

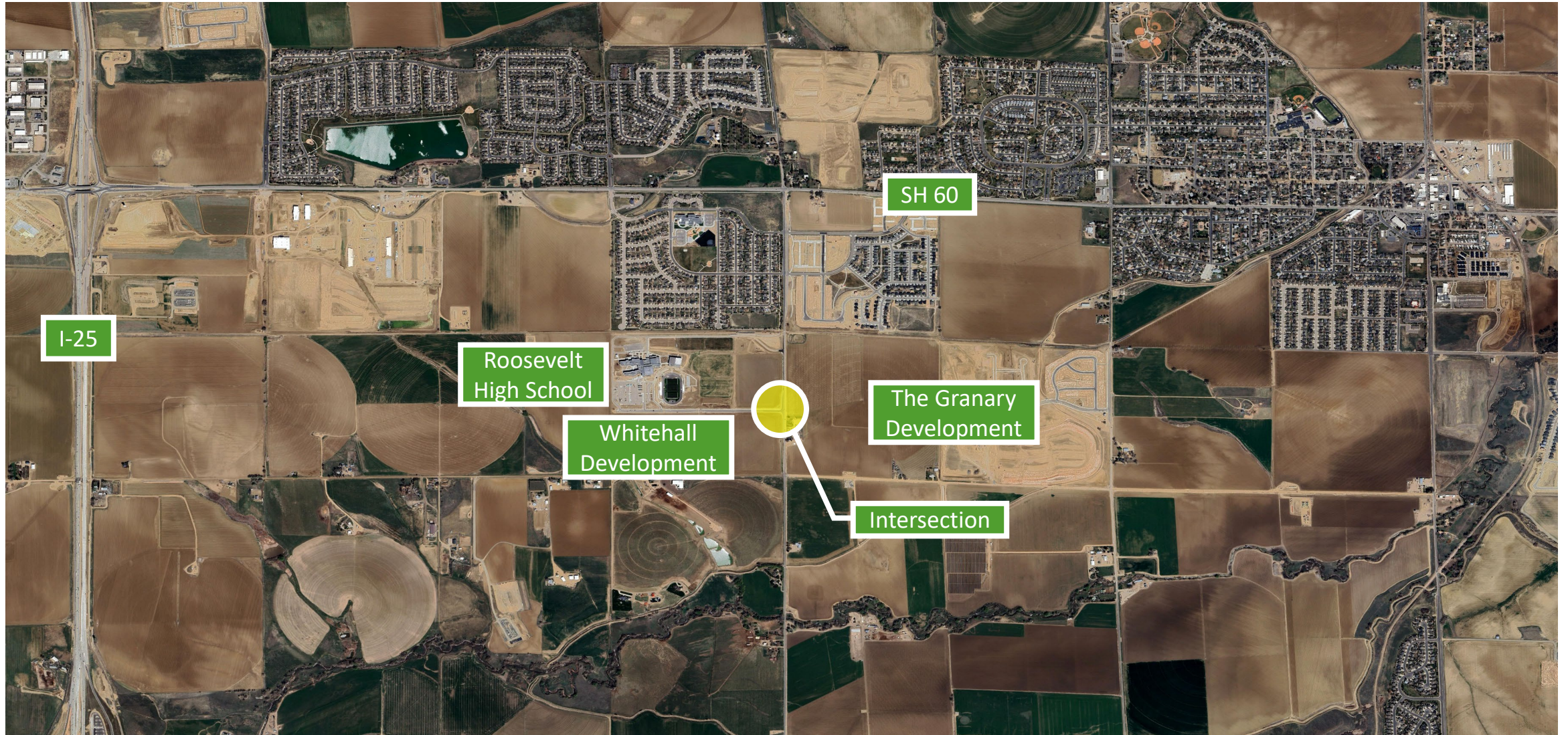
Colorado Blvd & Roosevelt Pkwy

Intersection Alternative Study

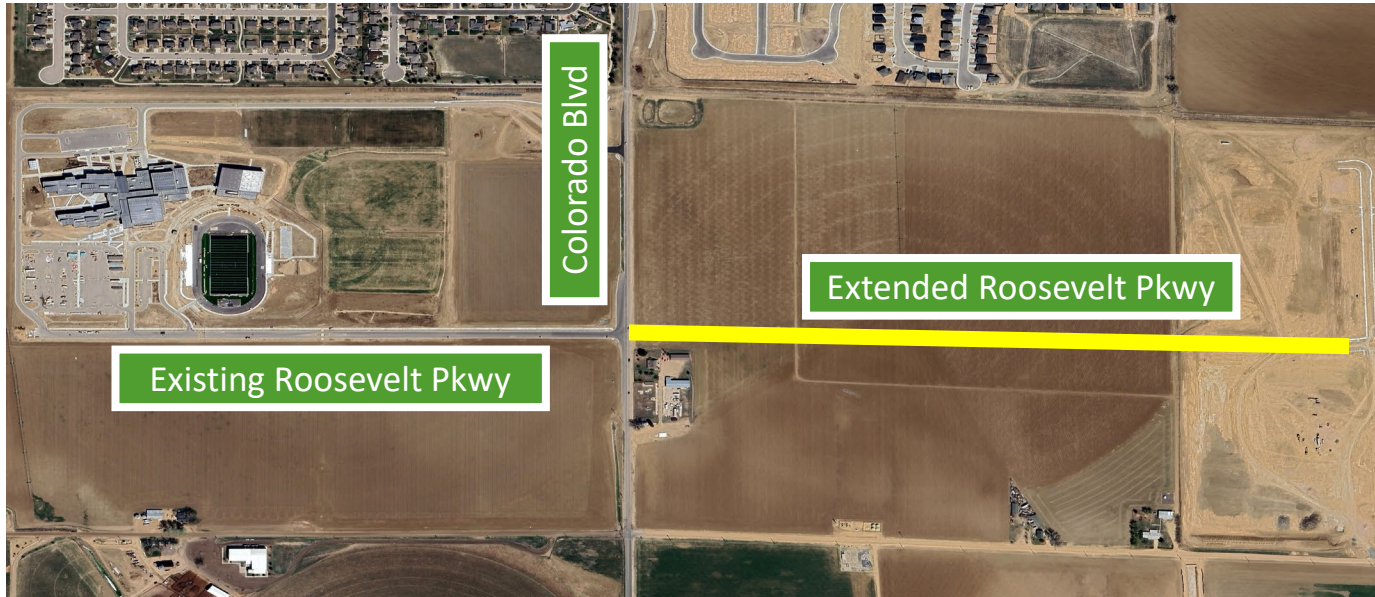


Johnstown
Colorado

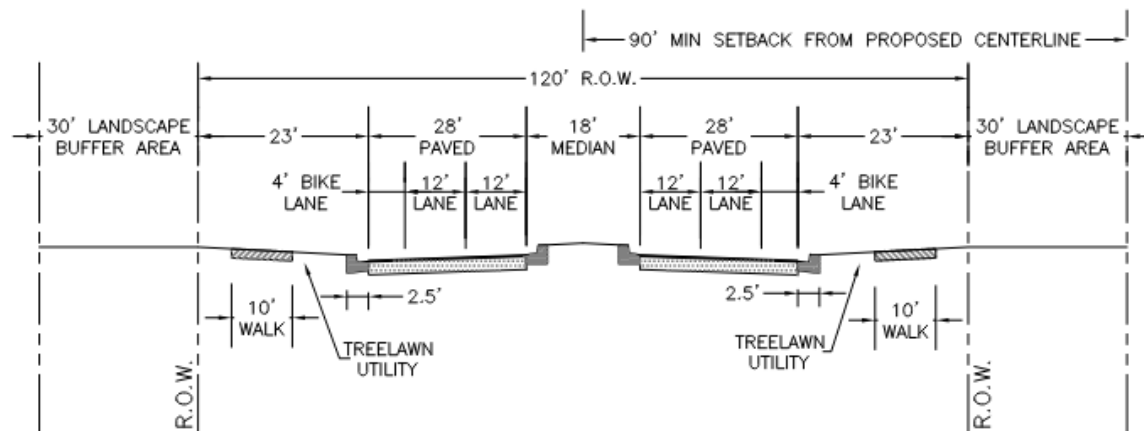
Study Location



Why Are Improvements Needed?

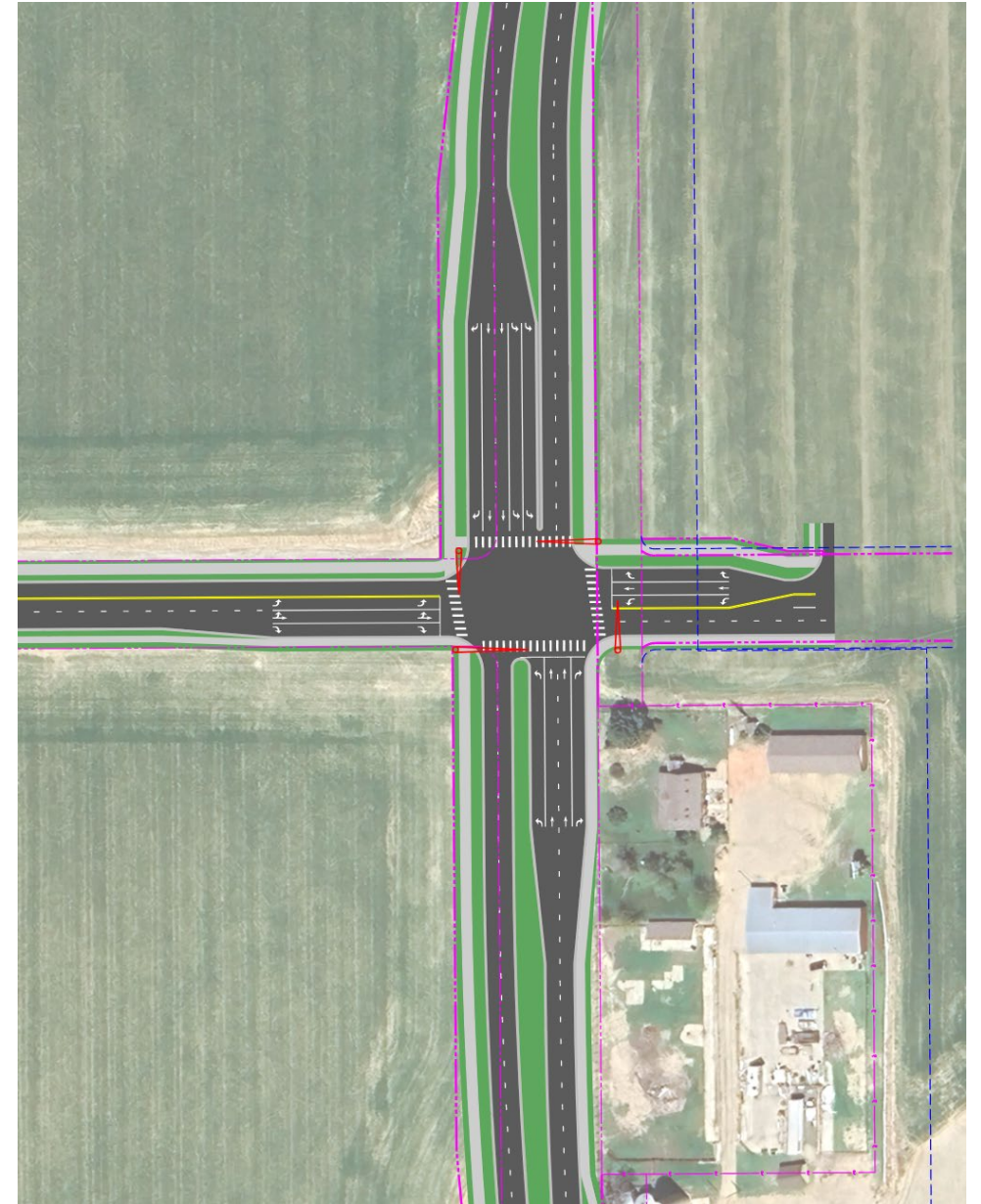


- Side street stop controlled
- Roosevelt High School
 - Currently 1,000 students
 - Capacity 1,300 students
- The Granary Development
 - 2800 Housing Units
 - Roosevelt Pkwy expanded east
- Whitehall Development
 - 750 Housing Units
 - Retail and office
- Colorado Blvd (WCR 13)
 - Ultimate 4 lane cross section



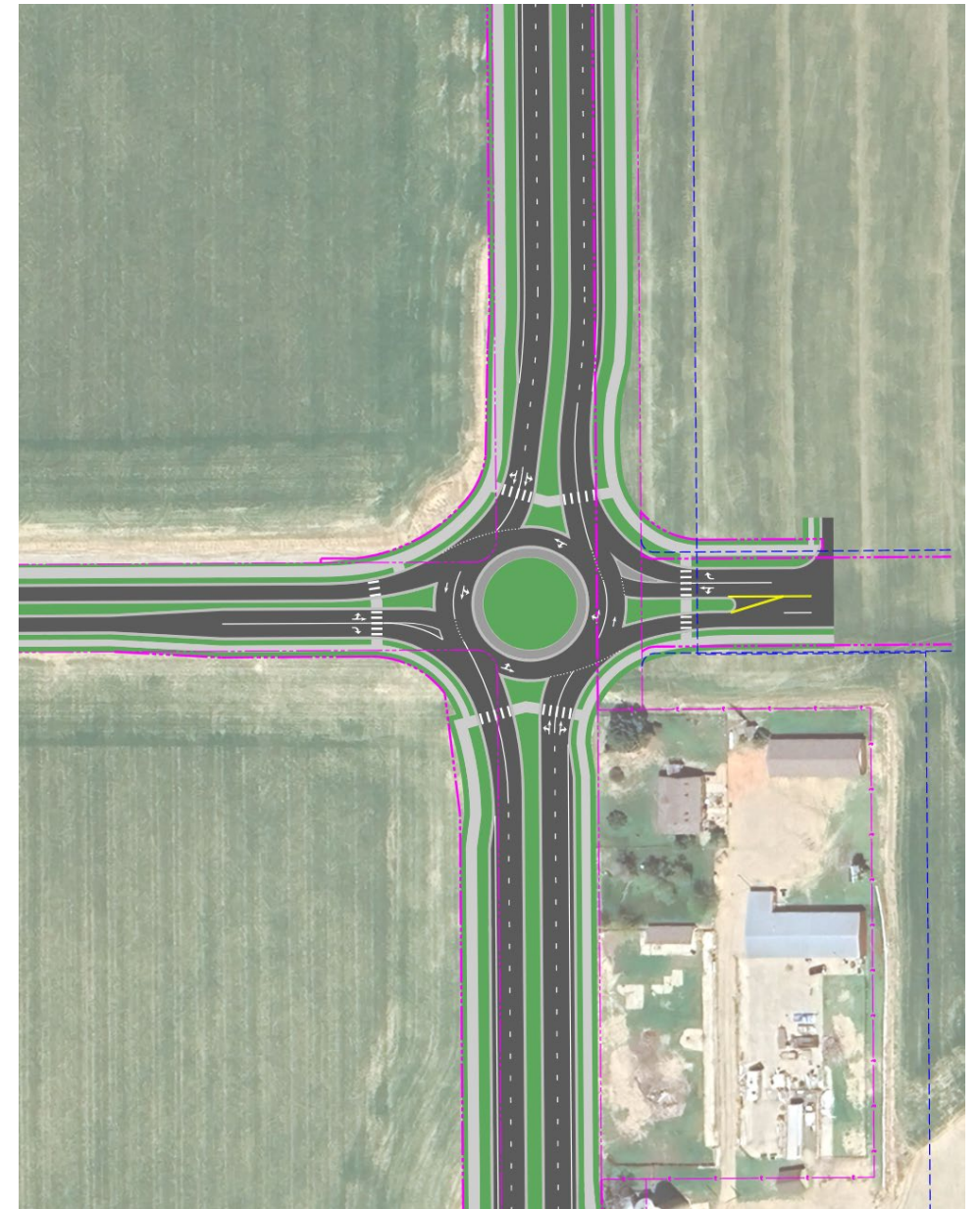
Traditional Signal

- Familiar to drivers
- Lanes can be added, and signals retimed as traffic volumes increase
- Requires dual left turns for southbound and eastbound directions
- Wide cross sections at intersection, requiring more right-of-way
- Overall Level of Service C with some turning movements at Level of Service D



2 Lane Roundabout

- Smaller footprint with less right-of-way acquisition
- Safer for pedestrians
- Can be phased to build a single lane and add a second circulating lane once traffic volumes require it
- Similar construction costs for ultimate configuration (more expensive for interim)
- Overall Level of Service B including all turning movements



Alternative Operations

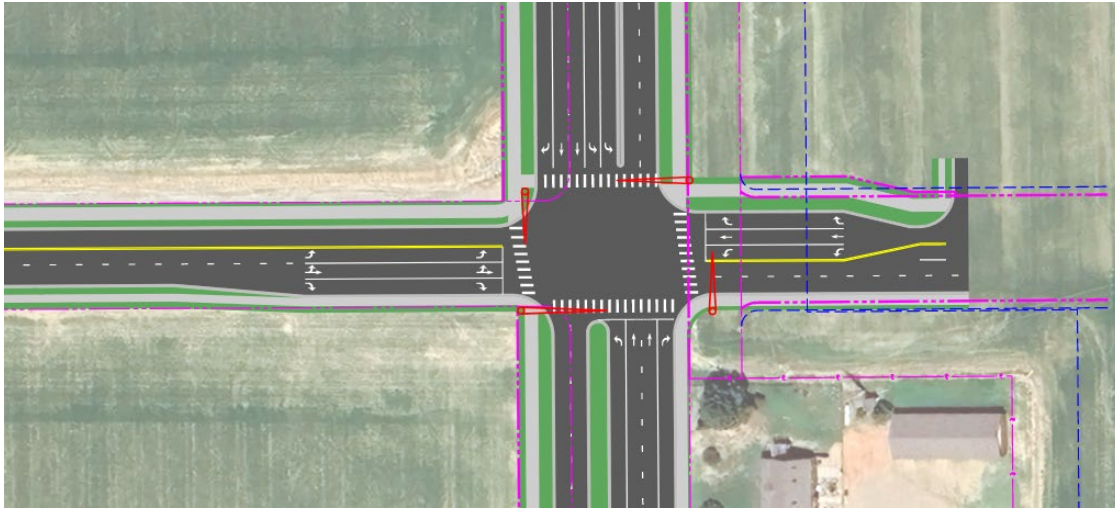


LOS	Average Delay (s/veh)	
	Signalized	Unsignalized
A	≤10	≤10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50



Scenario	Overall		Eastbound		Westbound		Northbound		Southbound	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing 2023	B	B	C	E	N/A	N/A	A	A	A	A
Signal 2045	C	B	B	B	C	B	C	B	D	B
2-Lane Roundabout 2045	B	B	B	A	B	B	A	B	B	B

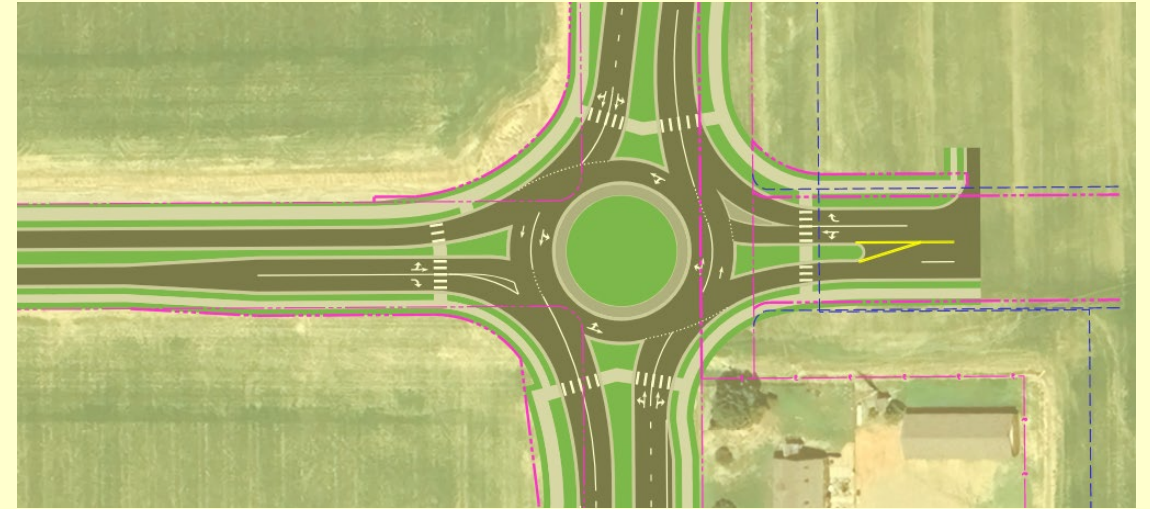
Alternative Comparison



Traditional Signal

- Familiar to drivers
- Simpler construction and phasing
- More lanes (including dual left turn lanes)
- Higher maintenance costs
- Requires more right-of-way

RECOMMENDED ALTERNATIVE



2 Lane Roundabout

- Better traffic operations
- Safer for pedestrians
- Lower maintenance costs
- Requires less right-of-way
- Unfamiliar to drivers

Questions?

