Preliminary Engineering for TH 23 from Cottonwood, MN to Granite Falls, MN

Project Scope of Work Overview
The proposed scope of work is for an Intersection Control Evaluation (ICE) Study, Hydraulic engineering, Geometric layout for reconstruction section, Detailed Design of ADA facilities in Granite Falls, and Subsurface Utility Engineering (SUE) for the project.

The work required under this contract is for State Project 4203-50 on Trunk Highway 23 from Granite Falls to Cottonwood. The project is a concrete overlay with grading for three bridge replacements, addition of five left turn lanes, realignment of a county road, and a section of full roadway reconstruction with storm water replacement near Granite Falls including ADA facilities.

Contract scope of work overview
The current scope of work will be for project development and will include:

1. Project Management
2. Preliminary Traffic Engineering
   - ICE at the intersection of TH 23 and TH 212 in Granite Falls
3. Preliminary Hydraulics Engineering for the project
4. Geometric Layout of Reconstruction area near Granite Falls
5. Preliminary Design of ADA facilities in Granite Falls
6. Subsurface Utility Engineering contract for the project

1. Project Management (Activity Code 1010)

Project management will include work necessary for communication and completion of the project tasks on time and within budget. The Contractor’s Project Manager or their primary duties will not be reassigned without the written consent of the State’s Project Manager. The Contractor’s staff will have the training and expertise necessary for the work tasks to which they are assigned.

1.1. Administration
Administration of the project will include meetings, progress reports, invoicing, preparation of contract amendment requests (if necessary), cost and schedule updates, billing preparation, other non-technical work, communication with the necessary project personnel, and all other work to ensure all the project tasks are completed on time, within budget, and in accordance with State and Federal laws, rules, and regulations.

1.2. Project Documentation
The State will maintain a project schedule throughout the duration of design activities while this contract is in effect. The Contractor will work with the State’s Project Manager to develop a schedule, risk register, project management plan, issues/action items list and will provide timely updates for these documents.

1.3. Kick-off Meeting
The Kick-off meeting will establish a communications protocol and discuss the project schedule. The Contractor will receive available existing information from the State. There will be State provided survey and mapping data, previous studies completed for the area, a brief discussion of known issues, and a review of the project schedule. The Contractor will prepare a meeting agenda and minutes.

1.4. **Project Management Team Meetings**
Meetings will be held monthly during the preliminary and detail design. With the Contractor’s Project Manager present, the project schedule and budget status will be reviewed. Issues that may affect the design, schedule, budget, or work quality will be presented and addressed. The Contractor will prepare an agenda and facilitate the Project Management Team meetings. The Contractor will also prepare and distribute draft minutes for review/comment to all meeting participants within 2 business days after each meeting and final minutes within 10 business days after each meeting.

1.5. **Quality Control Management**
The Contractor will maintain a Quality Management Plan (QMP) that specifies how the Contractor will perform Quality Assurance (QA) and Quality Control (QC) activities throughout the contract duration to ensure delivery of quality design in a timely manner and in conformance to contract requirements established for the project. The QMP will be submitted to the State’s Project Manager for reference within five business days of the Notice to Proceed.

The Contractor will serve as the quality manager on the project by reviewing deliverables, collating comments, and ensuring comments are adequately resolved.

**Deliverables**

The Contractor will:

A. Schedule and attend meetings.
B. Hold weekly conference call with State’s Project Manager.
C. Prepare meeting agendas, displays, and minutes.
D. Attend Project Management Team meetings to be held with District 8 Staff (assume 4).
E. Prepare and submit monthly progress and status reports.
F. Maintain project schedule.
G. Provide timely copies of critical correspondences and project issue data.
H. Quality Management Plan (QMP)
I. Attend utility coordination meeting

The State will:

A. Review and respond to submittals.
B. Coordinate internal reviews.
C. Provide copies of project correspondences, project studies, and general project information.
D. Attend meetings.
E. Approve deliverables.
F. Monitor quality control.
2. **Preliminary Traffic Engineering (Activity Code 1254)**

**Introduction:**

2.1 A traffic analysis and ICE study is needed at the intersection of Minnesota Highway 23 and United States State Highway 212. This analysis and study is proposed to identify and document future improvements to the intersection that will improve safety and mobility for motorists. This assessment will evaluate the current and future performance of the roads and intersections in the area, and develop strategies to meet those needs.

2.2 The purpose of the Analysis and ICE study is to:

   A. Evaluate existing conditions
   B. Facilitate discussion between partners
   C. Forecast future conditions
   D. Provide a list of alternatives
   E. Provide recommendation(s)
   F. Estimate Costs

The items mentioned above will provide the basis for further design and construction of improvements to the area transportation network.

**Analysis and Intersection Control Evaluation:**

2.3 The Contractor will conduct an Intersection Control Evaluation (ICE) study that may include the following intersection: TH-23/TH 212. The Contractor will also prepare a traffic forecast for vehicles, pedestrians and bicycles. The vehicle traffic forecast will include ESAL’s. The ICE study will follow the Minnesota Department of Transportation Intersection Control Evaluation Manual, which is located on the State’s Web site at the following address: [http://www.dot.state.mn.us/trafficeng/safety/ice/2007_ICE_Manual.pdf](http://www.dot.state.mn.us/trafficeng/safety/ice/2007_ICE_Manual.pdf)

**2.4 – Deliverables**

**Contractor Deliverables:**

A. Relevant traffic data for the ICE, including but not limited to: traffic volume (AADT, turning movement, class counts) data, crash data, and traffic forecasts (August 25, 2017).
B. Aerial imagery – Images from internet mapping sources will be considered adequate for the ICE, subject to the approval of the State (August 25, 2017).
C. Facilitation of meetings with partners (as needed).
D. Concept Drawings of Alternatives (September 29, 2017).
3. **Preliminary Hydraulics investigation (Activity Code 1141)**

**Introduction:**

3.1 The task of the Contractor will be to provide a detailed preliminary hydraulic design for the project which will include a completed preliminary hydraulic recommendation and coordination with regulatory agencies for the project. The Contractor will work on and complete such items as; drainage areas, drainage models, pre and post construction hydrology, pond/infiltration designs for NPDES compliance and rate control if necessary, and special ditch grades.

The hydraulic work will be in-depth, with the resulting comments leading to final cross-sections, construction limits, and geometric layout. MnDOT has completed preliminary hydraulic design for culverts including potential lining culverts which will be used to complete the overall preliminary hydraulic recommendation for the project. The majority of the work is to complete the preliminary hydraulic recommendation in relation to the left turn lanes, realignment of a county road, and a reconstruction area in Granite Falls.

3.2 A very high level of hydraulic experience and skill is required. All services will be performed in accordance with established standard procedures and practices of MnDOT. Prior to furnishing any services, the Contractor will meet with MnDOT District 8 staff to become familiar with District 8 MnDOT procedures and practices and with informal procedures and practices, particularly regarding detailed analysis of hydraulics design.

3.3 Contractor must be trained, highly skilled, and have extensive experience in roadway hydraulics analysis. The Hydraulics Specialist(s) must be experienced with MicroStation V8i / GEOPAK CADD, GEOPAK Drainage, and HydroCAD software.

Contractor will invoice all work using the State’s Source Type Codes as follows:

A. Source Type Code 1141 for all tasks and deliverables associated with hydraulics

The services to be provided under this contract are for preliminary storm sewer design, construction limits due to storm sewer, rate control structures/ponding, any coordination with the City of Granite Falls, and agency coordination.

**Referenced Documents:**

The State Drainage Manual is available on the web at:
http://www.dot.state.mn.us/bridge/hydraulics/drainagemanual.html

State Technical Memoranda available on the web at:
http://techmemos.dot.state.mn.us/techmemo.aspx

**Contract Tasks and Deliverables:**

3.1 **Preliminary Storm Sewer Design**

A. The Contractor will review the existing conditions hydraulic model to reflect surveyed as-built conditions and surface topography. Watershed areas, pipe routing, catch basin layouts and overland flow routes will be modified to match the existing conditions.
B. Complete a preliminary design and hydraulic analysis for proposed storm sewer for the urban roadway. Peak discharges will be determined by using the rational method and Atlas 14 data. A drainage area map with contours will be prepared for new storm sewer. It is assumed for scoping purposes that the impervious area will increase as a result of this project.

C. Provide all spread calculations

3.2 Hydraulics/Drainage Coordination with Other Agencies and Disciplines

A. The Contractor will coordinate all water resource issues with regulatory agencies. The Contractor will document the resolutions of issues for the correspondence file, including meeting minutes and memoranda for the record.

B. The Contractor will comply with and document the permit requirements, modifications, and contacts with the permitting agencies.

3.3 Construction Limits

The Contractor will need to complete preliminary design of the storm sewer system and preliminary ponding design so that construction limits can be completed.

A. The Contractor will include any rate control infrastructure needed in their construction limits

B. The Contractor will provide storm sewer construction limits to be incorporation into the layout.

3.4 Hydraulics Summary Report

A. The Contractor will summarize the results of the hydraulic evaluation including preliminary pipe sizing and gutter spread evaluation. The Contractor will recommend a preliminary pipe and catch basin configuration system so that construction limits can be completed.

B. The Contractor will summarize the rate control evaluation and recommend an option for ponding and outlet configurations. The Contractor will summarize the property needs for regional rate control.

C. The Contractor will summarize the regulatory requirements (City and Permitting Agencies) and how those requirements will be met with the project.

State Deliverables:

A. Survey Data (upon contract execution)
B. Existing Correspondence (upon contract execution)
C. Complete review and comments (within 15 business days)

Contractor Deliverables:

B. Final Drainage Areas (September 8, 2017)
C. Preliminary Storm Sewer Design (September 29, 2017)
D. Identification of Permits Needed (September 29, 2017)
E. Final Storm Sewer Design (October 27, 2017)
F. Draft Construction Limits (October 27, 2017)
G. Final Construction Limits (December 1, 2017)

4. **Geometric Layout of Reconstruction Section (Activity Code 1140)**

**Introduction:**

4.1 The Contractor will be asked to create a Level 2 Geometric Layout of the 1/3rd mile full reconstruction of TH 23 just south of Granite Falls that will be incorporated in with the State’s prepared Final Geometric Layout of the rest of the project. The State is preparing a Final Level 2 Layout for the rest of the project. This section of full reconstruction is from the intersection of TH 212 and TH 23 to the southern limits of the paved median of the four lane typical section on TH 23. There is no profile raise expected due to the location of Bridge # 87007.

Included with the Geometric Layout will be typical sections, profiles, and preliminary cross sections at maximum 50 foot intervals, construction limits, ADA recommendations and additional elements necessary for plan preparation and R/W acquisition. Construction limits will consider special ditch grades, storm water treatment or rate control locations, ADA improvements, extension of City Utilities, and any other items that effect construction limits and R/W impacts/acquisition. The Final Layout will also show the locations of all lighting for the section. The lighting location is important for coordination of borings due to close proximity of bed rock to the surface in that section.

As part of the Layout design, the Contractor will also provide preliminary construction staging plans with a possible detour route options for the reconstruction section including construction staging for the intersection of TH 212 and TH 23.

The Contractor will review and edit the Geometric Layout and construction limits as necessary due to the incorporation of the two layouts. This work will include coordination with the City of Granite Falls, Yellow Medicine County, and all other external partners for the project. All electronic files will be in Microstation power GEO-PAK SS3 or newer in accordance with State CADD standards.

4.2 – **Geometric Layout Deliverables and Dues Dates(s) or Time Requirement**

**State’s Deliverables:**
A. Provide survey data and necessary documents (upon contract start)
B. Review comments and changes (within 3 weeks)

**Contractor’s Deliverables:**
A. Level 2 Geometric Layout of roadway section listed above (December 15, 2017)
B. Preliminary Construction Staging Plans and possible Detour Routes (December 15, 2017)
C. Review and edits to Geometric Layout as needed

5. **Detailed Design of ADA Facilities (Activity Code 1250)**

**Introduction:**
5.1 The task of the Contractor will be to provide detailed ADA design work for the following projects to the 60% plan level for SP 4203-50. The Design Specialist will work towards providing ADA items such as; ADA field walk recommendations, ADA checklists, and ADA layouts of the project. The ADA work will be in-depth, with the resulting work leading to final (100%) construction limits and through 60% ADA layout plan review with Central Office ADA Office.

The scope of work for the detailed design of the ADA facilities for the project include the intersection of TH 212 and TH 23 in Granite Falls and along TH 212 heading east for 0.50 miles to Jefferson Ave. This work will total less than 12 ramps and limited amounts of sidewalk.

5.2 A very high level of design experience and skill is required. All services will be performed in accordance with established standard procedures and practices of MnDOT. Prior to furnishing any services, the Contractor’s Design Specialist will meet with MnDOT District 8 staff to become familiar with District 8 MnDOT procedures and practices and with informal procedures and practices, particularly regarding file transfer and communications.

5.3 – Detailed Design of ADA Facilities Deliverables and Dues Dates(s) or Time Requirement

State’s Deliverables:
A. Provide survey data and necessary documents (upon contract start)
B. Review comments and changes (within 3 weeks)

Contractor’s Deliverables:
A. ADA Field Walk recommendations (September 15, 2017)
B. ADA Layout of the project (November 3, 2017)
C. ADA Construction Limits (November 3, 2017)
D. 60% ADA layout plan reviewed by CO ADA Office (December 1, 2017)

6. Subsurface Utility Engineering and Utility Coordination (Activity Code 1195)

6.1 Project Overview and Limits
The Contractor will perform Subsurface Utility Engineering (SUE) and perform utility coordination for both underground and overhead utilities for State Project (S.P.) 4203-50 on Trunk Highway (T.H.) 23. Utilities located under this Contract will all be located to Quality Level B, in the areas described below.

Contractor will locate and designate public and private underground and overhead utility facilities within the project limits of the SP 4203-50 (T.H. 23) improvement project as noted below:

On the current TH 23 corridor from the intersection of County Road (CR) 24 south of Cottonwood to the intersection of TH 212 and TH 23 in Granite Falls.

6.2 Project Goal
The goal of this project is to obtain accurate utility field data broken down into an electronic format to avoid delays in the project due to inaccurate utility location information. The Contractor will assist the State in verifying all utilities are located and accounted for and identifying preliminary utility impacts for the project. The Contractor will complete the Utility Coordination up to and including State’s Step 3 – “Review of Information from Utility Owners”, from the “Utility Accommodation & Coordination Manual”, as well as complete the preliminary Utility
Information Sheets (UIS) for each utility’s conflict points within the corridor. The “Utility Accommodation & Coordination Manual” can be found at: http://www.dot.state.mn.us/utility/projectdelivery.html

6.3 Deliverable Standards
The following standards apply to all deliverables in the contract. See the individual deliverable description for more specific deliverable standard requirements.

A. Software
Sections within the scope of work identify the computer software to be used for deliverables. This section lists the software version the Contractor will use for deliverables.

1. Microsoft (MS) Word 2010
2. Adobe Acrobat 10.0
3. Microsoft (MS) Excel 2010
4. Microstation Version 08.05.02.55

B. Paper Copies of Reports
Paper copies will be printed as two-sided copies to the extent possible.

C. Paper Copies of Drawings
Paper copies of drawings will be printed on 11” x 17” white bond paper.

D. Electronic Documents
Electronic documents will be delivered via email or compact disc (CD), whenever practicable.

6.4 Scope of Work and Deliverables
The State requires SUE services of underground and overhead utility survey identification and location for this project located on and adjacent to TH 23. The Contractor must respond within 48 hours of receiving the notice to proceed to discuss the scope of work, utility impacts, required equipment, direct cost, and to negotiate hours of work. After the State gives the Contractor notice to proceed, the Contractor will commence work. The Contractor will submit an intermediate and final submission of the Quality Level B (designating) and Level A (locating) Utilities for the State Project within the following timeframe:

S.P. 4203-50:

1. First submission no later than 6 weeks from Notice to Proceed

The contractor will have completed all field work by November 17, 2017.

Submission of final reports to the State with all required deliverables must be completed by February 2, 2018 for S.P. 4203-50.

The Contractor will provide Quality Level B (designating) of the utilities throughout the corridor described above and up to 24 Quality Level A (locating) test holes at critical locations as determined through consultation between Contractor and the State’s Project Manager.
The Contractor will provide and verify quality Level A (Locating) identification of Utilities for this project. The provided information will be as directed by the State and as described in the Federal Highway Administration (FHWA) SUE publications and the American Society of Civil Engineers (ASCE) Standard CI/ASCE 38-02 for the whole project. The Contractor will fully accomplish these tasks to make it unnecessary for the State to supplement any of this work with its own personnel, except as noted hereinafter. The State may, however, review the work from time to time to verify accuracy and evaluate the performance of the Contractor.

6.5 Project Coordination Tasks

A. The Contractor will:

1. Work closely with the State to facilitate the orderly progress and timely completion of the project.

2. Attend an initial meeting and an on-site inspection with the State Project Manager to ensure familiarity with existing conditions and project requirements.

3. Develop a work plan that includes a description of the tasks to be performed and a proposed schedule of activities. The work plan must satisfy the requirements of the project and must be approved by the State prior to commencing work.

4. Meet with the State periodically, and at a minimum of once every two weeks, to coordinate the work effort, discuss progress, and resolve problems.

5. Provide the State with copies of diaries and correspondence that document work-related communications between the Contractor, utility owners, outside agencies, and/or private landowners.

6. Obtain all necessary permits and rights of entry from the State, local jurisdictions, and/or private landowners for all conflict locations and include the name in the list of deliverables to the State.

7. Provide all maintenance and traffic control necessary to perform the work. All maintenance and traffic control will be performed in accordance with the current Minnesota Manual of Uniform Traffic Control Devices (MMUTCD) and Part VI, “Field Manual for Temporary Traffic Control Zone Layouts”, the “Guide to Establishing Speed Limits in Highway Work Zones”, the Minnesota Flagging Handbook, the provisions of State Standard Specifications 1401 and 1710, the Minnesota Standard Signs Manual Parts 1 and II, and the Traffic Engineer Manual.

8. Provide all necessary equipment, supplies, and support personnel, including surveying capability, to secure the survey data required in this contract.

9. Upon completion of the work the Contractor will provide the State with a final report for each State Project consisting of:
   - Electronic copy of Test Hole Data Sheets in .pdf (when completed)
B. The State will:

1. Provide highway information showing the project limits, alignment, profile, benchmark data, drainage, coordinate data, CADD files, and any other applicable information; and

2. Provide a preliminary list of utilities or agency contact persons within the project limits.

### 6.6 Designating (Quality Level B)

A. For the purpose of this contract, “designate” refers to finding the presence and horizontal location of underground utilities using geophysical prospecting techniques, including electromagnetic, magnetic, ground penetrating radar, acoustical, pulse, sonic, and other energy fields methods. Contractor will also use appropriate methods to locate non-tonable facilities, such as unreinforced concrete mains or clay pipes. This work includes efforts and processes to achieve quality levels D, C, and B.

B. The Contractor will:

1. Verify, update and refine the survey information for above-ground and overhead utility facilities provided by State as needed.

2. Designate, record, and mark the approximate horizontal location of existing underground utilities and their major laterals and services to existing buildings (quality level B), including storm sewer, sanitary sewer and water main. All survey work will be the Contractor’s, or their Sub Contractor’s responsibility.

3. Horizontal surveying of underground utilities will be accurate to applicable survey standards.

4. Inspect manholes for active inlets or outlets to determine if the number of inlets and outlets match the information gathered to date. Any known inlets and outlets will be investigated to designate the attached facility to the maximum extent within the project limits.

5. Inspect manholes for inlets and outlets that have been bulkheaded. If bulkheads are found the Contractor must investigate the history of the bulkhead with the utility owner to determine if the facility was left in place and out of service or removed.

6. Designate abandoned of left in place out of service facilities based on Contractors recommendation or as directed by the State Project Manager.

7. Separately submit all quality level B utility designating data to the State in a MicroStation file compatible with States Level 2 CADD standards, available at [www.dot.state.mn.us/caes/cadd/](http://www.dot.state.mn.us/caes/cadd/). Contractor will also submit data to the State in an Excel spreadsheet file, as well as providing two hard copies of the MicroStation plans and Excel spreadsheets. Contractor will await States written authorization to perform quality level A work.
8. Be responsible for the accuracy of all information presented to the State. An official of the Contractor will certify all completed designating services on the plans as the State directs.

C. The State will:

1. Provide the Contractor with any Quality Level D and C information that others have previously acquired or provided.

6.7 Locating (Quality Level A)

A. Upon the State’s authorization and direction, the Contractor will locate utilities that have a high potential for conflicts with the proposed improvements. For the purpose of this contract, “locate” means to obtain the precise horizontal and vertical position of subsurface utilities by excavating a test hole. The test holes will be done using vacuum excavation or comparable nondestructive equipment in a manner that will not cause damage to the utility line while exposing it for data collection. After excavating a test hole, the Contractor will perform a field survey to determine the exact location and vertical position of the utility line. This work is considered quality level A.

B. The Contractor will:

1. Review plans and recommend areas to the State that require locating test hole sites within the project limits. The Contractor will recommend changes to the State’s location plan based on SUE best practices and obtain utility company records as required.

2. Locate abandoned or left in place out of service facilities based on Contractors recommendation or as directed by the State Project Manager.

3. Obtain all necessary permits and rights of entry from the State, local jurisdictions, and/or private landowners.

4. Neatly cut and remove the existing pavement or surface, with a maximum cut area of 225 square inches per test hole, unless unusual circumstances exist. The Contractor will excavate using a method enabling vertical and horizontal exploration through this cut.

5. Excavate test holes to expose the utility to be measured in a manner that ensures the safety of excavation and prevents any damage to the utility. In performing such excavations, the Contractor will comply with all applicable utility damage prevention laws and coordinate with utility inspectors as required.

6. Investigate, evaluate, measure, and record all utility data ascertainable from each test hole site.

7. Be responsible for any damage to the utility during excavation. In the event of utility damage, the Contractor will stop work and notify appropriate agencies, including the utility owner. Work will not resume until the owner has determined what action to take. The Contractor will be liable for all costs associated with the repair or replacement of the facility and will contact
the appropriate environmental coordinator immediately if hazardous materials are encountered.

8. Backfill the excavation with approved material around the utility structure and compact, in lifts, with appropriate devices.

9. Permanently restore the pavement within the limits of the original cut at the time of backfill. If the test hole is excavated in an area other than the roadway pavement, the Contractor will restore the area to equal or better condition than it was in before excavation. The Contractor will be responsible for the integrity of the backfill/surface restoration. If the work site is not appropriately restored, the Contractor must return and properly restore the site at no extra cost to the State.

10. Furnish, install, and color code a permanent above-the-ground marker (i.e., PK nail, peg, steel pin, or hub) directly above the centerline of the structure and record the elevation of the marker.

11. Provide complete cleanup of the work site to equal or better condition than it was before excavation.

12. Tie all vertical elevations to a minimum of two checked benchmarks. The accuracy of these turns will be in accordance with established surveying practices.

13. Return utility “locating” information (quality level A) to the State in a digital format compatible with the State’s Level 2 CADD Standards, available at www.dot.state.mn.us/caes/cadd/. The following test hole information must be included:
   a. Elevation of the top and/or bottom of the utility, tied to datum of the furnished plan;
   b. Elevation of the existing grade over the utility at the test hole;
   c. Horizontal location referenced to the project coordinate datum after performing all required survey work;
   d. Outside diameter of the pipe or width of the duct banks and configuration on the non-encased multiconduit systems;
   e. Utility structure material compositions;
   f. Pavement thickness and type, where applicable;
   g. Identification or benchmarks used to determine elevations;
   h. Elevation with accuracy of +/-0.05 ft;
   i. Horizontal location with an accuracy that is at least 0.01 feet;

14. Be responsible for the accuracy of all information presented to the State. An official of the Contractor will certify all completed locating services on the plans as the State directs.

C. The State will:

1. Provide input and recommendation of test hole locations.

6.8 Utility Coordination

A. Contractor will:
1. Assess the quality of any utility information gathered to date for this project and update as needed using various methods to identify all utility facilities and their owners within the project limits. Using the list provided by the State, Contractor will contact utilities, local government, and businesses needed to obtain records that are missing and to verify that records already received are the most current and correct to the best of the utility owners knowledge.

2. Contact Gopher State One Call to identify which utility owners have facilities in the project limits. Make Gopher State One Call for field utility locates and document ticket request information. Ticket request information to be supplied to State with deliverables.

3. Review the project site for utilities not already listed.

4. Update the preliminary lists of utilities or agency contact persons within the project limits provided by the State. Compile utility contact information including name of key contact person, address, phone numbers and e-mail addresses.

5. Schedule and facilitate a SUE Kick-Off Meeting to familiarize the utility owners with the project and facilitate discussions to determine if there are any initial concerns or information that can be shared prior to starting field locations.

6. Provide State meeting minutes of the SUE Kick-Off Meeting, and any other additional coordination meetings that occur during the duration of the contract.

7. Update and refine the above ground and overhead designating information provided by the State as needed.

8. Provide a recommendation to the State Project Manager on the utility quality level needed to locate any abandoned or left in place out of service facilities identified taking into account the risk that the facility may pose to the project.

9. Create preliminary UIS sheets and assign a unique conflict number for each potential conflict.

10. Provide each preliminary UIS to the respective utility owner for review.

11. Schedule Utility Workshops for each utility owner, if needed.

B. The State will:

   1. Provide the Contractor with any Quality Level D and C information acquired.
   2. Provide a brief presentation at the SUE Kick-off meeting to describe the construction project.
   3. Attend coordination meetings as required.
   5. Incorporate the utility information from the Utility Information Sheets to complete the Master Utility Agreements.

6.9 Data Management

A. Data management involves assembling and presenting the designating and locating information in a format compatible with the State’s Level 2 CADD standards, available at www.dot.state.mn.us/caes/cadd/.

B. Field information obtained and recorded in field books will be drafted on plan sheets in electronic format using Microstation power GEO-PAK SS3 or newer that the State uses under the supervision of a Minnesota Licensed Professional Engineer.
**Project Schedule**
Late finish dates (due dates) for project deliverables are listed below.

Phase 1 (Preliminary Engineering / Preliminary Design / Project Development)

- Task 1 Project Management - Ongoing
- Task 2 Traffic Engineering
  - Traffic Data Collection – 8/25/17
  - Draft ICE Report – 10/20/2017
  - Final ICE Report – 12/8/2017
- Task 2 Preliminary Hydraulic Design – 12/29/2017
- Task 3 Geometric Layout of Reconstruction Section – 12/15/2017
- Task 4 Preliminary ADA Design – 12/1/2017
- Task 5 SUE Work – 02/02/2017

**State Deliverables**
The State will provide the following information and data:

2. Environmental investigation and clearance
3. Litchfield Transportation Plan – State, October 2008
4. US 12 Downtown Litchfield Study - 2016
5. Cultural resources review and State Historic Preservation Office coordination
6. Geometric Layout, Design Memorandum with Design Exceptions
7. State’s electronic project directory standards and file naming standards found at: [http://www.dot.state.mn.us/caes/index.html](http://www.dot.state.mn.us/caes/index.html)
8. State’s ADA design standards at: [http://www.dot.state.mn.us/ada/design.html](http://www.dot.state.mn.us/ada/design.html)
10. SWPPP template

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