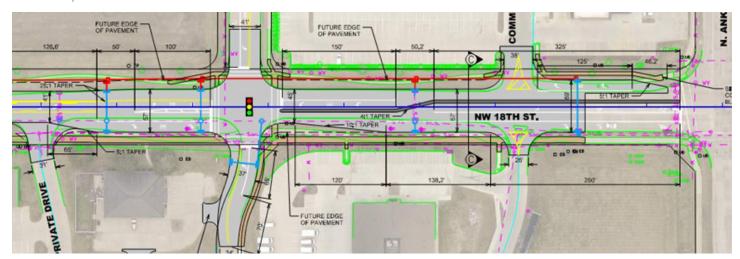
NORTHWEST 18TH STREET RECONSTRUCTION – NORTHWEST ASH DRIVE TO NORTH ANKENY BOULEVARD

ANKENY, IOWA







COMPLETION DATE

January 2022

REFERENCE

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PROJECT DESCRIPTION

NW 18th Street is a heavily traveled arterial roadway that is slowly deteriorating. With the continuous increase in traffic and new development expected along the corridor, McClure was hired by the City of Ankeny to perform intersection traffic data collection and review previous studies, crash history/safety analysis, traffic forecasting accounting for build-out of undeveloped land adjacent to the corridor, traffic modeling/operation analysis for existing and future AM peak, PM peak, and School PM peak hour traffic, access control review, and multi-modal review. Through this analysis, McClure provided a traffic impact study report that evaluated intersection lane geometrics and turn lane lengths, determination of eliminating or reconfiguring private entrances, and evaluation of intersection traffic control, including evaluating signalization versus roundabouts at key intersection locations within the project limits.

The results of the traffic study indicated that the roadway should be reconstructed to a 3-lane typical section, with designated right turn lanes at key locations with the ability to easily upgrade to a future 5-lane typical section. Additionally, the study indicated for a replacement of an existing traffic signal, installation of a new signal, and installation of a raised median that will increase traffic efficiency and safety. McClure evaluated current public utilities along with the proposed 3-lane section, future 5-lane section, and existing, proposed, and future pedestrian facilities to develop a conceptual layout that accounts for all factors while minimizing costs and disruptions.

As part of the concept layout, McClure developed typical cross sections, staging review and recommendations, and a cost opinion. McClure worked with the City of Ankeny Public Works, City of Ankeny Parks and Recreation, future development entities, and franchise utilities through the concept design and is currently working on the engineering design and plans of the project for a November 2022 letting.

PROJECT HIGHLIGHTS

- Traffic Impact Study that determined proposed and future intersection configurations, access improvements, and feasibility of roundabouts along the corridor.
- Conceptual layout that incorporated results from the Traffic Impact Study and integrated proposed and future geometrics and utility designs to minimize proposed and future improvement costs.
- Coordination with multiple entities in the development of the conceptual layout and developed preliminary staging layout, typical sections, and a project cost opinion.