

## Project Risks and Mitigation Strategies

The table below highlights potential risks and NDDOT mitigation strategies, the risk associated with uncertainties is minimal.

| Risk  | Description  | Mitigation Strategy   |
|---|--|---|
| <b>Schedule Delays</b>                                    | Schedule delays can happen due to unforeseen circumstances such as weather events or availability of materials/staffing. | A detailed project schedule for each of the project components will be prepared to keep track of the Project schedule and assure all necessary installation, design, and construction tasks are met. If one project component causes a delay, all attempts will be made to expedite other items of the schedule. NDDOT has also used milestone payments and compensation incentives to incentivize construction contractors to meet or exceed schedule expectations.  |
| <b>Changes to Project Scope</b>                           | Changes to the design of the Project do arise in the field.  | Most components of the Project have been advanced through at least the planning and preliminary engineering stages. The probability of substantive changes to the scope is low. NDDOT deploys conflict mitigation processes to actively address scope changes and minimize impacts to schedule and cost. If changes do occur, project partners will identify scope changes as early as possible to reduce the budget or allocate additional funding to ensure implementation.   |
| <b>Weather Events (ice, snow, rain, high water, cold)</b> | North Dakota witnesses extreme weather events that vary by season.   | Planning for adverse weather starts in the pre-construction planning phase to ensure schedules have been appropriately set. NDDOT and contractors incorporate historical weather data for events that could impact the project and are well aware of the state’s weather-related impacts to construction. Key activities that are weather dependent will be scheduled for safer seasons. Project milestone meetings will include seasonal conditions and upcoming weather-related impacts to schedule. If the weather prevents outdoor work, indoor work such as fabrication will be advanced to keep the Project moving. |
| <b>Procurement Delays</b>                                 | Procurement is anticipated to commence following MPDG award.   | Steel fabrication and signal poles are the only areas where procurement has proven a challenge for NDDOT’s construction projects. Adjustment of lead time to adjust for procurement will be considered for the Project.   |
| <b>Construction Cost Overruns and Schedule Delays</b>     | At the time of bid, market conditions, which are currently favorable, may be different.                                  | Market conditions are difficult to predict even a few years into the future. Contingencies are addressed via NDDOT’s standard programming estimation process, which tends to closely mirror the bid amounts typically received. The agency is confident any unanticipated cost increases will be covered by these estimates.  |