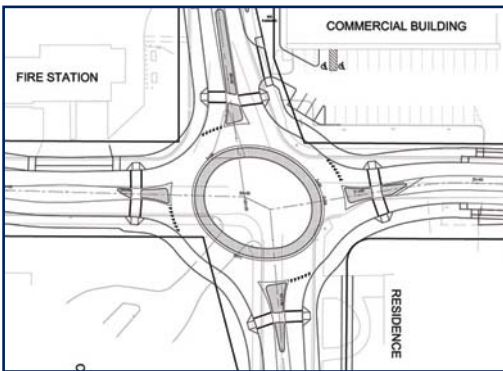


## Design



Parametrix prepares designs that find the best balance between safety, operations, and volume demand. We carry forth the information gathered and decisions made during the conceptual design phase and perform the engineering work necessary to prepare plans and documents that will be the basis for the final design. Our roundabout and roadway design teams will work through the engineering and plans preparation process in parallel. Parametrix recommends checkpoints at the 30, 60, and 90 percent design levels to assure that all stakeholders have ample opportunity to review designs and working plans prior to final decisions about alignments and details being made.

The design phase typically includes the following elements:

### Design

- Plan/ profile sheets showing existing and proposed roadway alignment
- Roadway sections
- Roundabout grading plan and truck apron profile
- Roundabout horizontal and geometric design plan, showing curb radii, elevations, splitter island geometrics, etc.
- Sewer and water plans and profiles
- Channelization and signing plans
- Illumination plans
- Landscaping plans
- Retaining wall profiles and details
- Staging and traffic control plans
- Geotechnical engineering
- Nearby access/driveway profiles
- Clear zone analysis
- Sight distance analysis
- Utility coordination and plan preparation
- Storm drainage plans – complete analysis for facility sizing and identify proposed facility location(s)
- ROW plans
- Design reports for client review at 30%, 60%, and 90% design levels
- Engineer's cost estimates at 60%, 90%, and final design

### Specifications

- Project specific special provisions
- Current amendments and general special provisions
- Special conditions and contract documents

### Bid Assistance

- Assist with project bid and award