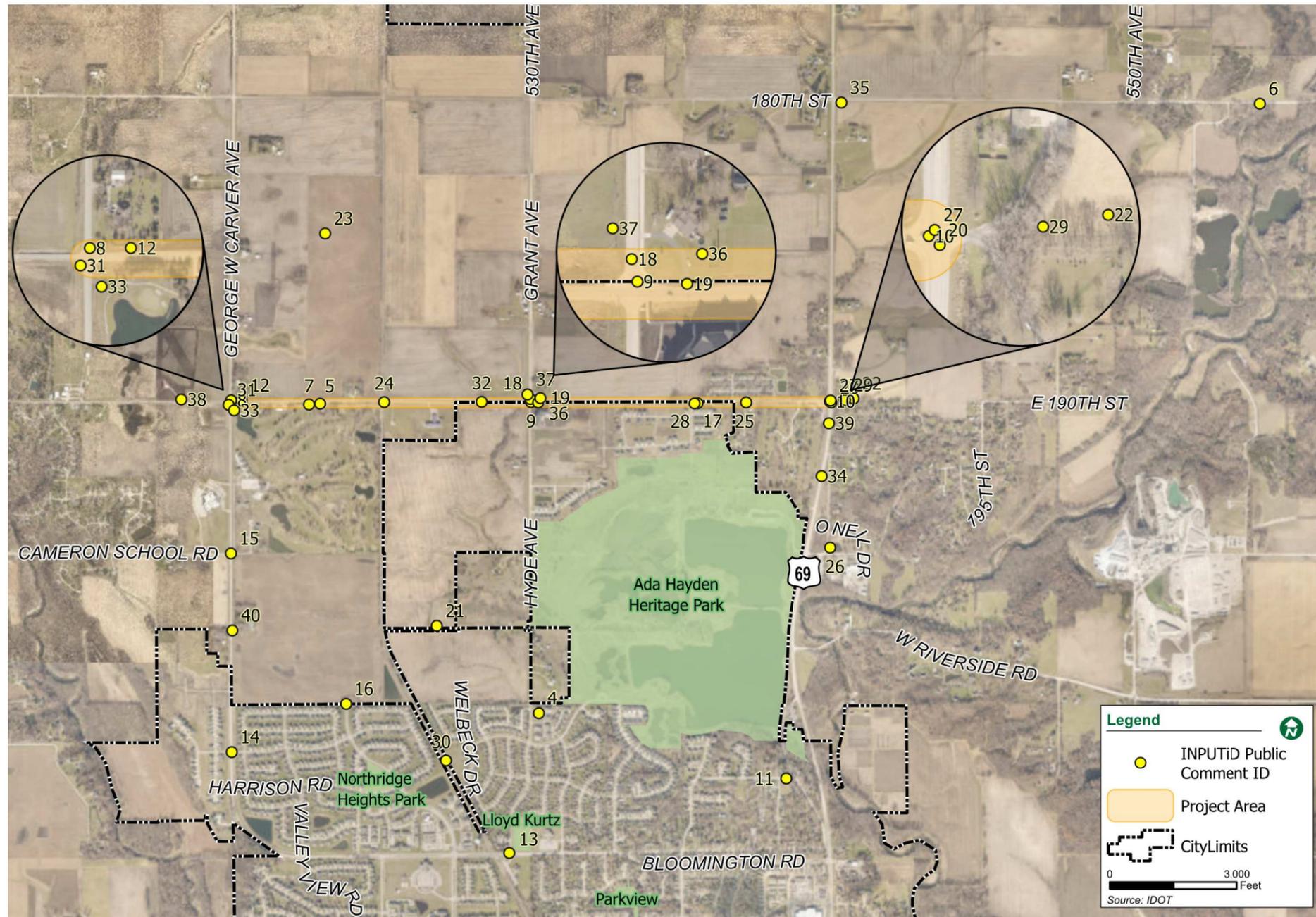


190th Street Corridor Study

190th Street



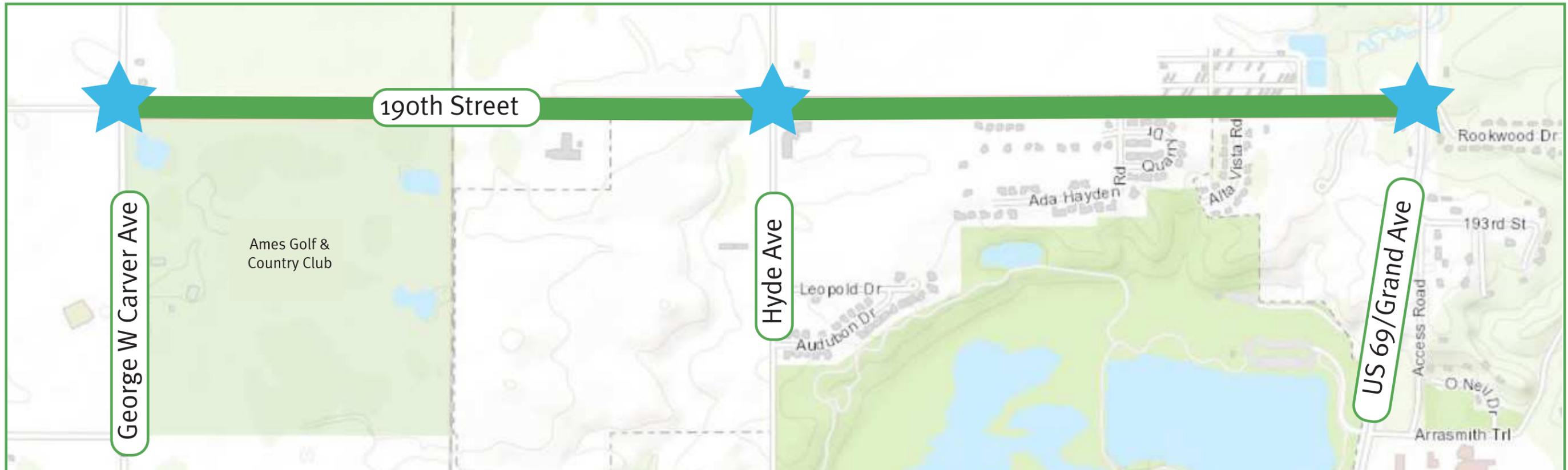
INPUT RECEIVED

- Functional classification of the corridor – area-wide arterial vs. neighborhood street
- Supporting road network in the area
- Improved connectivity to Interstate 35
- Safety and lighting along the corridor – speeding, parked cars, visibility, and turning traffic
- Bicycle and pedestrian needs and connectivity to area amenities – south side of corridor and north-south on Hyde Avenue
- North-south connectivity via Hyde Avenue and/or Stange Road or other corridors – increased vs. decreased
- Overall road condition/maintenance
- George Washington Carver Avenue intersection traffic control and safety – roundabout vs. signal
- US Highway 69 intersection traffic control and safety – roundabout vs. signal
- Feasibility of 180th Street as alternative connection
- Hyde Avenue intersection safety – pedestrians and turning traffic
- Future land use and expansion to north



190th Street Corridor Study

190th Street



EXISTING CORRIDOR CONDITIONS

- 2 miles from GW Carver Avenue on west end to US Highway 69 on east end
- Three major study intersections – GW Carver Avenue + Grant Avenue/Hyde Avenue + US Highway 69/Grand Avenue
- Minor collector with AADT of 2,000 to 3,120 + rural 2-lane with posted speeds of 35 to 55 mph
- Limited pedestrian or bike facilities
- No turn lanes at any of the intersections
- Intersection at Hyde Avenue had a crash rate above the statewide average before the temp signal. Operational issues perceived during AM and PM peaks, especially left turns
- Railroad tracks intersect between GW Carver Ave. and Grant Ave./Hyde Ave.
- Land uses – primarily residential and undeveloped agricultural
- Most traffic is local + speeding issues
- Future land use and expansion to north is under discussion
- Study is looking at roadway needs for existing and future land use



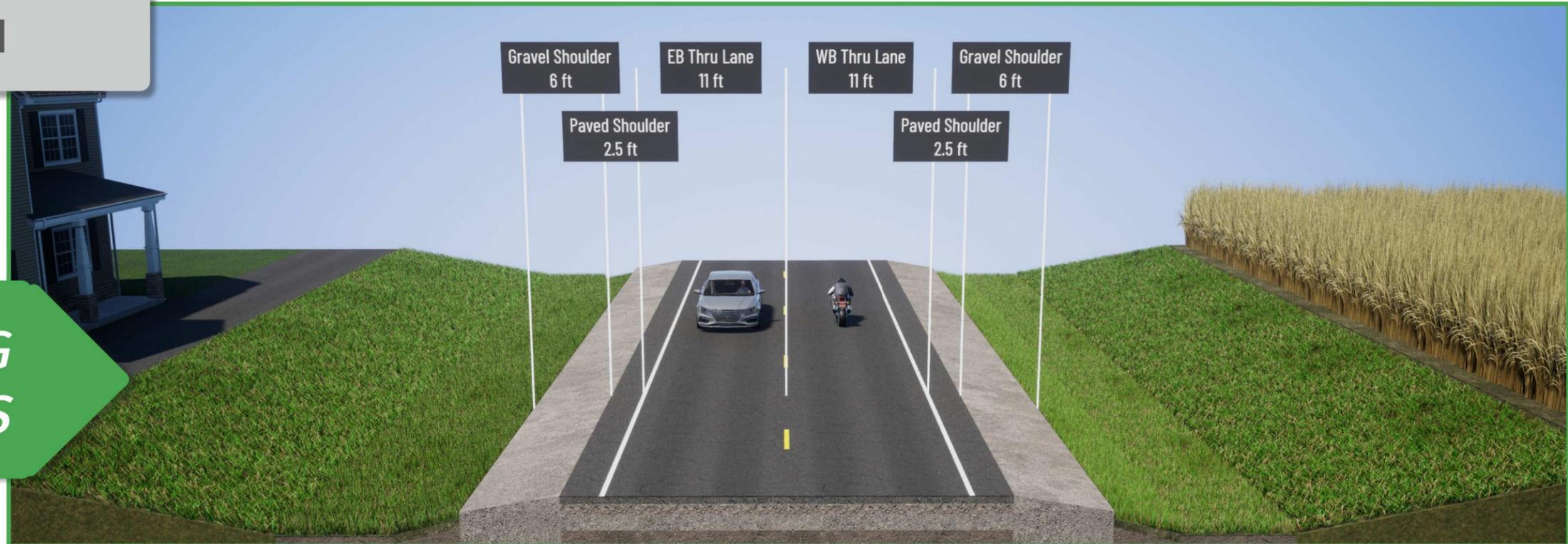
190th Street Corridor Study



190TH STREET CROSS SECTION

EXISTING CONDITIONS

2,000 to 3,120 vehicles per day



PROPOSED CHANGES

9,000 vehicles per day
estimated by 2045



190th Street Corridor Study

190th Street

190TH / GEORGE WASHINGTON
CARVER INTERSECTION

Jurisdictions involved: Story County

SIGNAL

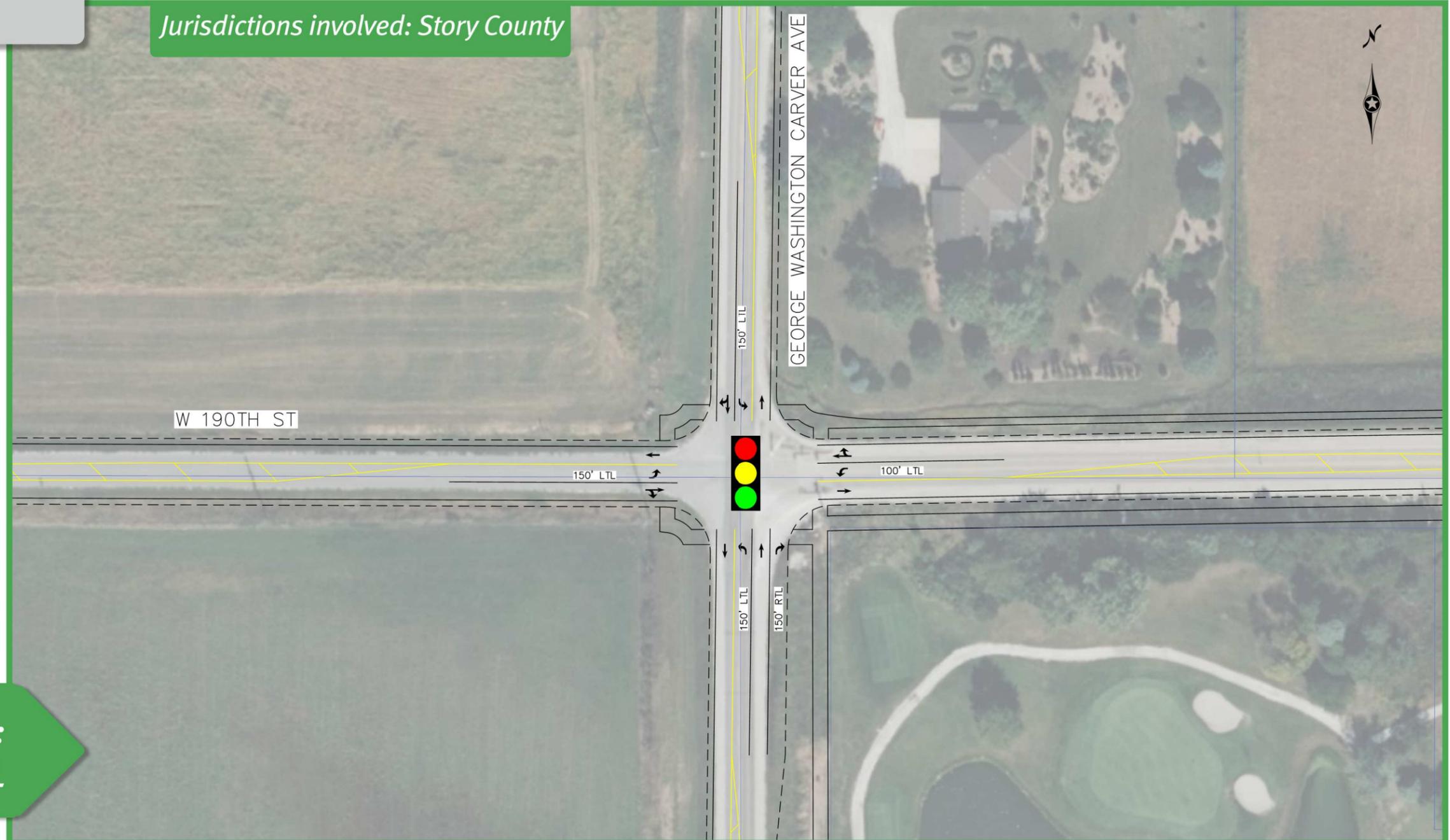
PROS:

- Improves delay at higher volume intersections.
- Provides Clear Right-of-Way for each movement, including protected pedestrian crossings.
- Potential Lower Impacts to Adjacent Properties.
- Can leverage modern adaptive signal technology.

CONS:

- Less efficient in low to moderate low traffic volumes.
- Pedestrians have a longer single crossing distance.
- Limited ability to manage vehicle speed.

OPTION #1:
SIGNAL



190th Street Corridor Study

190th Street

190TH / GEORGE WASHINGTON
CARVER INTERSECTION

Jurisdictions involved: Story County

ROUNDAABOUT

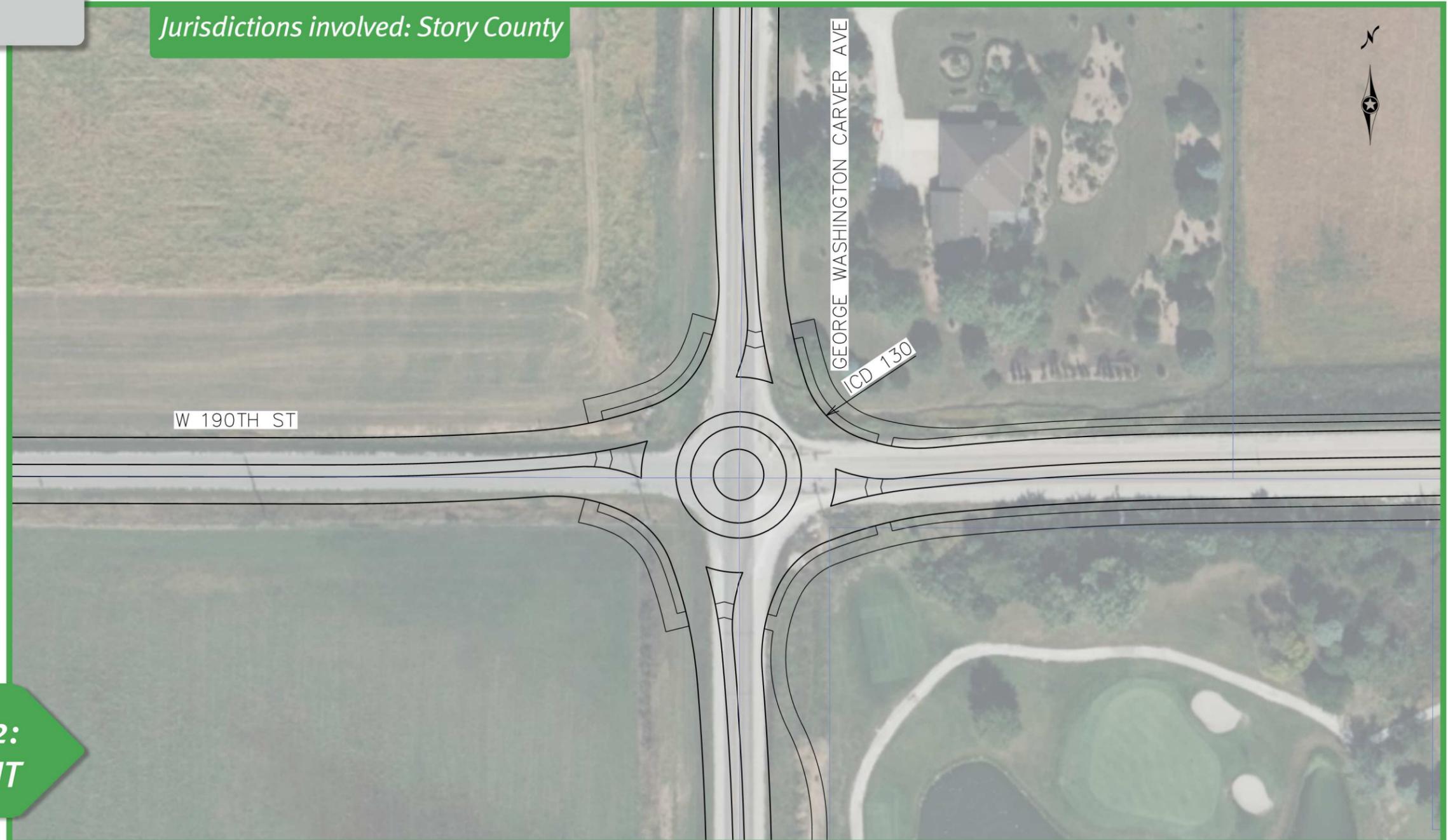
PROS:

- Intersection experiences significant reduction in crash severity.
- Design promotes consistently lower traffic speeds.
- Simplifies pedestrian crossings into 2 shorter crossings.
- Potential Energy Savings due to lack of signals.

CONS:

- Increased Construction Cost and impact to adjacent properties.
- May have difficulty managing unbalanced traffic flows.
- Does not allow for active corridor management for synchronization.

**OPTION #2:
ROUNDAABOUT**



190th Street Corridor Study

190th Street

190TH /HYDE /GRANT INTERSECTION

SIGNAL

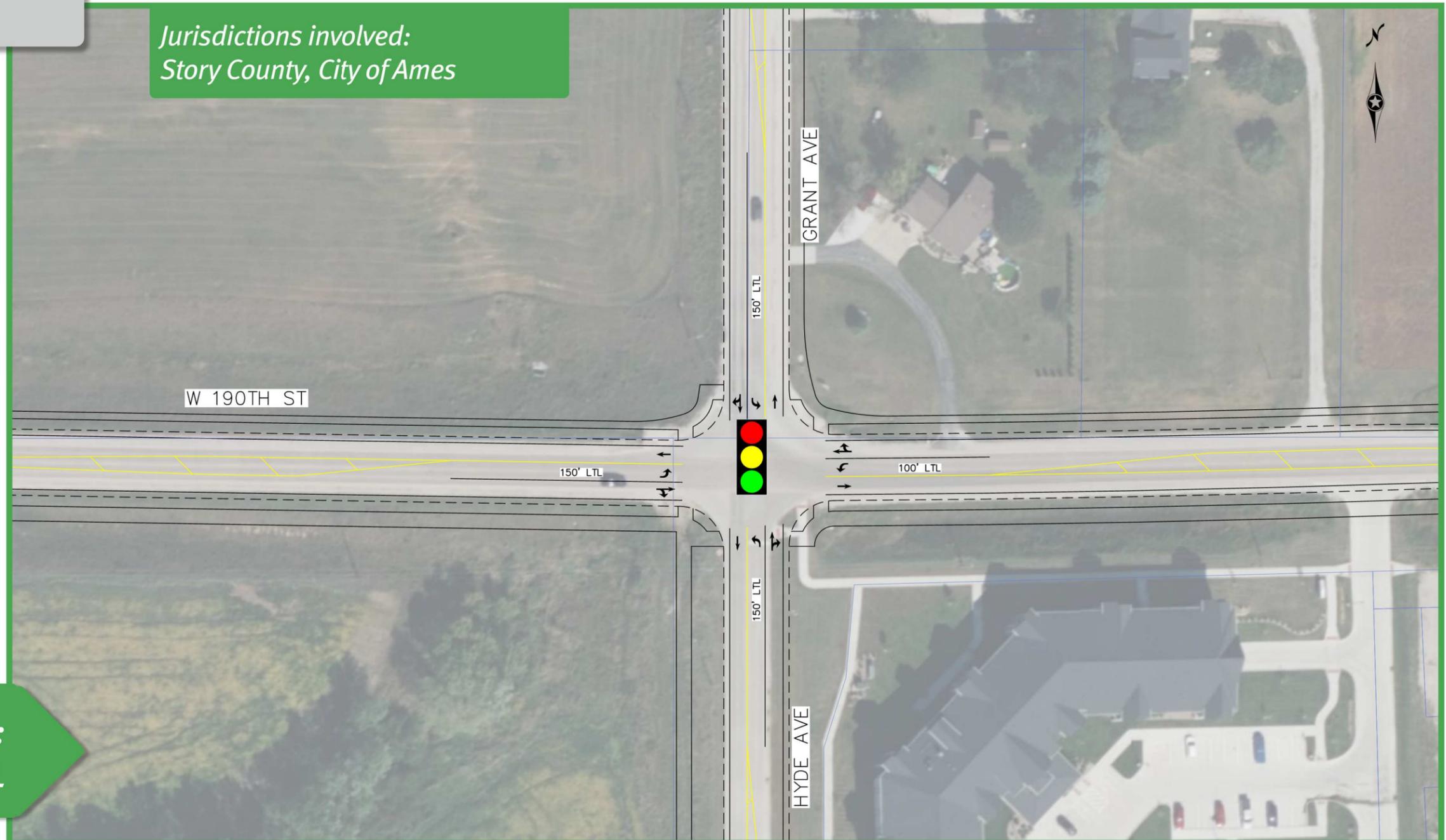
PROS:

- Improves delay at higher volume intersections.
- Provides Clear Right-of-Way for each movement, including protected pedestrian crossings.
- Potential Lower Impacts to Adjacent Properties.
- Can leverage modern adaptive signal technology.

CONS:

- Less efficient in low to moderate low traffic volumes.
- Pedestrians have a longer single crossing distance.
- Limited ability to manage vehicle speed.

Jurisdictions involved:
Story County, City of Ames



OPTION #1:
SIGNAL



190th Street Corridor Study

190th Street

190TH /HYDE /GRANT INTERSECTION

ROUNDAABOUT

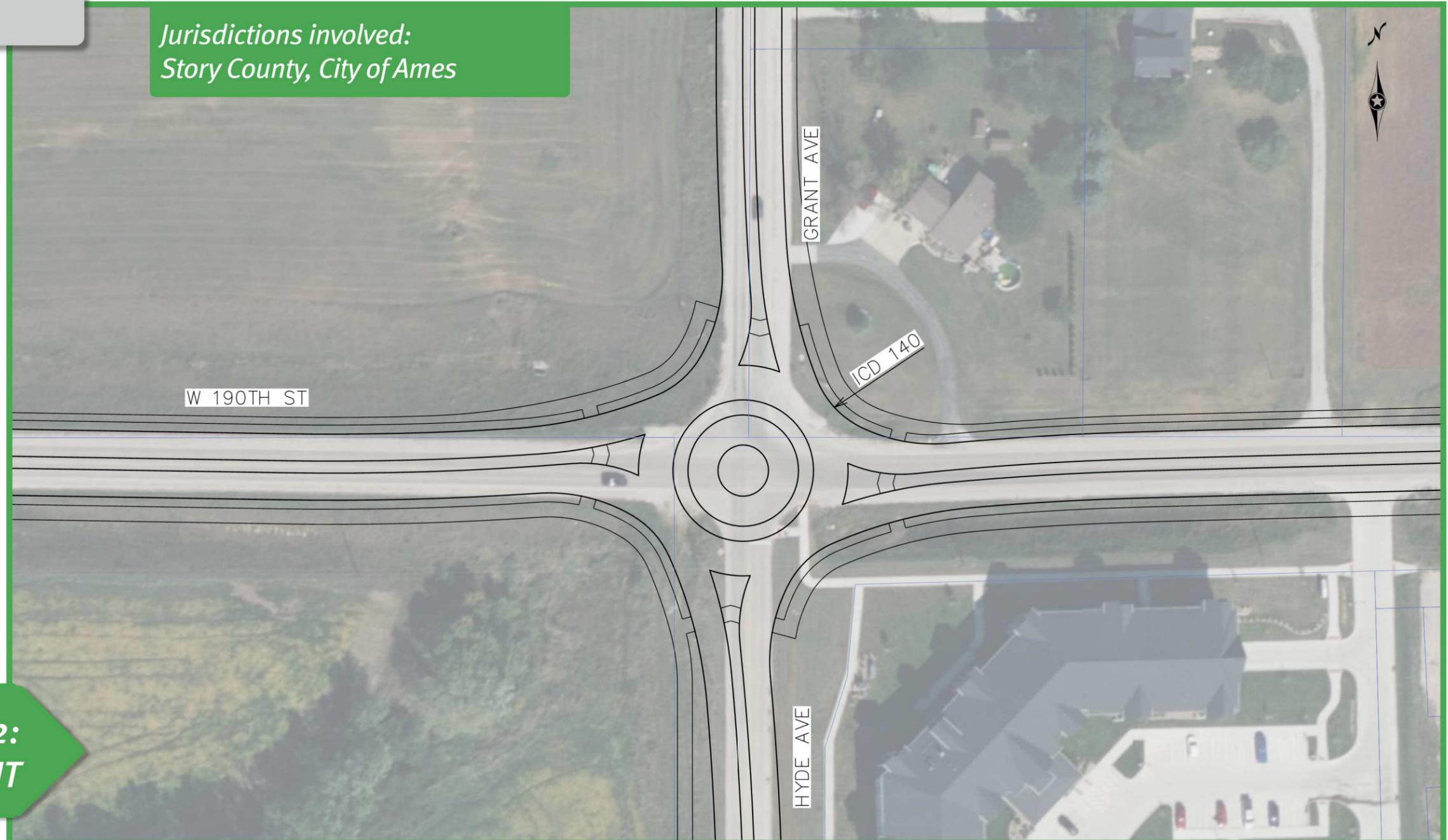
PROS:

- Intersection experiences significant reduction in crash severity.
- Design promotes consistently lower traffic speeds.
- Simplifies pedestrian crossings into 2 shorter crossings.
- Potential Energy Savings due to lack of signals.

CONS:

- Increased Construction Cost and impact to adjacent properties.
- May have difficulty managing unbalanced traffic flows.
- Does not allow for active corridor management for synchronization.

Jurisdictions involved:
Story County, City of Ames



**OPTION #2:
ROUNDAABOUT**



190th Street Corridor Study



190TH /US 69 INTERSECTION

SIGNAL

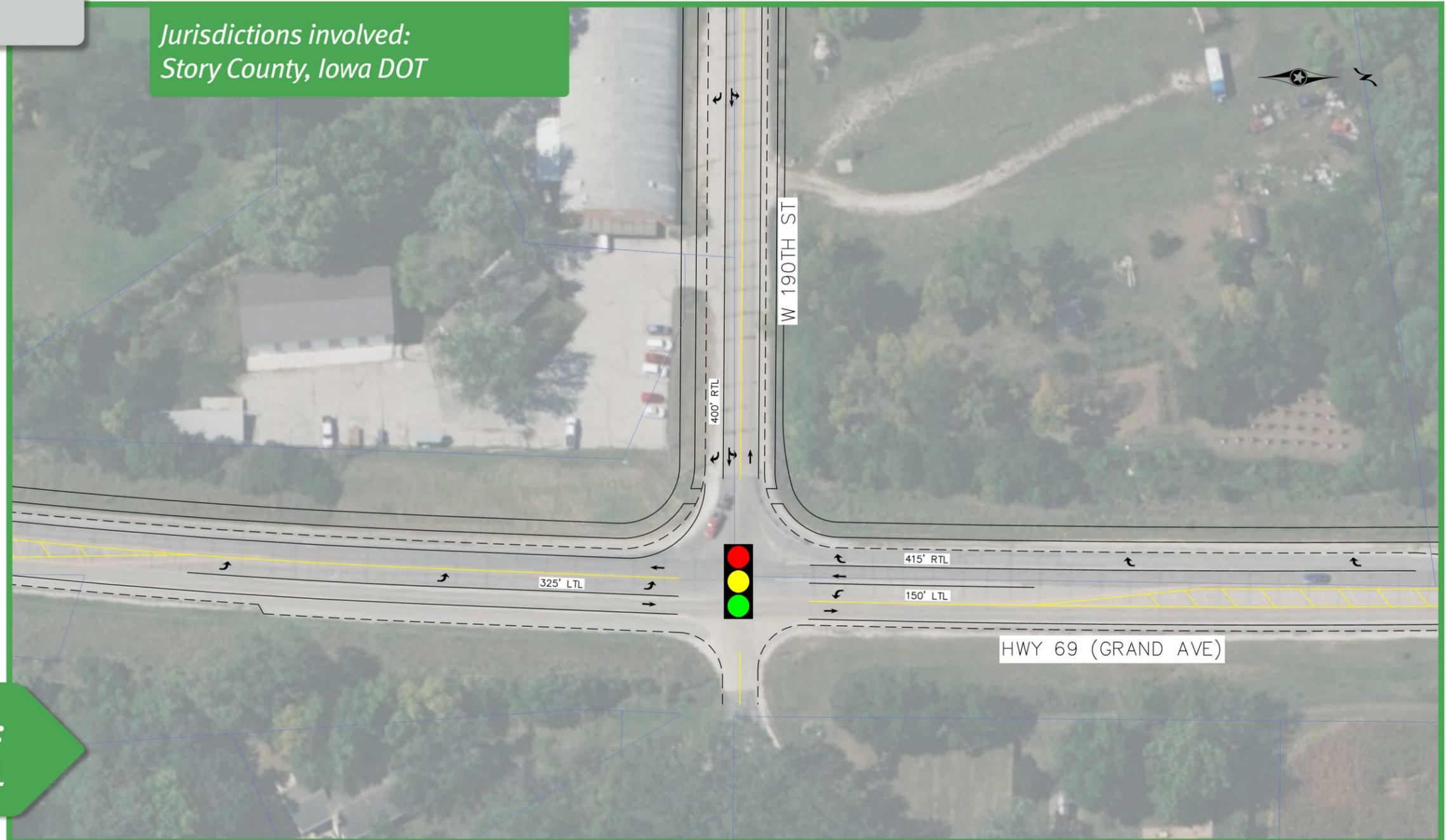
PROS:

- Improves delay at higher volume intersections.
- Provides Clear Right-of-Way for each movement, including protected pedestrian crossings.
- Potential Lower Impacts to Adjacent Properties.
- Can leverage modern adaptive signal technology.

CONS:

- Less efficient in low to moderate low traffic volumes.
- Pedestrians have a longer single crossing distance.
- Limited ability to manage vehicle speed.

Jurisdictions involved:
Story County, Iowa DOT



OPTION #1:
SIGNAL



190th Street Corridor Study

190th Street

190TH /US 69 INTERSECTION

ROUNDBABOUT

PROS:

- Intersection experiences significant reduction in crash severity.
- Design promotes consistently lower traffic speeds.
- Simplifies pedestrian crossings into 2 shorter crossings.
- Potential Energy Savings due to lack of signals.

CONS:

- Increased Construction Cost and impact to adjacent properties.
- May have difficulty managing unbalanced traffic flows.
- Does not allow for active corridor management for synchronization.

Jurisdictions involved:
Story County, Iowa DOT

**OPTION #2:
ROUNDBABOUT**

