



Wisconsin Department of Transportation
Division of Transportation System Development

Utility Coordination Newsletter

Miller Inspects Utilities for I-41 and I-39/90



Imagine standing in the midst of a huge highway construction zone and verifying the location of all the underground and overhead utilities prior to the start of the \$970 million highway construction project that will affect the daily lives of more than 70,000 drivers. This was the job that Ted Miller, WisDOT consultant and 30-year veteran of AECOM, led for Wisconsin's Interstate 41 corridor in Brown County.

"Very few people have the skill set to carry out work like this," said Norman Pawelczyk, WisDOT Technical Services chief, about Miller's work.

With his prior experience working in waste water treatment facilities and utilities, Miller honed his coordination skills. Prior to the I-41 project starting, Miller assembled binders for each section of the project containing all the utility work plans, copies of permits, overall view plan sheets, approval letters, etc. for all the project leaders.

He worked with the surveyors to stake, mark and verify the locations of the utilities in the right of way. He reviewed all the utility companies work plans to verify they didn't conflict with other work plans or with the road project. If he discovered a conflict, Miller would work with the project designers and utility

company to find an area to relocate the utility facility that resolved the conflict. This move would be noted in the workbooks so everyone would know where the utilities moved to.

When asked how he achieved success in the project Miller said, "The biggest thing is to coordinate with everyone and being diligent about the design."

Good planning and maintaining updated records helped Miller avoid a costly move of a three-phase underground power line. Miller changed the location of some of the affected storm sewers and he worked with the project designers to change the design to eliminate the need to move the power line. The overall cost for I-41 project was \$1.3 billion-\$970 million for Brown County and \$405 million for Winnebago County.

For more than five and half years Miller needed to stay in hotels close to the job site during his work week to direct the utility coordination of I-41. "Those were the motel days," sighs Miller. "Fortunately, I could work four long days." At the time Miller and his wife had two new Border Collie puppies. "My wife had to take care of the puppies herself while I was gone," said Miller who enjoys training the dogs to retrieve balls by color.

Finishing up the I-41 project in 2016, Miller's expertise from this project helped him achieve the lead utility field inspection role for the I-39/90 project from the Illinois state line until Madison. This \$1.2 billion project is equally complex but close to his home near North Freedom, Wis. Miller is finishing up details on the construction. The project is scheduled to be completed by fall 2021. Miller will be finishing his responsibilities with the project later in 2020 and will start working on a part-time, as-needed basis in early February 2020.

In his free time Miller enjoys taking care of his dogs, trap shooting and riding older restored motorcycles. Miller is a retired National Guard member.

Financial figures from "WisDOT Report to the Transportation Projects Commission on the Status of Major Highway Projects and Southeast Wis. Freeway Megaprojects" Aug 2019 Secretary-designee Craig Thompson <https://wisconsindot.gov/Documents/projects/6yr-hwy-impr/maj-hwy/status.pdf>

Traffic Counts Stats from WisDOT

<https://wisdot.maps.arcgis.com/apps/webappviewer/index.html?id=2e12a4f051de4ea9bc865ec6393731f8>

UN #07-01



Ted Miller, WisDOT consultant and AECOM



I-41 Brown County Improvements.



New I-41 Causeway and Bridge.

employee, directed utility field inspection for I-41 Brown County Project.



Miller's Border Collie puppies.



In April 2015 US 41 was officially added to the Interstate system.

Utilities Restore Power to Thousands

How does a power company handle nine tornadoes, 90 miles per hour winds and nearly 300,000 customers who are without power?

Working alongside municipalities, We Energies and Wisconsin Public Service (WPS) called in more than 1,000

of its employees and contractors as it faced a series of storms that rolled through northern Wisconsin and upper Michigan this past July.



The storms started July 19 and continued over several days. Utility crews barely cleaned up one storm and another one would hit in a different location. We Energies and WPS called in staff from all over the area to their control centers in Pewaukee and Green Bay, Wis. These became command centers for coordinating crews from across the state. Additional help and resources came from three mutual assistance groups, made up of industry professionals and contractors in the region.

"Municipalities were eager to move downed trees that crossed roads, but we needed to make sure there were no live wires within the trees," said Duane Miller, manager of gas and electric distribution operations for We Energies and employee of 44 years. "Safety is our main concern," said Miller.

When a storm hits and power lines are down, utility companies are faced with a decision of how to best restore power: repair or cut and clear. "Customers need to be patient," said Miller. He said sometimes the safest option is to go in

and cut down wires and trees and then go back to pull new lines.

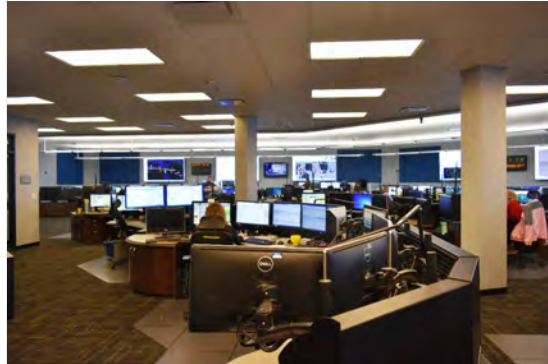
"When storms are so vast, we get directly involved in coordinating power restoration efforts with municipalities," said Jennifer Zierer, WEC Energy Group's manager of local affairs.

Across the We Energies and WPS service territories last July's storms damaged 700 utility poles and 580 transformers. The utilities also replaced 425,000 feet (80 miles) of electrical wire to successfully reconnect customers. Working cooperatively with municipalities during the repair process, Miller shared how We Energies and WPS are committed to safety, "We restored all customers without an accident or injury."

UN #07-02



Governor Tony Evers meets Tom Metcalfe, We Energies and Wisconsin Public Service (WPS) president, as they both assess storm damage for residents.



We Energies and WPS control centers directed teams across the Wisconsin and upper Michigan as they restored power safely to nearly 300,000 customers without any accidents or injuries.



We Energies and WPS replaced 700 power poles, 580



transformers and 425,000 feet of power lines to clean up from 9 tornadoes in July in northern Wisconsin and upper Michigan.

Upcoming Utility Conferences

WisDOT hosts utility conferences to provide utility companies, consultants, county and local agencies with information regarding proposed highway improvement projects. Conferences provide an excellent opportunity for WisDOT and its stakeholders to network and share information.

Conferences began a three year rotation in 2018. The first rotation will end this year with the Statewide Utility Conference, which is scheduled for September/October 2020 (exact date and location soon to be determined).

Continuing the same rotation in 2021, the Northeast and Southwest regions will host their conferences. In 2022, conferences will be held in the North Central, Northwest and Southeast Regions.

Typically in January of each year the region utility staff prepares and publish state and local project lists and/or a map for their counties. These project lists, materials and presentations from past conferences are available at the following link: [Region Utility Conference Reference Materials](#)

Additional updates are posted in the utility newsletter and can be found here: [WisDOT Utility Coordination Newsletters](#)

UN #07-03

Revised Utility Permits and Utility Accommodation Policy Webpage

The following webpages have been revised- [Utility Permits](#) and [Utility Accommodation Policy](#) Here is a summary of the changes:

Utility Permits

Added a new section on work zone requirements and training, which is linked to the [ROW Permit](#) since the information



pertains to all permitted activities in STH ROW.

Utility Accommodation

Combined all subjects into one file [HMM 09-15-00](#) for easier searching Revised [HMM 09-15-45](#) to correct the fax number on page 6 (work start notice) for the NW region. All of the boxes are now available for electronic input.

Section 1.1 now specifies that electronic copies permit or ESCP approvals are allowed (currently being implemented-the policy is just catching up).

Section 2.1 added language for pictures and Google Earth kmz files to be submitted for faster permit application processing.

A new link to the standard detail drawings for traffic control in chapter 16, section 15D of the FDM was added.

A link to the 2020 Flagger Handbook was added. The handbook can be used now. The flagger certification requirement is effective 1/1/20.

Added a new section on work zone requirements and training with a link to the [ROW Permit](#) since the information pertains to all permitted activities in STH ROW.

Work Zone Safety Booklet updated by end of year

The Work Zone Safety Booklet is in the process of being updated by the UW-Madison Transportation Operations and Safety (TOPS) Lab. It will replace the [March 2013 booklet](#) . The new booklet will be published sometime in early 2020.

New Policy Regarding Cellular Facilities

A new policy on cellular facilities has been developed and was reviewed and approved by the Office of General Counsel. The policy was also reviewed by WisDOT staff and FHWA. FHWA approved the policy. WisDOT Staff comments will be incorporated into the final version, which should be published in the Utility Accommodation Policy by the end January.

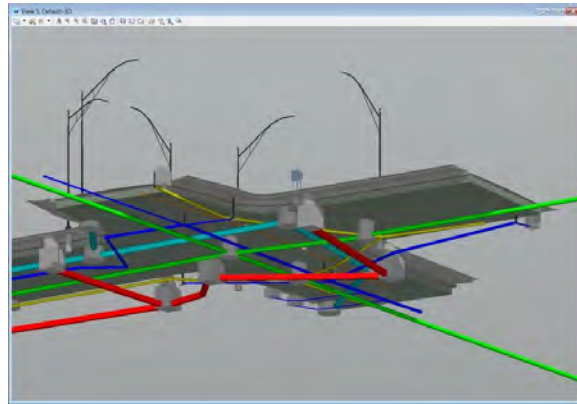
Questions regarding any of these topics can be directed to:

Bob Fasick

State Right-of-Way Permits Engineer
Bureau of Highway Maintenance
(608) 266-3438
robert.fasick@dot.wi.gov

3D Utility Survey Data

The Central Office Utility Unit is currently working with Jacobs Engineering on a contract that will provide research, analysis and recommendations for the use of 2D and 3D utility survey data in plans and models. This includes but is not limited to the depiction and transfer of survey data, clash detection practices and workflows, and requirements for permits.



A meeting was recently held with various contractors and other affected units within WisDOT to provide them with a project overview, current progress of the contract, and to hear firsthand experiences with 3D survey. The goal was to determine how contractors may assist in this project and to better understand their needs and priorities as this contract moves forward. Further discussions will be scheduled as needed.

People who have experience working with 3D utility data are encouraged to share their findings. Any information or questions can be directed to the Central Office Utility Unit inbox at DOTDTSDCOUtilityCoordination@dot.wi.gov

UN #07-05

Local Program Guidance

In the past on local program projects, WisDOT utilized management consultants (MCs) to be responsible for a large portion of coordination and review, and to work with both WisDOT and the local public agency (LPA). The recent removal of MCs on the local program has shifted more responsibility onto the LPA and its design consultant, and in turn caused some confusion as to how utility coordination should be handled moving forward.

Here are some key points regarding local program projects:

For utility companies:

- The LPA is the overall responsible party for all coordination, both during design and construction; they should be the first point of contact if issues arise.
- Wisconsin Administrative Code Ch. Trans 220 only applies to the State Trunk Highway (STH) system, which means it is not a requirement for local roads. However, the WisDOT Guide to Utility Coordination still recommends following the same, or similar coordination processes for all projects.
- Any release of rights documents, compensable agreements, work permits, or other project documents will be handled and approved by the LPA.
- Local program resources for utility coordination can be found [here](#).
- For additional resources, or to subscribe for local program updates, click [here](#).

(Note: Subscription link works best using Internet Explorer for the web browser)

For WisDOT staff:

- The assigned local program project manager (LPPM) will be the main WisDOT contact for project issues.
- There are no designated local program utility coordinators within the WisDOT regional offices, but staff is available to answer questions if the resources below do not adequately address any concerns.
- The statewide contact for local program utility coordination is [Abby Williamson](#).
- Local program resources for utility coordination can be found [here](#). Resources will be updated as needed, making it important to check for the latest versions.

For additional resources, or to subscribe for local program updates, click [here](#).

(Note: Subscription link works best using Internet Explorer for the web browser)

UN #07-06

Utility Coordination Tools Website is Live

The Central Office Utility Unit created a new website titled [Utility Coordination Tools](#) and was designed for WisDOT and consultant staff who perform utility coordination.



The website has been designed to provide tools and job aids, to reduce avoidable mistakes to help people remember what to do or be sure that they have completed all steps required. As more job aids and tools are developed they will be published on this site and announced in the Utility Coordination Newsletter or by special notice via email.

The website will be divided into categories and the first two available are for the PS&E and Let – Utility Coordination Related Documents and Land Rights Interpretation for WisDOT.

The Let Review Standards (LRS) Job Aid - The purpose is to document what is reviewed during the let review process by the Central Office Utility Unit. It also standardizes the let review process, so individuals submitting utility related documents for PS&E are receiving the same review comments from central office. It's also a historical document to track how unique situations were handled in the past. It is advised that any WisDOT or local program agency individual preparing the utilities article of the special provisions, the DT1080 – Utilities Status Report (USR), and utility related information on the General Notes page of the plan refer to this document during that process.

The Land Rights Interpretation for WisDOT section includes job aids and tools to help staff while reviewing right of way plats prior to finalizing to verify the utility's land right. Currently, a job aid and tool exist for determining a prescriptive right. The Prescriptive Rights Law job aid explains the laws in Wisconsin related to prescriptive rights by adverse user in Wisconsin and the job aid for the Prescriptive Rights Calculator (PRC) tool provides direction on what criteria is required to verify the prescriptive right.

UN #07-07

Let Review Standards

Central Office Utilities reviews every PS&E E-submittal from a utility coordination perspective. Some of the documents that are reviewed include the "Utilities" article of the special provisions and the Utility Status Report (USR). After the review is complete, the utility coordinator distribution list is utilized to share the list of items that have been identified as not being clear for Letting. Some items are revisions of modifications that are necessary prior to Central Office Utilities clearance in pseTrak, while others are best practices for future submittals.

A reference document has been created that is called Let Review Standards (LRS). The LRS contains common and unique situations that have been encountered in past Central Office reviews and how to handle these situations. For example, the LRS provides guidance for writing a special provision for a combined sewer system, or how to complete the USR for utility facilities installed before construction that are not related to the road project.

Items in the LRS will be modified when necessary and new items will be added when warranted. As a result, it's best to access the latest version of the document via the website. The LRS can be found on the wisconsindot.gov website on the [Utility Coordination Tools](#) page.

UN #07-08

<p>CATEGORY 1: Category 1 issues will be highlighted in red.</p>	<p><u>Issue must be revised or modified</u> due to Federal/State statues, administrative rules, regulations, policies, or procedures.</p>
<p>CATEGORY 2: Category 2 issues will be highlighted in yellow.</p>	<p><u>BTS Utility Unit recommends the issue be revised or modified</u> due to current policies or procedures.</p>
<p>CATEGORY 3: Category 3 issues will be highlighted in green.</p>	<p><u>Issues identified are best practices.</u> These issues <u>do not</u> need to be revised or modified to clear the project for Letting or addressed in an email to the BTS Utility Unit. However, these best practices should be incorporated in future Letting submittals in order to make the review and use of these utility documents easier.</p>
<p>CATEGORY 4: Category 4 issues will be highlighted in blue.</p>	<p><u>Issues identified are potentially a concern from a BTS Utility Unit perspective.</u> If the concerns are validated, you will receive an e-mail from the Bureau of Project Development (BPD). If the concern is not validated by BPD, you will receive an e-mail from the BTS Utility Unit clearing this issue.</p>

Norman's Corner

I'm excited for all the utility coordination projects and process improvements we are working on in 2020.

We're looking forward to hosting a Utility Conference this fall for WisDOT staff, consultants, local program and our utility contacts. Stay tuned for the date, times and topics. The organizing committee is in the final stages of selecting a location. Additionally, we will be asking our partners in the utility and construction industry to share their knowledge as speakers at the conference.



As we enter the start of a new year, let's all make a commitment to keeping the channels of communication open. Even with new forms of communication, sometimes a phone call or an in-person meeting is still the best way to resolve difficult or unclear situations.

Take advantage to our new Utility Coordination Tools website. It has numerous job aids, tools and other resources to make your job easier.

WisDOT's Utility Coordination Technical Committee (UCTC) is hard at work making improvements to our processes – again they may at times be reaching out to our internal staff and external partners for advice, opinions and involvement as they work through their various issues.

If you have a question or comment, please send it to:
DOTDTSDCUtilityCoordination@dot.wi.gov

Thanks,

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Bureau of Technical Services
4822 Madison Yards Way
Madison, WI 53705

Office: 608-266-2362

Cell: 608-516-6355

UN #07-09

Staff Changes

Hodges is New Utility Coordinator SW Region-La Crosse Office

James Hodges is the newest Utility Coordinator hired



in the SW Region – La Crosse office.

Hodges joins WisDOT with about 12 years of experience in utility coordination, from the consultant side. He began doing utility coordination primarily for BNSF Railway and Union Pacific Railroad and later Kansas City Southern as well as several short line rails. Hodges' DOT work includes work for Texas DOT (TxDOT) (primary Client for last 4 years), Oklahoma DOT (ODOT), Utah DOT (UDOT) and Washington DOT (WSDOT). He has also completed work for several local municipalities and private utilities. He has worked on projects in 18 states and one project in Canada. Prior to doing utility coordination, Hodges was in the US Air Force and the US Army and also worked at the US Post Office as a mail carrier.

Hodges is a native Texan but has lived all over the United States. He has lived in Holmen, Wis. for the last three years with his wife and three teenage children, two daughters and son. In his free time, Hodges enjoys spending time with his family.

Debby Kozol Retires from SW Region-Madison Office

Congratulations to Debby Kozol on her retirement. For 28 years Kozol has been a WisDOT employee with the last five years in utility coordination. Prior to that she worked in traffic engineering for 20 years and three years as a bridge engineer. Prior to working at WisDOT she worked for the Pennsylvania DOT.

In her retirement Kozol plans to continue being an active volunteer for various causes including: Sun Prairie Civic Theater, St. Vincent de Paul Sun Prairie Chapter and as an election official.

This winter she hopes to workout, ski and snowshoe. In retirement she also hopes to do a lot of travelling with her husband and two daughters to Pittsburgh, Penn. (her hometown), the upper peninsula of Michigan (where she went to school), Minnesota (to watch raptors) and downtown Chicago, IL. (to go to museums).



UN #07-10

Utility Coordination Training Available

Central office utility staff is available to provide training on a variety of subjects depending upon workload and availability. Past topics have included: right of way plat and plan reading, determining compensable utility facilities, Wis. Admin. Code ch. Trans 220 and utility coordination, work plan preparation, erosion control,



permitting and the Utility Accommodation Policy. WisDOT prefers to offer training to larger groups to make more efficient use of staff time. Large group training can

be requested by sending an email to:

DOTDTSDCOUtilityCoordination@dot.wi.gov

Work Zone Training

Work zone traffic control training is available through WisDOT's LearnCenter. To set up an account and register for training, follow the instructions at this link: <https://wisconsindot.gov/Pages/doing-bus/contractors/cntrctr-trng/default.aspx>

UN #07-11

TUMS-Framework Changes Struts to Spring

In the next phase of the TUMS Project, the application framework used to build TUMS and DOCR will be updated.

What does this mean? Following are some explanations to clarify.

1. **Application** – A software application created to resolve a specific business need. TUMS and DOCR were developed to address specific utility coordination needs.
2. **Java** – A programming language used by application developers to build software applications. TUMS and DOCR were developed using Java as the main programming language.
3. **Framework** – The building blocks or structure something is built upon. In this case, an application framework is a set of common software routines that provide foundation structure for developing an application.

Currently, TUMS and DOCR are built on an application framework called Struts. These applications are upgrading to a new framework known as Spring. Struts and Spring are further defined here:

4. **Struts and Spring** – Both are development frameworks for creating Web-based applications in Java.

Struts is an older application development framework that functioned well before but now needs to be replaced. It is considered "outdated" in the technology marketplace and has almost no support options.

Spring is a common application development framework for enterprise Java applications and is considered "current and supported" in the technology marketplace.

This update is required by the Bureau of Information Technology Services (BITS) for all Department applications built on a Struts framework.

Once completed, TUMS and DOCR can take advantage of contemporary programming methods and functions. Practical examples of this are improved menu systems and navigation (similar to the WisDOT Internet site).

The advantages of this upgrade will be hidden “under the hood” and most will not be obvious to system users. However, the upgrade will allow TUMS and DOCR to adapt and grow - alongside changing technologies and utility coordination needs.

UN #07-12

Zoo Interchange Named One of US Top Projects



The Zoo Interchange Project has been selected as the Number 3 top project of 10 nationally, in the [annual rankings presented by Roads & Bridges magazine](#)

The transportation industry trade journal credited WisDOT staff for having a robust involvement strategy for the public and stakeholders, as well as good decision-making on design, utilities and real estate that together helped to limit impact.

UN #07-13

IRWA Upcoming Training

Course 406 B: USPAP Refresher Course for 2020 , Instructor John Rolling, March 4, Appleton – Paper Valley Hotel

This course satisfies Title XI of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) requirements for standards, and ethics for appraiser certification and licensure, and has met the requirement for Standards and Ethics for state certification and licensure. The 7-hour course focuses on the changes to the edition of the Uniform Standards of Professional Appraisal Practice (USPAP). It also addresses common misunderstandings about USPAP. This course is intended to fulfill the 7-hour requirement as established by the Appraisal Qualifications Board (AQB) of the Appraisal Foundation.

Course 901 and 902: Engineering and Property Descriptions, March 3 and 4 2020, Appleton - Paper Valley Hotel

901 - The purpose of this course is to enable participants to improve their plan reading skills to perform their jobs more easily, effectively and efficiently. The course is designed to enable participants to improve their skills in using engineering plans and drawings.

902 - Industry: An advanced **course** that is required for the Oil and Gas Pipeline and Electric and Utilities pathways in the RWP program. It can also be applied towards the Generalist and Transportation pathways in the SR/WA program.

Course 604: Environmental Due Diligence and Liability, Instructor Marian Barnes, April 24, 2020, Green Bay WisDOT NE Region office.

This course provides the right of way professional with an understanding of the environmental due diligence components. Participants learn to recognize when a due diligence report should be ordered, as well as how reports should be analyzed.

Course 431: Valuation of Partial Acquisitions, September 2020, site and date TBD

This course presents more complex partial acquisition valuation problems and offers opportunities for the participants to understand better the possible applications of appraisal theory to specific partial acquisition appraisal situations.

Course 800: Real Estate Law, October 2020, site and date TBD

This course is designed to build on the basics of real estate law provided by Course 100 "Principles of Land Acquisition" and to assist right of way agents, property managers and others in collaborating with property owners and attorneys. This introductory level course provides novice employees dealing with real estate issues with basic right of way information and experienced employees with a broader perspective on legal issues and applicable law.

Course 603: Understanding Environmental Contamination, Instructor Marian Barnes, December 2020, Madison site and date TBD

This course is geared toward right of way professionals who may face the issue of contaminated properties, focusing on causes, effects and remedies of environmental contamination. This course emphasizes the importance of knowing the behavior of contaminants in the environment, environmental liabilities and auditing processes, underground storage tank removal and contamination assessment, cleanup and closures. Participants will learn how to evaluate potential problems that occur because of acquiring contaminated properties, and to evaluate, manage and minimize risks and liabilities.

To register follow this link: <https://www.irwaonline.org/courses/>

For general info about the IRWA Badger Chapter:
<https://irwabadgerchapter.com/>

UN #07-14

International Right of Way Association (IRWA) Utility/WisDOT Liaison Committee Meetings

This group of utility industry representatives and WisDOT staff gather at least three times per year

Upcoming Meeting:
February 20, 2020 9:30

to discuss various topics related to utility industry updates and concerns, as well as, WisDOT's utility accommodation and utility coordination policies.

People who want to know more about the group or attend a meeting, can contact DOTDTSDCOUtilityCoordination@dot.wi.gov

Additionally, people interested in suggesting meeting topics can contact Nicole Smullen, WEC Energy Group, at 414-221-5617 or email nicole.smullen@wecenergygroup.com

UN #07-15

a.m.

February Location:
Wis. State Patrol HQ
851 South Rolling
Meadows Drive
Fond du Lac, WI 54937



To subscribe, submit questions, suggestions, comments or potential newsletter articles, please send an email to DOTDTSDCOUtilityCoordination@dot.wi.gov . BTS/U will review each submission prior to publication.

This bulletin has been developed to provide updates, clarifications, job aids and news pertaining to WisDOT utility coordination and related WisDOT programs, policy and services. Information published in this bulletin will be of interest to those who work closely with utility coordination.