Michigan Utility Coordination Committee
September 30, 2015
10:00 am
MITA Office
Minutes

Al Dionise – AT&T
Dirk Dunham – Consumers Energy
Adolpho Castillo – DTE Energy
Robin Williams – Frontier
Steve Puuri – CRA/MML
Erik Smith – DTE Electric
Mark Loch - OHM
Nick Lefke– MDOT
Doug Needham – MITA

1. Review – July 20, 2015 minutes
    a. The minutes from the July 20, 2015 MUCC meeting were distributed and reviewed.

2. Status of GUIDE initiative
    a. A Request for Proposal (RFP) for the development of a complete collection of standards and a highly accessible, secure GIS centric spatial data repository is posted on the MDOT website. The posted RFP is attached to these Meeting Minutes.
    b. The due date for the submission of RFPs is 10/12/2015.
    c. It is anticipated that the selected consultant will start around November 2, 2015 with a project completion date of June 30, 2017.
    d. A significant portion of this contract will be the development of a field guidance document that includes a data dictionary, collection procedures, standards, quality control recommendation, and other applicable requirements and/or recommendation to efficiently get quality data from the field to the office.
    e. There will be no field component for this part of the initiative.
    f. The final SHRP2, Round 7, Implementation Assistance Program request for funding will be made available in April 2016. MDOT anticipates submitting an application for the "Utility Bundle (R01A/R01B/R15B)" to further support MUCC's GUIDE initiative. The SHRP2 Round 7 brochure is attached to these Meeting Minutes.
3. MDOT's Utility Relocation Tracking System (URTS) computer application
    a. An update to the URTS was provided.
    b. MDOT is allowing access by external users. However, they have not widely publicized access at this time.
    c. MDOT asked if utility companies had concerns about company contact names, phone numbers, and addresses being shared. There was no concern as this information is currently available in other applications.
    d. MDOT will work with providing access to this program from the committee members that requested access.

e. This item is completed and may be discussed during the 2016 MUCC conference.

4. MISS DIG's Design Ticket User Survey
    a. Prior to the meeting MISS DIG provided a draft survey, consisting of 16 questions, that will measure the successfulness of the Design Ticket.
    b. The draft survey was discussed in details and the proposed changes will be forwarded to MISS DIG.

5. 2016 MUCC Conference – January 20, 2016
    a. The 2016 MUCC Conference is scheduled for January 20, 2016 and will be held at the Soaring Eagle Casino and Resort, Mt. Pleasant from 9:00 am to 3:00 pm.
    b. A tentative agenda was discussed.
        i. 9:00-9:30 – Opening remarks and key note speaker (Brad Wieferich – MDOT Bureau Director of Development)
        ii. 9:30-9:45 – MUCC GUIDE – Status Update - Lefke
        iii. 9:45-10:45 – Joint Project Locator – M-53 Pilot project
            1. Possible presenters – Dan's Excavating (Brian Schember/Joe Goodall), USIC, URG, Consumers Energy, DTE, AT&T, Comcast, MISS DIG, MDOT
        iv. 10:45-11:00 - Break
        v. 11:00 – 11:30 – Complexities of Locating Deep Utilities (per PA 174) – Davis Construction (?)
        vi. 11:30-12:00 – MISS DIG update – possible topics
            1. Best practices
            2. Mapping
            3. Locates without borders
            4. Damage reporting
        vii. 12:00-1:00 – Lunch
        viii. 1:00-2:00 – Various Safety Topics
            1. MDOT – Traffic control – What is required to work safely in work zones?
            2. MIOSHA – Aerial clearance requirements, shoring procedures
            3. MDEQ – Proper disposal of hazardous soils, manhole pumping
        ix. 2:00-2:30 – MDOT Traffic Signal Projects – Use of Subsurface Utility Engineering (SUE) During Initial Project Survey
        x. 2:30-3:00 – MDOT's Utility Relocation Tracking System (URTS) computer application - Lefke

6. Next Meeting
    a. The next is scheduled for November 5, 2015 at 9:00am at the MITA office.

Michigan Department of Transportation

SCOPE OF SERVICE
FOR
DEVELOPMENT SERVICES

CONTROL SECTION: 84900

JOB NUMBER: 128158

PROJECT LOCATION: N/A

PROJECT DESCRIPTION: To achieve a sustainable, mature approach to the collection of underground utility data, Michigan Department of Transportation (MDOT) is pursuing development of complete collection standards and a highly accessible, secure GIS centric spatial data repository. For successful implementation, MDOT is looking to expand the Geospatial Utility Infrastructure Data Exchange (GUIDE) pilot requirements into a comprehensive data collection guidance document with supporting informational and educational materials in order to advance GUIDE to implementation. For detailed information on the GUIDE initiative please refer to the following report: 2014 GUIDE Pilot Initiative Report

ANTICIPATED START DATE: November 2, 2015

ANTICIPATED COMPLETION DATE: June 30, 2017

PRIMARY PREQUALIFICATION CLASSIFICATION: N/A

SECONDARY PREQUALIFICATION CLASSIFICATION: N/A

DBE REQUIRMENT: N/A

PERFERRED QUALIFICATIONS AND EXPERIENCE:
Technical Writer – Experience with the development of high quality training manuals, literature, specifications, etc. in the civil engineering field.

Graphics Artist – Experience in using modern digital media tools and applications to develop graphic illustrations for purposes of portraying technical concepts.

Geographic Information System (GIS) Specialist – Experience in using current ESRI software (or equivalent), creation and management of geospatial data, creation of data dictionaries, interoperability experience with common civil engineering applications (CAD).

Land Surveyor – Experience with GIS field data collection, design surveys, Subsurface Utility Engineering (SUE) data collection, modern survey technology and remote sensing techniques, geodetic control, field safety principles.

Utilities Subject Matter Expert – Experience with SUE, field safety principles unique to SUE, utility coordination, modern installation practices for underground utilizes, familiar with all utility facility types, current terminology, transportation / corridor installations, familiar with national industry standards, trends and initiatives.

INNOVATION:

The consultant shall list any potential innovations and/or innovative approaches to completing this project. At a minimum, innovations should specifically address technical writing and approaches to manual creation, GIS data collection, storage and retrieval, creation and management of geospatial data, underground utility data management, permitting and any other pertinent subjects that improve GUIDE.

MDOT PROJECT MANAGER:

Nick Lefke
Development Services Division
425 West Ottawa Street
P.O. Box 30050
Lansing, Michigan 48909
Phone: (517) 335-2208
E-mail: lefken@michigan.gov

The Consultant shall contact the MDOT Project Manager prior to beginning any work on this Project.

GENERAL INFORMATION and BACKGROUND:

Beginning in 2013, the Michigan Department of Transportation (MDOT), in partnership with the Michigan Utility Coordination Committee (MUCC), collaborated on a pilot initiative titled Geospatial Utility Infrastructure Data Exchange (GUIDE). During the 2013 calendar year, the MUCC developed a Draft Requirements Document for use in its 2014 pilot field implementation study involving three of the state's largest utilities: AT&T, Consumers Energy and DTE Energy.

In 2014, MDOT secured State Transportation Innovation Council (STIC) funding from the Federal Highway Administration (FHWA) to work with the MUCC on its GUIDE initiative. The funding was used to hire a consultant in order to comprehensively document the GUIDE pilot.

During the pilot, these utilities performed a total of seven planned new facility installations and piloted the work associated with collecting quality geospatial data identifying the accurate location of the newly installed underground facility. The geospatial data was then provided to MDOT for inclusion in an enterprise spatial database built in ESRI's ArcGIS Online (AGO). MDOT also did proof of concept exploration with the workflow, using generic output formats available in ESRI AGO, from the enterprise spatial database to 3D design.

The 2014 "GUIDE Pilot Initiative Report" was completed in March of 2015. This report thoroughly documents the MUCC GUIDE pilot initiative including key findings, benefits, lessons learned and future next steps.

Obtaining accurate utility information is essential for transportation infrastructure projects. Collecting and maintaining geospatial data needs to be standard practice for all underground utilities located within the public right-of-way. GUIDE presents an enterprise focused solution for meeting the challenges of collecting, maintaining and using accurate utility information. The GUIDE report recommended next step, intended to be fulfilled through this scope, is to continue the refinement and development of an all-encompassing GUIDE requirement documents, which would ultimately position MDOT to move from a pilot to a proof of program.

SCOPE OF WORK:

This scope is intended to be a five phase project as follows:

I. Kickoff and Current Status Assessment
II. Draft Deliverables
III. Stakeholder Review and Buy-In
IV. Finalize Deliverables
V. Knowledge Transfer and Training

Phase I. Kickoff and Current Status Assessment

- Project Kickoff Meeting
  The consultant will attend a project kickoff meeting in Lansing with the MDOT Project Manager and Project Team. The purpose of the meeting will be to inform the consultant on the 2013/2014 GUIDE pilot project and to discuss this scope of service.

- Current Status Assessment – Focused Literature Review
  MDOT will provide documents for the consultant team to review. MDOT will also provide recommendations on other information sources to consider. A brief report of documents reviewed and acknowledgment of current status of GUIDE and scope intent will be prepared by the consultant and delivered to the MDOT Project Manager.

Phase II. Draft Deliverables

- The consultant will prepare draft deliverables. Refer to the section below titled "Deliverables". The consultant should anticipant monthly "joint working sessions" with the MDOT Project Manager and Project Team during this phase.

Phase III. Stakeholder Review and Buy-In – Summit Milestone Meeting

- The consultant will present the draft deliverables to the MDOT Project Manager and Project Team at a summit meeting to be held in Lansing for the purposes of soliciting input and feedback from a representative cross section of the stakeholder community. The anticipated timeframe for this meeting is July 2016.

Phase IV. Finalize Deliverables

- The consultant will incorporate the feedback and input received at the Stakeholder Review and Buy In session into the final deliverables. The consultant shall anticipant monthly "joint working sessions" with the MDOT Project Manager and Project Team during this phase. The anticipated timeframe for delivery is December 2016.

Phase V. Knowledge Transfer and Training

- Presentation at MUCC Annual Conference
  The consultant will prepare and present on project outcomes at the 2017 MUCC Annual Conference in Mt. Pleasant Michigan (TBD date in January 2017). The presentation materials developed for this presentation will be a deliverable.

- Training Session
  The consultant will provide a one day training session. This session will summarize the deliverables and outcomes from this scope of work and will provide MDOT with a firm understanding of actions needed to implement GUIDE at an MDOT Regional level. The anticipated timeframe for this session is Spring 2017.

DELIVERABLES:

Current Status Assessment and Scope Report
The consultant shall prepare a brief report outlining the current status of GUIDE, acknowledgment of reviewed GUIDE documents and intent of this scope.

Manual / Training Guide: Create a comprehensive, high-quality manual and training guide in electronic format. It is anticipated that the guide will be comprised of a minimum of four major sections: Process Overview, Field, Office and Data Use. Use of embedded content, illustrations, graphics and/or photos is recommended, throughout the guide.

I. Process Overview
With respect to permitted underground utility installations, this section will discuss the data flow & process for GUIDE data collection on permitted installations. This section will inform the reader as to roles and responsibilities, workflows and processes. Where appropriate, this section will link to other sections within the guide.

II. Field
Develop a field guidance section that includes a data dictionary, collection procedures, standards, quality control recommendations, and other applicable requirements and/or recommendations to efficiently get quality data from the field to the office.

- Data Collection Standards & Observation Requirements – Describe data accuracy, collection interval, observation locations, survey control requirements unique to GUIDE. This section of the guide must account for different installation techniques, differing field conditions, utility types, etc. It's anticipated the consultant team will expand from instructions created for the GUIDE pilot project to explain such things as when to deviate from high level requirements in favor of increased or decreased frequency and detail, as appropriate. The "spirit" of the GUIDE pilot project will be employed in greater detail within this section accounting for lessons learned and utility types not accounted for within the pilot.

- Data Dictionary - Develop a schema / data dictionary for underground utility data collection specific to Michigan underground utilities. The data dictionary will be developed in both a documented format within the guide and electronic format embedded within the manual. The data dictionary will be supported, where appropriate, by definitions of attribution elements to clearly demonstrate the intentions of the required attributes.

- Collection Procedures & Practices – The guide will describe recommended tools and techniques for the data collection. It will also acknowledge safety considerations which need to be entertained for field collection while directing professional judgement and referring to common industry safety publications.

- Field Data Formatting, QC and Submittal Preparation – Prepare multiple sample deliverables intended to simulate common field scenarios for reference by future data providers. Recommended quality control procedures for field data review to be performed by the Surveyor. Describe data formatting requirements.

- Submittal Process – Describe the procedure to submit the data to the data repository owner (MDOT). This will be based up consultant team recommendations and a review of MDOT current IT and Document Management Systems / Capabilities.

III. Office

Develop an office section within the guide that defines how the data is received, reviewed, accepted and stored. Document the Quality Assurance procedures required for data acceptance and notification to data provider(s).

Develop data owner roles, document how user accounts are established, and determine how security measures are to be employed. Describe how data maintenance is performed including data edits unique to underground utilities. Describe how data may be converted to different formats if applicable.

IV. Data Use

Develop a user section within the guide that provides "how to" instructions to access the data once in the repository. This section will be informational and apply to the most common, anticipated use. It will describe output formats available to the user and intended uses.

Supporting Deliverables

- Recommended Disclaimer Language – The consultant will prepare recommended disclaimer language to reside with the data set. This will be developed in conjunction with MDOT Project Manager, Project Team and taken under consideration by MDOT's legal counsel.

- Metadata – The consultant will complete the MDOT Metadata form including development of a data description.

- Template Geodatabase – The consultant will develop and provide a template geodatabase, inclusive of the data dictionary referenced above.

- Sample Geodatabase – The consultant will develop and provide a comprehensive sample geodatabase simulating actual data for all utility types.

- Presentation Materials – The consultant will provide a copy of any presentation materials, in native format, to the MDOT Project Manager.

- Permit Attachment Document – The consultant will prepare a one page document that clearly describes, illustrates, and captures the fundamentals of GUIDE. The intent of this document is to inform permit applicants of their responsibilities to capture XYZ data (GUIDE requirements) for the permitted underground utility installation.

CONSULTANT PAYMENT:

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418. MDOT's travel and vehicle expense reimbursement

policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

Round 7 Coming Up in 2016

The following SHRP2 Solutions are tentatively scheduled to be available through the FHWA/AASHTO Implementation Assistance Program in 2016. **This will be the last opportunity to take advantage of the IAP's financial and technical assistance to implement SHRP2 products.**

Anticipated Round 7 Products – Application Period: April 1 – April 29, 2016

Informational Webinars: February – March 2016 (dates TBD)

RENEWAL

Utility Bundle (R01A/R01B/R15B)

Products to identify, record, and retrieve utility locations throughout the design process to aid in reducing costly relocations.

Railroad-DOT Mitigation Strategies (R16)

Model agreements to improve coordination between transportation agencies and railroads.

Techniques to Fingerprint Construction Materials (R06B)

Procedures and equipment to identify various construction materials in the laboratory and with portable devices.

Advanced Methods to Identifying Pavement Delamination (R06D)

Tools to detect subsurface delamination in asphalt pavements.

Guidelines for the Preservation of High-Traffic-Volume Roadways (R26)

Your guide to selecting the most-affordable options for extending pavement life.

Nondestructive Testing for Concrete Bridge Decks (R06A)

Recommended technologies to detect deterioration of concrete bridge decks.

Nondestructive Testing for Tunnel Linings (R06G)

Nondestructive testing technologies to pinpoint defects in or behind tunnel linings.

Service Life Design for Bridges (R19A)

Guidance, training, and technical assistance promoting service life design concepts and methods.

Service Limit State Design for Bridges (R19B)

Tool kit to perform state or site-specific calibrations for service limit state design for bridges.

RELIABILITY

Reliability Data and Analysis Tools bundle (L02/L05/L07/L08/C11)

Tools to help transportation planners and engineers improve monitoring and analysis of data to achieve more consistent, predictable highway travel.

Reliability in Simulation and Planning Models (L04)

Guidelines for incorporating reliability performance measures into travel models.

Regional Operations Forum (L36)

Regional training program to advance transportation systems management and operations.

More information is available at:
www.fhwa.dot.gov/GoSHRP2 or http://SHRP2.transportation.org