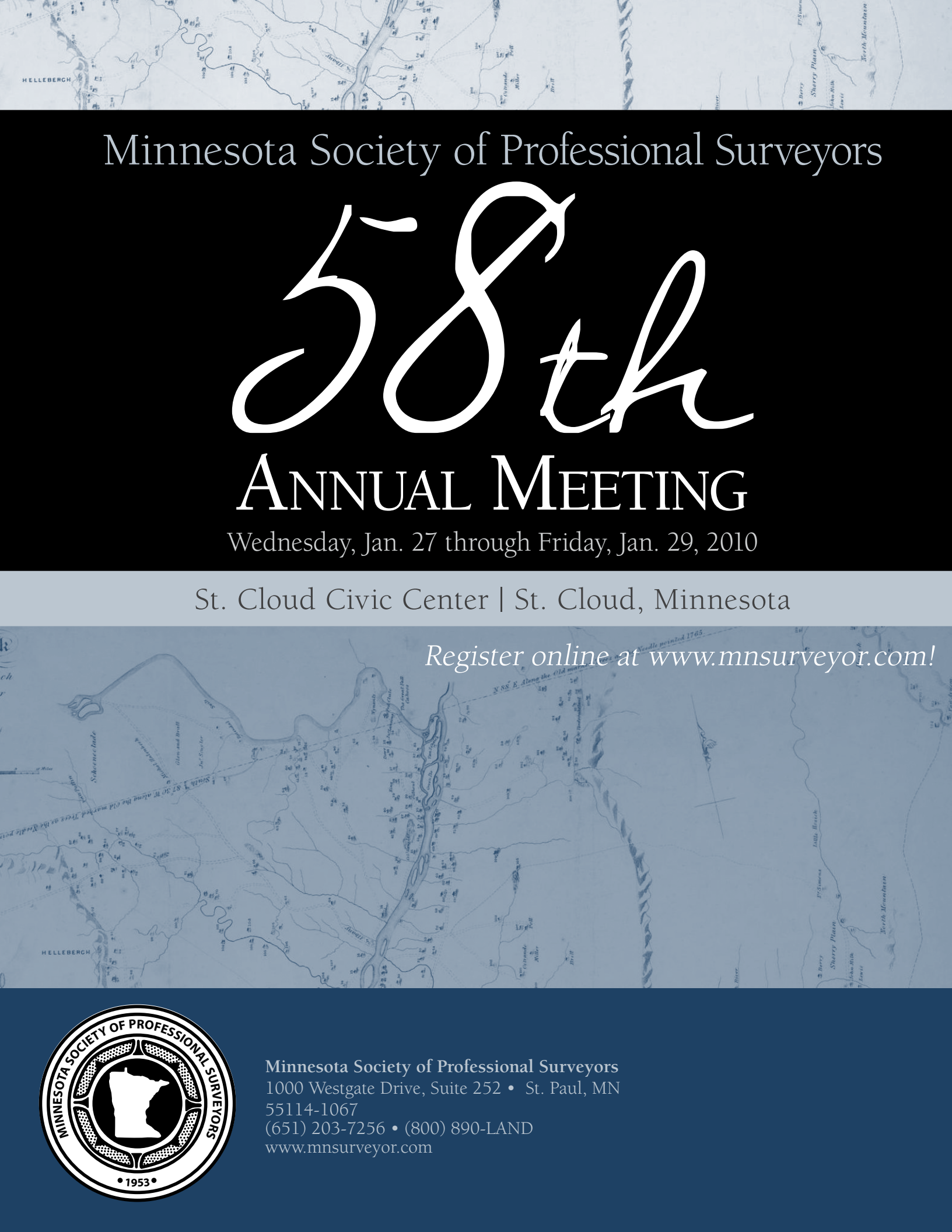




Minnesota Society of Professional Surveyors

58th

ANNUAL MEETING

Wednesday, Jan. 27 through Friday, Jan. 29, 2010

St. Cloud Civic Center | St. Cloud, Minnesota

Register online at www.mnsurveyor.com!



Minnesota Society of Professional Surveyors
1000 Westgate Drive, Suite 252 • St. Paul, MN
55114-1067
(651) 203-7256 • (800) 890-LAND
www.mnsurveyor.com

Welcome to the MSPS 58th Annual Meeting: Conference Highlights

Wednesday, Jan. 27, 2010: Seminar Day

Workshop/Seminar, St. Cloud Civic Center:

Law of Easements and Water Boundaries with Jeff Lucas 7.0 PDHs available

8 a.m.: Registration, materials pick up, rolls and coffee

8:30 a.m. to 12 p.m.: Law of Easements

12 to 1 p.m.: Lunch

1 to 4:30 p.m.: Water Boundaries

Law of Easements

Real property rights will be examined, generally, and non-possessory interests created by easements will be examined specifically. The classifications and the manner in which easements are created will be studied. This will include a discussion of easements created by conveyance and easements created by other means (e.g. prescription, implication, etc.). Once the creation of easements has been established, the scope, interpretation, and the rights and obligations, of both the easements owner and the owner of the servient estate will be examined. Concepts that will be studied include dominant estate and servient estate; easement in gross and easement appurtenant; express easement and implied (non-express) easement; and "running with the land." The termination and extinguishment of easements will wrap up the

discussion. At least six court cases from across the country that exemplify and flesh out these concepts will be examined by the participants with discussion to follow.

Water Boundaries

This seminar will cover the basic concepts behind water boundaries and how those concepts affect the private practice land surveyor. The history of water boundaries will be discussed including the "equal footing" doctrine, "navigability," "submerged lands," "mean high tide," "high water mark," "low water mark," and other issues affecting the identification and location of the boundary between the upland owner and submerged lands belonging to the sovereign. Necessary to any discussion of water boundaries is the commerce power of the Federal Government and the concepts of public and private waters. Non-navigable and man-made waters will also be discussed. The riparian and littoral rights of the upland owner and the problems facing the boundary surveyor will be studied. At least six court cases will be studied on the issue of water boundaries.

MSPS has applied for CLEs through the Minnesota State Board of Continuing Legal Education.

Ice Breaker: 4:30 to 7:30 p.m., Kelly Inn: Poolside Room

Stop by for complimentary refreshments, visit with your surveying peers and welcome our guests from neighboring and affiliate organizations.

Thursday, Jan. 28, 2010: Day 1 Social Events

Acoustic Jam Session: 3:45 to 6:00 p.m. at the Terry Haws Center

Musicians — bring your instruments. No amps, please. Everyone is welcome to attend.

MLS Foundation Live Auction: 5:00 to 6:00 p.m. Thursday, Haws Center

In conjunction with the pre-President's Banquet Social, the foundation will offer the opportunity to verbally outbid your friends and coworkers on donated items for sale. Auctioneer Ray Henry will call the items, and the cash bar will open at 3:45 p.m.

President's Banquet: 6:30 to 9:30 p.m. Thursday, Kelly Inn Ballroom (ticket required)

Join us for a gala evening of socializing, food, entertainment and door prizes. All MSPS members and guests are welcome and encouraged to attend the President's Banquet. This is a wonderful opportunity to spend a fine evening with your colleagues and friends in a nice setting with great food and first-class entertainment. Don't miss out! We hope to see you there!

President's Banquet Schedule

6:30 to 7 p.m.	Entertainment and cash bar
7 to 8 p.m.	Dinner
8 to 9 p.m.	Entertainment

Interested in Exhibiting?

Visit the MSPS Web site and download the exhibitor brochure at www.mnsurveyor.com.

Thursday & Friday, Jan. 28 to 29, 2010: Annual Meeting, days 1 and 2

58th Annual Meeting, St. Cloud Civic Center

This year's MSPS program features three concurrent sessions offering a wide variety of technical and business-related topics in the spacious St. Cloud Civic Center. Network with your surveying peers from throughout the region and be sure to visit with our exhibitors to see the latest surveying equipment.

Exhibits: Terry Haws Center

Exhibits for 2010 take place on both Thursday and Friday in the Haws Center, located on the first floor. Stop by and visit with our exhibitors and sustaining members as well as representatives of educational institutions. Breakfast and refreshments will be served in the Haws Center after the exhibit hall opens. Exhibits open at 8 a.m. on Thursday.

17th Annual Map Contest: Terry Haws Center

Entries will be judged in three categories: Subdivision Plat, C.I.C., and RLS; Boundary and/or Topographic Survey; and A.L.T.A. Survey. A student category is also included. The entry fee is \$5 per map. Cash and certificates will be awarded, and the maps will be displayed in the Exhibit Hall (Haws Center) Thursday through early Friday afternoon. See page 14 for details and entry form.

MLS Foundation Silent Auction: Opens at 9 a.m. Thursday and Friday, Terry Haws Center. Closes at 1 p.m. on Friday. To raise scholarship funds, the MLS Foundation will hold its traditional silent auction in the Exhibit Hall. Winners will be announced Friday after lunch and before the afternoon sessions start.

Friday, Jan. 29, 2010: Annual Meeting day 2

Friday Lunch: 11:45 a.m., Glenn Carlson Hall

SCSU Faculty/Student Program, awards and MLS Foundation scholarships

GENERAL INFORMATION

Location: The conference will be held at the Civic Center in St. Cloud, Minn. The Civic Center is located downtown beside the Mississippi River (see map on page 12). The address is 10 Fourth Ave. S.

Pre-registration: This is your way to save money and to enable us to plan the meeting better with adequate counts. Substantial price reductions will be realized for early registrations and for MSPS members. Full refunds (minus a \$25 processing fee) for cancellations prior to Jan. 9, 2010; 50 percent prior to Jan. 19, 2010; and none thereafter. Substitutions are permitted. Please fax all cancellation/substitution requests to MSPS at (651) 290-2266 or email tiffanys@ewald.com.

Continuing Education: Minnesota PDHs — the state board does not pre-approve credits. You must determine from their rules which classes you can claim for credit. The two business meetings WILL NOT be covered. Forms for Minnesota, Iowa, North Dakota and South Dakota will be available at the registration desk.

Reciprocity Programs: MSPS will offer a \$20 discount from its nonmember fee for those attending from a neighboring association of professional surveyors. MSPS also extends a fee

reciprocity to ACSM/NSPS members who are also members of a state society other than Minnesota.

Registration: Mail seminar/conference registration form along with payment to:

Minnesota Society of Professional Surveyors (MSPS)
1000 Westgate Drive, Suite 252 | St. Paul, MN 55114-1067

Registration forms will also be posted on our Web site, www.mnsurveyor.com.

Annual Meeting Committee:

Chairman: Terry Freeman

Members: Rick Blom, Robert Burell, John Freemyer, Matt Hansen, John Hosfield, Ed Otto, Rod Squires and Paul Voge.

SCHEDULE AT A GLANCE

Wednesday, January 27, 2010

7:30 to 8:00 a.m.	Registration
8:30 a.m. to 4:30 p.m.	Law of Easements and Water Boundaries, <i>Jeff Lucas</i>
4:30 to 7:30 p.m.	Ice Breaker, Kelly Inn

Thursday, January 28, 2010

	Session A	Session B	Session C
8 to 8:30 a.m.	Registration, Exhibit Hall Opens and Continental Breakfast		
8:30 to 9:30 a.m.	Business Meeting		
9:35 to 10:25 a.m.	A1: Eminent Domain (The State's Taking Power) <i>Jeff Lucas</i>	B2: Surviving Economic Downturns <i>Curt Sumner</i>	C3: The Business of Laser Scanning <i>Greg Schneider</i>
10:30 to 11:25 a.m.	A4: Eminent Domain (The State's Taking Power) (cont.) <i>Jeff Lucas</i>	B5: Copyright Basics <i>James Hartnett & Timothy Cruz</i>	C6: The Business of Laser Scanning, (cont.) <i>Greg Schneider</i>
11:30 a.m. to 12:45 p.m.	Lunch, Visit Exhibitors		
12:45 to 1:40 p.m.	A7: Eminent Domain (The State's Taking Power) (cont.) <i>Jeff Lucas</i>	B8: Licensure Board Update, the 4 Es (Education, Exam and Experience, Enforcement and Ethics). <i>Doreen Frost & David Landecker</i>	C9: GEOID09 & NSRS Update <i>David Zenk</i>
1:45 to 2:40 p.m.	A10: Eminent Domain (The State's Taking Power) (cont.) <i>Jeff Lucas</i>	B11: MnDOT's Construction Outlook <i>Abby McKenzie</i>	C12: GPS - Myths vs. Facts <i>Steve Richter</i>
2:45 to 3:45 p.m.	A13: Inside the Black Box (Data Collector) <i>Eric Fuller</i>		C14: Chapter Meetings
3:45 to 6:00 p.m.	Jam Session, Visit Exhibitors, MLS Foundation Auction		
6:00 to 6:30 p.m.	Social Time		
6:30 to 9:30 p.m.	President's Banquet, Kelly Inn		

Friday, January 29, 2010

	Session A	Session B	Session C
7:30 a.m.	Registration Opens, Continental Breakfast		
8:30 to 9:25 a.m.	A15: Lawyer vs. Surveyor: Can a landowner screw up the description of their property so that it may no longer be surveyed? <i>Dennis Pederson & David Meyers</i>	B16: History of the Iowa-Minnesota Border Survey <i>Captain Andrew Talcott</i>	C17: Accuracy and Precision <i>Chris Rotegard</i>
9:30 to 10:25 a.m.	A18: Risk Management (Using the ALTA/ACSM Standards as a Tool) <i>Curt Sumner</i>	B19: History of the Iowa-Minnesota Border Survey (cont.) <i>Captain Andrew Talcott</i>	C20: Accuracy and Precision (cont.) <i>Chris Rotegard</i>
10:25 to 10:45 a.m.	Break: Visit the Exhibitors		
10:45 to 11:40 a.m.	A21: Manual of Guidelines for Platting in Minnesota <i>William Brown & Michael Welling</i>	B25: Histories of Land Surveyors and a Review of the Economic Health of the Surveying Community in 2009 <i>Ron Murphy</i>	C23: Accuracy and Precision (cont.) <i>Chris Rotegard</i>
11:45 a.m. to 1:15 p.m.	Lunch, SCSU Faculty-Student Program, Scholarship Awards, Surveyor Awards, Pass the Gavel		
1:30 to 2:25 p.m.	A24: The Status of LiDAR Data in Minnesota <i>Tim Loesch</i>	B22: Principal Meridians and Base-lines <i>Rod Squires</i>	C26: Tips & Tricks of Civil 3D for Survey <i>Chad Studor & Rob Black</i>
2:30 to 3:25 p.m.	A27: Ground Penetrating Radar (GPR) and Monument Location <i>Brian Herridge</i>	B28: Tracing the Footsteps of US GLO Deputy Surveyors <i>Gary Stevenson</i>	C29: Advanced Coordinate Calculations <i>Eric Fuller</i>

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8 to 8:30 a.m. — Registration, Continental Breakfast, Exhibit Hall Opens. Silent Auction Starts at 9 a.m.

8:30 to 9:30 a.m. — Business Meeting

9:35 to 10:25 a.m. — Concurrent Sessions A, B & C

Session A1: Eminent Domain (The State's Taking Power)

Jeff Lucas

Many surveyors, as well as the general public, have little understanding of eminent domain and the state's power to take private property. This half-day seminar will study the recent Supreme Court action in the case of *Kelo v. City of New London* that has sparked the interest of legal scholars, land surveyors, and ordinary citizens. The basics of eminent domain will be studied, along with basic property rights. Prior court decisions leading up to the decision in *Kelo* will be studied. And recent developments in the law will be discussed. Case studies and discussion. Power Point presentation.

Session continues to 2:40 p.m.

Jeffery N. Lucas is in private practice in Birmingham, Alabama. Mr. Lucas has been in the surveying business for 31 years. He is a licensed land surveyor registered in Alabama, Florida, Georgia, Mississippi and Tennessee. Mr. Lucas is also a licensed attorney and member of the Alabama State Bar. Mr. Lucas specializes in land boundary issues and practices throughout the southeast. He has been a seminar leader on surveying topics that include ALTA/ACSM standards, survey technical standards, boundary law, survey law, legal descriptions, state plane coordinates, geodetic surveying, and water boundaries. In addition, he has authored many articles on surveying and boundary issues that have been published in state and national professional journals.

Session B2: Surviving Economic Downturns

Curtis Sumner

A discussion on how surveyors can prepare themselves to survive economic downturns. Among topics to be discussed will be right-sizing one's company to fit qualifications, personnel, and potential markets.

Curtis W. (Curt) Sumner is a licensed surveyor in Virginia and Maryland with over 40 years of experience. Prior to becoming the Executive Director of ACSM and NSPS in 1998, he managed professional services firms as both a partner and a sole owner, with primary responsibility for client development/relations.

Session C3: The Business of Laser Scanning; Hype or Competitive Advantage?

Greg Schneider

Is your business ready for the upcoming stimulus work? When it does come your way, are you "shovel ready" with the right tools and workflows to beat the competition? This is your opportunity to enter new markets, diversify your product and service portfolio and handle precision measurement applications you otherwise could not compete for. Do not risk being left behind... companies like yours have already taken advantage of the latest HDSTM technology to make profits during the latest recession.

Session continues to 11:25 a.m.



Gregory S. Schneider is the Midwest Regional Manager at Leica Geosystems, Inc. Employed by the High Definition Surveying (HDS) Division of Leica Geosystems, Greg Schneider has worked in the Surveying and Engineering Industry since 1982. Subsequently, Greg's career has spanned many disciplines of these industries. In 2003 Greg joined Leica as an HDS Applications Engineer

(then Cyra Technologies) focusing on laser scanning hardware and software solutions. Greg is a certified HDS trainer and has provided project support services on over 200 laser scanning projects throughout the United States.

10:30 to 11:25 a.m. — Concurrent Sessions A, B & C

Session A4: Eminent Domain (The State's Taking Power) Continued

Jeff Lucas

Many surveyors, as well as the general public, have little understanding of eminent domain and the state's power to take private property. This half-day seminar will study the recent Supreme Court action in the case of *Kelo v. City of New London* that has sparked the interest of legal scholars, land surveyors, and ordinary citizens. The basics of eminent domain will be studied, along with basic property rights. Prior court decisions leading up to the decision in *Kelo* will be studied. And recent developments in the law will be discussed. Case studies and discussion. Power Point presentation.

Session continues to 2:40 p.m.

Session B5: Copyright Basics

James Hartnett & Timothy Cruz

Copyright Basics will explore copyright protection in architectural works. The presentation will include specific discussion relating to the scope of protectable expression in maps and surveys. We anticipate an interactive format.



Jim Hartnett is a partner in Faegre & Benson's Business Litigation group. He regularly represents clients in the construction industry, including design professionals, and has handled a variety of intellectual property cases, including patent, copyright and Lanham Act matters.

Tim Cruz is an associate in Faegre & Benson's intellectual property practice with a particular focus on copyright, trademark and patent litigation, including opposition and cancellation proceedings before the Trademark Trial and Appeal Board.

Session C6: The Business of Laser Scanning; Hype or Competitive Advantage? (continued)

Greg Schneider

Is your business ready for the upcoming stimulus work? When it does come your way, are you "shovel ready" with the right tools and workflows to beat the competition? This is your opportunity to enter new markets, diversify your product and service portfolio and handle precision measurement applications you otherwise could not compete for. Do not risk being left behind... companies like yours have already taken advantage of the latest HDSTM technology to make profits during the latest recession.

11:30 a.m. to 12:45 p.m. — Lunch and Visit Exhibitors

12:45 to 1:40 p.m. — Concurrent Sessions A, B & C

Session A7: Eminent Domain (The State's Taking Power) Continued

Jeff Lucas

Many surveyors, as well as the general public, have little understanding of eminent domain and the state's power to take private property. This half-day seminar will study the recent Supreme

Court action in the case of *Kelo v. City of New London* that has sparked the interest of legal scholars, land surveyors, and ordinary citizens. The basics of eminent domain will be studied, along with basic property rights. Prior court decisions leading up to the decision in *Kelo* will be studied. And recent developments in the law will be discussed. Case studies and discussion. Power Point presentation.

Session continues to 2:40 p.m.

Session B8: Licensure Board Update, the 4 Es (Education, Exam and Experience, Enforcement and Ethics)

Doreen Frost & David Landecker

Regulation is more complex than the application and license issuance. The multiple elements will be discussed along with the changes that are being considered.

David Landecker has more than 34 years of experience in the land surveying industry. His career began at Consulting Engineers Diversified (CED), a Minneapolis based land surveying and engineering firm. In 1978, Landecker joined Landecker and Associates as a land surveyor and served as the president of that firm. In 2009 Landecker joined Ulteig Engineers Inc. and currently serves as Associate Vice President and Team leader of the land survey departments of the firm's Detroit Lakes and Fargo offices.

David has been a licensed Professional Land Surveyor in the State of Minnesota since 1985. He currently serves as a land survey member and treasurer on the executive committee for the Minnesota Board of AELSLAGID. He currently serves on the board of MSPS as acting Past President. He is a member of the National Society of Professional Surveyors (NSPS) and National Council of Examiners for Engineering and Surveying (NCEES).

Session C9: GEOID09 & NSRS Update

David Zenk

The official release of GEOID09, and current and future plans by NGS for the National Spatial Reference System will be presented.



David Zenk is a Geodesist with the National Geodetic Survey, serving as Geodetic Advisor in Minnesota. He holds Bachelor of Science Degrees in Civil Engineering and Mechanical Engineering from the University of Minnesota and a Master's Degree in Land Surveying from Oregon State University. He has served as adjunct faculty at the University of Minnesota Geography Department and at Saint Cloud State University Geography

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Department. He is licensed as a Registered Land Surveyor and Professional Engineer in the State of Minnesota.

1:45 to 2:40 p.m. — Concurrent Sessions A, B and C

Session A10: Eminent Domain (The State's Taking Power) Continued

Jeff Lucas

Many surveyors, as well as the general public, have little understanding of eminent domain and the state's power to take private property. This half-day seminar will study the recent Supreme Court action in the case of *Kelo v. City of New London* that has sparked the interest of legal scholars, land surveyors, and ordinary citizens. The basics of eminent domain will be studied, along with basic property rights. Prior court decisions leading up to the decision in *Kelo* will be studied. And recent developments in the law will be discussed. Case studies and discussion. Power Point presentation.

Session B11: MnDOT's Construction Outlook

Abigail McKenzie

The presentation will provide an overview of MnDOT's planned construction program in 2010 and 2011, an update on stimulus projects and MnDOT's Chapter 152 bond program.

Abby McKenzie is Director of Office of Investment Management, responsible for statewide planning and programming for MnDOT since 2006. Abby joined MnDOT in 1995 as Director of Economic Analysis and also served as Director of Statewide Planning and Performance Measurement, before becoming Director of OIM. Prior to joining MnDOT, Abby was Director of Information and Analysis for the Department of Trade and Economic Development. She holds a Master's degree in Public Policy from the University of Michigan.

Session C12: GPS – Myths vs. Facts

Steve Richter

With so much talk about GPS, its health, and the DOD's long term commitment, we will try to answer some questions regarding the future of the system. What is the current health of the GPS system? How does GNSS play a role in GPS' future? What about these new GPS signals? How will that impact me?

Steve Richter is a Trimble Certified Trainer for Frontier Precision, Inc. A charter member of the Trimble MGIS Hall of Fame, Steve started his career in the Surveying profession back in 1989, working with CAD products and services while he attended college. Getting into GPS technology in 1991, Steve has spent the last 18+ years specializing in that discipline. With the past 11 years focused on training and support, Steve has been able to provide certified training to Engineering, Surveying, and MGIS professionals throughout the Upper Midwest as well as provide technology driven lectures on GPS and Surveying. He currently resides in Minnesota working out of the St. Cloud office for Frontier Precision.

2:45 to 3:45 p.m. — Concurrent Sessions A & C

Session A13: Inside the Black Box (Data Collector)

Eric Fuller

Presentation will look at the basics of the concepts and parameters which are utilized within the typical surveying data collector when options such as different datums, coordinate systems, scale factors, etc., are selected.



Eric Fuller is currently the Interim Director of and Assistant Professor in the Land Surveying and Mapping Science Program at St. Cloud State University. Licensed land surveyor in Maryland, Minnesota, and Virginia. Master's Degree in Engineering from Purdue University with emphasis in Geomatics.

Session C14: Chapter Meetings

3:45 to 6:00 p.m. — Jam Session, Visit Exhibitors, MLS Foundation Auction

6:00 to 6:30 p.m. — Social Time

6:30 to 9:30 p.m. — President's Banquet



Glen Everhart, Musical Humorist

An evening with Glen Everhart is a fun, funny, totally interactive musical experience! Glen's show is a one man comedy musical variety act, combining his hilarious songs and stories with marvelous musicianship and audience participation from beginning to end. His knack for pulling an audience "out of their shell" and making them forget themselves in laughter impresses clients all over the USA. So get ready to listen, laugh, sing, shout, and duck flying projectiles...

Fast Facts about Glen Everhart:

Glen Everhart was born and raised in St. Paul Minnesota. He received his B.A. Degree in Music Education from St. Cloud University and taught public school full and part-time for a total of seven years. Glen has been performing professionally full-time now since 1987 – 22 years! His performances have taken him to 25 states and 2 countries.

Glen has won the following awards: The Great American Song Contest with the song "Young People of the World", and "Entertainer of the Year" by G. L. Berg Entertainment staff.

2010 Guest Program

Headquarters: Kelly Inn, Highway 23 and 4th Avenue South, St. Cloud, Minn.

Hospitality Rooms: #567-#569

Please share with your guest: You are cordially invited to share in two fun-filled days with another taste of Minnesota outside our own lives. We would love to have you!

This year's guest program will be very similar to last year's. Please join First Lady Carol Schellack in the hospitality room for breakfast on Thursday morning at 7:30 a.m. Following breakfast, the whole group, pairs or individuals (or any combination) may head out to do as they choose. We will have plenty of local attraction information available from the St. Cloud Convention and Visitors Bureau to give out.

No formal registration is necessary. If you have any questions, please contact Taryn Ayres at 651-265-7856 or taryna@ewald.com.

SESSION DESCRIPTIONS: Friday, January 29, 2010

7:30 a.m. — Registration Opens, Continental Breakfast

8:30 to 9:25 a.m. — Concurrent Sessions A, B & C

Session A15: Lawyer vs. Surveyor: Can a Landowner Screw up the Description of Their Property so That it May No Longer Be Surveyed?

Dennis Pederson & David Meyers

What happens when an owner of registered land digs a harbor, then subdivides the land along the new shoreline into lots? What is the legal description of the land under the harbor and can a surveyor locate the boundary of the platted lots along the harbor? What happens when a surveyor trying to survey the land under the harbor meets the lawyer who wants his client's dock to stay in the harbor? Does a trespass lawsuit prevail over a proceeding subsequent? Don't miss the fun (but surveyor beware: only the lawyer gets to tell his side in court).

Dennis Pederson is a professional land surveyor and a principal of Bogart Pederson & Associates, Inc. (BPA) in Becker for the last 12 years. Prior to that, he worked for John Oliver & Associates in Elk River for 24 years and received his Land Surveyor's license in 1983. BPA has a balance of land surveying, civil engineering, and mapping clients in both the public and private sectors. He partners with Mr. Meyers as an instructor for the Boundary Law Class at St. Cloud State University. He has served as part time Mille Lacs County surveyor and is a member of the Minnesota Association of County Surveyors. He also is a member of the Minnesota Society of Professional Surveyors and served as Secretary of the Board of Directors, as well as chairing the Education Committee for 11 years. He belongs to the American Congress of Surveying and Mapping and the Geographic and Land Information Society. His specialty is complex retrace-ment surveys, especially with shoreline issues, and the Boundary Commission.



David J. Meyers is a shareholder with Rinke Noonan, Attorneys at Law, in St. Cloud, MN. He is certified as a Real Property Specialist by the Minnesota State Bar Association and he is also certified as a Qualified Neutral by the Minnesota Supreme Court. He serves as Examiner of Titles for Sherburne County and is Deputy Examiner of Titles in several other counties. He is an instructor for the

Boundary Law Class at St. Cloud State University. Mr. Meyers also advises governments and land owners on land use and zoning matters. For over 10 years he was a member of the Sher-

burne County Planning Commission and the Sherburne County Board of Adjustments.

Session B16: History of the Iowa-Minnesota Border Survey

Don Borchering as Captain Andrew Talcott

"Who were these Guys?" "What was their background?" "What were their other accomplishments?"

Session continues to 10:25 a.m.

Captain Andrew Talcott was born 1797 in Glastonbury, Conn. Graduated West Point 1818. Explored Missouri River under Gen. Atkinson 1819; surveyed route from Fort Atkinson to Fort Snelling 1820; Superior Officer and friend of Robert E. Lee on Hampton Roads project 1828-1834; Surveyed Ohio-Michigan Border 1835; Commission for survey of Northeastern Boundary of the United States 1840-1843; Chief Engineer, Richmond-Danville Railroad 1848-1855. Surveyed Iowa-Minnesota Border 1852; Engineer, Mexico and Pacific Railroad, 1857-1867. Divided "Talcott Method" for determining latitude by observing stars near their zenith.

Session C17: Accuracy and Precision

Chris Rotegard

This session will enable you to get the maximum accuracy out of your survey equipment. We will cover equipment error sources in surveys, field equipment checks, calibrations and service information.

Session continues to 11:40 a.m.

Chris Rotegard has been serving the surveying and engineering community for 25 years. After Graduating from Hennepin Technical College, he started his career at Brunson Instruments as a Service Technician. After 7 years, he entered the Sales division with Sokkia Corporation working to the position of District Manager. After a brief time with Fieldworks, he is employed by Leica Geosystems as a Direct Manufacturer Representative. Mr. Rotegard is a certified Instructor in GPS, Robotics Technology and Data Collection.

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9:30 to 10:25 a.m. — Concurrent Sessions A, B & C

Session A18: Risk Management (Using the ALTA/ACSM Standards as a Tool)

Curt Sumner

Unmet expectations by clients are among the top reasons lawsuits are filed against surveyors. This session will discuss how surveyors can better identify, and direct, what those expectations could/should be.

Session B19: History of the Iowa-Minnesota Border Survey (Continued)

Don Borcharding as Captain Andrew Talcott

“How did they get there?” “How did they establish the parallel?” “How were they supplied?”

Session C20: Accuracy and Precision (Continued)

Chris Rotegard

This session will enable you to get the maximum accuracy out of your survey equipment. We will cover equipment error sources in surveys, field equipment checks, calibrations and service information.

10:25 to 10:45 a.m. — Break, Visit Exhibitors

10:45 to 11:40 a.m. — Concurrent Sessions A, B & C

Session A21: Manual of Guidelines for Platting in Minnesota

William Brown & Michael Welling

This presentation will review revisions to the MSPS/MACS Subdivision Plat Manual that reflect recent changes in Minnesota Law for the preparation of Registered Land Surveys and Subdivision Plats.

William Brown is a Hennepin County Surveyor.

Michael Welling is a Washington County Surveyor.

Session B25: Histories of Land Surveyors and a Review of the Economic Health of the Surveying Community in 2009

Ron Murphy

Ron Murphy will present excerpts from the histories of land surveyors taken over the last two years and discuss other items of survey interest. The session will close with a review of the economic health of the land surveying community and Sunde Land Surveying in 2009.

Ron Murphy, licensed in 1974, sold Comstock and Davis, Inc., where he had worked for more than 50 years, to Sunde Land Surveying in November 2006. Mr. Murphy still works there as a consultant. He was the MSPS Surveyor of the Year in 2000. He is the chair of the ethics committee and a past member of the state board. Mr. Murphy's natural good looks, snappy dressing ability and humility got him the job at Sunde — where a pretty face does stand out.

Session C23: Accuracy and Precision (Continued)

Chris Rotegard

This session will enable you to get the maximum accuracy out of your survey equipment. We will cover equipment error sources in surveys, field equipment checks, calibrations and service information.

11:45 a.m. to 1:15 p.m. — Lunch, SCSU Faculty-Student Program, Scholarship Awards, Surveyor Awards, Pass the Gavel

1:30 to 2:25 p.m. — Concurrent Sessions A, B & C

Session A24: The Status of LiDAR Data in Minnesota

Tim Loesch

The State DEM Committee has been working toward a publicly available high-resolution elevation dataset for the State. This presentation will give a brief introduction to LiDAR, discuss the current status in Minnesota and present some uses and examples of the data.

Tim Loesch's work experience includes the Minnesota Land Management Information Center and a private Municipal Engineering firm. He has worked at the Minnesota DNR since 1994.

Tim currently is the GIS Section Manager at the DNR, providing data, custom software, training and assistance to over 2,000 Staff. Tim is a frequent workshop holder and presenter at conferences and has taught classes at the University of St. Thomas, St. Mary's University and is currently an instructor at the University of Minnesota MGIS program.

Session B22: Principal Meridians and Baselines

Rod Squires, University of Minnesota

The Principal Meridians and Baselines that were used to provide the relative location for each township established in the public land surveying process only make sense when looked at historically.



Rod Squires, who is a frequent contributor to the *Minnesota Surveyor*, is Associate Professor of Geography at the University of Minnesota. A compilation of those articles will be published by the Society in 2010.

His recent work describing the special instructions applicable to the surveys in Minnesota, which he described at the annual meeting in 2007 and 2008, can be seen at <http://www.lrrb.org/PDF/200805.pdf>.

Session C26: Tips & Tricks of Civil 3D for Survey

Chad Studor & Rob Black

New Survey features for 2010 will be reviewed and demonstrated. The most efficient linework editing will be shown with the latest available from the Subscription Extension Manager released in October. Tips and tricks will be shared and a short Q&A will be available. If time, HDS data will be imported into Civil 3D.

Chad Studor is based near Detroit where he provides customized consulting, training, support, and implementation services for AutoCAD® and all Autodesk® Infrastructure industrial solutions for Avatech. He is also a certified instructor for Leica Geosystems™ and has developed into a leader in the world of High Definition Laser Scanning. By incorporating nine years of industrial experience, and an understanding of vertical solutions as an Autodesk partner, Chad has become well known in the infrastructure discipline. During his ten years with Avatech, Chad has conducted countless classes and presentations.

Rob Black
Client Manager-Avatech Solutions

2:30 to 3:25 p.m. — Concurrent Sessions A, B & C

Session A27: Ground Penetrating Radar (GPR) and Monument Location

Brian Herridge

Ground Penetrating Radar (GPR) has proven a useful tool for the exploration of monuments and corner stones. GPR employs radio waves to image subsurface features such as utilities, geologic structures and corner stones. The systems are hand portable and can image the subsurface in 2D or 3D. This presentation will provide an overview of the systems and techniques as well as show examples of pertinent subsurface images.

Brian Herridge is a geologist and graduate of the University of St. Thomas (St. Paul, MN). He has over 20 years experience with geophysical systems and techniques. Over 20 years he has conducted hundreds of subsurface investigations usually employing 3D imaging techniques coupled with PC processing capabilities.

Session B28: Tracing the Footsteps of US GLO Deputy Surveyors

Gary Stevenson

Gary Stevenson will recount his experiences of retracing the work of a couple of deputy surveyors employed by the US General Land Office in Minnesota.

Gary H. Stevenson has been a licensed land surveyor in Minnesota for 32 years. He has been the Douglas County Surveyor for the past 5 years. He was the Dakota County Surveyor and Land Information Director for 15 years, where he managed the implementation and development of Dakota County's Geographic Information System (GIS). Other surveying experience includes Westwood Professional Services in St. Cloud, his own private practice in Walker, Minnesota, supervisor of field crews for the Minnesota Department of Natural Resources, and crew chief for the Wright County Surveyor's Office. He has also served as County Surveyor for Cass and Benton Counties in Minnesota. He is a graduate of Dunwoody Industrial Institute. He is a member of the Minnesota Society of Professional Surveyors, National Society of Professional Surveyors, National Association of County Surveyors, Minnesota Association of County Surveyors, and Minnesota GIS/LIS Consortium.

Session C29: Advanced Coordinate Calculations

Eric Fuller

This presentation will look at some advanced aspects of conversions between coordinate systems, between ground coordinates and grid coordinates, etc.

Hotel Registration Information

Kelly Inn (10 Fourth Avenue S.)
Connected to the Civic Center

Room Rates: (all nonsmoking — smokers request)

Single (king): \$77
Double (two double beds): \$87
(all plus tax)

Room block in effect until Dec. 27, 2009
Call (320) 253-0606

Contact the hotel reservations line and mention MSPS.

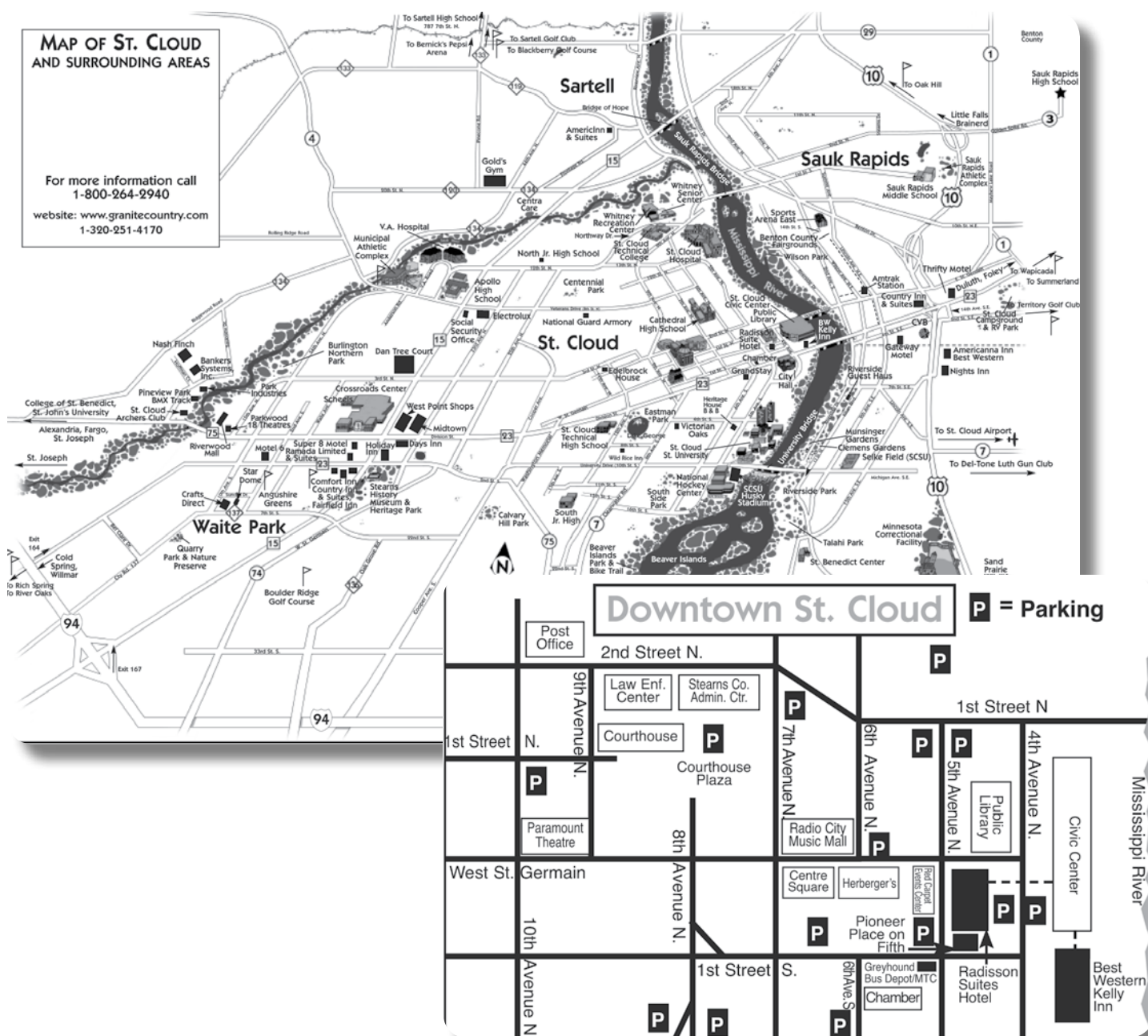
Radisson Hotel (404 W. St. Germain)
Connected by skyway to the Civic Center

Room Rates: (all nonsmoking — smokers request)

Oversized Queen Suite-\$89
Master Double Suite (2 room suite with 2 double beds)-\$99
(both plus tax)

Room block in effect until Dec. 27, 2009
Call (320) 654-1661

Contact the hotel reservations line and mention MSPS.



Not a Member? Join the Minnesota Society of Professional Surveyors!



Welcome to MSPS, we invite you to consider becoming a member of our organization! The Minnesota Society of Professional Surveyors has been working to provide accurate land and boundary information to property owners, builders and design professionals since 1953.

Dues payable to MSPS are not deductible as a charitable contribution but may be deductible as an ordinary and necessary business expense. A portion of dues, however, is not deductible as an ordinary and necessary business expense to the extent that MSPS engages in lobbying. The non-deductible portion of dues for fiscal year 2009 is 25.3%. We suggest you consult your tax advisor concerning this information.

Types of membership:

Licensed members: \$170

Any person who is licensed as a Land Surveyor pursuant to the laws of the State of Minnesota.

Training members: \$85

Any person who has successfully passed the Fundamentals of Land Surveying Exam as issued by N.C.E.E.S. and is a resident of Minnesota, Iowa, North Dakota, South Dakota or Wisconsin.

Associate members: \$80

Any person who is Licensed and in good standing as Land Surveyor in any state of the United States other than Minnesota or in any province of Canada.

Technical members: \$75

Any person who has an active interest in land surveying and not eligible for membership under other classifications.

Sustaining members: \$310

Any individual, partnership, or corporation engaged in the manufacture or distribution of surveying instruments and/or equipment, or in the compilation and/or reproduction of maps, or in the performance of services for land surveyors.

Student members: \$35

Any person who is a full time student with an interest in land surveying.

Honorary members:

Those members who have attained unusual professional recognition by their contribution to the profession of land surveying.

Life members:

Those members who have attained 62 years of age and have retired from active practice as land surveyors and who have paid

their dues for each of nine (9) years preceding and also in the year which they attained such age if so retired, whichever is later.

Retired members:

Those training or technical members who have attained 62 years of age, have retired from work and have paid dues for each of the preceding nine (9) years preceding and also in the year which they attained such age if so retired, whichever is later.

Firm members:

Any firm that has Licensed Members who are actively engaged as consultants in the field of land surveying in Minnesota. The number of personnel is the total average of all personnel, including principals, licensed surveyors, designers, drafters, technicians, clerical and other employees (excluding part-time or second employees) on the firm's payroll for the past calendar year. In the case of Land Surveying-Engineering firms, the prorated portion of personnel concerned with, or in general support of the surveying function should be counted.

Map Contest Rules

Rules

1. With the exception of student entries, all maps must be of an actual survey or subdivision of Minnesota land, drawn in the calendar year 2009. Only maps following state statutes Chapter 505 and/or MSPS Recommended Procedures will be reviewed. Design details and engineering construction details will not be reviewed.
2. Tint blocks should not be blocked out.
3. Must be drawn by submitting individual.
4. With the exception of student entries, all maps must bear the name of a Licensed Minnesota Land Surveyor.
5. Entries shall be unmounted blue, blackline or color prints, which will become the property of MSPS.
6. Entries (submitted in duplicate) must indicate category and be accompanied by an entry form and fee of \$5 per category. One entry is allowed per category per individual.
7. Entries will be displayed at the conference.
8. First-place awards will be presented and all winners will be announced at the conference.
9. Maps and fees must be postmarked by January 15, 2010. Student entries must be postmarked by January 15, 2010. Late entries will not be judged or returned. All decisions of the judges are final. Results will be published in the MSPS *Minnesota Surveyor* magazine.

Judging

All entries will be checked for compliance with Minnesota statutes and/or MSPS Recommended Procedures. No map will be judged if it does not comply with the law and standards.

Guidelines

1. Compliance with the law and standards.
2. Originality.
3. Overall Appearance: Neatness, balance, consistency.
4. Lettering: Clear, unmistakable.
5. Qualifying notes or statements: Clearly, unmistakably stated.

Signature and seal are optional

Awards

Certificates and \$100 cash will be awarded for first place in each category. Special awards will be presented upon decision of the judges.

Good luck!

MSPS Conference 2010: 17th Annual Map Contest Entry

Please choose one or more of the following categories:

- ☐ A. Subdivision Plat, C.I.C. or Registered Land Survey (RLS)
☐ B. Boundary and/or Topographic Survey
☐ C. A.L.T.A. Survey
☐ D. Student Entry — any category (must be a class assignment project)

\$100 Cash and framed certificate for first-place winner in each category (see above for contest rules).

Date: _____ Name: _____

Employed by: _____

Address: _____ City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____ E-mail: _____

Enclosed are two (2) prints for each category entered and a check in the amount of \$5 per category payable to the Minnesota Society of Professional Surveyors. Total amount enclosed: \$_____

Mail entry maps, form and check to:

MSPS • 1000 Westgate Dr., Ste. 252
St. Paul, MN 55114-1067
(800) 890-LAND or (651) 203-7256 • fax (651) 290-2266

(For office use only)

initials		fin.
date		
CK/CC		
amt. paid		
bal. due		

MSPS 2010 Conference: 58th Annual Meeting Registration Form

January 27 - 29, 2010 • St. Cloud Civic Center, St. Cloud, MN

Basic information

Name: _____ Employer: _____ Registration # _____

Work Address: _____ City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____ E-mail: (for confirmations) _____

Date: _____ Are you an MSPS member? ☐ Yes ☐ No

Is your company a firm member? ☐ Yes ☐ No

Conference fee: Includes daily breakfast, lunch, breaks, conference materials and PDHs. Does NOT include President's Banquet* or Wed. Seminar**

	Full conference before 1/08/10	Full conf. on or after 1/08/10	Thursday only before 1/08/10	Thursday only on or after 1/08/10	Friday only before 1/08/10	Friday only on or after 1/08/10
MSPS member	☐ \$290	☐ \$320	☐ \$175	☐ \$205	☐ \$230	☐ \$260
Nonmember	☐ \$365	☐ \$395	☐ \$250	☐ \$280	☐ \$305	☐ \$335
Firm member	☐ \$280	☐ \$310	☐ \$165	☐ \$195	☐ \$220	☐ \$250
Life member	☐ \$95	☐ \$125	☐ \$35	☐ \$65	☐ \$35	☐ \$65
Technician	☐ \$255	☐ \$285	☐ \$140	☐ \$170	☐ \$200	☐ \$230
Student	☐ \$50	☐ \$50	☐ \$25	☐ \$25	☐ \$25	☐ \$25

Conference fees include lunches on the days for which you register.

Conference fee total: _____

Additional items — these are not included in your conference fee (above)

Before 1/08/10 On or after 1/08/10
*President's banquet ☐ \$45 ☐ \$55 x _____ (# of tickets) = _____

Additional guest names: _____

Additional items total: \$ _____

**Wednesday seminar fee

	Before 1/08/10	On or after 1/08/10
MSPS member	☐ \$145	☐ \$165
Nonmember	☐ \$155	☐ \$175
Life member	☐ \$30	☐ \$50

Wednesday seminar fee total: \$ _____

Session selections: Indicate which sessions you will attend by checking only one box per time period. See pages 5 – 11 for session descriptions. Sessions **are** included in the registration fee.

THURSDAY, JANUARY 28

9:35 to 10:25 a.m.: ☐ A1 ☐ B2 ☐ C3
10:30 to 11:25 a.m.: ☐ A4 ☐ B5 ☐ C6
12:45 to 1:40 p.m.: ☐ A7 ☐ B8 ☐ C9
1:45 to 2:40 p.m.: ☐ A10 ☐ B11 ☐ C12
2:45 to 3:45 p.m.: ☐ A13 ☐ C14

FRIDAY, JANUARY 29

8:30 to 9:25 a.m.: ☐ A15 ☐ B16 ☐ C17
9:30 to 10:25 a.m.: ☐ A18 ☐ B19 ☐ C20
10:45 to 11:40 a.m.: ☐ A21 ☐ B25 ☐ C23
1:30 to 2:25 p.m.: ☐ A24 ☐ B22 ☐ C26
2:30 to 3:25 p.m.: ☐ A27 ☐ B28 ☐ C29

Special meal requirements: ☐ No ☐ Yes:

If yes, please specify: _____

Payment options

Grand total: _____

☐ Check ☐ Visa ☐ MasterCard ☐ PO # (attach a copy of PO with this form) _____

Card #: _____ Exp. date: _____ 3-digit security code _____

Card holder (please print): _____ Signature: _____

Refund policy: Full refunds for cancellations (minus a \$25 processing fee) prior to Jan. 8, 2010; 50 percent prior to Jan. 21, 2010 and none thereafter. Substitutions are permitted. Please fax all cancellation/substitution requests to MSPS at (651) 290-2266.

Make checks payable and mail to:

MSPS • 1000 Westgate Dr., Ste. 252
St. Paul, MN 55114-1067
(800) 890-LAND or (651) 203-7256
fax (651) 290-2266

(For office use only)

initials	fin.
date	
CK/CC	
amt. paid	
bal. due	

Please note: Iowa, North Dakota, South Dakota and Minnesota PDHs available.
See registration desk for details and forms.

Minnesota Society of Professional Surveyors

58th ANNUAL MEETING

Wednesday, Jan. 27 through Friday, Jan. 29, 2010

St. Cloud Civic Center | St. Cloud, Minnesota



Look inside for information about our presenters, the annual map contest, president's banquet, Wednesday's seminar and registration!

Register online at
www.mnsurveyor.com!

Minnesota Society of Professional Surveyors

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