



2015 Underground School

MMUA / APPA / MREA

May 5 - 8, 2015 MMUA Training Center, Marshall, MN

Minnesota Municipal Utilities Association and our partners—Minnesota Rural Electric Association and American Public Power Association—are pleased to bring you the 2015 Underground School.

The MMUA Job Training & Safety Committee has put a lot of effort into the development of this school, and feels it has a lot of good training to offer to any level of lineworker. We will have a class for everybody, from the apprentice to experienced journeyman.

Please read through this brochure. Select classes based on the need for training your apprentices and journeymen. Students will need to decide which hands-on session they wish to take. Please consider a second choice, as classes fill on a first come, first served basis.

Training Center Mission: *To promote, perform, and enhance safe work environments in our municipal utilities, with the willingness to learn and pass on the passion of the craft.*

Minnesota Municipal Utilities
Association

3025 Harbor Lane North, Suite 400
Plymouth, MN 55447

Phone: 763-551-1230

Fax: 763-551-0459

www.mmua.org



2015 Underground School – What You Will Learn

GENERAL SESSIONS

Tuesday, May 5

Safety Rules & Regulations: Do We Really Need Them?

Joe Schmidt, CSP, MMUA

Each and every day we are given a different working environment. Recognizing the hazards associated with those changes becomes a challenge because of the differing dynamics with every job we perform. It has become commonplace to feel that personal protective equipment and the respective rules will prevent injuries, but reality show differently.

We have all been in the situation of not wanting to wear PPE, for whatever the reason. Ultimately we are told that OSHA requires its use or the employer mandates it. Are those efforts successful or should there be alternative thoughts in our personal decision making process for PPE use?

Demonstration with Salisbury—New Product/Care and Maintenance of Personal Protective Equipment

Border States Electric

Ergonomics: Why Battery Operated Tools Can Pay for Themselves!

Nick Koch, Huskie Tools and Jeff Wangstad, Lee Noonan

Friday, May 8

Utility Damage Prevention

Mike Mendiola, Minnesota Office of Pipeline Safety

Barb Cederberg, Gopher State One Call

HANDS-ON TRAINING SESSIONS

Class 1: Proper Cable Identification, Testing and Grounding Methods

Instructors: Martin Meixell, Fairmont Public Utilities; Nick Hall and Sean McDowell, Rochester Public Utilities

This class is designed to demonstrate proper safety and work procedures for high voltage and secondary underground cable isolation, identification, verification and grounding. Students will train and participate in the use of standard operating procedures, switching procedures and proper personal protective equipment needed for the job. Proper tailboard briefings, rubber cover up, lock-out/tag-out, good communication between co-workers and maintaining minimum approach distances will also be covered in this training.

Class 2: Directional Boring with Conduit into Substation Application

*Equipment Vendor/Instructor: Kevin Kollos, Ditch Witch
Instructors: Wade Williams, Fairmont Public Utilities; John Egan, Sauk Centre Public Utilities; Marshall Municipal Utilities*

This class will focus on expansion for the future by directional boring multiple conduits from a newly installed cabinet to a riser pole which will serve as a feeder to a new development. In this class, the students will be instructed on preparing the site, identifying the hazards and other utilities that may be in the area, excavate and directional bore from one site to the other and demonstrate site cleanup when the project is completed. This class will focus on safety and the proper procedures to make the lineworker more comfortable around the equipment.

Class 3: Underground System Maintenance and Repair

Instructors: James Monroe, New Ulm Public Utilities; Brian Remme, Missouri River Energy Services/Luverne; City of Pierre (SD); Watertown (SD) Municipal Utilities

Underground system maintenance and repair is the heartbeat of your utility. The expertise to find and replace damaged or suspected problems before that unplanned outage is of paramount importance with computers and other sensitive electronics throughout your neighborhoods and small/large companies alike.

Topics for this class:

- Proper Isolating, Testing and Grounding
- Appropriate Methods When Installing and Removing Elbow Terminations
- Tool Selection for Terminating Cable
- Switching Procedure
- Lock-Out/Tag-Out
- Trench Layout

Class 4: Trench Excavation—Complete Competent Person & Confined Space Training

Vendor/Instructor: Jordan Fischer, United Rental

Underground maintenance and construction often puts us in unstable or dangerous atmospheres. This class is designed for all employees involved in trenching work and confined spaces giving them the necessary skills and training to determine when and how to enter these work stations. This class will offer classroom training along with hands-on training out in the field.

Topics for this class:

- Trench Safety
- OSHA Excavation Standard
- Competent Person Responsibilities
- Sloping, Shoring and Shielding Guidelines
- Protective Systems
- Soil Analysis
- Identifying Permit Required Confined Space
- Monitoring Equipment
- Ventilating Equipment
- Duties of Supervisors, Entrants and Attendants
- Permit requirements for Confined Spaces

ADVANCED TRAINING SESSION

Class 5: Map Design and Implementation to an Electrical System

Instructors: Bryant Tauer and Joe Moore, Moorhead Public Service; Chad Riess, Rochester Public Utilities

The proper design and system layout of your underground distribution is the single most important function before any wire is installed in the ground. Without this engineering step, it is doubtful that your underground system will perform and function properly.

Topics for this class:

- Design a Residential Neighborhood Distribution System
- Map Electrical Infrastructure
- Discuss System Theory
- Load Calculations
- Transformer Layout and Selection
- Create Material Pick Lists
- GPS Data Collection
- Engineering Analysis

2015 Underground School Agenda

Tuesday, May 5

12:00-1:00 pm	Registration
1:00-2:00 pm	Safety Rules & Regulations: Do We Really Need Them?
2:00-3:00 pm	Demonstration with Salisbury
3:00-4:00 pm	Ergonomics: Why Battery Operated Tools Can Pay for Themselves!
4:30-7:00 pm	Product Show and Reception at Ramada

Wednesday, May 6

8:30 am-12:00 pm	Hands-On and Advanced Lineworker Class
12:00-12:30 pm	Lunch served at Training Center
12:30-4:00 pm	Hands-On and Advanced Lineworker Class
5:00 pm	Golfing or Sporting Clay Shoot (at participant's expense)

Thursday, May 7

8:30 am-12:00 pm	Hands-On and Advanced Lineworker Class
12:00-12:30 pm	Lunch served at Training Center
12:30-3:00 pm	Hands-On and Advanced Lineworker Class
3:00-4:00 pm	Lineworker Rodeo Mystery Event

Friday, May 8

8:30-10:30 am	Utility Damage Prevention
10:30-11:00 am	Closing Comments and Adjourn

What to Bring

Hands-On Class:

- Hard Hat
- Safety Glasses
- Work Gloves
- Work Boots (no tennis shoes allowed)
- High Visibility Clothing Appropriate for the Weather
- Rain Gear (just in case)

Advanced Class:

- Note Pad & Pen/Pencil
- Calculator
- Hard Hat
- High Visibility Clothing Appropriate for the Weather

Lineworker Rodeo Mystery Event

This mystery event is open to all classes of lineworker, from first-year apprentice to the advanced journeyman. This is a fun event which demonstrates safe working practices and a little speed. A trophy plaque will be awarded to the person with the best time and least amount of infractions.

Evening Activities

Tuesday, May 5

4:00—7:00 pm

Product Show and Reception, Ramada in Marshall

Included in the registration is admission to the product show. This is a great place to see what products are available to the lineworker industry and a chance to visit with the vendors about product needs.

There will be an assortment of hors d'oeuvres and a cash bar available to everyone in attendance.

Wednesday, May 6

5:00 pm

Sporting Clay Shoot or Golf

At participant's expense, we will arrange a fun evening of golf at one of the local golf courses in the Marshall area or an evening of shooting sporting clays at Shooter's Gun Club. If you are unable to bring a firearm we will make sure there are some available for you to use.

Certificates

Each participant will receive a certificate of achievement showing the hours of attendance acquired.

2015 Underground School

MMUA Registration Information

Registration Fee

Members

\$440 per student on or before April 21, 2015

Non-Members

\$690 per student on or before April 21, 2015

All fees will increase \$50 on or after April 22, 2015.

Fee includes: workshop tuition, materials, Product Show & Reception, two lunches, refreshment breaks and certificate.

Refunds

A refund will be given on advance registrations if the MMUA office is notified by 4:30 pm on April 21. A cancellation fee of \$25 per person will be charged.

Marshall Hotel Information

AmericInn Motel & Suites

1406 Lyon Street
507-537-9424
Ask for MMUA's reduced rate.

RAMADA (formerly Best Western)

Junction of Hwy. 19 & 23
507-532-3221
Ask for MMUA's reduced rate.

Traveler's Lodge

1425 East College Drive
507-532-5721

Comfort Inn

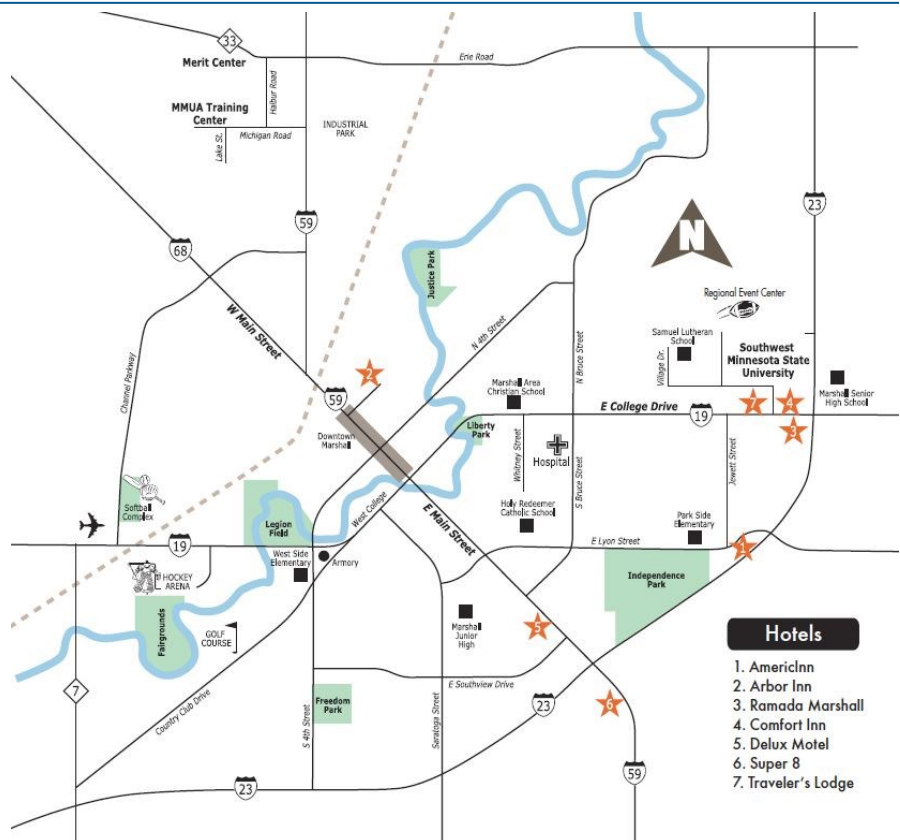
1511 East College Drive
507-532-3070

Super 8

1106 East Main Street
507-537-1461

Deluxe Motel

516 East Main Street
507-532-4441



Questions?

For questions about the program and its content, contact Pete Wyffels at MMUA. His phone number is 507-380-9578 or email pwylfells@mmua.org.

For questions or problems with registration or reservations, contact Rita Kelly at MMUA. Her phone number is 507-63-746-0707 or email rkelly@mmua.org.

MMUA Training Center
1004 Michigan Road
Marshall, MN 56258
May 5 - 8, 2015



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Attendee Information

1) Name : _____

Email : _____

2) Name : _____

Email : _____

Class Selection (indicate 1st and 2nd choice)

- _____ Class 1: Proper Cable Identification, Testing & Grounding Methods
_____ Class 2: Directional Boring with Conduit into a Substation Application
_____ Class 3: Underground System Maintenance & Repair
_____ Class 4: Trench Excavation-Complete Competent Person/Confined Sp.
_____ Class 5: Map Design & Implementation to an Electrical System (Advanced)

We will make every effort to accommodate your first choice. If you are selecting the Advanced Lineworker Class, a second choice is not necessary.

Utility: _____

Address: _____

City: _____

State/Zip: _____

Main Contact: _____

Email: _____

Phone: _____

Registration Fees

Members:

\$440 on or before **April 21, 2015**

Non-Members:

\$690 on or before **April 21, 2015**

All fees increase \$50 on or after **April 22, 2015**

Total Due: \$ _____

Payment

- Check Payable to MMUA
 Bill Utility/Company
 Purchase order _____
 Credit Card
 Visa MasterCard Discover

Name as it Appears on Card

Cardholder's Signature

Credit Card Number

Expiration Date

Card Code on Back

REFUND: A full refund (minus \$25 per person processing fee) will be given on advance registrations if the MMUA office is notified by 4:30 pm on **April 21, 2015**.

PHOTOGRAPHS: By registering for this conference, I authorize Minnesota Municipal Utilities Association (MMUA) to photograph me at this event and use such photographs in MMUA marketing pieces (both electronic and print). I understand that I will not be paid for giving this consent.

QUESTIONS: Please contact Rita Kelly by email rkelly@mmua.org or phone 763-746-0707.

Register online: www.mmua.org/event/underground-school

Register by mail: Minnesota Municipal Utilities Association
3025 Harbor Lane North, Suite 400
Plymouth, MN 55447

Register by email: rkelly@mmua.org

Register by phone: 763-746-0707

Register by fax: 763-551-0459

Registration Deadline is
April 21, 2015