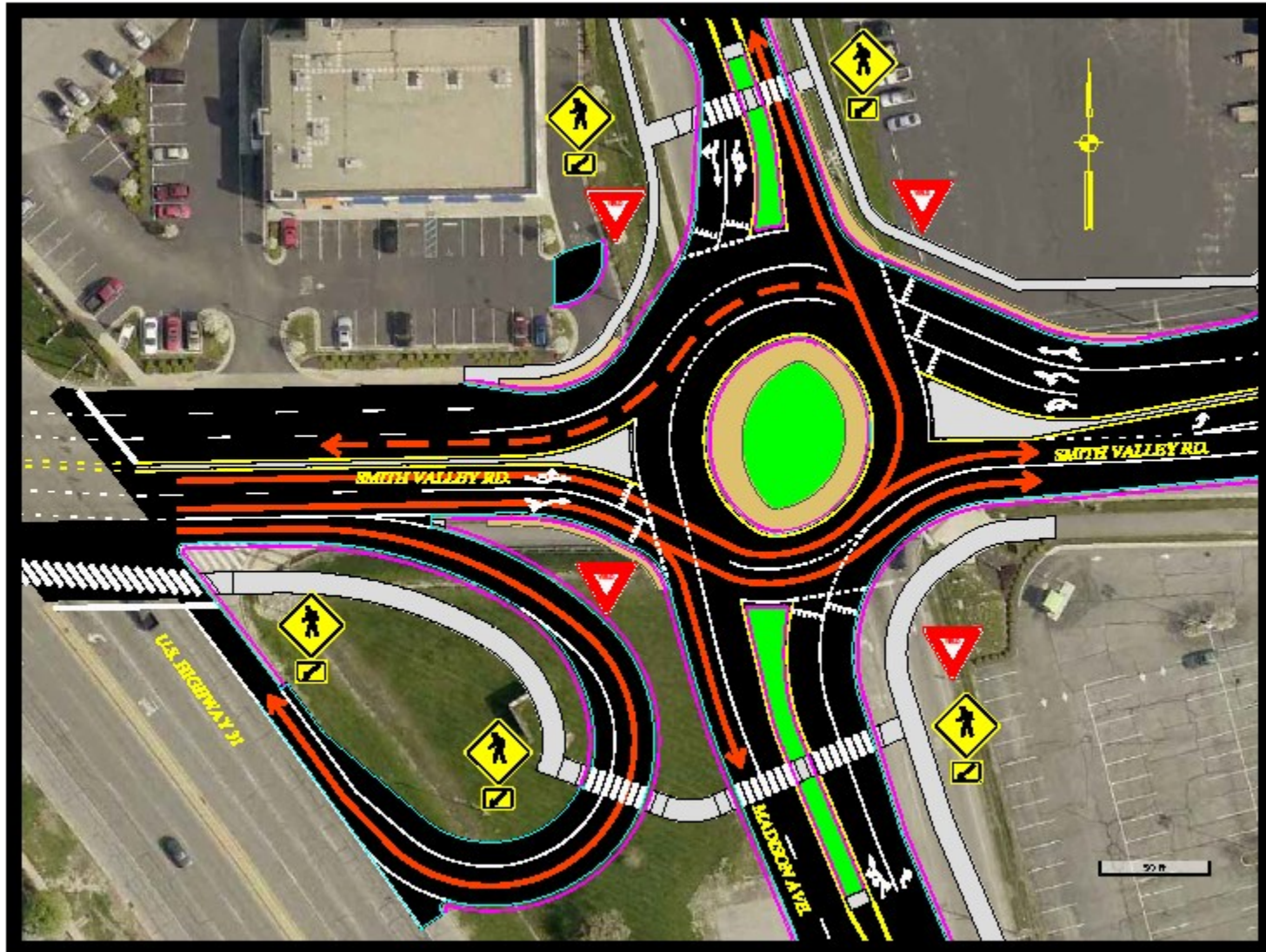
# Roundabouts are Efficient

## Reduced congestion and less traffic delays

- up to 23% reduction! (Insurance Institute for Highway Safety)
- equivalent to 325,000 fewer hours annually nationwide

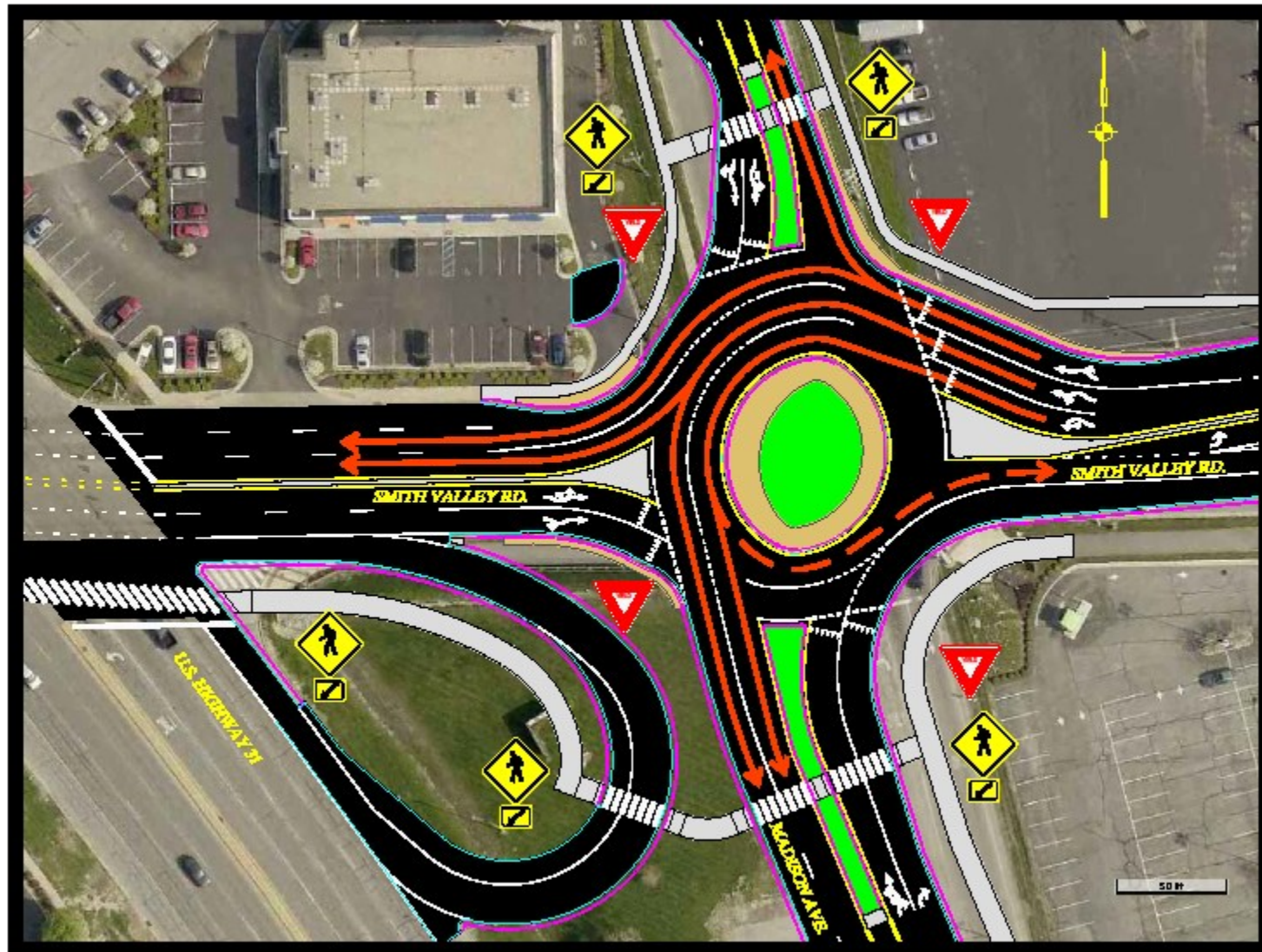


# Turning Patterns – East Bound

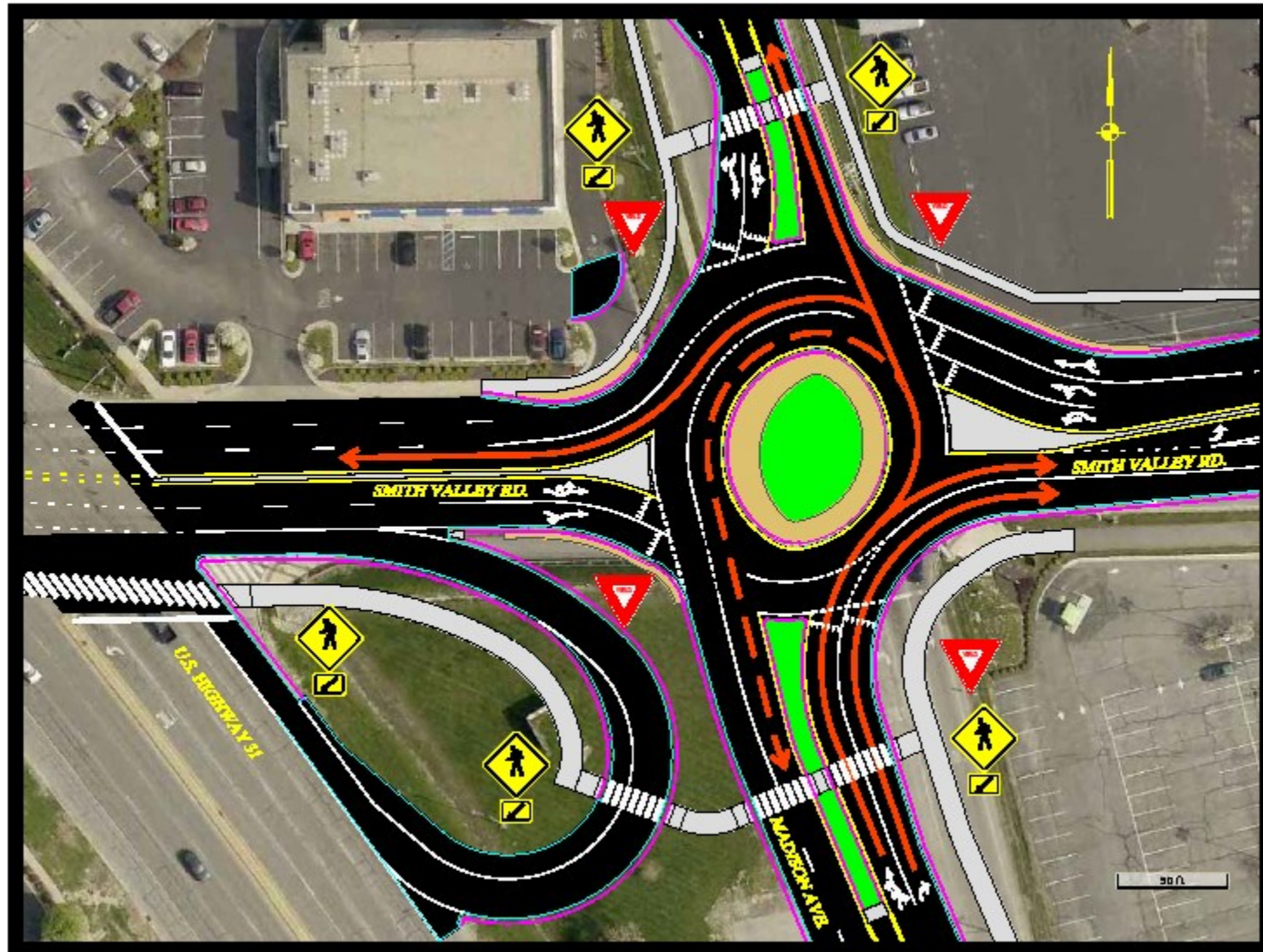




# Turning Patterns – West Bound

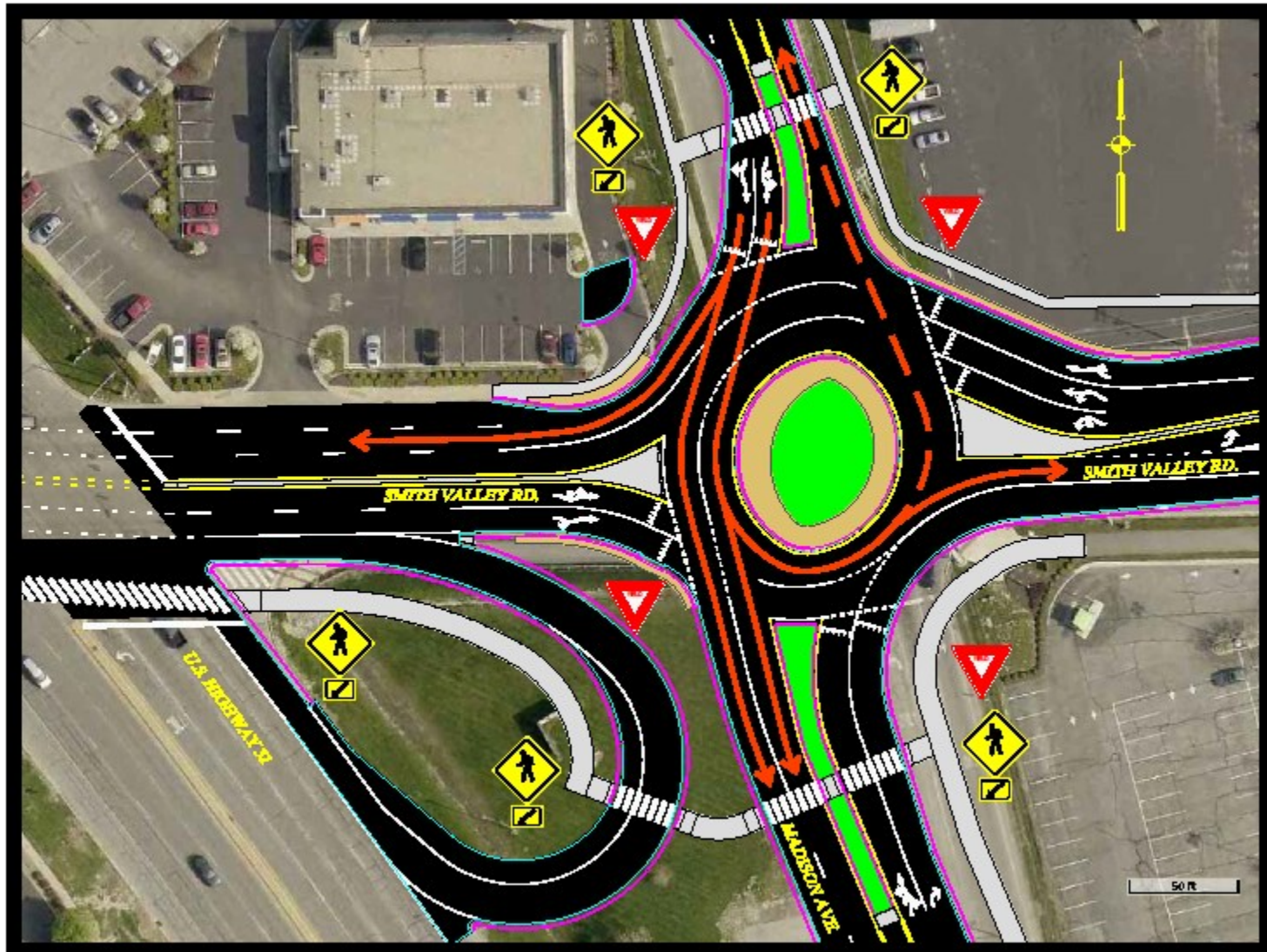


# Turning Patterns – North Bound



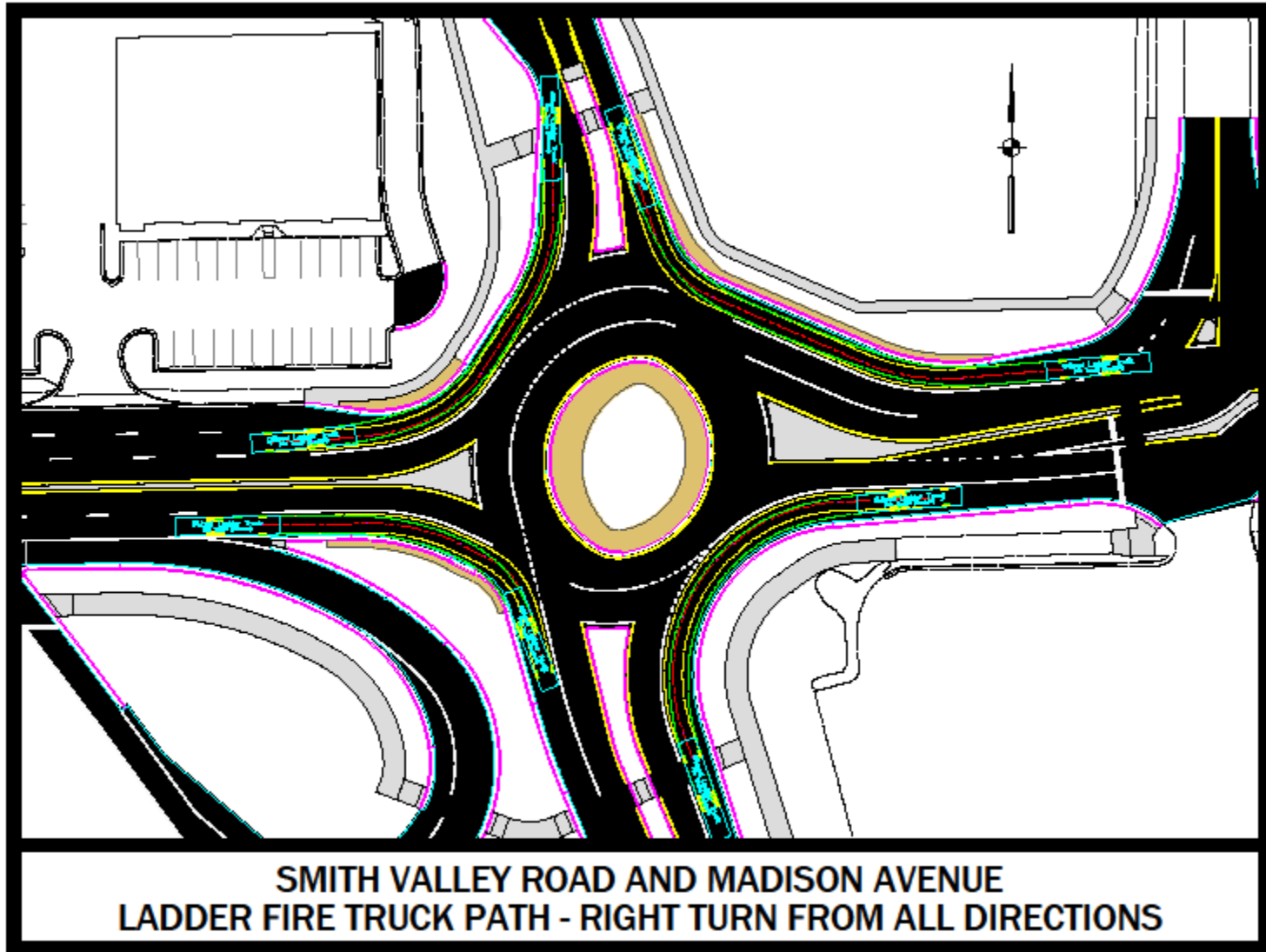


# Turning Patterns – South Bound

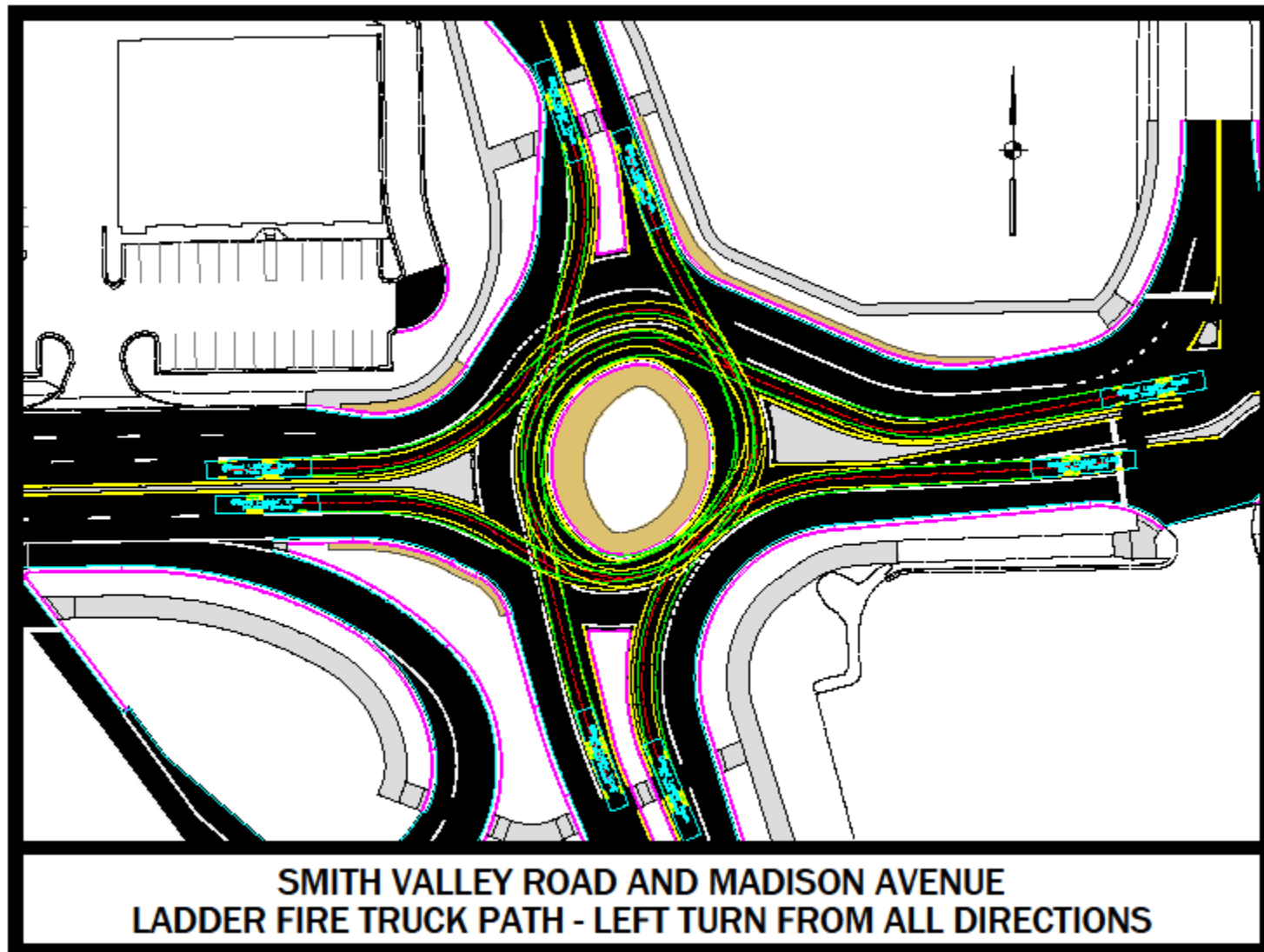




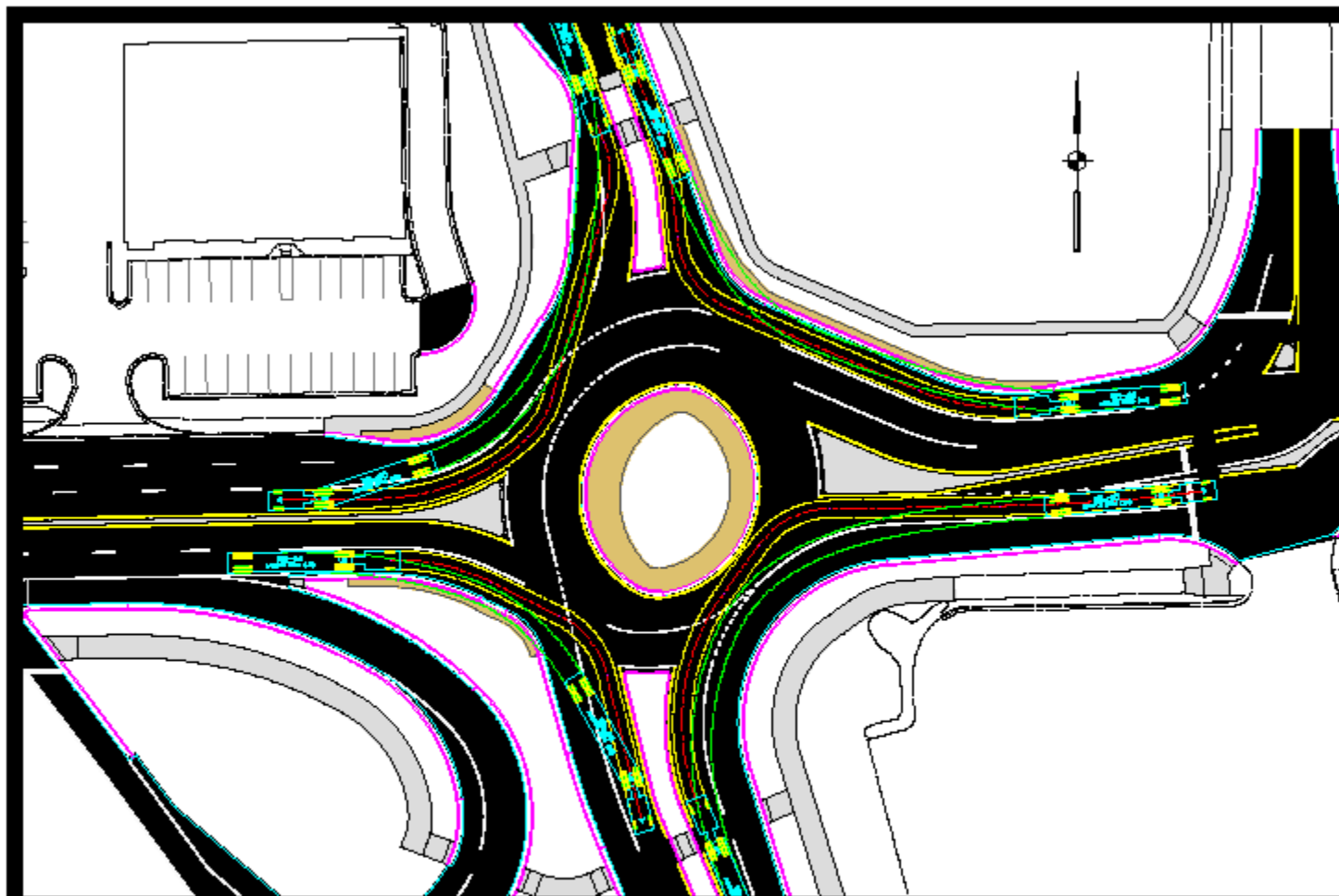
# Greenwood Fire Truck Right Turns



# Greenwood Fire Truck Left Turns



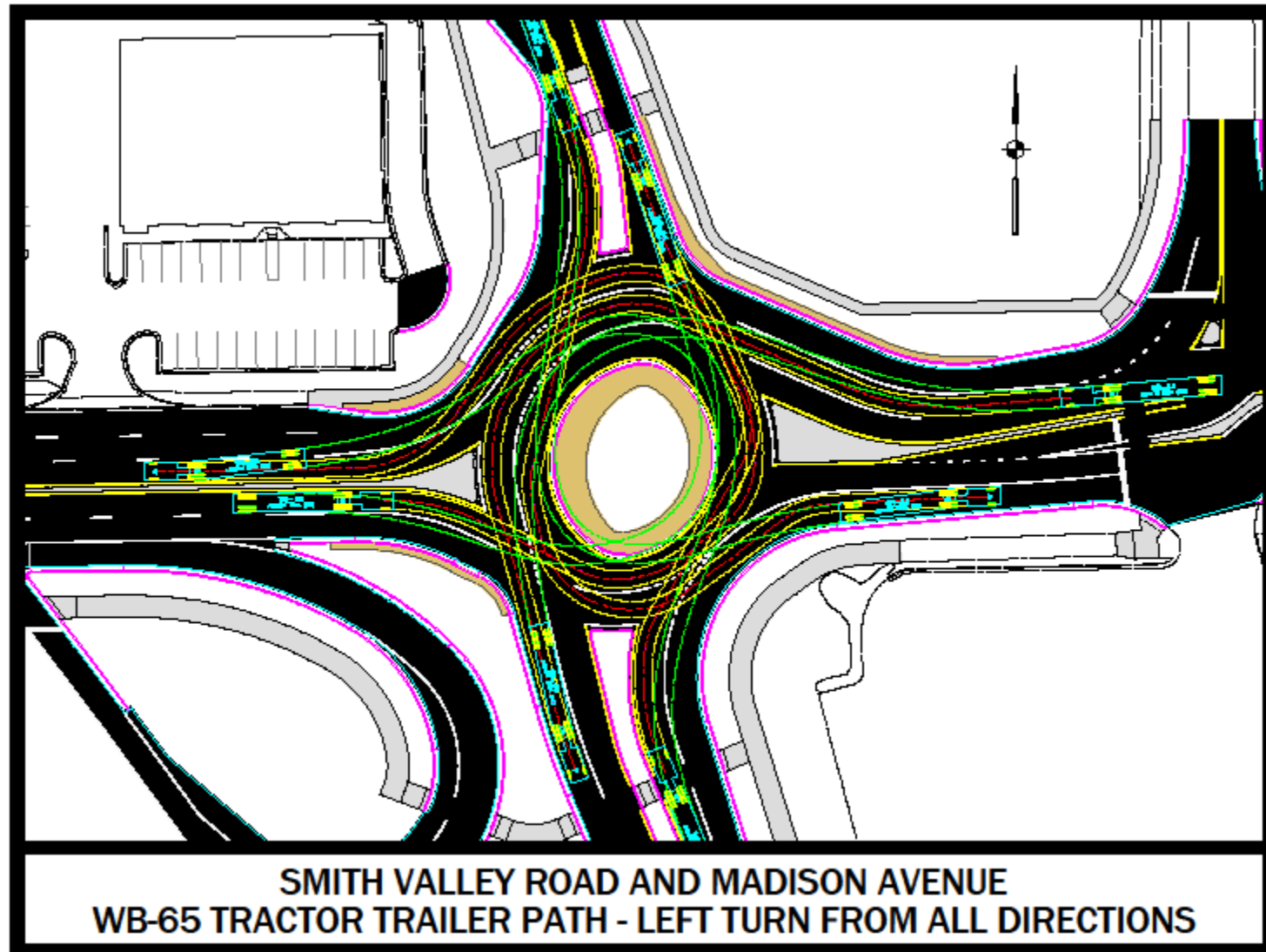
# Large Semi Truck Right Turns



**SMITH VALLEY ROAD AND MADISON AVENUE  
WB-65 TRACTOR TRAILER PATH - RIGHT TURN FROM ALL DIRECTIONS**



# Large Semi Truck Left Turns



# City of Greenwood

## Smith Valley & Madison Project

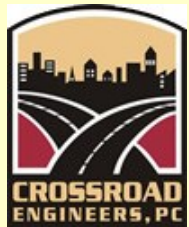
### Project Information & Schedule

- Projected Construction Cost \$2,500,000 with INDOT contributing \$500,000
- 0.6 Acres of Permanent Right of Way needed
- Project to bid in late 2017/early 2018
- Construction in 2018
- Construction in phases with SMV open



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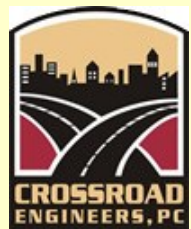
# City of Greenwood

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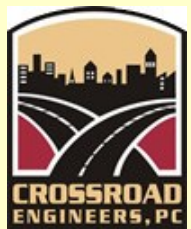
# City of Greenwood Smith Valley & Madison Project

## Public Information to be Continued



Trent Newport, PE, LS

Mark Beck, PE





# City of Greenwood

## Smith Valley & Madison Project

# QUESTIONS?



Trent Newport, PE, LS

Mark Beck, PE



