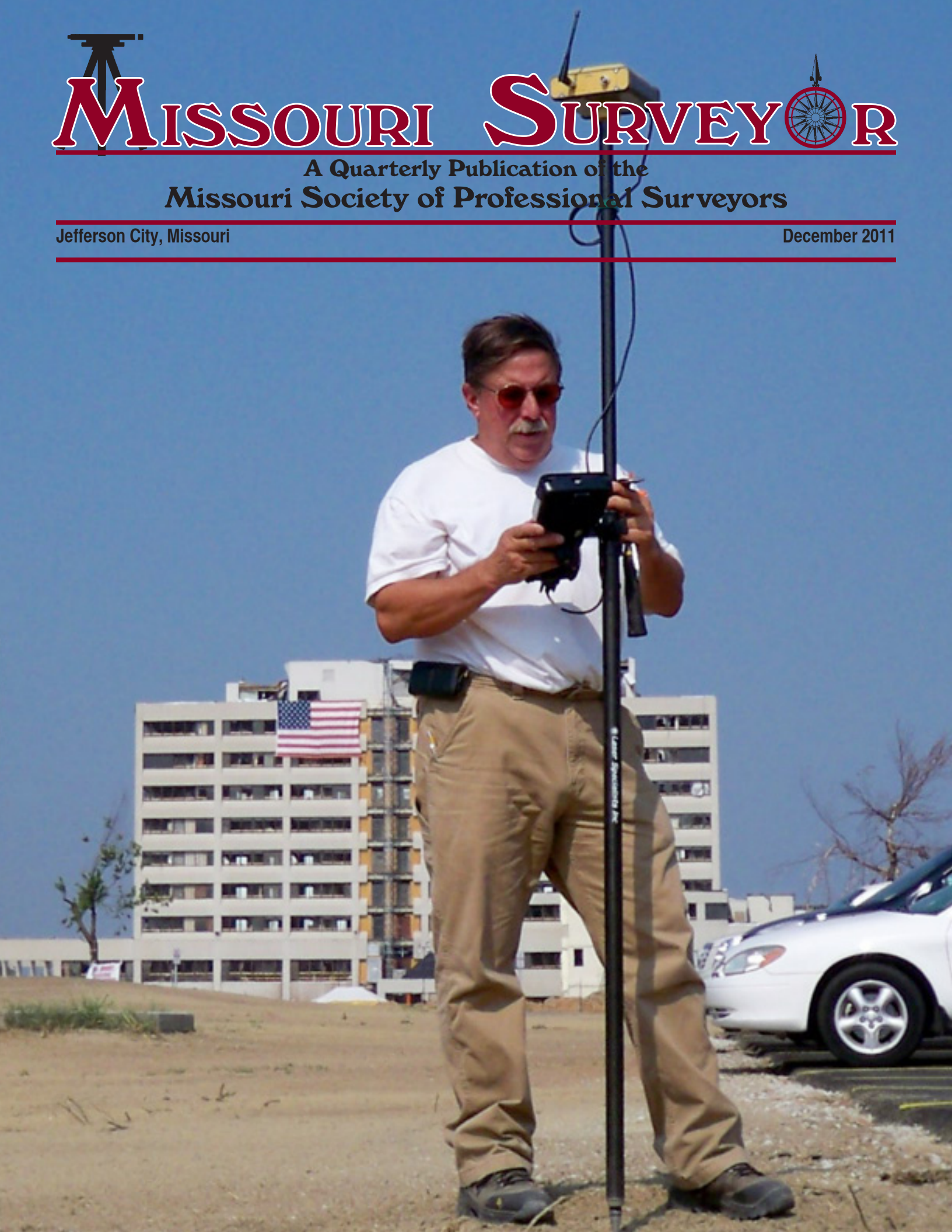
Missouri Surveyor

A Quarterly Publication of the
Missouri Society of Professional Surveyors

Jefferson City, Missouri December 2011



MISSOURI SURVEYOR

CALENDAR OF EVENTS

2011-2012

February 8, 2012
Board of Directors Meeting and
Capitol Visitation
Capitol Plaza Hotel
Jefferson City, MO

May 10-12, 2012
Board Meeting and
Spring Workshop
Lodge of Four Seasons
Lake Ozark, MO

July 13-14, 2012
Board Meeting and
Golf Tournament
Minimum Standards Workshop
Lodge of Four Seasons
Lake Ozark, MO

August 15-17, 2012
Land Surveyor's Review Course
Best Western Hotel
Jefferson City, MO

October 11-13, 2012
55th Annual Meeting
and Convention
Hilton Frontenac Hotel
St. Louis, MO

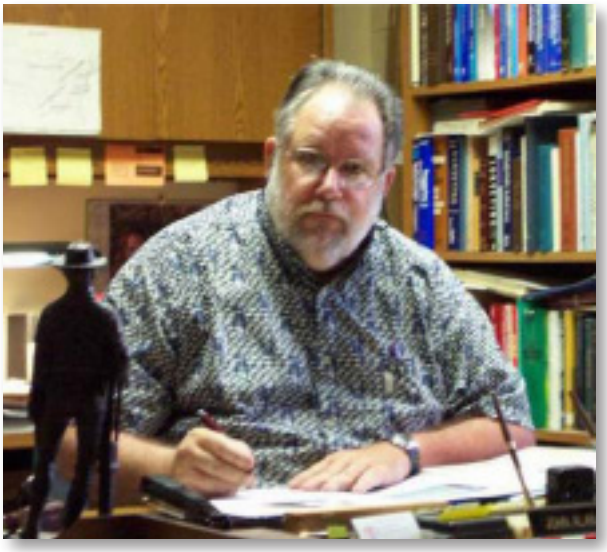
December 1, 2012
Board of Directors Meeting
MSPS Office
Jefferson City, MO

October 10-12, 2013
56th Annual Meeting
and Convention
Tan-Tar-A Resort
Golf Club, Marina
and Indoor Waterpark
Osage Beach, MO

John Alan Holleck, Editor

Notes from the Editor's Desk

John Alan Holleck



Well, here it is December and another year has passed us without our noticing the change. This issue will be late due this month due to the laziness of your editor. Sandy and I did not get together until late November, rather than early in the month as usual. I hope this will not inconvenience any of our cadre of readers. Enough about my laziness index let us look at what is upcoming in the December issue of the *Missouri Surveyor.*

As usual pages two and three are reserved for the "Editor's Notes" and the "President's Message," respectfully. Next is an article related to the Joplin twister and the devastation in caused to one of our surveying family. The title of the article is "Amazing Grace" by Joe Clayton and Chris Wickern. A very entertaining article follows entitled "Tripods and Training Wheels" by Kansas Surveyor, Ernie Cantu. Next, Dan Govero enters the Festus Hall Of Fame. Dick L. Elgin and David R. Knowles have a new book entitled *The U. S. Public Land Survey System of Arkansas*. Their book has some applications for Missouri. Just exactly what is meant by "Minimum Level of Competency," Joel Leininger tackles that question in the article of that title. Next, we are repeating for the membership's information remarks delivered by Robert E. Myers entitled, "Land Survey Program Presentation." Bob delineates the status of the Land Surveyor Program. This is followed by various documents related to the Joplin tornado reported by Zachary Winters, "Rebuilding Effort in Joplin." Included in a very cogent letter to the Joplin City Manager on what the Land Surveying community is willing to do to help.

The back half of the journal begins with Stan Emerick's winning of the Robert E. Myers Service, the most prestige's of the MSPS awards. This is followed by Mark Nolte's winning of the Surveyor of the Year award. Intermixed with the awards are the names of new PLS's and LSIT's. "Record Survey – Whose Map Is It?" by Aaron Smith, Arizona surveyor follows. Our next article is "Fences as Boundary Evidence" by Colorado surveyor Dexter M. Brinker. He tries to answer the age old question are fences "Friend or Foe?" Next is a reprint of Sara Parker Pauley's speaking points before the MSPS convention. Last but not least the December issue ends with an FAQ on the "Minimum Standard Detail Requirements ALTA/ACSM Land Title Surveys (effective 2-23-11)," or what are the latest changes, if any.

THE MISSOURI SURVEYOR

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President's Message

Joe Carrow, PLS

I write this message as the wind is blowing outside and the green leaves turn to brown, giving us the signals that summer and even fall will soon give way to winter. I know that many of us are also feeling that this is a good analogy for the business season as well. I have heard a lot of new catch phrases such as: The New Reality, Economic Downturn, or Market Correction. The result of these inflictions are leaving many of us contemplating the possibility of increasing our "Debt Ceiling" to survive the winter as we await the return of greener pastures that come along with the spring rains and warmth of the summer sun, metaphorically speaking, of course.

The 2011 MSPS annual meeting and barbeque was a great success. I would like to congratulate Mark Nolte and everyone who had a hand in preparation. I hope Mark is well on the path to a full recovery. It was a shame he was unable to attend the meeting due to knee surgery. I would like to thank the Director of the Department of Natural Resources, Ms. Sara Parker Pauley, and State Geologist, Mr. Joe Gillman for attending the annual business meeting. We were glad to have a packed house during the director's presentation. We look forward to working together with the DNR in the exploration of new and creative ways to improve the financial footings of the Land Survey Program that will result in the construction of a program built to withstand the test of time.

On the national front, NSPS and The Coalition To Save Our GPS are at the forefront of the ongoing struggle with LightSquared over the possible interference of their terrestrial based transmitters with Global Positioning System satellite signal, provided the FCC grants the approval. We should all take time to e-mail our respective legislators with our concerns.

We have two main legislative issues for this season; first to provide long term viability for the Land Survey Program and second to introduce an increase in the educational requirements to sit for the LSIT. I look forward to working with the legislative committee, MSPS membership, DNR, and the board of registration on these and all issues that may arise this coming year, and will try to keep all up-to-date.

Front Cover: Here Jim Herre, Indian Creek Surveying, LLC, goes about the seemly endless task of locating and staking. This essential piece of the puzzle; at the now Iconic St. John's Hospital complex moves to repair a broken neighborhood. Restoration of Joplin's infrastructure has relied heavily upon the small but dedicated group of Professional Surveyors that make up the Southwest Chapter of MSPS.

Back Cover: All that remains of the Chris Stewart home and neighborhood; a view that was blocked by homes and trees until 5:41 P.M. May 22, 2011.

Amazing Grace

Joe Clayton, PLS & Chris Wickern, PLS

St. Mary's Church- Joplin, Missouri AP Photo

No evil shall befall you, nor shall affliction come near your tent, for to His Angels God has given command about you, that they guard you in all your ways. Upon their hands they will bear you up, lest you dash your foot against a stone.
Psalm 91: 10-12

If you were to place every licensed land surveyor in the State of Missouri in one community, it would be a town of fewer than 1,000 residents. All of us are affected when a member of our small community suffers a loss. The City of Joplin suffered widespread devastation in an EF-5 tornado that devastated their community, and these are the stories of two of our brother surveyors.

The Stewart Residence Before May 22nd Chris's story by Joe Clayton, PLS

Chris Stewart of Chris Stewart Surveying ran his survey business from his home. May 22nd was just another Sunday for the Stewart family. Storms are a fact of life for lifelong Joplin residents, but as the TV reports worsened and the sirens started sounding even veterans of prior tornadoes, like Chris, became concerned.

When it became obvious they were in the direct path of the storm Chris went, as we are all told to do, seek shelter in the bathroom; but at the last moment Chris' wife Karen saw a hand point down the hall toward a closet in a spare bedroom and she led them there. Chris recalled how another tornado many years ago sounded just like a train. This was more ominous, and sounded more, "like an animal or some sort of demon growling." Chris stated, "It kept getting worse. We prayed, begging really. I knew it was the end.

Chris Stewart Surveying & Family Residence after May 22nd

The closest was knocked on its side and we were briefly trapped, but the storm was over and we had made it out alive. The hand of God guided and saved us! All that was left of the bathroom was the tile on the floor. We prayed and our prayers were answered!" The loss suffered by Chris Stewart and his family as measured in home, office and equipment was total. But as for the measure of their perseverance, hope and most definitely faith; it was only strengthened.

I've known Chris for a number of years; his nephew Jason is one of my closest friends. Jason's family had been one of my first concerns as soon as I knew the outcome of my own family. It was near midnight the evening of the storm when Jason called. He gave me hope relating how everyone in his family had survived, but his uncle Chris had lost all except the most important, life itself.

Chris and Karen are devout Christians. They are the type of people who give openly of themselves, while expecting nothing in return. Chris has always been quick to help those in need and has donated time, talent, and money through charities and their church. Chris' church has always helped the victims of tragedy. The recent victims in the Southern United States, who had lost so much when twisters pulverized neighborhoods and killed people across six states, had been the subject of those concerns earlier on that Sunday. Now Chris and Karen were the people in need.

Chris related that it was hard to accept a helping hand when you are used to being the helping hand. Charity as it turns out can be harder to accept than one would believe. Chris and Karen also noted how disap-

pointed folks would look if you turned down their help and how they began to accept a little help here and there. I could see both Karen and Chris' faces light up as they described the look of joy on another's face after having accepted such offers of help. After all they had been through concern for the feelings and spirit of those helping them; that is typical to the character of Chris and Karen!

So it was with great interest when on the 2nd of June the head of my division asked who in Joplin surveying had suffered a loss. He explained Lowell Ballard, a Principal and the Director of Geospatial Technology for the Timmons Group, stated they were in a position to donate vehicles with equipment and supplies to a smaller survey/engineering firm affected by the recent tornado in Joplin. This was a story that was being repeated as people within the Timmons Group were looking for a worthy recipient or recipients in need. They were ready to put the wheels in motion literally!

And as reported by Zach Winters in the Southwest Chapter Newsletter for July; about a dozen chapter members gathered in the parking lot of Anderson Engineering's Joplin Office with Timmons Group President Brian Bortell, PE and Director of Field Operations Chris Dodson, PWS, around two fully loaded surveying trucks. By loaded I mean instruments, computer, shelving, safety equipment, pin locators, stakes, lathes, countless other small accessories and items needed to conduct the business of surveying

(From left): Timmons Group President Brian Bortell, PE, and Director of Field Operations Chris Dodson, PWS, from Richmond, Virginia, presented two fully-loaded surveying trucks to Southwest Chapter Missouri Society of Professional Surveyors Vice President Chris Stewart, PLS, Wife Karen, and Son Tommy, in Joplin, Missouri, After the Stewart Family Suffered a Total Loss in the City of Joplin's Devastating May 22, 2011 Citywide Tornado.

This is a very compelling story of human interest filled with the tragedy of man against nature and at this point the story could end. But at his core Chris is a man of faith, charity and hope who openly gives of himself. Chris stated, "Two vehicles filled with equipment are more than I can use." The firm of Stewart & Neece had also suffered some damage. Thankfully they had moved from a directly in the storm path location a few years before, but their East 15th Street office still was damaged. Chris generously donated one of the fully loaded vehicles to his friends Wayne and Rodney Neece.

Chris, who is also the current MSPS Southwest Chapter Vice President, had no telephone service and had no way of knowing someone wanted to donate equipment to him. But through the local MSPS Chapter the word went out and a group that hadn't even existed a few years before had helped an out of state firm help a fellow local practitioner.

St. John's Hospital- Joplin, Missouri AP Photo Mike Johnson's story by Chris Wickern, PLS

The exchange of information, relationships that are built, friendships, fellowship and sense of community is strong within the Southwest Chapter, as it is throughout the Missouri Society of Professional Surveyors, and is but one example of the positive affect that comes from being a member of our professional society. Joplin will rebuild and the great examples of service to causes greater than themselves; who are also surveyors will as always be there to lead the way!

Mike Johnson, PLS, and District Survey Manger for MoDOT was visiting his father, a patient at St. John's Hospital on the fourth floor in the north wing. Mike and his wife had gone to the parking lot to get an umbrella for his mother to use when they left. The news was on as they passed a nurses station and the weather was indicating very severe weather right over Joplin. They hurried back; the lights went out and came back on just as they reached their family. That's when the siren sounded and the lights flickered. Then there was a loud bang as the lights went out and all of the windows in the hospital gave way. Mike looked down the hallway and saw a wall of flying debris heading for them. He grabbed the hall rail on each side of his mother and pulled himself as close to the wall as possible. His wife and cousin (a nurse from Springfield) were leaning over his dad to protect him as he sat in a chair hooked up to an I.V.

That's when the force of the debris hit them, and began to pound them. The floor shook violently and the wall he had secured himself and his mom to began to heave in and out. He heard his wife and cousin shouting the Lord's Prayer, and he and his mother joined in. Then, the storm stopped as suddenly as it began.

Within a few minutes the door to the stairwell opened and a bright light entered the dark hallway. Mike looked at the wall where he had anchored himself and his mom. The only section of the wall still standing was the portion where they rode out the storm.

They all survived, cut and bruised, but physically whole. Mike said this is without a doubt the most horrific event they have ever experienced, and that they did not survive the tragedy on their own. It was only His divine grace that saw them through.

Tripods and Training Wheels

by Ernie Cantu, L.S., K.S. Reprinted from *Section Lines*, Kansas, August 2011

Thick traffic congestion posed a common problem when getting these section corner ties, so we used a common solution of shooting remote distances with a total station and a zero-offset prism. It was a method used time and time again. However, tying down this particular section corner on this particular day was about to become vividly etched into my memories.

My crew set up the total station off of the road pavement, out of the way of the vehicles that were coming and going to pick up children at the end of a school day. With the K-through-12 school district at this corner, the students filing out of the buildings found us to be a curiously amusing sight as they traveled homeward in herds of three to five. "Are you taking pictures?" Yeah, I've been asked that before, zillions of times.

One by one, the bunches passed by, watching the man at the tripod aim that camera-type machine at the other guy, me, who kept crossing the intersection and going from point to point to point. We discovered that there are not just the hazards of traffic on the road; there is also the hazard of setting up a total station over a sidewalk ramp next to a school at the end of the school day. That would still be obstruction of the flow of traffic.

A tiny little girl approached, practicing her unrefined skills of riding her prized little bicycle on the way home after school. She had training wheels on her tiny little bike with a colorful basket attached to the front of the handlebars and bright long tassels dangling from the ends of the handle grips and waving in the breeze. She saw that total station ahead, a barricade constructed on her road. As she nervously rode closer and closer she noticed something. The man standing next to that tripod was not on the sidewalk; he was standing in the grass on another side of the tripod, clearly out of her way. That left this triangular shaped tunnel ahead that was just the perfect size for her tiny little bike and her tiny little training wheels and her tiny little self.

We weren't done yet with the section corner ties when I looked up and saw that bicycle heading right for the tripod with all those brightly colored slivers of plastic tassels dancing beside her. She crashed right into the tripod. The instrument operator was looking my way through the total station, and then suddenly he wasn't.

No, the total station didn't go crashing down to shatter on the pavement. The tips of the little girl's handlebars hit the legs of the tripod and shifted the whole setup, dragging the tripod along the sidewalk for about a half foot before all quickly came to a stand-still. The sound of tripod tips scraping over a concrete sidewalk filled the air. I was startled with disbelief! Did that just happen? A kid rode a bicycle right into the tripod! She crashed right into the tripod! Then, since I immediately saw that all was okay, I started laughing. The instrument clearly had been knocked out of level, but we could just re-level and finish up. I quickly crossed the street, heading over to the setup to make sure things turned out okay.

The little girl on the little bicycle was not amused though. She thought she should have fit under that obstruction and something went wrong. She had a look of determination on her face. As soon as she came to a stop, she adjusted the right end of the handlebars by shaking her bicycle. It worked, that end was free of the side of the tunnel. So she rode on - and crashed into the tripod again, scooting the tripod a few more inches, scraping the tripod tips over the concrete again. The training wheels did an excellent job of keeping her upright. By this time, the instrument operator realized what exactly was going on and had a firm grasp on the tripod, trying to untangle the tripod from the little critter that was caught in his "net". She had been halted again by the tunnel that was smaller than it was supposed to be. She sat there for a second and looked around, trying to figure out what to do to get herself out of this jam.

I was right there, finding the whole situation to be a hilarious spectacle. I think I might have been laughing. "Go ahead," I told her, "just drive right on through. You'll make it." The total station was already out of level and the instrument operator had a firm grip keeping it from tipping over. "It's okay, just push right on through."

She did. She adjusted her handlebars again by shaking her bicycle - and shaking the tripod - so that she was once again freed up. She pushed forward and made it through her tunnel, never looking up at anyone to acknowledge that anyone else even existed.

Making it through to the other side of her tunnel, she continued on her way home, pedaling that tiny little bike and putting all her trust in those training wheels. We re-leveled the total station and finished getting the rest of the measurements. The rest of the day both of us kept bringing up the event. What an unusual and wonderful thing to happen to brighten up the day!

Govero named member in Festus R-6 Hall of Fame

by Kevin Carbery Reprinted from *Jefferson County Leader*, Thursday, Sept. 15, 2011

It was a common occurrence in the late 1950's and early '60s for Festus High School students to gather at the Govero farm.

Dan Govero, who graduated from Festus High in 1962, would get his folks to allow his friends to visit for school and social activities.

"Kids used to come out to the house and go sleigh riding or ice skating on our pond," said Govero, 67, of Festus, whose family farm was behind what is now the Drury Inn. "We'd have a bonfire. We'd have huge groups of people. Since we had the only two-car garage without posts in town, they'd build floats for parades at our house and we'd pull them with a tractor. That was for our class floats. It was fun"

Govero went on to found Govero Land Services, a surveying and civil engineering firm in Imperial, in 1988.

Govero's accomplishments in life, including serving as chairman of the Jefferson County Port Authority and participating in numerous professional boards and civic organizations, convinced those behind the Festus R-6 Hall of Fame to make him the hall's 16th inductee, its only one for the 2011-2012 school year.

He was formally inducted at a reception at 3:30 p.m. Friday in the lobby of Festus High School. He also was recognized as part of pregame ceremonies at 6:30 p.m. that day prior to the Tigers' Homecoming football game against Pacific.

Assistant superintendent Link Luttrell said Govero is a terrific example for current students.

"When you look at the four main criteria - leadership, service, being a role model and character - he epitomizes each of those," Luttrell said. "He has good character and has achieved a lot in his profession. He's someone young people can look up to. We're honored he's going to be part of this select institution."

"It's nice to be recognized. I've always tried to give back to the community. The ceremony is going to be very exciting."

Dan Govero
Festus Hall of Fame inductee

Luttrell coordinates the Hall of Fame Committee, which is made up of alumni, staff, parents and school board members who select nominees from Festus High and Douglass Cooperative High School.

Govero said he has many memories of his days spent in Festus schools and has remained connected to the district over the years.

"My nieces and nephews went to school there," he said. "I have great-nieces in school there now."

Govero has watched the school district grow over the years. He attended Festus High School when it occupied the site where Festus City Hall now stands.

"There was no lunch room," he said of the old school. "You brought your lunch, went home for lunch or went downtown to eat."

He said his main after-school activities centered around the drama department.

"I was a behind-the-scenes guy for school plays," he said.

Govero graduated from the Ranken Technical School of Mechanical Trades in 1967 and became a registered land surveyor in 1980. He served in the National Guard Corps of Engineers in the late 1960s.

Among the honors Govero has accumulated are: the 1991 Missouri Society of Registered Land Surveyors Surveyor of the Year; the 1998 Home Builders Association President's Award; the 2006 Distinguished Individual Award-Mastodon Art -Science Regional Fair; and the 2010 Jeffersonian Award, which recognizes outstanding efforts in promoting progress in Jefferson County.

His newest honor is a thrill, Govero said.

"It's nice to be recognized," he said. "I've always tried to give back to the community. The ceremony is going to be very exciting."

MO Colleges/Universities Where Land Surveying Coursework is Available

The following list will be updated quarterly as new information becomes available.

Longview Community College — Lee's Summit, Missouri
Contact: David Gann, PLS, Program Coordinator/Instructor — Land Surveying MCC — Longview, MEP Division
Longview Community College
Science and Technology Bldg.
500 SW Longview Road
Lee's Summit, Missouri 64081-2105
816-672-2336; Fax 816-672-2034; Cell 816-803-9179

Florissant Community College — St. Louis, Missouri
Contact: Ashok Agrawal
Florissant Community College
3400 Pershall Road
St. Louis, Missouri 63135
314-595-4535

Missouri State University — Springfield, Missouri
Contact: Thomas G. Plymate
Southwest Missouri State University
901 So. National
Springfield, Missouri 65804-0089
417-836-5800

Mineral Area College — Flat River, Missouri
Contact: Jim Hrouda
Mineral Area College
P.O. Box 1000
Park Hills, Missouri 63601
573-431-4593, ext. 309

Missouri Western State University — St. Joseph, Missouri
Contact: Department of Engineering Technology
Missouri Western State University
Wilson Hall 193
4525 Downs Drive
St. Joseph, MO 64507
816-271-5820
www.missouriwestern.edu/EngTech/

St. Louis Community College at Florissant Valley
Contact: Norman R. Brown
St. Louis Community College at Florissant Valley
3400 Pershall Road
St. Louis, Missouri 63135-1499
314-595-4306

Three Rivers Communitiy College — Poplar Bluff, Missouri
Contact: Larry Kimbrow, Associate Dean
Ron Rains, Faculty
Three Rivers Community College
2080 Three Rivers Blvd.
Poplar Bluff, Missouri 63901
573-840-9689 or -9683
877-TRY-TRCC (toll free)

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elgin@mst.edu

University of Missouri-Columbia, Missouri
Contact: Lois Tolson
University of Missouri-Columbia
W1025 Engineering Bldg. East
Columbia, Missouri 65211
573-882-4377

Missouri Southern State College — Joplin, Missouri
Contact: Dr. Tia Strait
School of Technology
3950 E. Newman Rd.
Joplin, MO 64801-1595
1-800-606-MSSC or 1-417-782-MSSC

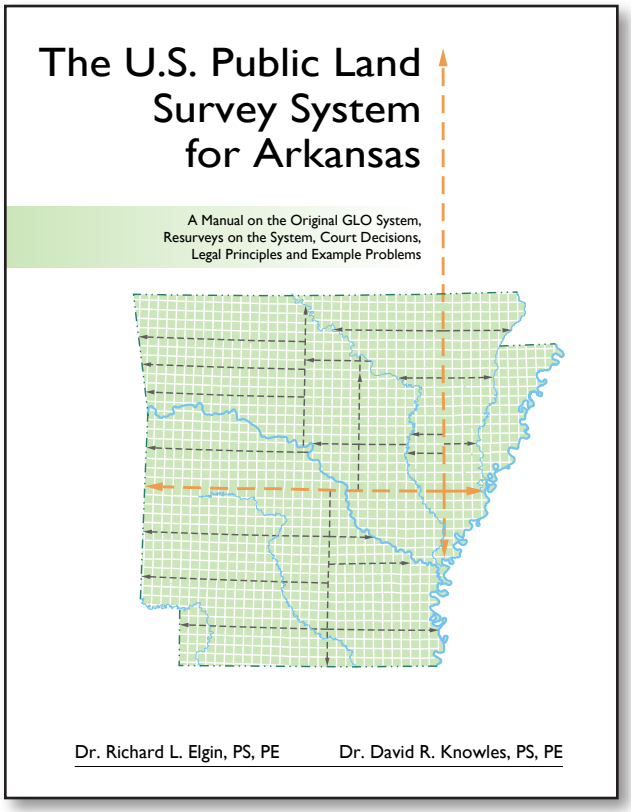
The New Manual: "The U.S. Public Land Survey System for Arkansas"

Dr. Richard Elgin, PS, PE

Practically all USPLSS states suffer the same malady: No one manual which covers all aspects of the rectangular system of land surveys, specifically for their state. In one learned reference, where can the surveying student, the surveying educator, those preparing for the state-specific surveying exam (especially comity applicants), and even licensed practitioners study and learn of the USPLSS for their state? Typically such a manual does not exist. That void is now filled for Arkansas. The new manual, "The U.S. Public Land Survey System for Arkansas" contains complete instruction and reference on the subject. Funded through Arkansas State Surveyor Everett Rowland's office and about two years in the making, this tremendous manual is believed to be the first of its kind in the United States.

It is fitting that this manual be prepared for Arkansas because the USPLSS in the state is so different and unique, compared to all other states. (Except, perhaps for Missouri.) The USPLSS there is different in several ways: 1.) It was surveyed under Tiffin's Instructions and a few subsequent instructions issued by Principal Deputy Surveyor Rector in St. Louis. 2.) There are sets of "double corners" (standard and closing) along each township exterior, not just Standard Lines. 3) The Standard Lines were placed where needed, and do not follow any pattern (a method also used in Missouri). 4.) Arkansas has no statute law relative to the reestablishment of lost corners. 5.) The state's common law is not replete with a full range of decisions from which legal principles for resurveys on the system can be discerned. (Actually there is a dearth of highly applicable cases.) 6.) With "Minimum Standards" not addressing resurveys on the USPLSS and the current "BLM Manual" being mostly not applicable to the state, the USPLSS resurveyor seeking guidance must look further. With this new manual, guidance is within.

This manual begins with the early history of the USPLSS in America. This is the period from the Land Ordinance of 1785 and continues with the development of the system into 1815. In the fall of 1815, surveys of the public lands began in the Missouri Territory with the establishment of the Initial Point to the 5th Principal Meridian in what is today east-central Arkansas. Chapter 2 describes how the state's system of sections, townships and ranges were originally surveyed by the General Land Office (GLO) deputy surveyors. The chapter describes the surveying of standard lines, guide meridians, township exteriors and the township subdivisions. These are considered the "original surveys," those which subdivided the State. Chapter 3 describes today's task of conducting resurveys on the system. Once the monuments of the USPLSS become obliterated or lost, how they are to be restored or reestablished is detailed. This chapter describes the four phases of a resurvey on the system. Since statehood the Arkansas Courts have had before it issues related to resurveys on the USPLSS. The Courts have issued judgments and established precedents. Chapter 4 of the manual examines these cases and discusses the judgments. Chapter 5 examines the GLO's "restoration manual," and its guidelines, which came into effect shortly after the original GLO surveys in Arkansas were completed. Those guidelines (issued in 1883) are adapted to today's practice and are converted to legal principles for the reestablishment of lost corners on Arkansas' USPLSS. Calculations are a large part of today's resurvey and reestablishment of lost corners. Chapter 6 explains the protraction of fractional sections and gives protraction examples. It also offers an array of single proportion and double proportion problems, applying coordinate geometry and the legal principles offered in Chapter 5.



Although written for Arkansas, the manual has application in other early USPLSS states, and especially in Missouri. It would behoove any comity applicant for an Arkansas Professional Surveyor license to read and study this manual. The manual price is $66.00 (post paid), and can be ordered through: Arkansas State Surveyor's office; 11701 I-30, Suite 323; Little Rock, AR 72209. Phone: 501-683-1666. Email: kami.sharp@arkansas.gov.

The manual's authors are Drs. Dick Elgin and David Knowles. These two coauthored "Legal Principles of Boundary Location for Arkansas" in 1984 and, with Dr. Joe Senne, coauthored the Lietz/Sokkia ephemeris (1985-2007) and codeveloped the celestial observation software, "ASTRO*ROM", "ASTRO*CARO" and "ASTRO*DISK." Dick is semi-retired and works for Archer-Elgin Surveying and Engineering, LLC (Rolla, MO). David is completely retired from the University of Arkansas and ties flies. They can be reach at elginknowles@gmail.com

Minimum Level of Competency

by Joel Leininger, L.S. Reprinted from *Section Lines*, Kansas, May 2011

We turn now to a subject that has annoyed me for years, and shortly you shall see why. Discourse is, by its very nature, most useful when the language used moves the conversation in a helpful direction. But we have a term in licensing that (to me) seems calculated to truncate that conversation, smothering debate with a meaningless platitude. Of course I am referring to the phrase, "minimum level of competency."

On the surface, and to the dimmer bulbs among us, the phrase seems innocent enough. It usually is heard in response to whether someone was qualified enough to be issued a license. "Oh, well licensing is only designed to ensure a minimum level of competency." Ah yes, but what exactly is that? Confronted with that question, nearly all responses begin (and end) with a shrug of the shoulders or perhaps a long pause. You see, not only is the term undefined, it will always remain so, for it is indefinable. The vast number of situations potentially confronting the licensed surveyor (and every other licensed professional, for that matter) prevents anyone from compiling an accurate laundry list comprising minimum competence. Indeed, what may seem trivial to some and therefore appropriate for dispatch by our less competent brethren, may well hide complexities that dwarf that of other projects.

From a distance it might seem as if some situations could be relegated to less experienced people (and codified as such), but how would that play out exactly? (We are entitled to exactness in this discussion, for in most every case where the phrase under consideration is tossed into the conversation, it is in response to a question over licensing efficacy. When licensing itself is examined, exactness is mandatory, as livelihoods are at stake.)

Inexpensive

I once had an attorney bravely try to answer my "what exactly does that mean" question by saying that perhaps it meant (in the realm of surveying) only working on inexpensive property. Now, there is so much idiocy wrapped up in this definition that I am tempted here to let it twist in the wind for a while and accumulate its own ridicule, but as others may stumble upon that definition in the absence of any other, we'll examine it.

What are we assuming by saying that inexpensive property requires less competence to survey? Perhaps because the property is inexpensive, mistakes, even if serious, would not require expensive remedies. Or perhaps inexpensive generally means small, and smaller projects are easier to control (both administratively and by traverse) than larger projects. This is all speculation, of course, as no one has the answers to any of this. But let's address these two possibilities. Inexpensive properties are no less prone to expensive mistakes, because the seriousness of mistakes does not correlate to the property value. If the survey was a boundary survey, the work necessarily affects all of the adjoiners as well as the property itself. Are the adjoining properties to be considered inexpensive as well? In fact, the level of effort required to adequately survey a property has never depended on its value. It depends instead on the property's age (speaking of boundaries here), on its accessibility and on the quality of the written and field evidence defining its boundaries. This is true whether it is appraised at $1,000 or at $1,000,000. Indeed, I wish the market allowed us to structure our fees based on the value of the property in question. I'd be considerably better off, that's for sure.

The notion that small properties are usually less expensive than large properties is also silly. Some of the most expensive real estate in the world comprises less than a city block because it is part of a city block. Skyscrapers tend to live on small parcels like that, and have some of the highest property valuations anywhere. Swatting arguments down like this is almost too easy. Enough picking on that poor attorney's argument. At least she proffered an idea, flawed as it was. Rarely does anyone even go that far.

Task Analysis

NCEES has expended some effort in trying to identify the tasks confronting newly licensed surveyors through its periodic task analyses. Basically, the idea is to poll newly licensed surveyors about the kinds of tasks they are facing, and then structure the NCEES test accordingly. Am I the only one who sees the circular logic in this? Are we to assume that because newly licensed surveyors are engaging in certain tasks that those tasks are the ones in which newly licensed surveyors are supposed to be engaged? This is a wild stab at the minimum competence issue: Wild stabs at something are okay when nothing else is available, and as long as everyone involved remembers the attempt is, in fact, a wild stab. The danger comes when everyone forgets the tenuous nature of the underlying theory. A former boss of mine used to talk of a SWAG (Scientific Wild A** Guess). That seems to fit here.

Deep Roots and Long Tails

We would be foolish to assume that all newly licensed people are as competent as they will ever be. Experience is an effective teacher, and even old hands can be surprised. (I was shocked recently by a title doctrine that is both pervasive and well argued by jurists across the country, but unknown to me despite 30 years of practice. I haven't decided yet whether I know enough about its effects across the country to write about it or not. Stay tuned.) Ours is a complex playground with deep roots and long tails. Although every state recognizes that experience is essential prior to licensure, clearly the presumption is that the surveyor will continue to grow subsequent to getting his green light. Thus, we presume varying levels of competence among the licensed ranks.

But what is the minimum? I honestly cannot say. And I'm fairly sure no one else can articulate it convincingly either. Thanks in advance for never using the term with me.

Joel Leininger is a principal of S.J. Martenet & Co. in Baltimore.

Dogs Welcome

Reprinted from *Section Lines*, Kansas, August 2011

A man wrote a letter to a small hotel in a Midwest town he planned to visit on his vacation. He wrote: "I would very much like to bring my dog with me. He is well-groomed and very well behaved. Would you be willing to permit me to keep him in my room with me at night?" An immediate reply came from the hotel owner, who wrote: "I've been operating this hotel for many years. In all that time, I've never had a dog steal towels, bed clothes, silverware or pictures off the walls. I've never had to evict a dog in the middle of the night for being drunk and disorderly. And I've never had a dog run out on a hotel bill. Yes, indeed, your dog is welcome at my hotel. And, if your dog will vouch for you, you're welcome to stay here, too."

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Land Survey Program Presentation

by Robert E. Myers, L.S.P. Oct. 14, 2011 during 2011 Annual Business Meeting

I would like to talk to you today about what has happened TO the land survey program and WITHIN the land survey program so that you have a clear understanding of the situation.

First let me put this in historical perspective. In the 1950s and 60s the professional surveyors realized that there were very serious problems in the surveying profession and surveying system. MSPS called together a very dedicated group to begin the study of the situation and to make recommendations to the legislature on the corrective actions that need to be taken. That group was composed of professional engineers, professional surveyors, an attorney and the state geologist. They proposed that the legislature create a separate organization called the Land Survey Authority, which was a five-man board composed of two surveyors, one engineer, one attorney practicing in real property law and the state geologist.

The duties of that organization are outlined in the proposed statute and you probably know most of those as the goals of the land survey authority. The proposed statute place the responsibility for the operation and management of this new agency with the state land surveyor who was to be hired by the authority to be the chief administrative officer. The propose legislation also created a user fee of one dollar to be collected by the recorder of deeds on the recording of any documents conveying the interest in real property. At that time this fee was sufficient to fund the survey operation.

The legislation was enacted into law in 1969 and was first fully funded in 1971. This new organization was under the department of Business Administration. I was hired as the state the land surveyor and we had our own building which was previously the highway patrol academy.

In 1974 the legislature decided to reorganize state government in order to consolidate many of the boards and commissions and abolish those organizations that had overlapping responsibilities. The Department of Natural Resources was created at that time. The Land Survey Authority and The Missouri Geological Survey and Water Resources were placed in that department. The Land Survey board was abolished. The Department of Natural Resources created the Division of Geology and Land Survey to be housed in Rolla. This division was initially called the Division of Research and Technical Information. The Land Survey Authority building was transferred to the University of Missouri -Rolla and the Land Survey program was moved to the Geological Survey building.

The land survey program and the geology program existed side-by-side with the director of the geology program and the state the land surveyor serving as deputy directors of the division. From that time on the land survey program developed many projects to improve the land survey system. All these projects represent a single concept of government "that is that the role of government is to do those things which are too large for an individual to do and require the pooling of financial and personal resources in order to accomplish the desired result". This included the development of land records repository, development of standards, revision of surveying statutes, the execution of township level surveys, state boundary surveys, investigation of problem areas that were too large to be handled by a single client and many other similar projects.

In 1991 the legislature created a Land Survey Advisory Committee to work with the Director of the Department of Natural Resources in the prioritization and administration of the program. This was intended to provide input from the land survey profession to the Director. Unfortunately, some of the directors felt that this committee interfered with their prerogatives. Subsequently the committee reports were either ignored or not well received by the director's office.

At this time there is a lot of turmoil within land survey program. Morale is at all time low. This is due in part to a lack of personnel and funding for operations of the program. In 2010, 10 employees were terminated or allowed to resign or retire. All contract work was severely limited due to lack of funding. The lack of funding was due in part to the turndown in the economy and part to the amount of money being used to administer all the programs at the division and department level called the cost allocation fund. The Advisory committee felt that the amount of money being taken for administration was excessive in view of the number of employees that were actually being funded in 2010 and 2011.

There are actually only 12 employees left in the program at this time, although the cost allocation assessment for the program is based on 26 employees. 26 full time employees (FTE) is the number of employees requested by the division and finally appropriated by the legislature for FY 2010, FY2011 and FY 2012. The division knew that there was not enough money in the land survey fund for 26 FTE's. and the performance measures reported in the budget request were not realistic. The Land Survey Advisory Committee communicated their feelings on the higher amount of the cost allocation to the director and the legislature. As a result, a State Senator introduced legislation to move the program to the Department of Agriculture. The state surveyor was not allowed to testify for - or against the legislation, nor was any of his employees. In fact, the state surveyor was informed that if the legislation did not pass and he stayed in the department he would be in deep trouble for causing this legislation to be introduced. The legislation did not pass and the state surveyor and the land survey program have suffered. The state land surveyor was moved from his office in the building that housed all of his employees to a broom closet in the geological survey building. The state land surveyor filed a grievance on his removal to the broom closet and as a result was given a better office but in the geology building. This office is away from the staff that he should be directing and away from his program secretary and the records repository. If he is away from his office for any length of time, someone in the administrative staff checks on his whereabouts.

All of the land survey employees feel that they are being discriminated against. They feel that the administration is vindictive. As you might imagine their morale is very low. Some of the duties of the program secretary have been moved to other administrative positions and the chain of command has changed considerably. The land survey program is now operated and budgeted as a section of the geological survey program -not as a standalone program. I don't believe this is appropriate considering that the 2012 appropriations for the land survey program is for 26 FTE (24 people from the land survey fund and two people from parks). Until the user fee generates sufficient funding the actual staff will remain at 14, but with the likelihood that additional personnel and contracting funds will be added as the overall funding increases. The staff is extremely limited almost to the point of not being able to do meaningful work. The land record s repository staff is so short that any retirement or sickness would impact the ability to keep you- as a land surveyor- current with the records that you need.

The Stakeholder committee which was appointed by the department and division of geology and land survey has prepared a draft report. We don't know what the final report will look like but we hope that it will contain solutions to most of the problems.

What must we do!

First, additional funds or new ways of funding the program must be investigated. The department, the division and the land survey program must think outside of the box but in all respects the profession needs to be consulted and to be a part of this process through the redefinition of the land survey committee.

Secondly, the equality of the land survey program within the division of geology and land survey must be restored and the morale of the program employees including the state land surveyor and his staff must be regained.

Both the additional funding and changing the status of the program can be at least partially accomplished by the department but if necessary legislation will need to be enacted to make the system viable and responsive to you - the land surveying profession. I call on you to work with the MSPS officers and the legislature to accomplish these basic goals this coming year.

Rebuilding Effort in Joplin

Reported by Zachary Winters Reprinted from *Southwest Chapter Newsletter*, June 2011

Monnie Sears

On this page and the next are experts from the June Southwest Chapter Newsletter as reported by Zachary Winters. At issue; how the city was going to proceed with the rebuilding effort in Joplin after the tornado. Current Chapter President Monnie Sears drafted the letter following.

EDITOR'S NOTE

To Boldly Go Where No Surveyor Has Gone Before

(So we don't end up 'Where No Surveyor Would Ever Want To Be Again')

Although I admired his courage, my initial reaction was that President Monnie Sears' response at the last meeting was overly bold. However, after reading his June 3, 2011 letter to City Manager Mark Rohr at the City of Joplin, I believe this letter, written on behalf of the SW Chapter, was not only appropriate, but necessary.

As it stands at this moment, I've been unable to confirm the status of this item with the City, and would not feel comfortable advising a client to make plans to reconstruct in an area badly affected by the City of Joplin's recent citywide tornado; even based on my survey of the client's boundary lines.

For even the best efforts on the part of a client to locate boundaries through a Minimum Standards Property Boundary Survey prepared by a Professional Surveyor in no way prevent an adjoiner from breaking ground on a new encroachment, if surveying requirements are indeed waived. This can be exacerbated if the client delays construction for some time; the encroaching improvements of an adjoiner could be constructed during a pre-construction / planning phase of the client.

At that point, the adjoiner has a bona fide (albeit sheepish) response, which goes something to the effect of "... well, the surveying requirements were waived ...". And of course the client isn't pleased, and may be thinking, *my surveyor should have anticipated this, insisted on staking, flagging, temporary fencing, etc.*

***

I wish I could say this issue was taken care of, behind us, and we're now moving forward in a positive direction. But, at this time, I don't know where it stands.

Other than the fact that SW Chapter President Monnie Sears has hand delivered the following letter to the City of Joplin.

On behalf of the Chapter,
Thank you sir.

SOUTHWEST CHAPTER MISSOURI SOCIETY OF PROFESSIONAL SURVEYORS
c/o: Monnie Sears, President • 7231 E 24th Street • Joplin, MO 64804 • Tel: 417.438.0728

The city has for the most part acquiesced to Monnie's suggestions. One can only wonder what harm could have been done without this protection of infrastructure from these dedicated chapter members and their leadership!

SOUTHWEST CHAPTER
MISSOURI SOCIETY OF
PROFESSIONAL SURVEYORS

June 3, 2011

City of Joplin
602 South Main Street
Joplin, MO 64801

Attn: R. Mark Rohr, City Manager

RE: City of Joplin Surveying Infrastructure

Dear Sir:

The Southwest Chapter of the Missouri Society of Professional Surveyors held their monthly meeting today. The main point of discussion was the recent tornado and the effect that the tornado and the cleanup operations may have on the surveying infrastructure in the area.

People rely on landmarks such as fences, trees, bushes and power poles to identify their property lines. Many of these landmarks have been destroyed, and many more will be removed when the heavy equipment starts clearing the damage. Survey monuments are already scarce in some neighborhoods and many will be torn out during the clearing operations.

While subdivision plats and survey plats provide a record of where the property lines are located, the legal location of the boundary is where the monuments were set when originally surveyed. The monuments (the pins, nails and chiseled crosses) are the infrastructure of our surveying system. Finding, preserving and perpetuating these monuments is the most valuable method of protecting the rights and interests of property owners. When streets, alleys and easements are taken into consideration, the City of Joplin is a major property holder with a substantial interest in the accurate location of property lines.

We ask, as the City plans its recovery, that you be mindful of the surveying infrastructure, its preservation and its perpetuation.

Fortunately, none of our surveyors lost life or limb in the tornado. Some had damage to their offices and one had a total loss of equipment. But, overall, our local surveyors are faring well and are ready to handle the anticipated workload required to rebuild our community.

Another item of discussion was a rumor that the City is willing to waive the necessary plot plans required for building permits. As surveyors, the Chapter members feel that such a waiver would harm the general welfare of the community. It creates a risk that new construction could be across property lines, over easements or into setback areas. These problems can be difficult to remedy and last as long as the new structures do.

Please let us know if the Southwest Chapter of the Missouri Society of Professional Surveyors can be of any assistance to the City of Joplin in the coming months.

Sincerely,
SOUTHWEST CHAPTER MISSOURI SOCIETY OF PROFESSIONAL SURVEYORS

Monnie Sears
President

SOUTHWEST CHAPTER MISSOURI SOCIETY OF PROFESSIONAL SURVEYORS
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Scenes from the 2011 Annual Meeting – *Thanks to all who participated*

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Stan Emerick Receives Service Award

The 2011 Robert E. Myers Service Award was presented to Stan Emerick at the 54th annual meeting awards luncheon at the University Plaza Hotel in Springfield on October 14, 2011.

Stan began his career in surveying by mapping archaeological sites for Southern Illinois University at Carbondale. After college, he went to work for Booker & Associates in St. Louis, where he would meet his wife, Jo.

He has been a professional land surveyor for more than twenty five years, working for some of the most prominent surveying firms in the St. Louis metropolitan area. He is licensed in three states and is a member of several state and historical surveying societies.

He currently serves as Chairman of the Land Survey Advisory Committee for the Missouri Department of Natural Resources. He also serves as a Director for the Missouri Society of Professional Surveyors and chairs their History and co-chairs the Standards Committees. He also contributes articles to the Missouri Surveyor. He has tirelessly worked this past year to try to find additional funding for the Land Survey Program by backing legislation, meetings with DNR, and serving on committees.

Stan currently works as a Senior Project Surveyor with the Farnsworth Group, located in Webster Groves, Missouri. He and Jo reside in Chesterfield, where they raised their two children, Erin and Adam (who are both pursuing careers in the engineering and surveying fields).

The Robert Myers Service award has been given since 1990. This award is given to an MSPS member who, over an extended period of time (ten years minimum) has given exemplary service and dedication to the surveying profession and in particular to the Society. Thanks, Stan, for your many years of service to the surveying profession.

LSITs Licensed in 2011 – Congratulations

Thomas Matthew Barnard
West Plains

William Dustin Boatwright
Scott City

Patrick E. Boren
La Plata

Jeffrey Brandon Charchol
Springfield

Benjamin Austin DeSain
St. Louis

Jeremiah D. Ditch
New Haven

Christopher R. Gumminger
Pleasant Hill

Timothy J. Higby
Kansas City

David Wayne Jones Jr.
Raytown

Roger C. Mallott
Rolla

Christopher A. Moore
Houston

Bradley Austin Mull
Malta Bend

Adam C. Murry
Odessa

Brian Paul Otten
St Louis

Jerrod C. Roberts
Van Buren

Kelly K. Snell
Cape Girardeau

Travis A Tomson
Jefferson City

Mark Scott Volkmann
Bourbon

Vivian Ann Wasson
Springfield

Justin Michael White
Marionville

Colin Wayne Zahner
Perryville

Mark Nolte Recognized as Surveyor of the Year and Given the MSPS Legislative Award

The Surveyor of the Year award has been given since 1987. This award is given to an MSPS member who has given freely of his time and efforts to the organization and toward the betterment of the surveying profession. – This year's recipient has worked endless hours on behalf of the land surveyor in Missouri. This year's recipient was Mark Nolte, Nolte Land Surveying, Higginsville Missouri and president of MSPS.

Mark worked with Senator Bill Stouffer to write and introduce legislation to try to move the struggling Land Survey Program out the Department of Natural Resources to a state department that would not siphon off all of its excess funding. He attended hearings, committee meetings, DNR meetings, met with legislators and government officials, all in an effort to help the Land Survey Program.

Mark Nolte began his surveying career in Granite City Illinois working for Juneau Associates in the early 80's. He has worked for Dunlap Construction in Houston Texas and Turner Collie and Braden in Austin Texas before coming back to Missouri to work for McCarthy Brothers Construction in St. Louis. His career then took him back to Texas to work for Tri-Con in Burleson and RDM Construction in San Antonio. He returned to Missouri in 1990 and worked for Land Tech and M & M Land Surveying before starting his own business in 1992 - Nolte Land Surveying. In addition to property boundary work, Nolte Surveying performs construction surveying at nuclear power plants across the country for homeland security purposes as well as the department of energy facilities to secure areas providing construction staking and mapping.

Mark graduated from the University of Missouri Columbia with Bachelor of General Studies, Land Surveying – Construction Management.

Mark was the MSPS President in 2010-2011 and has served on numerous committees and task forces. He holds a MoDOT Concrete Field Certification and MoDOT Concrete Strength Certification. He is a licensed surveyor in Missouri and is currently the Lafayette County Surveyor. In addition he is a Private Pilot, Instrument Rating, approximately 1,000 Hours. He and his wife Carole have a Daughter, Lily.

Congratulations Mark on this well deserved award!

Land Surveyors Licensed in 2011

Don Michael Brady
Texarkana TX

James Ralph Freeland
Greenville SC

Sylvester Farris Furse IV
Rolla MO

Charles B. Gardiner III
Longwood FL

Kellan Michael Gregory
Belton MO

James Ryan Mikel
Kansas City KS

Ty Jeremy Milner
Doniphan MO

Franke Sinker
Fulton MO

Michael E. Small
Augusta KS

Scott M. Spayer
St. Louis MO

John Tobin Taylor
Pacific MO

David Mark Varner
St. Louis MO

Matthew Gregg Vogelsang
Warrenton MO

Matthew Douglas Wade
Pontiac MO

David N. Young
Clarksville TN

Record of Survey – Whose Map Is It?

by Aaron Smith, PLS Reprinted from *The Nevada Traverse*, Vol. 37, No. 3, 2010

Many surveyors have made up their minds that the last thing that they can legally do without overlap from other professions is to survey a deed described line, make a determination as to its location and file his or her opinion (map). I may or may not agree with this, but what I am referring to is commonly known as the "Record of Survey", and for most Professional Land Surveyors, they consider it their document. During this discussion on the Record of Survey, which is reviewed by the County Surveyor's office and subsequently recorded in the County Recorder's Office, I will pose the question; whose map is it? Is it a map that is prepared by you and should be recorded as is, or does it have the look and feel of your county surveyors opinion, or do you take into account the future and put together a document that will stand the test of time? I hope that the map will be a compilation of all three. I will take the position that it is the public's map and it is my privilege to survey the lines, set the corners and file it with the County. On March 16, 1907, the Senate enacted what would be commonly known as the Land Surveyors Act, and most, if not all of those statutes are still with us in the now current Professional Land Surveyors Act (Business and Professions Code, B&P).

Even in 1907, the body of the Senate knew the importance of the duties of the Professional Land Surveyor and set guidelines that even today we rely on. Those individuals who had the foresight to enact these statutes clearly understood the problems then, and the potential for future problems.

The purpose of the Record of Survey, in my opinion, is to review the written documents that describe land boundaries, locate the deed described lines on the ground, which may need extrinsic evidence to locate, such as parol testimony, note any possible discrepancies that may differ from the written document, and finally, make my findings of Public Record. Principle 5, Chapter 14, The Role of the Surveyor, Brown's Boundary Control and Legal Principles, fourth edition states "A land surveyor locates boundary lines according to the description in the deed and then relates lines of possession that do not agree with these lines and reports the facts to the client, in writing." We can also include in this concept, easements or any other written right that can be identified on the ground from the written record. In the Third Edition of Evidence and Procedures for Boundary Location, chapter 5, Evidence General, it says, "The student, surveyor, or attorney must first make the major distinction between facts and evidence. The actual corner point is a fact, all of the information that is used to identify, describe, recover, or preserve the point is evidence of that point, the corner." Your map can help perpetuate the evidence that can lead to facts, and the facts can lead to the corner. This map should also locate and show the relationship to any prior surveys, senior lines, or subdivisions that are near or adjoining your property. Your determinations in the location of these lines are a professional opinion, and the evidence used to locate these boundaries should be reflected on your map. If, during the course of your survey, there is a difference in the location of previously set monuments by other surveyors, and that of the lines you have reconstructed, then it is your duty to show these positions on your map so they may be readily retraced by another surveyor. Your map should clearly show why you have disagreed with these monuments, and if needed, a statement should be made on the map for clarity. This is the essence of Perpetuating the Evidence. Each surveyor over time has been trained as to the different types of evidence used to locate boundaries, such as iron pipes, hubs, fences, old road cuts, historic buildings built at the time of the original subdivision, stones, posts in rock mounds, hedge lines ... etc. Perpetuating these types of evidence on the map is of paramount responsibility to the surveyor. The evidence reflected on the map should be noted with the ability to reestablish these occupation lines by mathematical computations, or at minimum, compare the relative positions by scale.

If a Professional Land Surveyor makes measurements to locate the deed described-lines, which are different from the apparent lines of occupation, and does not show these on his or her map, then one has not done their job. If there are reasons for these differences, and these reasons are not easily detected in the recorded documents, then notes should be placed on the map for further clarification.

The Record of Survey prepared by you, or under your direction, needs to reflect all the pertinent information and evidence used to establish your boundary decisions, and even that evidence you analyzed, but decided not to rely on.

Chapter 5 of Evidence and Procedures says, "before any surveyor obtains sufficient knowledge of the available evidence, it is nearly impossible to make a correct boundary determination or location." Unrecorded documents, previous surveys made by your firm, old files from previous land surveyors and or engineers, and any testimony from neighbors or 'old timers,' should be noted on your map. The location as to where those documents can be found for

inspection by the land surveyor needing to review this information should also be noted in the legend, or notes made on the map. A professional land surveyor should not withhold pertinent information that was used in the final determination of the deed described lines, but should instead look for the opportunity to make that information of public record with the recording of their record of survey. The lack of showing all evidence accepted and not accepted could be the reason there is litigation over your map, or boundary resolution.

"Perhaps the worst disagreements arise from a failure of one surveyor to uncover all available evidence. Two surveyors having the same evidence, if equally educated and equally intelligent, should come to the same conclusions. Unfortunately, all surveyors are not equally diligent in their search. The one with all the evidence usually comes to the correct conclusion, whereas the one with partial evidence makes faulty location." This is a quote from Chapter 5, Evidence and Procedures, and is for both field evidence and research. I hope that surveyors will take the time to uncover the evidence, document that evidence on their map, and perpetuate it for the next land surveyor, so we can have "all the evidence" available to the profession.

"A plat should be complete in itself and should present sufficient evidence of monuments (record and locative) and measurements so that any other surveyor can clearly, without ambiguity, find the locative points and follow the reasoning of the surveyor. A plat does not show the client's land alone; it shows all ties necessary to prove the correctness of location." Chapter 9, Evidence and Procedures.

The map should reflect the measured bearings and distances, B&P code 8764, and compare those to the record information. The record information for comparison could be deeds, maps, unrecorded surveys, unrecorded grants, County right of way maps, survey notes from the County Surveyor's Office, and any other document you have obtained. If these documents are not recorded in the Recorder's Office, they should be referenced on your map. For all the monuments found, there should be a complete description of the monument, including any scribings, character, type of metal, size, and its relative position to occupation, fence corners ... etc. If you are noting a fence, then the type and material should be noted as well. This will assist the land surveyor to identify these lines of occupation for future retracements. "If the surveyor is delegated the privilege of remonumentation of deteriorated corners, he should also be delegated the responsibility of perpetuating the evidence." Quote from Chapter 15, Evidence and Procedures.

Now that we have discussed some of the reasoning behind the record of survey, let's look at the question posed, whose map is it? As I stated early on, I believe it is the public's map, and I have been hired to prepare this document and have it recorded with the county in which the survey was made. These maps perpetuate the location of old historic pieces of evidence, and when we can continue to use these maps to relocate these positions, then it is in the interest of the public to have the map properly documented. Land surveyors in the past and the present have felt that the map they were hired to prepare, is the record of their professional opinion and final conclusions as to the retracement of the deed described lines, and the map should be recorded as they see fit. Without a doubt that is true, the map reflects their decisions, and it should, this is the reason we sought licensure, so we can take responsibility for those decisions. If one does a proper survey and documents the map correctly, then there will be no need for comment on the record of survey before filing, which is, in my opinion, the goal that should be strived for with your survey. There is a list of items that the County Surveyor is required to review for technical correctness before they approve the map for recording, and they are listed in section 8764 of the Professional Land Surveyor's Act:

(a) All monuments found, set, reset, replaced, or removed, describing their kind, size, and location relating thereto.
(b) Bearing or witness monuments, basis of bearings, bearing and length of lines, scale of map, and north arrow.
(c) Name and legal designation of the property in which the survey is located, and the date or time period of the survey.
(d) The relationship to those portions of adjacent tracts, streets, or senior conveyances which have common lines with the survey.
(e) Memorandum of oaths.
(f) Statements required by section 8764.5.
(g) Any other data necessary for the intelligent interpretation of the various items and locations of the

(continued on page 26)

Record of Survey – Whose Map Is It? *(continued from page 25)*

> points, lines, and areas shown, or convenient for the identification of the survey or surveyor, as may be determined by the civil engineer or land surveyor preparing the record of survey.

The record of survey shall also show, either graphically or by note, the reason or reasons, if any, why the mandatory filing provisions of paragraphs (1) to (5), inclusive, of subdivision (b) of Section 8762 apply.

The record of survey need not consist of a survey of an entire property.

As you can see, there is not much that can be reviewed to check for consistency with this section. However, one should note subsection (g) which states "any other data necessary for the intelligent interpretation of the various items," again telling the surveyor in responsible charge to ensure that the map and its evidence as shown is in harmony with the results of the evidence on the ground. Remember, the county surveyor reviews your map based upon the information provided by the professional, and hardly ever does the county surveyor visit the subject property to inspect the results of your survey. If the record of survey is properly documented, then the evidence used in today's boundary determination will be made of record for all of time, and the welfare of the public as it relates to land boundaries are better served.

There is one other section that allows for further review by the county surveyor and that is section 8766 (c) which in part states, "nothing in this section shall limit the county surveyor from including notes expressing opinions regarding the record of survey, or the methods or procedures utilized or employed in the performance of the survey." When applicable, it is appropriate for the county surveyor to request additional information to substantiate the conclusion of the field survey performed, and I believe this section allows for the county surveyor to ask for this. And of course, we are all familiar with section 8768, which in short says the county surveyor and the surveyor preparing the map may add notes to the items not agreed upon in accordance with section 8766, and these notes are added to the map prior to recording.

I have taken the position with my maps that the agency reviewing my survey map before it records is the last set of eyes to check my work and provide me with feedback. I would rather have a comment on the review of my map, than for the map to record for all of time with my errors. I may not always agree with the comments, but rarely do I find a need to argue with them either

One of our jobs as a professional surveyor in the state of California is to render a professional opinion on the location of a deed described line. Yes, there are those who believe we are licensed to monument and locate the unwritten transfer of title, better known as Adverse Possession or Prescriptive Rights, but I still believe we should locate deed described lines and show the relationship of occupied land that is not consistent with the deed, and let the judicial system transfer unwritten rights when necessary. This can be a complicated area of surveying, and I will not render any opinions on how you or your firm should handle these situations. When there is a discrepancy between the deed described lines and the lines of apparent occupation, I believe the land surveyor has a duty to both parties to find solutions. It is unfair to the property owners, to set your corners, note the discrepancies on the map, and record it without the involvement of the neighbors. Yes, I do think Land Surveyors should play an active role in the solution, but they must also understand the laws, and which remedies are applicable to their situation. You do not want to make the situation worse by applying an incorrect solution to the already existing controversy between neighbors. Surveyors, perform a survey and document it to perpetuate all the possible evidence, it is then, that the public's best interest is protected, and the land surveyor has done their job, and so, the question, 'whose map is it?'

Something I feel all land surveyors should remember; the budget should never compromise the integrity of the survey work. We have been hired to perform a function, and an important one at that, one that affects not only your client, who is paying the bill, but all of the adjoining lines you are surveying. Consider the impacts of reestablishing a section corner, the impact of that decision could affect property rights in four different sections, 2 miles by 2 miles. More importantly, most, if not all of the property owners who are affected by the field survey and establishment of the section corner, had no input to your roles and responsibilities, but the survey is now of record.

We are charged with being a Professional, so one should not step lightly into this line of work, unless they are prepared. For those surveyors who have been around awhile, they should look to pass on as much knowledge and skill as possible to those who will follow. One of the ways to perpetuate evidence is to teach and mentor those individuals coming up through the profession, so they may learn the proper techniques and skills to allow them to be a Professional, and protect the welfare of the public as you have.

This article is not a guide to performing boundary surveys and preparing Records of Survey's, but merely a reminder to remember what your job as Professional Land Surveyor is, and a very important one, at that.

I would like to thank Paul M. Brown, PLS and Lawrence A. Stevens, PLS for their mentoring efforts.

Fences as Boundary Evidence

by Dexter M. Brinker Reprinted from *Georgia Land Surveyor*, Vol. 50, No. 3, Nov/Dec 2011

One of the few truly professional services offered by the land surveyor is the analysis of existing land boundary evidence. Perhaps the hardest question he has to answer is, "when is a fence a boundary monument, and when is it just a fence?" The following discussion will not solve the problem, but will outline for the beginning land surveyor some of the main considerations facing him and the profession as a whole when dealing with boundary fences.

Early in my gyrations as a land surveyor I heard the expression, "Oh, he's just a fence-line surveyor." From the way it was said, I knew it wasn't a compliment. The implication was that the person being referred to would assume that existing fences were in the right place (that is, on the property boundaries), make the measurements necessary to delineate these fences, and furnish the client a pretty map showing everything in order. Obviously, this method eliminated the need for either record or monument searches and gave this surveyor a great price advantage over the one who insisted on performing all of those wonderful and professional acts of searching and evaluating! Since I was young and idealistic, I determined that I would never resort to being a "fence-line surveyor."

A few years later, however, I found myself involved in restoring a section corner. The original stone was probably part of someone's fireplace but there was a good assortment of right-of-way fences that seemed to perpetuate the original location of the corner. I knew that if I measured from the nearest available monuments and did a lot of questionable proportioning, I would surely come up with a different location which would probably not be as valid as the one I already had and which would certainly cause a lot of trouble for all adjoining landowners. So, all of a sudden, I became a "fence-line surveyor."

Good, Bad, or Questionable Fences

As years went by, I learned that there were "good fences," "bad fences," and "questionable fences." I also formulated "Brinker's Law of Fences," namely, "All land surveyors, lawyers, landowners, and judges will evaluate the same fence differently." All of which brings up the basic question, "Why does anyone want to be a land surveyor and take the risk of making fence line decisions?" If you insist on being a land surveyor, you had better know your fences!

A very pertinent remark was made by A. C. Mulford in his booklet, "Boundaries and Landmarks." He said, "Loose, faulty and ignorant conveyances, the use of perishable landmarks or no landmarks at all, the temptation to build fences 'offline' for a dozen reasons, good and bad, and innumerable other things have conspired to render the boundaries of land the most uncertain of all things."

In an expansion of this idea, Russell E. Kastelle presented a very interesting paper at the ACSM 1985 Fall Convention in Indianapolis. His discussion, entitled "Fence Lines, Title Lines and Property Lines," explains some of the reasons why fences often are not where you might expect them to be. On the other hand, you must not ignore the possibility that fence lines may be the best possible collateral evidence preserving previous survey monument locations. In some cases the fence may actually define the original boundary intent.

The fundamental problem is being able to prove, or at least develop a preponderance of evidence to show, that the fence can be relied upon. Not an easy task! However, here are a few guidelines to help you evaluate problem fences:

If at all possible, learn whether the fence was built before or after conveyance, and whether it was built before or after a survey. These facts may help establish the intent of the conveyance. However, in all cases, the possibility of a defective survey must be considered.

Remember that, before 1919, many land surveys were done by engineers and other "non-surveyors," but the resulting fence lines, built in good faith may indeed be title lines even though recorded dimensions do not agree with ground evidence. Master your state statutes and case law on the subject and learn the fencing customs peculiar to your region.

Even if the fence was built after a proper survey by a competent licensed land surveyor, you will have to deal with the problem of "acceptable positional tolerance at the time the survey was done."

Keep in mind that many physical objects or conditions, other than fences, may be considered as collateral evidence. These include, but are not limited to, retaining walls, building walls, party walls, hedges, roads, utilities, changes in sidewalk construction, paths worn by animals along previous fences, rows of rocks thrown from cultivated fields, and variations in vegetation. All should be subjected to close scrutiny on the chance that they may indicate where an ancient boundary was.

If a group of fences seems to fit a recorded plat but does not agree with a survey monument, consider the possibility that the monument may be wrong!

Whether restoring aliquot lines in the public land survey system or ancient boundaries created by any other method, never disregard a fence that may be more than a fence; it may be a survey monument. Conversely, do not assume that every fence is a boundary; do your homework!

Once I was retained by an irate landowner who wanted me to assure him that the fence which he had recently built was in the correct position. It was a beautiful redwood fence solidly set in concrete, but the neighbor claimed it was on his property. I did a meticulous survey to establish the lot line. However, before setting the lot corners, I got out not only my dip needle but also my trusty shovel. No response on the dip needle, but the shovel revealed a brass rod at each end of the lot line

within 0.02 ft. of where I would have set my markers. These comers were set long before numbered markers were required, but the brass rods were a "trademark" of an earlier surveyor in the area known to have done quality work. I felt good about my survey but had to inform my client that the fence was, indeed, a foot into his neighbor's land. "How," I asked my client, "did you establish the line for your fence?" "Well," he said, "I split the distance between our garage roofs." I guess that has to be a classic example of a "bad fence."

Let us now consider an example of a "good fence," but one not completely free of problems. Several years ago, my wife and I were negotiating to buy an 80-acre (more or less) parcel of land described in government survey terminology (i.e., the S1/2 SW1/4 of a section). We told the realtor we would buy it if he could acquire for us a road easement across an adjoiner's land to give us access to a nearby county road. The realtor was successful but, in describing the easement, relied on an incomplete and defective land survey. Neither monument which controlled the boundary from which the easement started was in existence, and it appeared that a theoretical tie was made to an existing quarter comer about 1500 ft. away using the still-too-prevalent assumption that all sections are exactly a mile on each side and are perfectly square.

Sometime later, after we had completed the purchase of the land, our new neighbor and I met on the ground and agreed on the intent of the easement location as marked by several centerline stakes. I proceeded to build a fence on the sideline of the easement at the prescribed distance from the centerline. Later, when the road was built, the original survey markers were lost, but as far as our neighbor and we are concerned, this is a "good fence"; that is, it is in the intended location.

However, consider what could happen if we both sold our land before the statutory acquiescence period (20 years in Colorado) expires, and one of the new owners insisted on a resurvey of the easement location. The discrepancy between the record and field location is so great that the easement could easily be moved 100 feet from its present and proper location unless the new surveyor accepted the fence as collateral evidence defining the original survey. It is very likely that some land surveyors would, indeed, accept the fence, but others would rely on the recorded description. In addition, the uncertainty of the starting boundary, coupled with confusion over the basis of bearings, could lead to a wide assortment of solutions. Hence the new owners would probably end up turning their problem over to lawyers and courts with no assurance of ending up with the correct decision.

In our particular case, I hope to avoid such future problems by recording a boundary agreement plat, signed by our neighbors and us, with an appropriate note indicating that the fence, as built, is to control over the recorded verbal description.

All land surveyors working within the framework of the public land survey system should be particularly mindful of the implications of the discussion on the proper location of aliquot lines in general and the center of section in particular. For example, in the same section of land, one fence may be judged to be controlling (i.e., acceptable collateral evidence), while another may be rejected. When it comes to fences on or near aliquot lines, each land surveyor has to make his own decision and live with "Brinker's Law" as quoted above. It is a sad commentary that after 200 years of use and abuse, the public land survey system does not offer any clear and concise standards of positional tolerance for either accepting or establishing aliquot lines. The fact that we are still arguing among ourselves over the proper location for a "center of section" is a disgrace to the land surveying profession. We can only hope that land surveyors of the future will attack this problem more aggressively than those of the past, and will quit turning these important decisions over to the courts.

On a more positive note, and one which I hope will guide those future land surveyors, let me close with another statement from A. G. Milford's booklet: "For after all, when it comes to a question of the stability of property and the peace of the community, it is far more important to have a somewhat faulty measurement of the spot where the line truly exists than it is to have an extremely accurate measurement of the place where the line does not exist at all." In other words, there are still some "good fences."

Some Guidelines for Evaluating Problem Fences

- Try to date the fence. Sometimes the material and condition will help you determine the age. Examine the part that is in the ground for rust or rot. Compare with fences of known age.
- Ask adjoiners and nearby residents if they know the history of the fence in question.
- Search records for names of previous landowners in the vicinity. Send them a short letter explaining your need and a brief set of questions for them to answer. Perhaps you would want to ask them to phone you collect if they have pertinent information.
- Study aerial photographs if available.
- Fence lines are amazingly visible, especially if animals have walked along them.
- Try to visualize the terrain, vegetation, land values, and usual surveying techniques at the time the fence was built.
- Study the differences between agreement fences, fences of convenience,
- Fences of acquiescence, fences of adverse possession, and fences built at a time when one party owned the land on both sides.

The Profession and the Center of Section

Our thanks to Dexter M. Brinker, Durango, CO, for giving us the above article; he can be reached at 970-247-8172.

DNR Director Sara Parker Pauley Addresses MSPS Membership

Missouri Society of Professional Surveyors business meeting - October 14, 2011

- The need for systematic restoration and maintenance of land corners and geodetic marks, as well as centralized archival and dissemination of land survey records to the public was widely recognized many decades ago.

- To meet this need, the Land Survey Authority was created and funded by legislation in 1969 (RSMo 59 and 60). During reorganization of government in 1973, the Missouri Geological Survey and the Missouri land survey effort were placed in the Department of Natural Resources as one division ultimately with the name of Division of Geology and Land Survey. Under the division, both the Geological Survey Program and the Land Survey Program have strong interest in preserving and utilizing data and records.

- Since its inception, the main duties of the Land Survey Program are unchanged and the need for survey related data and services continue to grow. Professional surveyors today are required, to provide more data and reports with their surveys. Lenders, developers, and potential home owners need more data on property that only an accurate survey can reveal. They look to the Land Survey Program to meet their needs.

- Unfortunately the fee that was established in 1969 is no longer adequate to fully support the program and its objectives.

- In FY10, the department made some difficult decisions and implemented several organizational changes in the program aimed at balancing long term expenditures with projected revenues. The overarching objective being: keep the program solvent until we can address our revenue challenges.

- The department clearly recognizes the impacts of reduced services and has been working aggressively to prioritize objectives, reduce costs to the program, and find efficiencies in the way we operate.
    - We have reduced administrative operating costs.
    - We are developing web based access to land survey records to allow users more timely access to data which will in turn be more cost effective for the user and free up staff to work on priority issues.
    - We continue to make investments in technology that will lead to faster, more accurate document archival.
    - All of these efficiency measures will increase data accuracy, respond to customer needs, provide information in a more timely manner and lead to an overall improved product for the citizens.

- The department held a series of stakeholder meetings this summer, to listen to the concerns and recommendations of the professional community. This group undertook a cost benefit analysis of options such as moving the program to a different state agency, privatization of certain program services, and discussion of potential revenue shortfall implications.
    - We are evaluating options to increase revenue through legislation that would allow the Fund to retain interest earnings.
    - We are evaluating the possibility of utilizing Fund revenue in a more creative manner that would allow funding staff from the sale of documents.
    - We are evaluating whether we are covering our expenses with the current $1.00 document fee and is there an opportunity to increase the document fee without putting undue burden on our users.

Sara Parker Pauley

- There are many options being discussed and considered. But ultimately a robust, fiscally sound land survey program that meets the needs of Missourians is the goal.

- We are in a challenging fiscal environment, however the department is committed to:
    - continue to find innovative ways to implement efficiencies that will increase productivity and reduce costs of the program
    - continue indexing statewide survey records for public distribution and long-term stewardship
    - continued development of new standards for accurate surveys
    - and to continue to work cooperatively with our stakeholders.

Minimum Standard Detail Requirements for ALTA/ ACSM Land Title Surveys (effective 2-23-11)

Reprinted from *Evergreen State Surveyor*, Summer 2011

Frequently Asked Questions:

Since the adoption of the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys by the leadership of ALTA and NSPS/ACSM, industry professionals have shared questions about various sections of the new standard. This document provides additional information on some of the most frequently asked questions and common concerns.

If you have additional questions or concerns,. please feel free to contact the staff liaison for ALTA's Liaison Committee with the ACSM, Kelly Romeo, at kromer@alta.org

QUESTION #11: Where can I find and download the 2011 Standard and these FAQs?

Visit the ALTA website at www.alta.org/forms, and look in the "Most Requested" section. You can also find the standard on the ACSM website at www.acsm.net in the "Standards" section.

QUESTION #2: May I reprint the standard with my company logo, signature block, and minor modifications?

Yes. The Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys are copyrighted by ALTA along with the ACSM and NSPS. In general, ALTA permits "Derivative" versions of all of its copyrighted forms for company branding and use of the ALTA forms for education/training purposes.

Please note that substantive changes to anything other than Table A, Item 22, in the Minimum Standards would result in a document that is not an official ALTA/ACSM Land Title Survey.

QUESTION #3,: If a Surveyor began work on a Survey before the effective date of 2/23/11 or is asked to update information requiring an updated Certification, may the 2005 Standard still be used?

If the work was contracted and began before February 23, 2011, it may be completed under the 2005 standards, but otherwise any survey which is certified or re-certified on or after 2/23/11 should use the 2011 Standard. Use of the Standard is voluntary, of course, and the Client and Surveyor may agree to different terms which could include use of the 2005 Standard, but in such cases the final plat or map could not be labeled an ALTA/ACSM Land Title Survey.

QUESTION #4: What happens if the Surveyor is requested to change the Certification? Does that mean it's not a "real" ALTA/ACSM Land Title Survey?

There is some concern in the Client community regarding the use of the words "only" and "unaltered" in Section 7 covering Certification.

Under the 2011 Standard, the only certification allowed on the face of an ALTA/ACSM Land Title Survey is the Certification in Section 7, except as required by law or regulation. Some state surveying boards, for example, require specific wording for Certification.

The Certification in Section 7 is almost always sufficient and this standard "short-form" Certification covers every issue that the Surveyor can actually and honestly certify to by stating that the Survey was conducted in accordance with the Standards. The change effected by the wording in Section 7 of the 2011 Standard is essentially a statement from the title industry and the surveying profession that title insurance coverage can be provided without additional or alternate Certification.

For those Clients who require an additional or alternate Certification, it is permissible to negotiate with the Surveyor to provide another additional Certification on a separate sheet of paper and cross-reference it to the Survey.

In lieu of an additional or alternate Certification, the drafters believe that Lenders may simply use these standards (including Table A, and Table A, Item 22, if necessary) as the basis for their requirements.

QUESTION #5: Are Title Companies required to provide deeds to the Surveyor as indicated in Section 4 - Records Research?

The American Land Title Association's position has always been that title research should be provided to the Surveyor if needed. Notwithstanding that, here are a few things that will help clarify this requirement.

- The standards are actually a contract between the Surveyor and Client. Although the Standard anticipates that title research would and should be provided by the Title Company, these Standards cannot actually force that, unless the Title Company is the Client.

- The drafters do not expect a significant change in what Surveyors will ask from Title Companies; in fact, many

(continued on page 34)

Minimum Standard Detail Requirements *(continued from page 32)*

states require Surveyors to do their own research, although some Surveyors will likely try to obtain assistance from the Title Company.

- There is nothing in the Standard indicating that the research must be provided by the Title Company at no cost.

- The Title Company does not need to provide any deeds unless they are specifically requested. This is because there are many states whose administrative laws dictate that Surveyors must do their own deed research. Even in those states, however, the surveyor might wish to enlist the Title Company's help, but again there is nothing that says "for free."

- It may seem that the requirement to provide adjoiner deeds will require a title search. There is nothing in the Standards about a title search for adjoiners. It simply says "current record descriptions of adjoiners." This was intended to be very clear and very limited.

- Under Section 6.C.vi. it is very clear that when the adjoiner is a lot in a platted, recorded subdivision, the individual deeds are not required at all unless elected by the client pursuant to Table A item 13.

- While the new 2011 standards now specifically mention adjoiner deeds, the last 4 or 5 prior versions of these standards very clearly implied that adjoiner descriptions would need to be part of the documents provided.

In some states, the title company should consider whether state law relating to the unauthorized practice of law or the licensing of abstractors may prohibit it from providing adjoiner deeds or other record information.

QUESTION #6: Are Title Companies required to provide zoning information as seems to be indicated in Table A Item 6 (b)?

In most cases, this item is related to the Client requesting an ALTA Endorsement 3.1 (Zoning Completed Structure) from the Title Company. This endorsement is very important and requires careful research. Title Companies generally do not rely on Surveyor research to support issuance of this Endorsement.

In any event, this item does not require that Title Companies provide this information. If the title company is not otherwise doing zoning research, or if they simply don't want the liability associated with providing such information to the surveyor, they can simply decline to provide the information. The requirement says "as provided by the insurer" and if the insurer provides no information, the Surveyor has nothing to report. At that point, the Client and the Surveyor can decide what to do. Perhaps there will be an additional service negotiated whereby the Surveyor will do the research independently, or a third party can be hired.

The primary reason that this change was made is that Lenders often ask Surveyors to certify that there are no violations of the setbacks or parking requirements, but such "violations" are not matters of Survey, rather they are legal or jurisdictional determination.

The surveyor and title company should consider whether state law relating to the unauthorized practice of law may prohibit it from providing zoning information.

QUESTION #7: What kind of liability insurance do Surveyors need to satisfy Table A, Item 21?

Surveyors will need Professional Liability Insurance (a.k.a. "Errors and Omissions" Insurance). This is a different insurance product than general liability insurance.

QUESTION #8: What is meant by 'to be in effect throughout the contract term' in Table A Item 21?

If item 21 is selected by the client, the surveyor will need to have or obtain a professional liability insurance policy. The "term of the contract" will be the time frame agreed upon between the surveyor and client. Most states have a statute of repose in addition to their statute of limitations limiting the length of time that the surveyors are liable for their professional services. Such laws will define the period of time unless the parties contract to a different time frame. Surveyors should review the terms of their policy to be sure they are not contractually agreeing to something outside the scope of their policy.

QUESTION #9: How much Professional Liability Insurance is required per Table A, Item 21?

The amount of insurance referred to in Table A, Item 21, is a matter that must be negotiated between the Surveyor and the Client. The Client must consider the answer to these questions: If the surveyor I have hired were to make a mistake in the survey of this property, what kind of mistake might it be? What would be the potential monetary damages resulting from this mistake? The answers to these questions will depend, at least in part, on the value and location of the land and the type of improvements, if any, constructed on the land. For example, it seems reasonable to conclude that the potential damages resulting from an error made while Surveying a twenty-acre tract of vacant land in the middle of a rural countryside will not be as great as the potential damages stemming from an error made while surveying a twenty-story office building in downtown Chicago.

Do You Have A Question? Let us know by contacting the staff liaison to ALTA's Liaison Committee with the ACSM. Send your questions to Kelly Romeo at kromeo@alta.org

Please Patronize Our Supporters

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