



Farnsworth
GROUP

PRESENTATION FOR

Fourth at Rickelman Intersection

City of Effingham | December 6, 2022

Why Roundabouts?

- + Safety
- + Reduced vehicle delay and fuel use
- + Requires less overall maintenance
- + Not subject to power outages or malfunctions
- + Reduced need for long left or right turn lanes for stacking of vehicles
- + Postpone or eliminate future intersection upgrades
- + Reduced emissions



Why Roundabouts?

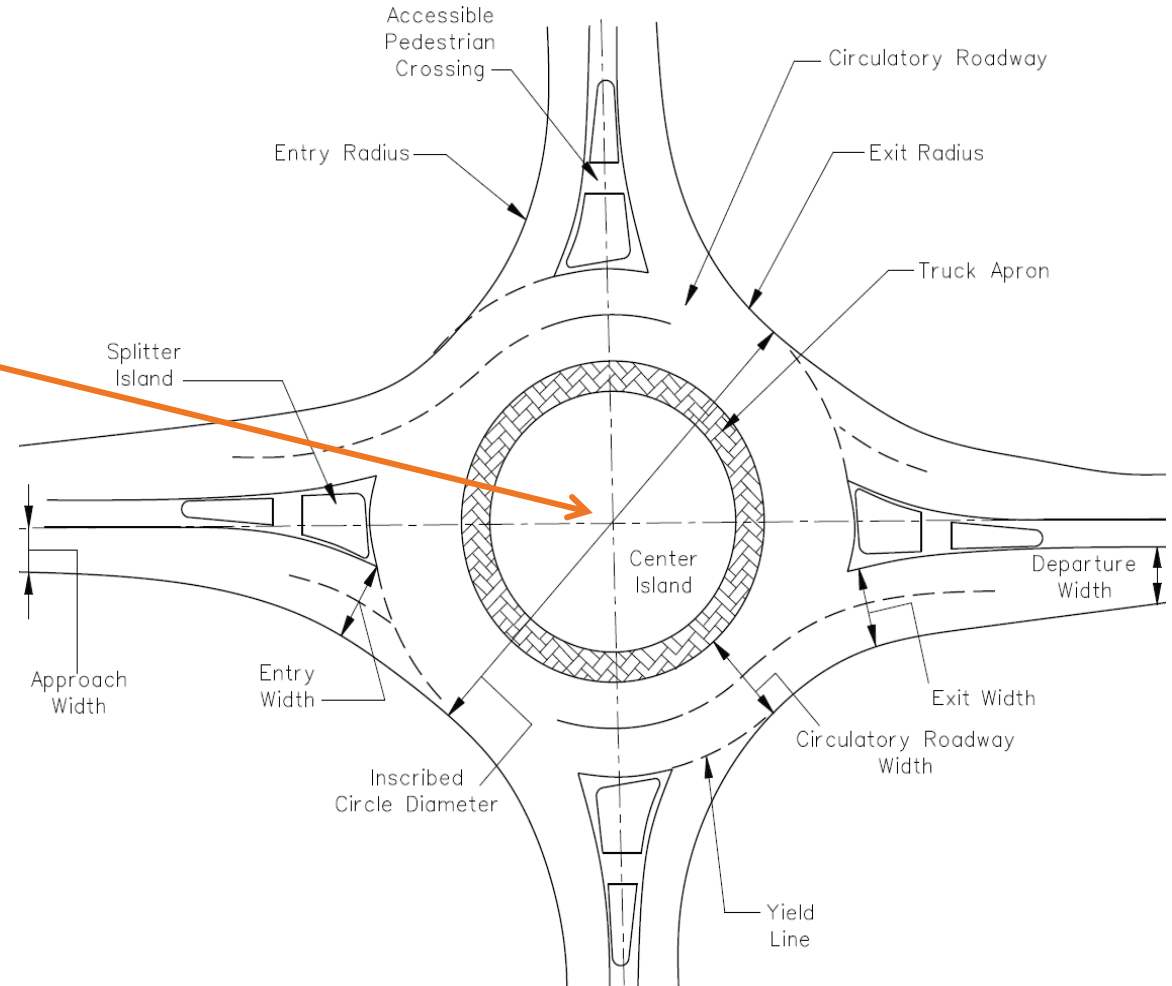


- + Center Islands can be landscaped
- + Can provide attractive area centerpieces or gateways
- + Less overall paved surface (less storm water runoff)

Anatomy of a Roundabout

CENTER ISLAND

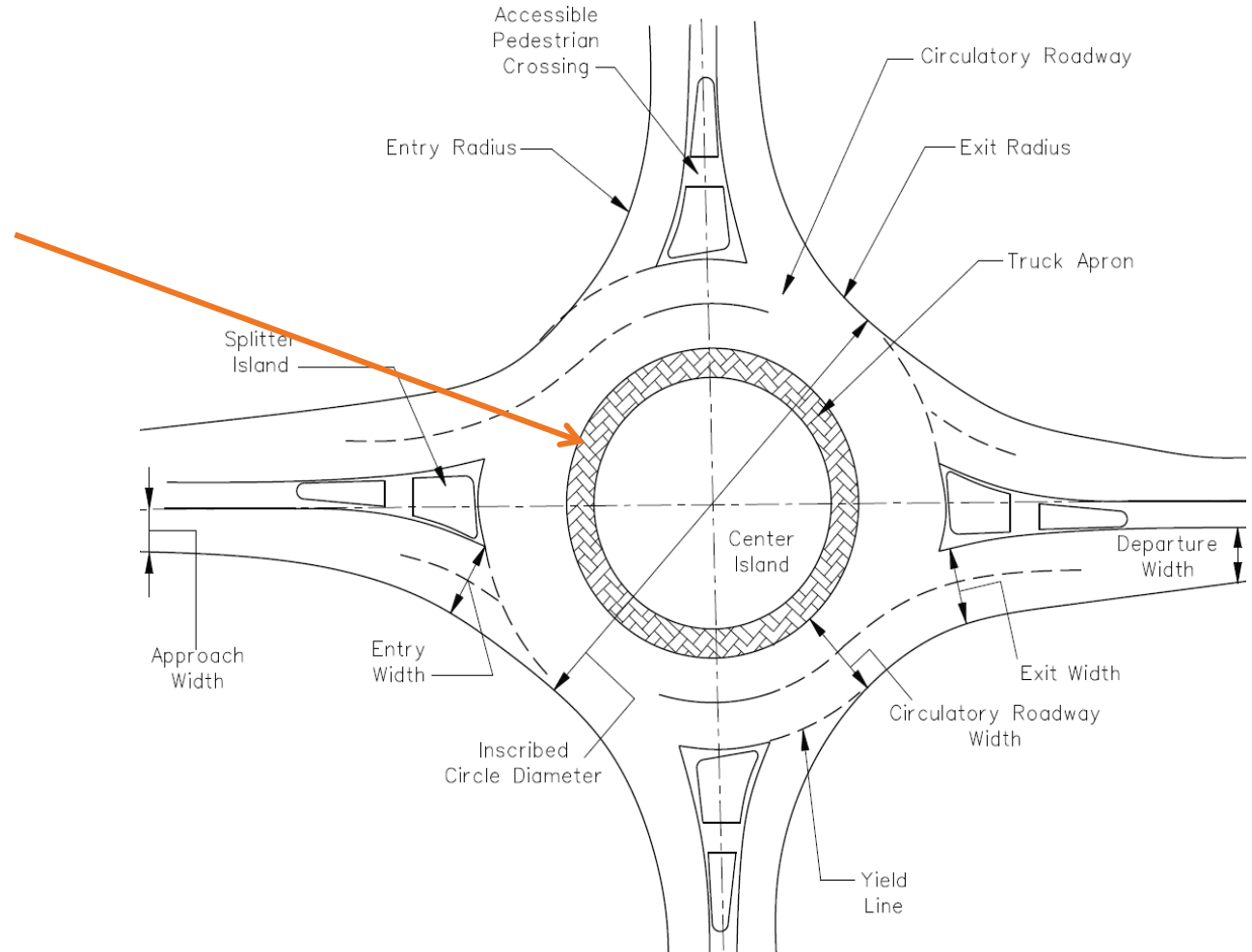
- + Traffic moves in one direction
- + Prevents severe head-on and right-angle crashes



Anatomy of a Roundabout

MOUNTABLE TRUCK APRON

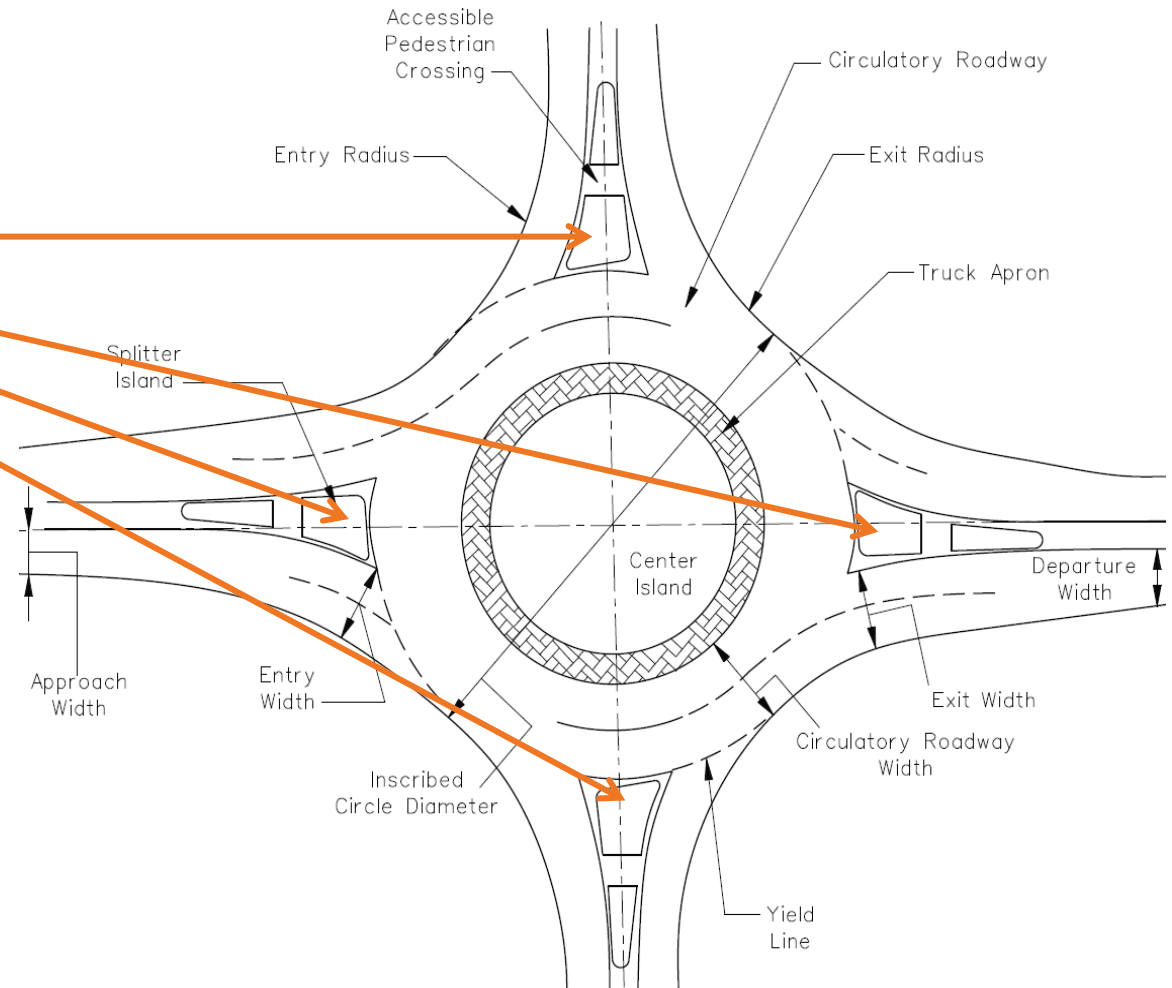
+ Accommodates large vehicles



Anatomy of a Roundabout

SPLITTER ISLANDS

- + Separates entering and exiting vehicles
- + Pedestrian crossing and refuge
- + Slows vehicles
- + Forces vehicles into correct entering angle



Why Roundabouts?

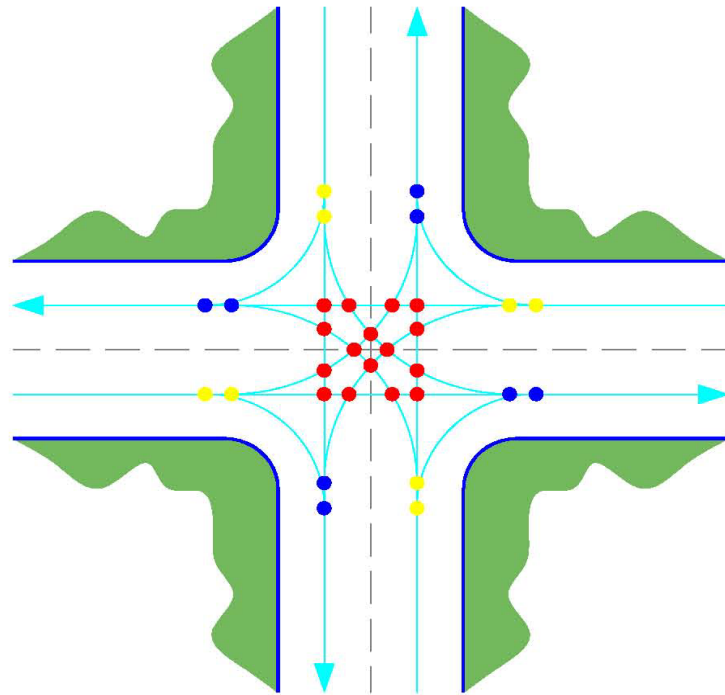
VEHICLE SAFETY

- + Reduced crashes and injuries
 - + 40% decrease in all crashes
 - + 80% decrease in injuries
 - + 90% decrease in fatalities



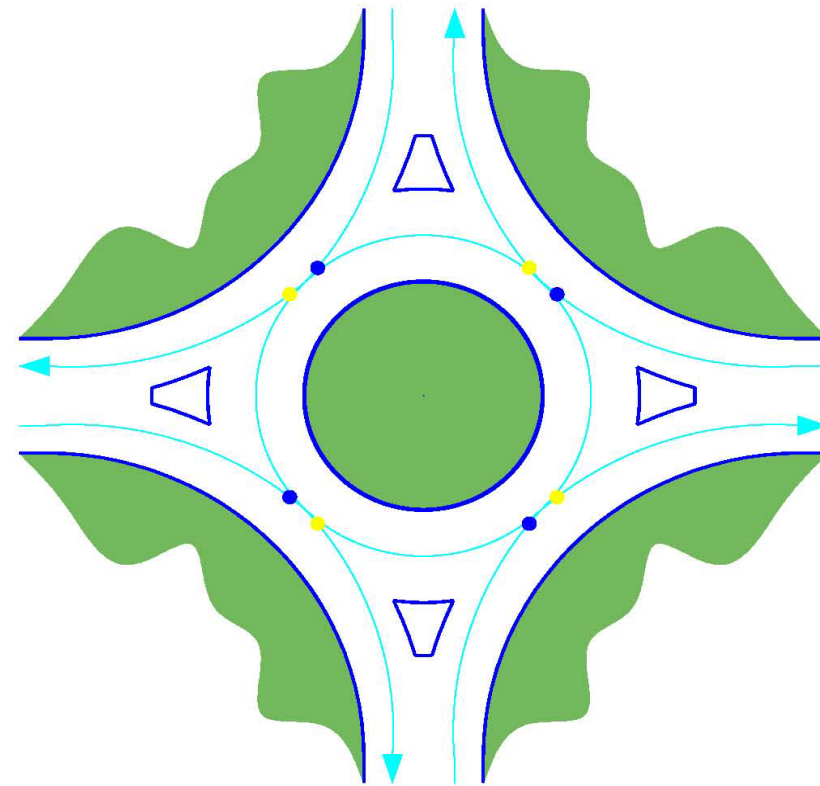
Why Roundabouts?

VEHICLE CONFLICT POINTS



32 CONFLICT POINTS

● DIVERGING ● MERGING ● CROSSING



8 CONFLICT POINTS

● DIVERGING ● MERGING ● CROSSING

Why Roundabouts?

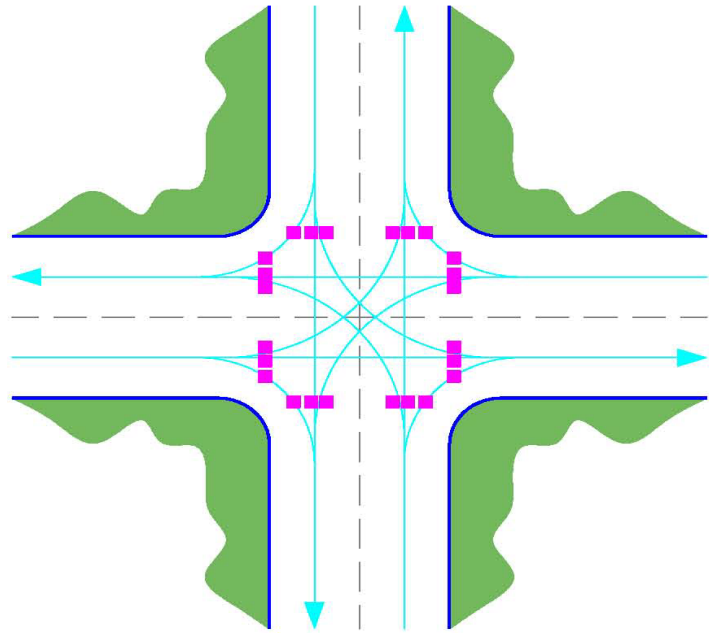
PEDESTRIAN SAFETY

- + Splitter islands provide refuge
- + Pedestrians only look in one direction
- + Crossing distance is shorter
- + Splitter islands slow down vehicles

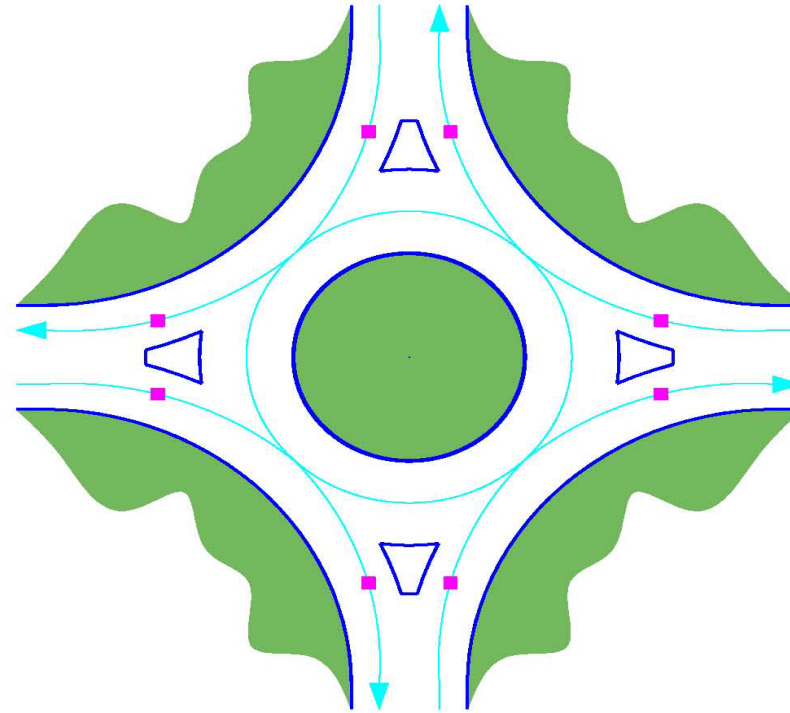


Why Roundabouts?

PEDESTRIAN CONFLICT POINTS

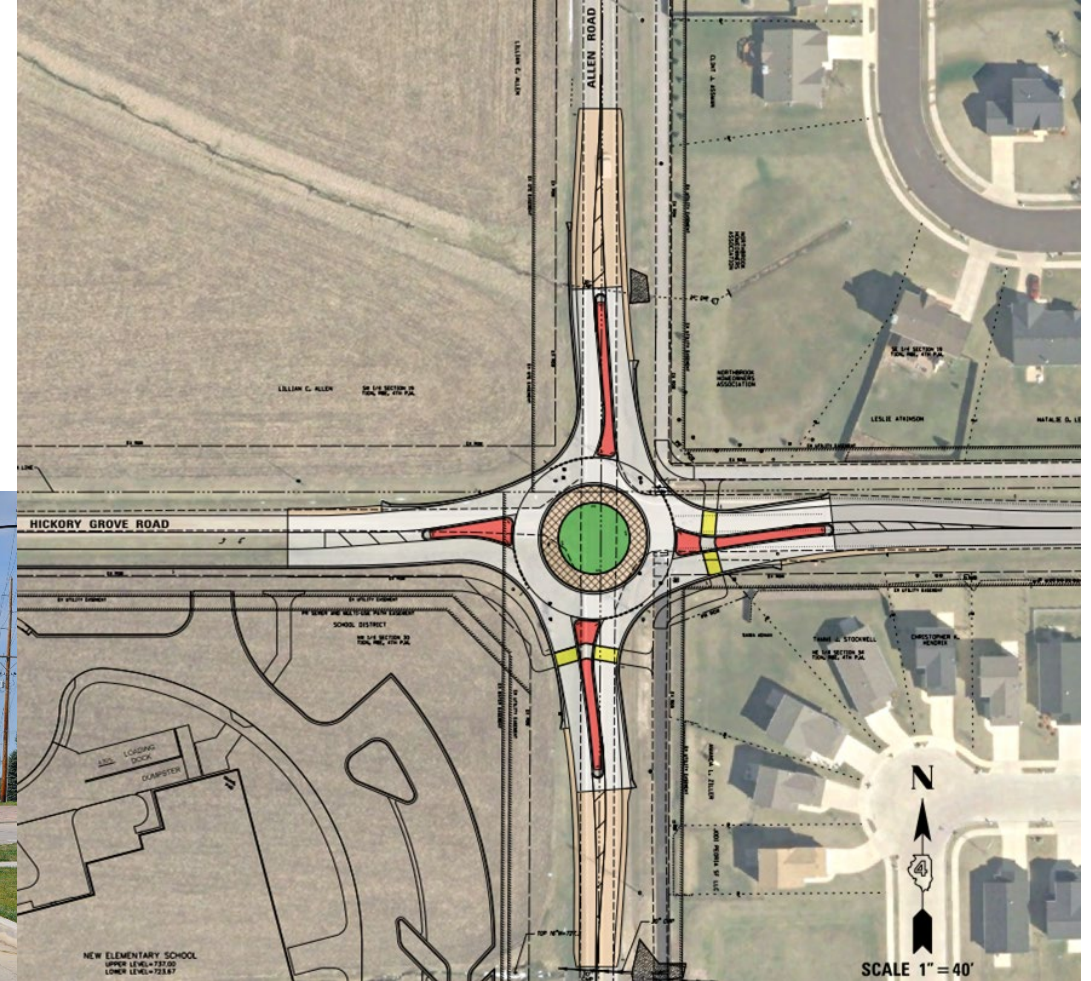


■ PEDESTRIAN
24 VEHICLE / PEDESTRIAN
CONFLICT POINTS

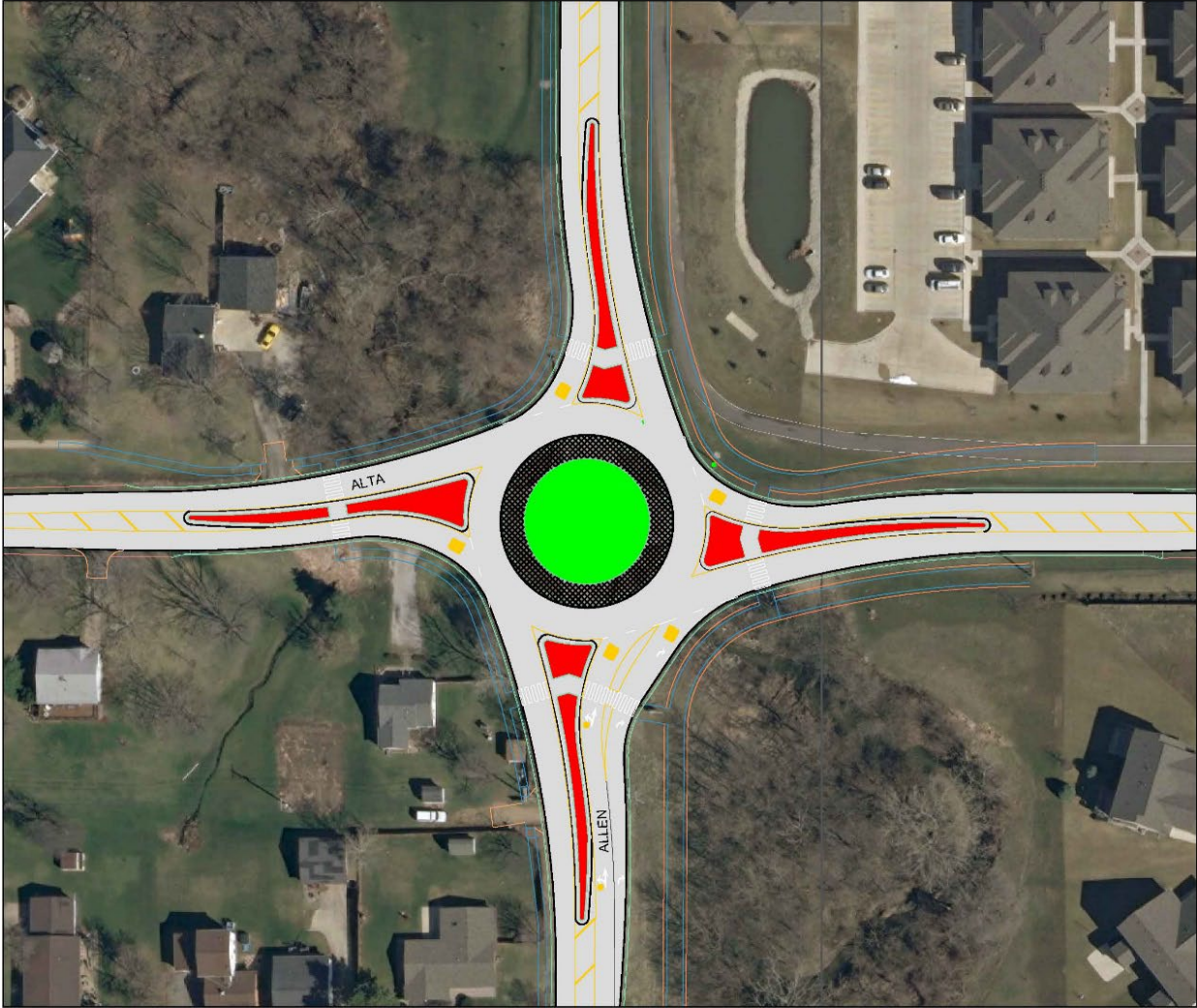


■ PEDESTRIAN
8 VEHICLE / PEDESTRIAN
CONFLICT POINTS

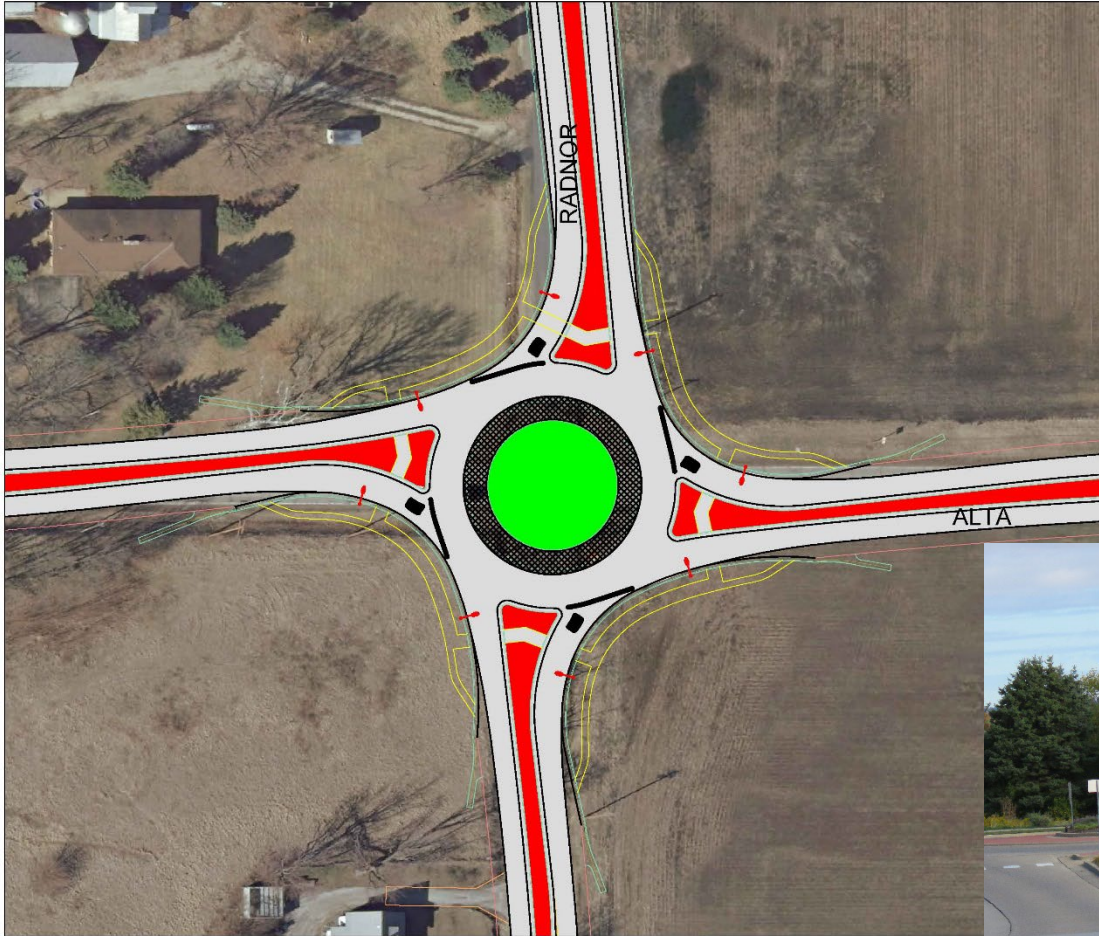
Peoria Roundabouts | Allen Road and Hickory Grove



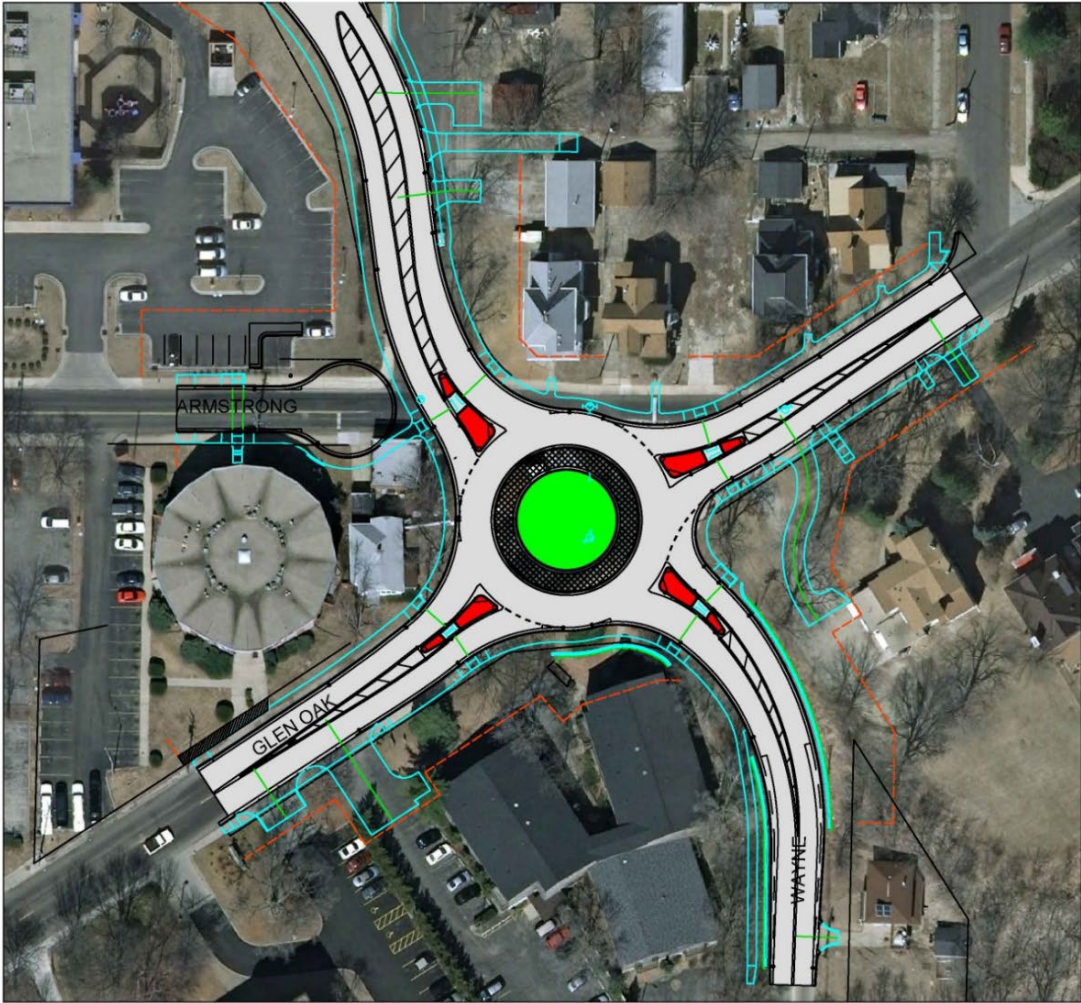
Peoria Roundabouts | Allen Road and Alta Lane



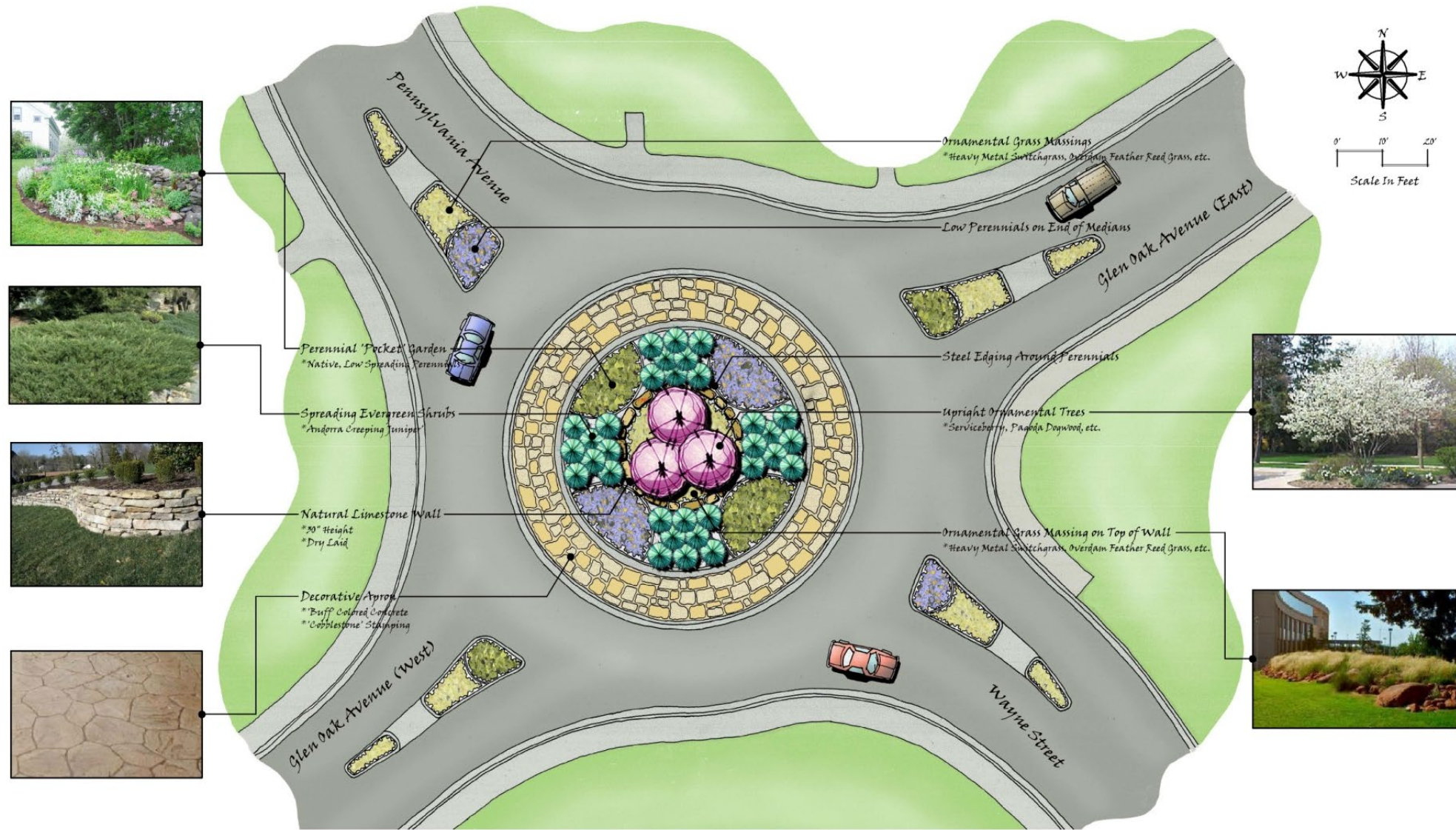
Peoria Roundabouts | Alta and Radnor Road Roundabout



Peoria Roundabouts | Pennsylvania Avenue and Wayne



Peoria Roundabouts | Pennsylvania Avenue and Wayne



Peoria Roundabouts | Washington Street and Harrison Street



Benefits of a Roundabout

- + Vehicle and pedestrian safety
- + Reduced delay and fuel use
- + Less overall maintenance





Farnsworth
GROUP

