HOOSIER SURVEYOR



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VOLUME 32 NUMBER 2 FALL 2005



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ISPLS member, Dennis Grumpp, New Palestine, serves as Ebenezer Buckingham, U.S. Deputy Surveyor, at reinactment of the setting of Indiana's Initial Point. (See pages 20 and 21 for pictures)

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Editor's Comments

As I look out into the changing color of the trees in our woods, I am very aware that the year is moving on, fall is here, and the annual January Conference in Indianapolis is fast approaching. This issue includes a copy of the program for the 2 1/2 day meeting and many interesting topics are included - something to suit everyone's needs. If you didn't attend the ISHS/ISPLS-sponsored Second Principal Meridian Initial Point Bicentennial Celebration (1805-2005) at French Lick in September, you missed a great surveying history lesson and fellowship opportunity. I think the poem by the late Charley Condra on "The Old Surveyor's Thoughts" (which I read at the celebration) is great and very appropriate for Indiana surveyors. Realizing the importance of fence lines to land surveyors, we have included another article on said topic be Walt Robillard. Ken Curtis, editor

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EDITORS NOTE

Deadlines for copy for various planned issues of the Hoosier Surveyor are as follows: Winter - December 31; Spring - March 31; Summer - June 30; Fall - September 30.

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Articles and columns appearing in this publication do not necessarily reflect the viewpoints of ISPLS or the Hoosier Surveyor staff, but are published as a service to its members, the general public and for the betterment of the surveying profession. No responsibility is assumed for errors, misquotes or deletions as to its contents.

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ISPLS BOARD OF DIRECTORS (2005)

l to r, first row: Anthony Gregory, Highland; Ed Sweetland, Greenfield; John Stephens, Wabash; Frank Ballintyn, Sellersburg; Mark Isaacs, Brownstown; Second row: Harold Hart, Charlestown; John Updike, Fort Wayne; Ron Wharry, Frankford; Don Bengel, Valparaiso; Perry Cloyd, Columbus; and Richard Hudson, Valparaiso. Not pictured: Steven Murray, Battle Ground.

PRESIDENT'S THOUGHTS

by Ronald Wharry, PLS, Frankfort, Indiana



I guess I should not be surprised that this year is almost over as it has passed so fast. As with any year some things seem to be unfinished and will be considered an ongoing working event. But we can also look back and see the accomplishments with pride at the progress that has been made. The legislative committee took off as we left the Convention of last year. Publications will have new manual

updates. Public information should be continuing as career days intensify; to see if there is any chance to explore intersociety cooperation and to inform the public as to the efforts of the surveyors' role in their lives to make it better. Trig Star events should increase and I request all Chapters to see if they can help a little extra this year as this is a great program that will reap rewards well into the future. The education classes should be well received and I implore everyone to take advantage of the many opportunities to attend these workshops as we have them around the State and we endeavor to reach as many members as possible to offer several types of information that can be used in the expansion of your knowledge and the growth of your business. I want to thank those with the work being completed as to the establishment of our border with Michigan and the efforts will continue next year with your support as with other committees.

New committees will be formed in the coming year and I ask all those appointed to serve to work with a strength of mind and unified success to take a fresh look at the charges they will be given. Please make it known to your Board members or to our incoming President as to your willing readiness to participate and resolve to making next year even better. Please do not underestimate your valuable contributions you make to your profession. As this is a volunteer association, its improvement will not take place unless each of us pitches in to complete our segment of the overall goals. I also want to invite some of our newer members, yes and they are younger, to see if they can offer some of their time and energy to help out on any committee they have an interest in.

The next Board of Directors meetings will be held at our new office and I invite anyone to come and see your Board in action and offer your services where they can be used to the enhancement of the Society and benefit its membership. ISPLS Chapters will have more meetings during the coming months and I ask that every member take the effort to attend those functions and help out where they can at this grass roots level of the Society.

I attended the Signature Event workshop on August 30th through September 2nd at French Lick to celebrate the 200th Anniversary of the setting of the Initial Point. The workshop was well attended and very informative. Most people also went to the reenactment and was enlightened as to the way the point was set. Thanks to all who helped make this event a success.

You will be receiving your notice, as shown in this newsletter, to attend the Annual Conference in January and I urge everyone to make an effort to come and celebrate your Society's event. The slate

of classes this year again will be exciting and informative and, by the end of the week, will give anyone a wealth of things to talk about. Lets support the exhibitors that make our work easier. Lets all try to come and renew those acquaintances and make new friends that will last a lifetime.

I want to thank the current Board of Directors with the work they did this year with the insight and their thoughts they provided at our meetings. I indeed want to thank Dianne and Valerie for their service they provided in the operation of the office and keeping us informed of the things we all needed to get to. And last I humbly want to thank you, the membership, for the opportunity to serve as your President during this 53rd year of the existence of this great Society and I look forward to working with you and the new Board next year.

Board of Registration News by Gary Kent, PLS

The primary news from the State Board of Registration is related to the proposed revisions to the Administrative rules of the Board. A public hearing to receive comments on the revision will be held in December. We encourage suveyors to attend meetings.

The proposed revisions represent a significant rewrite of much of Rule 12, together with revisions to most of chapters of the Administrative Code. The proposal includes:

- Requiring an associates degree in order to qualify for registration
- Requiring that ½ of the required experience be obtained after graduation
- Lowering by one credit hour the physics and calculus requirements
- A new section addressing the use of electronic signatures and seals
- A requirement that surveyors notify the Board of the address of all offices in which they are practicing
- A clarification of Surveyor Responsibility
- Eliminating repetitious language by consolidating the requirements for original and retracement surveys
- Significantly revising the measurement standards of 876 IAC 1-12-7 and 8
- Additions and clarifications to the Route Survey portions of the Rule
- A new section of Rule 12 addressing corner perpetuation
- Allowing the rollover of 4 elective hours of continuing education

In other news of interest, the audit of the 2004 renewal with regard to continuing education has been completed. Approximately 30 registrants may ultimately face sanctions for not meeting the requirements.

Governor Daniels has appointed two new members to the Registration Board. The terms of David Blankenbaker and Mike Falk have expired and the Governor appointed Rich Hudson from Valparaiso and Johnson County Surveyor Doug Lechner as their replacements. E.R. Gray's term is also up, but his replacement is yet to be named and he will continue to serve until that time.

ISPLS BOARD OF DIRECTORS MEETING HIGHLIGHTS

by Dianne Bennett, Executive Director

May 14, 2005

The ISPLS Board of Directors held a meeting on Saturday, May 14, 2005 at headquarters. President Wharry called the meeting to order at 10:07 a.m. The minutes and treasurers reports were reviewed and approved with revisions.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Communication: Membership - The following membership applications were reviewed and approved. Life Member - Michael J. Marlow; Associate - Bruce White, Eric Rider and John Herron II.

The ISPLS renewal form was reviewed by the board. It was decided to remove the old ACSM logo and replace it with the NSPS logo. The members will not have to sign their renewal forms this year.

Intersociety Relations - ISPLS was invited to a day at the track (IMS) with ACEC on May 19th (Speedway) at noon.

Perry Cloyd reported that an Inter-Society Professional Group through the internet has been formed.

Publications - There is work being done on updating the Indiana Law Manual. There was discussion that ISPLS needs to publish a paper covering surveying closure ratios and their relations to a certain timeframes.

Hoosier Surveyor - The Spring issue is at the printer.

Web Page - We are in the process of sending the members their ID and password for the website.

Public Information and Marketing - The committee has met with a few high schools during the past months.

Professional Development: Education - The ISPLS Spring seminar on April 22nd (Indianapolis) had 50 in attendance and the April 29th (Jasper) had 23 in attendance.

The Hoosier Hills Chapter had 50 in attendance at their May 6th seminar.

The 2005 Convention had 624 in attendance. That number includes full time, one day, spouse and students.

Scholarship - The committee interviewed 7 students from Vincennes University on April 20th. The committee recommended to award the \$3000 Peggy Archer Memorial Scholarship to Todd J. Nordyke. A motion was made and passed to accept the committee's recommendation.

Technicians - The committee is currently working on a fall technician seminar.

Trig Star - The period to give the exam has ended. Indiana's state winner will be submitted. A summary of school participation by chapter is as follows: Wabash Valley Chapter - 8 schools; Northwest Chapter - 5 schools; Central Indiana Chapter - 2 schools and Southwest Chapter - 2 schools.

We have a "three-peat" winner. William Young of Hobart High School has won for the third straight year. The board will be inviting the Trig Star winner to the 2006 convention.

Government Affairs: Board of Registration - Perry Cloyd presented a written report on the Board of Registration activities for their April 8th and May 13th meetings.

Legislation - The ISPLS board reviewed Senate Bill 139.

Internal Affairs - Budget & Finance - The board reviewed the new ISPLS headquarter lease. A motion to accept the lease based

on items 6 and 9 being modified was passed.

The board reviewed the proposed 2005/2006 ISPLS budget. After much discussion the budget was tabled for the next BOD meeting on July 9, 2005.

Chapter Reports - Northeast Chapter - Their next meeting will be later in the summer.

Tecumseh Chapter - Their next meeting is May 25th.

Central Indiana Chapter - They held a meeting May 12th to discuss the Hendricks County drainage requirements and the Trimble VRS network.

Initial Point Chapter - Awarded a scholarship to a Vincennes University student.

New Business - Ron Wharry reported on the Michigan & Indiana border determination.

Initial Point Reenactment - Roger Woodfill and Vic McCauley were asking for a \$6500 grant to host the event. A motion was made and passed to approve the grant.

July 9, 2005

The ISPLS Board of Directors held a meeting on Saturday, July 9, 2005 at Vincennes University. President Wharry called the meeting to order at 10:35 a.m.. The minutes and treasurers reports were reviewed and approved with revisions.

Staff Activity Report - A written report was submitted for board review. The report is stated under individual topics listed below.

Dianne reported that the office had been moved to suite 719 on July 1st.

Communication - Membership the 2005/2006 2nd membership renewal notice will go out next week.

Publications - Discussion about the revisions of manual 3 will be discussed at the September meeting.

Hoosier Surveyor - Any articles for the next issue need to be submitted by July 15th.

Professional Development: Education - The BOD reviewed the fall seminars and part of the ISPLS Convention seminars. These seminars will be submitted to the BOR at their next meeting.

Scholarship - The committee is in process of reviewing the Vincennes and Purdue scholarship amounts and the possibility of adding another fund for scholarships in other surveying schools in the state.

Technicians - Nathan Althouse is working with Dan Kovert on planning a technician seminar for route surveying.

Trig-Star - Tony Gregory reported that there is no rule that restricts a past winner of the award, winning the award again. William Young was the Indiana winner and has taken the national test, results are still pending.

Licensing Exam Review - The next review will be September 16 & 17th.

Government Affairs: Legislation - Changes to Rule 12 is being discussed and reviewed by the BOR.

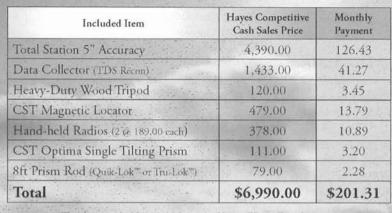
Board of Registration - A lengthy discussion was held on the proposed changes to Rule 12.

HARN/GIS Monumentation - We need cooperation from the County Surveyors to scan section corner information. There are counties that presently don't have GIS.

... continued Page 5

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Minutes

...continued from Page 3

County Surveyors - The county surveyor's are looking into providing a web site.

Internal Affairs: Budget & Finance - After discussion there was a motion to approve the 2005/2006 budget. The new lease for headquarters has been signed.

Nominations - The slate for the President Elect will be submitted to the BOD by August 21st.

Chapters - Northwest Chapter - Their next meeting will be in September. The golf outing will be on July 14th.

Northeast Chapter - Their next meeting will be July 14th and the golf outing will be August 5th.

Hoosier Hills Chapter - Their next meeting is July 12th.

Initial Point Chapter - Their next meeting will be in July and they will be discussing the Initial Point seminar.

Southwest Chapter - They held a meeting on May 2nd and increased the scholarship amount from \$750 to \$1000. Their next meeting will be the second Tuesday of August.

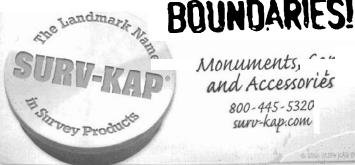
Greenville Chapter - Their next meeting will be September 7th.
Old Business - Ron Wharry sent out report cards to all the committee chairmen.

New Business - Tony Gregory reported that he was offering a Surveying Law course on-line at Purdue Calumet. Three campuses will participate in this on-line course; Purdue Calumet, IUPUI, and IUPUFW.

Other topics discussed were POB's Surveyor of the year award, cell phone for ISPLS President and the roster.







Things That Make You Go Hmmmmmmmmm-

Abraham Lincoln was elected to Congress in 1846. John F. Kennedy was elected to Congress in 1946.

Abraham Lincoln was elected President in 1860. John F. Kennedy was elected President in 1960.

Both were particularly concerned with civil rights. Both wives lost a child while living in the White House.

Both Presidents were shot on a Friday Both Presidents were shot in the head.

Now it gets really weird.

Lincoln's secretary was named Kennedy. Kennedy's secretary was named Lincoln.

Both were assassinated by Southerners. Both were succeeded by Southerners named Johnson.

Andrew Johnson, who succeeded Lincoln, was born in 1808. Lyndon Johnson, who succeeded Kennedy, was born in 1908.

John Wilkes Booth, who assassinated Lincoln, was born in 1839

Lee Harvey Oswald, who assassinated Kennedy, was born in 1939.

Both assassins were known by their three names. Both names are composed of fifteen letters.

Both Booth and Oswald were assassinated before their trials.

Now hang on to your seat.

Lincoln was shot at the theater named "Ford". Kennedy was shot in a car called "Lincoln" made by Ford.

And here's the "kicker":

A week before Lincoln was shot, he was in Monroe, Maryland. A week before Kennedy was shot, he was with Marilyn Monroe.

AND

Lincoln was shot in a theater and the assassin ran to a warehouse.

Kennedy was shot from a warehouse and the assassin ran to a theater.













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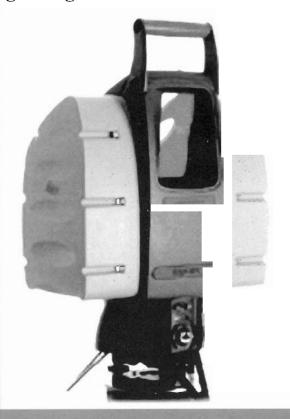






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U.S. Supreme Court Expands Eminent Domain

The following is taken from the syllabus of the case, which was prepared by the Court's Reporter of Decisions. It does not include the opinions of the Justices, but only a synopsis of the decision.

Syllabus KELO ET AL. v. CITY OF NEW LONDON ET AL. CERTIORARI TO THE SUPREME COURT OF CONNECTICUT No. 04-108. Argued February 22, 2005 - Decided June 23, 2005.

After approving an integrated development plan designed to revitalize its ailing economy, respondent city, through its development agent, purchased most of the property earmarked for the project from willing sellers, but initiated condemnation proceedings when petitioners, the owners of the rest of the property , refused to sell. Petitioners brought this state-court action claiming, inter alia, that the taking of their properties would violate the "public use" restriction in the Fifth Amendment's Takings Clause. The trial court granted a permanent restraining order prohibiting the taking of the some of the properties, but denying relief as to others. The Connecticut Supreme Court affirmed in part and reversed in part, upholding all of the proposed takings. Held: The city's proposed disposition of petitioners' property qualifies as a "public use" within the meaning of the Takings Clause. Though the city could not take petitioners' land simply to confer a private benefit on a particular private party, the takings at issue here would be executed pursuant to a carefully considered development plan, which was not adopted to benefit a particular class of identifiable individuals. Moreover, while the city is not planning to open the condemned land - at least not in its entirety - to use by the general public. This Court long ago rejected any literal requirements that condemned property be put into use for the public. Rather, it has embraced the broader and more natural interpretation of public use as "public purpose". Without exception, the Court has defined that concept broadly, reflecting its longstanding policy of deference to legislative judgments as to what public needs justify the use of the takings power. The city's determination that the area at issue was sufficiently distressed to justify a program of economic rejuvenation is entitled to deference. The city has carefully formulated a development plan that it believes will provide appreciable benefits to the community, including, but not limited to, new jobs and increased tax revenue. As with other exercises in urban planning and development, the city is trying to coordinate a variety of commercial, residential, and recreational land uses, with the hope that they will form a whole greater than the sum of its parts. To effectuate this plan, the city has invoked a state statute that specifically authorizes the use of eminent domain to promote economic development. Given the plan's comprehensive character, the thorough deliberation that preceded its adoption, and the limited scope of this Court's review in such cases, it is appropriate here to resolve the challenges of the individual owners, not on a piecemeal basis, but rather in light of the entire plan. Because that plan unquestionably serves a public purpose, the takings challenged here satisfy the Fifth Amendment. Petitioners' proposal that the Court adopt a new brightline rule that economic development does not qualify as a public use is supported by neither precedent nor logic. Promoting economic development is a traditional and long accepted governmental function, and there is no principled way of distinguishing it from the other public purposes the Court has recognized. Also rejected is petitioners' argument that for takings

Mapping Indiana

New to the Library Collections

The library is concluding a 10-month project to catalog its map collection that will improve access to the public. The majority of the maps in the collection were previously uncataloged, stored by rough estimates of geographic location and date, and were accessible only through the aid of library staff. Now that these graphic treasures are cataloged and added to the library's online catalog, researchers in Indiana, or in any location with internet access, can search electronically and locate items of potential interest.

Because Indiana Historical Society (IHS) collections cannot be browsed visually, it is vital that catalogers provide as much information as possible in the catalog record so that researchers can determine if an item is one they wish to examine.

To benefit potential users, information such as time frame, place of creation, creator(s), possible subject matter, special features, or historical significance of the map is included in the record. The map collection is now accessed by searching key terms, subject matter, titles, cartographers, publishers, and so on via the Voyager online public catalog. With multiple access points, the likelihood of finding an applicable resource has increased immeasurably.

Some of the maps now available for use have been part of the IHS collection since the 1920s or earlier. There are nearly 1,100 maps in the collection, and most are now cataloged and stored according to Library of Congress classification number.

The collection is comprised of maps acquired through donations, bequests or purchases and includes hand-drawn maps, originals, reprints and reproductions. The earliest map in the collection dates from 1540, and the most recent from 1998.

The maps cover early exploration of the North American continent, the creation of the Northwest Territory and the development of Indiana as a state, and they illustrate growth and settlement over four centuries. Some maps from earlier periods were printed in German, French, Spanish, Italian, Latin or English, each bearing various trademarks, idiosyncrasies or errors that made individual maps unique. Subject areas covered include transportation routes, land ownership, bird's eye views, geology, special commemorative and illustrative maps and more.

Maps are available for use and can be viewed in the Smith Library. Because of the sometimes fragile nature of maps and their size and complexity in transporting, please expect a few extra minutes for retrieval from collection storage.

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of this kind the Court should require a "reasonable certainty" that the expected public benefits will actually accrue. Such a rule would represent an even greater departure from the Court's precedent. The disadvantages of a heightened form of review are especially pronounced in this type of case, where orderly implementation of a comprehensive plan requires all interested parties' legal rights to be established before new construction can commence. The Court declines to second-guess the wisdom of the means the city has selected to effectuate its plan. Justice Stevens delivered the opinion of the Court, in which Justice Kennedy, Souter, Ginsburg, and Breyer joined. Justice Kennedy also filed a concurring opinion. Justice O'Connor filed a dissenting opinion, in which Justices Rehnquist, Scalia and Thomas joined. Justice Thomas also filed a dissenting opinion.



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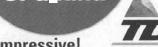
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Fences

By Walt Robillard

(As presented to the Texas Surveyors Association – October 6, 1976)

Fences are the most common types of evidence afforded the surveyor. Unfortunately, the mere existence of a fence is substituted for expertise. From early recorded time, man has relied upon ditches, dividing walls, stockades, bulwarks and fences. The Great Wall of China was built in the 3rd century B.C. to keep invaders out; as was Hadrian's Wall in England.

From the earliest biblical times, to the Indians of North America, to today – fences have played a vital role in a country's development. Man has shown originality in his utilization of materials for fences; stone fences, dry wallow wattle fences, brush; wooden fences, and wire; stump fences and brick; concrete fences and turf; privet, boxwood, locust, cactus, fuchsia and hawthorn; woven wire, barbed wire, down to the single wire running around an enclosure with an electric charge being sent rhythmically thorough it.

To appreciate the full implication of fences, the land surveyor or attorney must realize their ancient heritage. Stemming from the Latin "fender" to defend-ward off-the original concepts were confining or enclosing against humans and animals alike.

While Mosaic law in the early testament warned offenders against removing a neighbor's landmark, references also referred to "Zion is a fortress encircled by walls and bastions."

In ancient Rome and Greece, fences were utilized to protect gardens and homes, while herdsmen attended livestock in unfenced fields. The Romans brought their methods to Britain and Gaul where the local people were taught hedging, ditching and stone and brick work to replace wattle and mud walls.

It was during this period that the eventual problems caused by fences were predicted by Sir Thomas More in utopia who wrote of Henry VIII: "They stop the course of agriculture, destroying houses and towns, reserving only the churches, and enclose grounds that they may lodge their sheep in them."

Fences were elevated to the paramount beauty during the Renaissance. In the famous formal gardens, rosemary, thyme, and sage were surrounded by moats as a form of partition. The motto "ever fence the right."

In America the "heathens" used palisades as did the peoples of China and Africa. These fences moulded into their natural surroundings. Father Gabriel Sugard related the type of fencing used by the Indians with these words in 1600: "In this stretch of country there are about twenty-five towns and villages. Some of these are not enclosed or shut in, while others are fortified by strong wood palisades in three rows interlaced into one another and reinforced within by large, thick pieces of bark to a height of eight or nine feet, and at the bottom there are great trunks of trees placed lengthwise resting on strong, short forks made from tree trunks…and defend their ramparts with great courage and skill."

As the frontier was pushed westward, the settlers utilized every imaginable material for fences. Originally, brush was piled along with roots and logs. Pigs went under, cows went through and men went over. To be legal they had to be "40 feed wide-and damned high."

Later as the wilderness was cleared, stumping bees originated,

and oxen extracted entire stumps. They were removed and were placed to form fences. In New England farmers extracted stones and boulders from fields, placed them in orderly piles and lines, and the New England stone wall evolved.

Snake rail fences obtained popularity and we remember, one Abe Lincoln split rails, then dodging boulders and trees placed alternate rails inter-locking them until they presented formidable structures.

The snake rail or split rail fences gave way too, because of the need to better identify the exact boundary lines. The patriots at Lexington and Concord utilized the stone walls and split rails separating farms as defenses.

Present day fences can be traced to 1873 in DeKalb, Illinois with the patenting of barbed wire. The barbed wire is placed on equal par with the revolver, the regulating rifle, and the windmill as taming the west. Single or multiple wires fastened to posts of wood, concrete, and even stone stretched for miles.

Robert Frost wrote "something doesn't like a fence? Is it elves?" This cannot be said of surveyors, for surveyors like fences as do some children like security blankets. With them they feel secure. Fences are evidence. As evidence they may indicate property ownership or they may not. That is what must be determined. The strength or dignity surveyors place on fences is directly proportional to their durability. But this may be a poor concept. When one considers the historical concept of fences, consideration has to be given to such matters as "fence waste" or the amount of land utilized by fences. At times this wastage was estimated at six acres in twenty.

Original survey lines were often marked and cut on trees. In the course of time these were cut or died. Original stakes marking corners were over-grown or destroyed but nevertheless disappeared. Presumptions are made that the original survey ran straight between corners and that each land-owner knew his bounds. The pioneers in clearing land were a constant menace to the original markers as were dissatisfied neighbors.

As time has evolved the question of fences entered by the common law and the statutory law realms-chief Justice Cook related "Reason is the life of the law; nay, the common law itself is, nothing but reason." Thus if this is the interpretation, the question or rather the answer to fences will be easy.

The initial confusion results even in the description, Black describes fence: "n. A hedge, structure, or partition, erected for the purpose of enclosing a piece of land, or to divide a piece of land into district portions, or to separate two contiguous estates." (Kimball Carter 95 Va 7). By virtue of the description, separation of land is indicated and an ideal structure could be described as "horse high, bull strong and skunk tight." But other forms of partition or separation must be considered if the true context of the fence is to be involved. Since a fence is a limiting structure, a dike, drainage ditch or turn-row could also be limiting or circumscribing.

Neighbors quarrels, like international wars, usually resulted

... continued Page 11



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Fences

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from boundary disputes. Fences usually were the only tangible result of the boundaries. Where original lines become obliterated, the fence row or fence is all that was left as evidence where the original line was located. Fences are one of the most common kinds of evidence available to the surveyor. Fences may or may not show ownership; thus they may or may not add considerable significance relative to property decisions.

If fences are found to coincide with on-the-ground measurements, no problems are encountered by the surveyor, but where the "footsteps" of the original surveyor are lost, the question arises, if the fence the best possible indication of the line? The surveyor must determine the significance of fences that deviate from measurements. Monuments called for and identified at fence corners, if undisturbed, take priority over the fence line. If the fence itself deviates from a straight line between corners, the surveyor must then determine the significance of the fence in relation to the original surveyed line. The original position of the surveyor must be questioned.

Where none of the original monuments can be found or identified, old fence lines can raise questions and lead to presumptions of corner location. A surveyor can assume a fence corner or intersection is the location or perpetuation of a corner because builders took more pains at these points than along lines. If the corners are assumed correct, what about the lines between them? The fence line that diverges off from a straight line can cause conflicts, because it then becomes a problem of vested rights. In the line of evidences the surveyor is able to collect, interpret and relate the evidence of fences.

Sufficiency

Although the question of sufficiency may be detailed under both common and statutory law, the surveyor must realize that lawful and sufficient are not synonyms. Common law fences are sufficient when they answer the purpose of keeping cattle enclosed and insufficient if they fail to do so. ¹ Sufficiency under the common law further states to be sufficient it need not be constructed of any particular material or have an attractive appearance.² The surveyor may have to decide as to the sufficiency for certain aspects of his work under the common law.

Sufficiency may also be stipulated by statute as depicted in early legislation as "the bottom rail is to be within four inches of the ground and not more than four inches apart, and the whole fence will be staked and ridered."

Once a fence statutorily meets the requirements of sufficiency it can be termed as lawful.³ Lawful fences if not maintained may deteriorate after disuse and become a common law fence. The surveyor may be called upon to determine the sufficiency of a fence and be asked to determine if old deteriorated fences at one time possessed the dignity of being lawful.

Types of Fences

Partition – Partition fences assume the dignity of boundary fences. There are several problems that one could envision, since it is contemplated that a partition fence is on the dividing line.⁴

The question concerning the surveyor as to a partition fence is

not one of legality, but one of location or position and history. The question of legality rests with the courts. The question of location rests with the surveyors. It I not essential that the fence be exactly on the dividing line,⁵ but a fence agreed upon by contiguous owners may be regarded as a partition fence.⁶

Both parties can assume the fence is on the true dividing line, but since all of the facts are not readily available, the fence will not become fixed and should be placed on the true line when it is established.⁷

The true line or that positioned by the surveyor from written descriptions is only a mathematical line. Its true location can never be actually located because of errors in equipment and methods. Each individual can define it relative to his techniques and methods, but to say it is without error he cannot. The surveyor can make statements concerning fences in relation to his survey, but to be able to give advice relative to deviations, he can only advise.

In a retracement of an 1836 grant the surveyor assembled all of the necessary background data. The SW corner is common to four grants. It then runs East 40 poles to a spruce – pine; North 100 poles to a maple; west 40 poles to a chestnut; thence South 100 (1650 ft.) poles to the point of beginning. In retracing the grant the surveyor actually finds the following: SW corner-a point agreed upon by all parties; SW to SE 40.96 (675.84 ft.) poles to a spruce; SE to NE 98.79 (1633.02 ft.) poles to a badly decayed split rail fence, approximately 18 inches high, with "foot stones" still in place; It goes in a westerly directions approximately 520 feet (30.9 poles) and cannot be identified any further west.

The surveyor cannot say the fence is the property line. He is able to reveal it lies at 98.97 poles; it is an old split rail fence, 100+ years old; it does possess characteristics he can see and measure; but to state this is the north side of the grant he cannot. This is law. If he is able to assemble additional evidence to support his contentions, he may be able to pass judgment, but certain questions will arise. Who built this fence? Was it surveyed and then built? Or vice versa? Was it intended to be the dividing line between the grants? Obviously he cannot answer these questions. If he were able to, then light could be cast upon the true relevance of the structure, otherwise he can only repeat.

Early owners were likely to agree upon fence locations as a matter of convenience only. Once placed, the fence itself becomes a monument, right or wrong. A fence corner may lead to the assumption that a corner is near, but unless supported by additional cooperative evidence, the surveyor cannot say. It can be assumed that the builders honored survey monuments that were in place, but we can only assume that. We do not know. Then the line between the corners, usually a curved one, may define acquired rights but the true property line is a straight line between corners unless otherwise indicated. Landowners may make any agreement relative to fences they desire, but unless these are reduced to writing they are of little future value. Parol agreements carry little weight. Relative to ancient evidence, the older the fences, the greater the weight the courts see to place in them. Although the period of time is set statutorily, usually 30 years, makes a fence ancient. If ancient fences are used by a surveyor in attempting to duplicate or reproduce old surveys they certainly offer strong evidence of the location of

... continued Page 23

PROGRAM SCHEDULE 2006 ISPLS CONVENTION

Indianapolis, Marriott East, Indianapolis, (January 18-20, 2006)

Wednesday, January 18, 2006

Rule 10 (Ethics) - Ross Holloway, PE-PLS (3 CEH Mandatory)

This session will review Rules of Professional Conduct, 865 IAC 10 (Rule 10). Each subsection, 1 through 24, will be discussed with examples given to illustrate the particular ethical concern and the ramification to the public and professional when ethics are compromised. Presenter will encourage those attending to provide their own examples of ethical situations and will address possible acceptable resolution under Rule 10.

Discrepancies in the Official Record - Ron Scherler (3 CEH Elective)

This session will examine how the courts have resolved discrepancies in the official survey record. Four of the leading cases will be examined in detail and several BLM surveys involving various record discrepancies will be discussed. Principles will be presented for resolving the most common discrepancies including:

- * Adjacent Townships show different information for the same line.
- * Areas are not based on the distances shown on the plat.
- * Plat bearing and distance does not agree with the field notes.
- * Field notes are ambiguous.

Upon completion of the course the surveyor will have a basic knowledge of the pertinent case law, know how to apply the principles for resolving record discrepancies and understand how other factors might influence decisions.

<u>INDOT Permitting Process</u> - Dwane Myers, PE & Merrill Dougherty, PE (3 CEH Elective)

The objective of this course is to instruct surveyors how to successfully complete an INDOT application and associated documents, plans, details etc. for ingress and egress onto INDOT roadways.

Writing Legal Descriptions - Randy Miller, PLS (3 CEH Mandatory)

The attendee will discuss the history of legal descriptions and their construction including the interpretive parameters available.

A view of a description prepared to today's standards will be discussed and its relationship to the historical deed description analyzed. Emphasis will be made on the words and phrases that surveyors utilize.

<u>Surveyor's Role in Floodplain Management</u> - Rodney Renkenberger, PLS (3 CEH Elective)

This purpose of this course is to: Provide an understanding of National Flood Insurance Program.; define Floodplain Management Terms and Acronyms; interpret Federal, State, and Local Floodplain Management Regulations; provide clarification of Insurance vs. Regulatory Interpretations; define Surveyor's Role in the National Flood Insurance Program; understand the difference between Detailed, Limited, and approximate Study Areas; Letters of Map Amendment (LOMAs) and Letters of Map Revision (LOMRs); how to resolve conflicts between Mapped Floodway and Floodway Fringe Boundaries; FEMA revised Elevation Certificate-new requirements; changes; FEMA Technical Bulletins - expanding your reference library; inspire Surveyor participation in community Flood Disaster/Flood Mitigation Projects. Promote professionalism through advanced certifications.

Thursday, January 19, 2006

<u>Surveyors Reports</u> - Randy Miller (3 CEH Mandatory)

The attendee will discuss the elements and requirements necessary to create a surveyors report per Title 865 IAC 1.1-12 et seq.

Discussion will be centered around reporting the Theory of Location, availability of monuments, lines of occupation, and clarity and ambiguity of record descriptions for a survey.

<u>Discrepancies in the Official Records</u> - Ron Scherler (3 CEH Elective)

Repeat of Wednesdays course.

<u>Practice Management Cost & Operations</u> - David Wahby (6 CEH Elective)

It is not uncommon for survey firm principals, project managers and technical staff to become confused and handcuffed when confronted with firm financial matters. After all, they are trained as surveyors, not accountants. This program is designed to peel away the layers of mystery and provide participants with the necessary basics - specifically as they pertain to survey firm financial management. The presentation will consist of lecture, group exercises and interactive question and answer exchanges. Attendees will return to their office energized by new found financial skills, increased confidence, and a set of simple yet powerful tools and procedures they will use day in and day out to better understand and manage their firms.

<u>Section Corner Perpetuation in Indiana</u> - Gary Kent, PLS, Cindy Candler, PLS, & Kurt Candler, PLS (6 CEH Mandatory)

This workshop has the overall objective of educating surveyors on the basics of section corner perpetuation. With the increase in funds available for corner perpetuation, many counties are embarking on corner perpetuation programs. Both the County Surveyors and Surveyors that may be contracted to do this work need to understand the Public Land System, the sources of information and the appropriate procedures for conducting corner perpetuation.

Specific performance objectives include improving participants' knowledge base such that after attending this workshop, they are able to:

Evaluate the legal status of a "missing" corner List the primary elements of Tiffin's Instructions and other appropriate GLO Instructions as they relate to the Public Lands in Indiana Explain the proper subdivision of sections (and improper methods that may have been used)

Identify the various sources of information and *outline* the collection of evidence

Evaluate conflicting evidence and determine the most probable location of a corner

...continued Page 13

Program Schedule ...continued from Page 12

<u>Public Land Surveys the 21st Century</u> - Dennis Mouland, PLS (6 CEH Elective)

The PLSS was designed by Jefferson and others to be a simple and thorough means of disposing of and describing huge amounts of land. Yet today, the retracement surveyor working in the PLSS is faced with extremely complicated issues, many of which were planned to be avoided by its creators. This course analyzes these factors:

- * The history and background of the PLSS
- * The original intent and purposes of the PLSS
- * Complexities we now face in retracement, and why
- * Analysis of how the law deals with most of these issues
- * Discussion of case law and it's role in answering complex boundary issues
- * Challenge for the future; what it will take to be an expert in PLSS retracement in this new century

<u>Easements, Right of Way & Encumbrances</u> - Walter Robillard, Esq. PLS (6 CEH Elective)

The seminar will discuss one of the areas in which surveyors are becoming more professionally involved. The seminar will discuss the purpose of easements; how they are created; how they are terminated and other interest in land. The instructor will show how the area of easements can possibly be a new source of expertise for the surveyor. Using actual case studies the full impact of this specialized area will be examined, as they relate to the surveyor.

<u>Surveyors Reports</u> - Randy Miller (3 CEH Mandatory) Repeat of Thursday morning course.

Clearwater BMP - Siavash Beik, PE (3 CEH Elective)

The objective of the class is to familiarize the participants with the erosion and sediment control basics and make them comfortable with selection and design of construction and post-construction Best Management Practices (BMPs) that may be utilized as part of a new development and redevelopment.

Friday, January 20, 2006

<u>Mentoring and Training Young Professionals</u> - Dennis Mouland, PLS (6 CEH Elective)

As the survey profession becomes more fragmented in its training and experience models, the "survey manager" or business owner is faced with new responsibilities and challenges in helping to mentor and train the next generation of surveyors. This course shows it is a mandatory part of the professional's job, why it is more important now than ever before, and how to help shape the future of the profession. Highlights include:

- Why we are in trouble in our apprenticeships
- What it means to mentor
- Ways to do it, regardless of business size or scope
- How to train people in business, technical, and legal subjects

Accuracy In Motion, Vertical Testing of ATV Mounted GPS Data Collection - Bruce Strack, PLS & Craig Williams, PLS (3 CEH Elective)

The goal of this seminar is to compare the elevations established during data collection while continuously moving on an ATV to the elevations established by numerous other methods including the stationary collection of GPS data mounted on a survey rod and the conventional data collected with a total station. The accuracies are also investigated in relation to the speed of the ATV. The steps involved in this method and the interesting results are discussed in length with charts comparing the different methods and

<u>Rule 10 (Ethics)</u> - Ross Holloway, PE-PLS (3 CEH Mandatory) Repeat of Wednesday's course.

processing styles. The reliability of topographical data concerning

both horizontal and vertical accuracies is also discussed.

Enhanced Human Resource Management - David Wahby (3 CEH Elective)

At too many firms, large and small, beyond basic compliance with complex and often contradictory regulations, Human Resources is frequently viewed as a necessary evil and relegated to the backroom to be ignored and avoided as much as possible.

Through a combination of traditional lecture, case study, group exercises and facilitated roundtable discussions, this session will provide insight into the best practices of professional firms from across the country. Understand the proper role of Human Relations at your firm. Find out the best ways to motivate a professional staff. Discover what you can do to prevent the best and brightest from leaving. Explore the pros and cons of various forms of organizations on staff morale and overall firm efficiency. Learn how to truly engage your staff, regardless of firm size, by tightly intertwining their success with the success of the firm. You will leave this seminar with a blueprint for how you can elevate your firm's human resources into valuable firm asset. To be covered:

- 12 questions all staff want answered
- Why staff leaves a company
- Management theory Herzberg and McGregor
- Senior principals role
- Leadership distinguished from management
- Growing great people
- Communication is key
- Performance evaluations
- Your firm's form of organization
- Recruiting
- Rewards and recognition
- Incentive compensation
- Creating internal developmental pathways

<u>Theory of Location & Surveyor Reports</u> - Tony Gregory (6 CEH Mandatory)

The objective of this presentation will be to provide an overview of the methods and benefits of displaying and explaining the theory of location of boundary surveys. Specific emphasis will be given to the preparation and use of written surveyors reports. Attention will be given to adherence to current standards for boundary surveys. Attendees will review sample surveyor reports, and participate in the development of a model surveyor report.

...continued Page 14

Program Schedule ...continued from Page 13

<u>Traffic Safety and More</u> - Ronald Koons (3 CEH Elective)

There are more cars on our highways every day. Surveyors have been listed as one of the top ten professions to be the victims of workplace traffic fatalities. These facts make safety on the roadways increasingly more important. Very few surveyors are aware of the *specific* guidelines outlined in the November 2003 Manual on Uniform Traffic Control Devices, (MUTCD) Part 6, as they apply to surveying field crews. In addition, OSHA has a sign, signal, and barricade regulation that took effect in December 2002. This session will introduce the topic and give guidelines on what signage and protection is required for field crew employees. We will start this session by giving an update on both recent Surveyor citations by OSHA and any new OSHA regulations that would affect the surveying profession.

Those attending will obtain an understanding of the proper procedures to protect their employees on or around a roadway and be updated on recent OSHA activity and other important safety items for surveyors.

The Value of Your Practice - David Wahby (3 CEH Elective)

In the survey/engineering/architectural profession, there are only a handful of publicly traded firms, and the ones which are publicly traded are so large, they bear little resemblance to the typical firm. So how does one go about determining what one's firm might be worth? This session is designed to delve into the intricacies of the balance sheet, concepts of firm valuation and ownership transition. Examine various concepts for determining firm value and why a firm can be worth more or less depending on choices made years before you ever attempt to sell or retire from your practice. Learn why ownership transition is very much more than just moving dollars around – that's the easy part. Go through the pros and cons of an inside sale versus a sale to outsiders. To be covered:

- Philosophies to operate by
- Tangible and intangible value
- Balance sheet approach
- Goodwill
- Internal transitions
- External transition/selling the firm
- Liquidations
- Common formulas for finding value
- How to maximize your firm's value

<u>Insurance Cost Savings For Your Business</u> - Kevin Collins, Jeff Grigsby and B. Michael Haffey (3 CEH elective)

Provide an in-depth review of professional liability exposures faced by the practice of the business and review health insurance cost saving techniques by utilizing high deductible health plans.

Accuracy In Motion, Vertical Testing of ATV Mounted GPS <u>Data Collection</u> - Bruce Strack, PLS & Craig Williams, PLS (3 CEH Elective)

Repeat of Friday morning course.

The Indiana Map - Jill Saligoe-Simmel, Ph.D. (3 CEH Elective)

Attendees will be familiar with the availability of the 2005 statewide orthophotography data base and 2005 statewide elevation data base available as part of the Indiana Map. Attendees will learn what data are available, how to access the data, and how the data are used.

Spouse Program

This year the Convention Committee has elected to use the services of "Accent on Indianapolis" to assist in arranging the Spouses Program. Departure will be from the hotel each day at 9:30 am with arrival back at 3:00 pm.

When it comes to shopping and fine dining, CLAY TERRACE has it all. If sophistication is what you are after, look no further. Clay Terrace is the 1st Lifestyle Center located in Central Indiana. It is home to an eclectic array of high-end income fashion and food retailers; some of the top in the country and Central Indiana exclusives. Located in Carmel, Indiana, Clay Terrace offers many unique and specialty shops; something everyone is sure to enjoy! Lunch will be served at Kona Grill.

Visit the FASHION MALL at KEYSTONE for more shopping opportunities! With Saks Fifth Avenue and Parisian as our anchors, this upscale center offers 95 other specialty shops and restaurants, including Keystone Grill, The Cheesecake Factory and Sullivan's Steakhouse. Also featured are exclusive stores, such as Lillie Rubin, Restoration Hardware, Janie & Jack, L'Occitane, Coldwater Creek, MAC Cosmetics, Pottery Barn Kids, Coach, Brighton Collectibles, Cynde's Shoes and many others.

Convention Registration Form Wednesday January 18 Thursday January 19 (Afternoon)

•	realition of the second of the	A 10001 5	any various y 15 (11 feet 100 to)
8:00 - 12:00 p.m.	Board of Directors Meeting Patriot Board Room	12:30-3:30 p.m.	Surveyor's Reports Randy Miller (3 CEH Mandatory)
12:00 - 7:00 p.m.	*** REGISTRATION *** ATRIUM ***	12:30- 3:30 p.m.	Cleanwater BMP
1:00 – 4:00 p.m.	Rule 10 - Ethics Ross Holloway (3 CEH Mandatory)		Siavash Beik (3 CEH Elective)
1:00 – 4:00 p.m.	Discrepancies in the Official Record Ron Scherler (3 CEH Elective)	12:30 – 3:30 p.m.	Practice Management Cost & Operations David Wahby (Part 2 of 2)
1:00 – 4:00 p.m.	INDOT Permitting Process Dwane Myers & Merril Dougherty (3 CEH Elective)	12:30 – 3:30 p.m.	Easements, Right of Way & Encumbrances Walter Robillard (Part 2 of 2)
1:00 – 4:00 p.m.	Writing Legal Descriptions Randy Miller (3 CEH Mandatory)	12:45 – 3:45 p.m.	Section Corner Perpetuation in Indiana Gary Kent, Cindy Candler & Kurt Candler (Part 2 of 2)
1:00 – 4:00 p.m.	Surveyor's Role in Floodplain Management Rodney Renkenberger (3 CEH Elective)	12:45 – 3:45 p.m.	Public Land Surveys in the 21st Century Dennis Mouland (Part 2 of 2)
1:00 – 6:00 p.m.	EXHIBIT HALL OPENS (LIBERTY HALL)	4:00 – 5:00 p.m.	ISPLS BUSINESS MEETING
7:00 – 10:00 p.m.	L. V. V. St. J. C. Su. Post	5:00 p.m.	EXHIBIT HALL CLOSES
6:00 p.m.	Las Vegas Style Casino Party Board of Directors Dinner	6:30 p.m	BANQUET (LIBERTY HALL)
indicate first choic attended in full to re	e pre-registered. Classroom space may be limited. Please ce () and alternate (A). NOTE: Seminars must be eccive CEH credit. Registration in a seminar that is a Part by registers you in Part 2.	attended in full to re I of 2 automaticall	the (\checkmark) and alternate (A). NOTE: Seminars must be exceive CEH credit. Registration in a seminar that is a Pa by registers you in Part 2.
7:00 a.m. – 5:00 p.	.m. *** REGISTRATION *** ATRIUM ***	7:00 – 8:15 a.m.	PAST PRES. BREAKFAST (WILKIE ROOM)
7:00	EXHIBIT HALL OPENS (LIBERTY HALL)	7:00 a.m.	EXHIBIT HALL OPENS (LIBERTY HALL)
8:15 – 11:15 a.m.	Surveyor's Reports Randy Miller (3 CEH Mandatory)	8:00 – 11:00 a.m.	Mentoring & Training Young Professionals Dennis Mouland (6 CEH Elective) (Part 1 of 2)
8:00 - 11:00 a.m.	Discrepancies in the Official Record Ron Scherler (3 CEH Elective)	8:00 – 11:00 a.m.	Accuracy in Motion Bruce Strack and Craig Williams (3 CEH Elective)
8:15 – 11:15 a.m.	Practice Management Cost & Operations David Wahby (6 CEH Elective) (Part 1 of 2)	8:15 – 11:15 a.m.	
8:15 – 11:15 a.m.	Section Corner Perpetuation in Indiana Gary Kent, Cindy Candler & Kurt Candler (6 CEH Mandatory) (Part 1 of 2)	8:30 – 11:30 a.m.	Enhanced Human Resources Management David Wahby (3 CEH Elective)
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8:30 – 11:30 a.m.	(6 CEH Elective) (Part 1 of 2) Easements, Right of Way & Encumbrances Walter Robillard		Traffic Safety & More Ron Koons (3 CEH Elective)
	(6 CEH Elective) (Part 1 of 2)	•	. Lunch (Staggered start and finish)
11:00 – 12:45 p.m	. Lunch (Staggered start and finish)	12:00	EXHIBIT HALL CLOSES

Convention Registration Form

Friday January 20 (Afternoon)

			REGISTRATION FORM		
12:30 – 3:30 p.m	n. The Value of Your Practice David Wahby (3 CEH Elective)	Mail to:	ISPLS 55 Monument Circle, Suite 719		
12:30 – 3:30 p.m	n. Mentoring & Training Young Professionals Dennis Mouland (Part 2 of 2)	Nomai	Indianapolis, IN 46204		
12:30 – 3:30 p.m	Insurance Cost Savings for Your Business Kevin Collins, Michael Haffey & Jeff Grigsby	Name: L.S. Number:			
	(3 CEH Elective)				
12:30 – 3:30 p.m	n. Accuracy in Motion Bruce Strack and Craig Williams				
	(3 CEH Elective)	City, State:_			
12:30 – 3:30 p.m	n. Theory of Location & Surveyor Reports Tony Gregory (Part 2 of 2)	Zip Code: _	Phone:		
12:30 – 3:30 p.m	n. The Indiana Map Jill Saligore-Simmel (3 CEH Elective)	Spouse Nam	e:		
LODGING		SINGLE REGISTRANT & SPOUSE FORM For additional registrants please make copies of this form or contact ISPL for additional forms.			
•	Marriott East				
	Street Indianapolis, IN 46219			Fee	
317/322–371	16	☐ Memb		\$ 300.00	
www.indianapolismarriotteast.com group code SPLSPLA			/lember	\$ 500.00	
		☐ Spouse ☐ Studer		\$ 125.00	
Convention Rates (below) have been arranged. Please indicate you are attending the 2006 ISPLS Convention when making reservation. Reservations must be received by 12/27/05 in order to guarantee room and			nt (Full Time) (Member)	\$ 30.00 \$ 210.00	
			(Non-Member)	\$ 210.00	
			ee (After 12/29/05)	\$ 50.00	
availability.			I/NSPS Member (Full Convention)	\$ 300.00	
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Ç	29.00	_	Banquet Ticket Thursday Night	\$ 50.00	
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Quau. 513	55.00	ACSM	I\NSPS Member- Membership #		
Registrations received after 12/31/05 (including walk-in's) will include a \$50.00 late fee, and will be accepted based on available space, and will not be guaranteed handouts or meals. Refund requests received by 1/07/06, a 50% discount will be made. After 1/07/06, no refunds will be made.		TOTA	`		
		Firm I	Member – Deduct 20%		
No further Registration will be accepted after 1/02/06. After 1/02/06 registration will be at the door.		TOTA	L AMOUNT ENCLOSED		
registration with	oc at the door.	Method of P	ayment		
The full time re	gistration fee for the convention includes all handouts,	C	heck (Please make check payable to ISPLS))	
refreshment breaks, two luncheons and the banquet. The registration fee for spouses includes a like number of meals. The student (full time) registration fee includes meetings and luncheons only. One-day registrant's fee include handouts and luncheons for the day registered.			W		
		Account Nu	Visa Master Card		
		Expiration I	Date		
As a reminder indicate your first choice with an (\checkmark) and an Alternate (A) .					
It would also be appreciated if you would indicate by a (✓) if you plan on attending the Las Vegas Style Casino Party and/or the Banquet on Friday Night.			ne:		
	The Retter Half of the Tecumseh Chapter of ISPLS will a	once again be h	aying their silent Auction for the Margaret		

Cunningham Scholarship Fund. All sessions have been approved for Continuing Education Credits.

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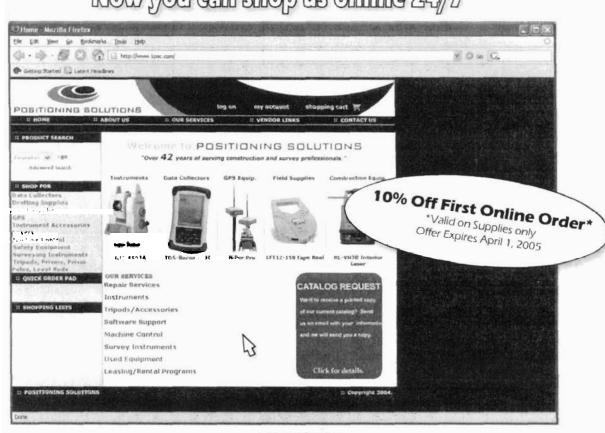
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An Old Surveyor's Thoughts

Charles E. Condra, PLS-PE (deceased) Former Floyd County Surveyor New Albany, Indiana

Once there was a young surveyor Well trained in knowledge and skill His compass he set o'er an old limestone On the side of a windswept hill

It was a large cut stone and solid Which to some it might look strange But to those who know, the numbers would show The sections, the townships and range.

His sight he had set for a course due north From his needle tried and true And it centered a tree on a distant knob As he focused the line into view.

Then he chained down the hill to a gully And up on the other side Noting the gullys position To which some surveyor had tied.

Then on to the tree he measured
The one on the distant knob
And found it was blazed as an old line tree
A blaze that time had not robbed.

Then on he pushed toward the corner Searching and checking ahead Taking and noting with pleasure The gifts of surveyors long dead.

And then on the top of a high bald knob They were scarcely able to climb He came to the place for the section stones Some surveyor had tied to three pines.

The mound of stones were all scattered about As if by some boys at play And by searching around the blazed pines they found And their troubles just faded away.

So a cross he did cut on that stone capped hill
So large it could never be lost
And placed all the stones from the mound round about
To preserve it no matter the cost.

Long after he's gone surveyors will run O'er the lines he has trod this day And hopes they'll be noting with pleasure and pride The marks he has made on his way.

And when they are searching and digging around For a long lost corner stone
The pleasure they'll get when finding it,
Will tell them he, too, has known.

And may many a stone remain evermore As memorials that all might well know The part that was played by surveyors now gone In making our Hoosier State grow.

So when we're a might bit conceited And critical of others gone by Lets just face one fact we can never come back To give it another old try.

Their work was well done a' considerin
The problems they all had to face
And had we been there with their troubles and care
I doubt we'd improve much their place.

So a toast to Bill Clark and Tom Freeman May their works forever be praised To Buckingham too for our base run so true And the meridian so nobly he raised.

And to Rector, McDonald and others Sing loud that old hosanna For the work they have done in the surveys they've run In grand old Indiana.

Note: This poem was composed by Charles Condra, founding and charter member of ISPLS, and published in the Proceedings of Conferences on Land Surveying (1953-57); compiled and edited by Ken Curtis; Purdue University Engineering Bulletin #93, January 1958.

Second Principal Meridian Initial Point Bicentennial Celebration, 1805-2005

September 1-2, 2005

Sponsors: ISHS and ISPLS

Program and speakers were listed in previous Hoosier Surveyor 32-1, p. 23.

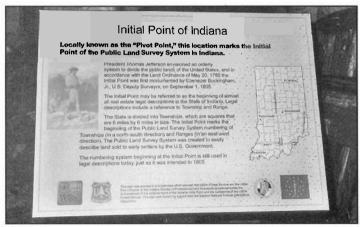
Planning Committee was composed of Ken Anderson, Terry Kendall, Victor McCauley, Jim Oakley, Ross Taylor, and Roger Woodfill. Location: French Lick Springs Resort, West Baden Springs Hotel, and Initial Point, seven miles south of Paoli on Indiana State Road #37.



Buckingham swears in survey crew.



Survey crew commences survey with compass and chain.



New plaque at Initial Point.



Sign at trail leading to Initial Point.



Triangular railing surrounding stone.



A happy occasion.



Thomas Jefferson was paid with own likeness.



Surveying memorabilia swap-meet was held in West Baden dome.



Roger Woodfill and his sales table.



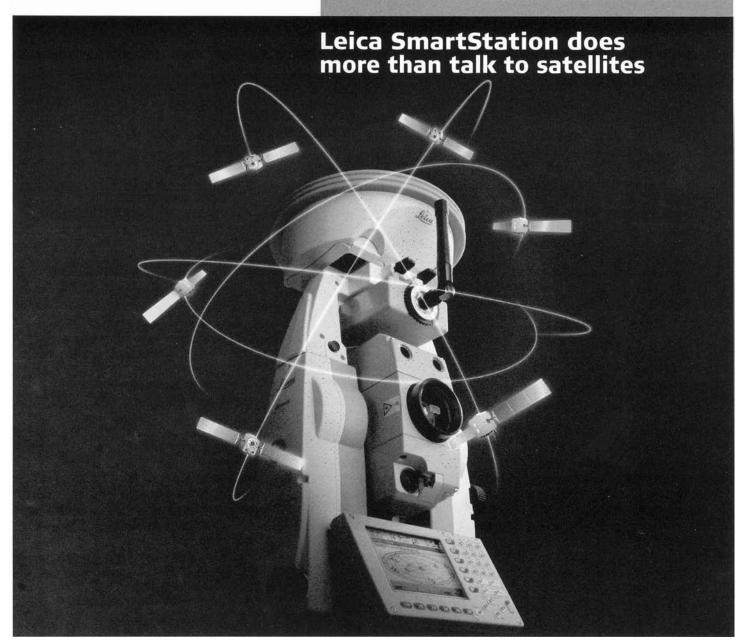
The monument on south lawn of courthouse in Paoli.



Some old-timers



Some U.S. Forest Service old-timers.



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Fences

...continued from Page 11

interest and original lines.8 There must be additional weight placed upon them as indicating original locations when they are in dispute with surveyed lines.

It is reasonable to assume that the early settlers constructed their fences on the true boundary lines as nearly as possible at a time when the original was still available. Therefore it is reasonable to use these fences, the original, as evidence of where ancient monuments once stood.9 They are not proof.

It is an accepted fact that where two contiguous owners acquiesce to lines, marked by fences or some other form of division for a statutory period, this line can become the true boundary, although a resurvey may show otherwise, and neither party intended to claim more than what was indicated in his deed.

On the other hand, a landowner purposely set a hedge back from the true line, without informing the adjacent owner. Since the second owner had no knowledge of the act or intent, the line could become fixed if he believed the hedge were placed on the true boundary. Both decisions as to the conclusiveness of the fence as the boundary are points of law. Where these are located in relation to on the ground title lines are points of survey and fall within the surveyor's purview.

The surveyor is a collector of evidence, and fences are one form or class of evidence. Boundaries may be proved by every kind of evidence admissible to establish any other controverted fact. 10 This class is no stronger nor weaker than other evidence he collects.

It will be at times the best remaining evidence. It is the duty of the surveyor to gather evidence of possession, which fences belong. relate this evidence of possession to tile lines and then gather, evaluate and recommend where conveyance lines belong. Every decision the surveyor makes is subject to final review by the courts.

Fences are the surveyors security blanket. Each individual feels that he has completed his job once he has located the fences on a tract of land. The truth is, his troubles may just be starting.

Footnotes

- Jackson v Rutland 2cR.Co.25 vt. 150, 60 AM Rec 246
- Giller v. West, 162, Ind. 17, 69 NE 548 29-Fences-Surveyors p.xxiv
- 3 Worthington v Wade, 82 Tex. 20, 175 W520
- Rose v Lendenam, 147 Mich 372, 110 NW 939
- 5 Card v Nole 67 Iowa 552, 25NW 744
- 6 Hoon v Hennesey, 2q Mount253, 74 Poc 452
- Schmuck v Beck 72 Mount 606 234 Poc. 477
- 8 Beaubieu v Kellogg 69 Mich 333, 37 WW 691
- 9 Cannan v Blackman 232 Iowa 722, 6 WW 2d 116
- 9C.J. p 273 sec 307

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Completed Career

George W. Green, 68, PLS ISPLS Member

George W. Green 68, of Indianapolis, passed away July 25. 2005. He was a Land Surveyor for Keeler-Webb and Associates. He was an Army Veteran and a member of St. Michael's Catholic Church, Indiana Society of Professional Land Surveyors and Sigma Pi Alpha. He was a graduate of Jeffersonville High School and Purdue University, Services were held Friday, July 29, 2005 at St. Michael's Catholic Church. Entombment took place at Our Lady of Peace Cemetery.

Purdue University Calumet Distance Education Course

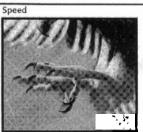
Purdue University Calumet will offer Surveying Computations. a 3-credit-hour course, by distance education in the spring semester.

The class, CET 210, will be taught by Professor Anthony Gregory, who also has taught Surveying Law and Property Surveying using the same method.

The course will begin Jan. 17 and end May 13. It will consist of a series of narrated PowerPoint lectures available on the Internet, readings, graded assignments and examinations.

Topics covered include an analysis of errors in surveying measurements; adjustments to surveying measurements, including an introduction to the least squares adjustment method: computations using rectangular coordinates including intersections and coordinate transformations; and computations associated with horizontal and vertical control networks.

For more information on the course, fees and how to register. contact Gregory by phone at (219) 989-2577 or by e-mail at gregory @calumet.purdue.edu.





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Confined Spaces & Your Employees

by Ronald E. Koons, RoSaKo Safety

We received a phone call recently from a surveyor who had a question on Confined Spaces. He indicated that one of his field crew members had been speaking with a relative and the conversation somehow turned to Confined Space safety. Evidently the relative had been through a training class because the information that was passed on was "OSHA Correct". When the employee discussed this with the surveyor both of them were shocked and just couldn't believe everything they heard was correct. After assuring the surveyor the information was correct I added a few items to make the discussion surveyor specific. This is probably a good time to again go over the basics of Confined Space safety for everyone. Hopefully none of you will be "shocked".

The best way to start is by giving some definitions on Confined Spaces and Permit Required Confined Spaces.

A Confined Space is defined as:

- a) An area which has adequate size and configuration for employee entry.
- b) An area that has limited means of access or egress.
- An area which is not designed for continuous employee occupancy.

A Permit Required Confined Space (PRCS):

- a) Must meet the criteria for a Confined Space.
- b) Must have the potential for: Hazardous Atmospheric Conditions (Toxic, Flammable, or Asphyxiating), or Engulfment, or Hazardous Configuration, or any other recognizable hazard.

There should be no question that sanitary manholes and lift stations are included in the PRCS. Where some surveyors get confused is in the storm sewer manholes, systems, lift stations, and inlet grates. First of all, there is always a potential for Methane gas in a storm sewer. Secondly don't forget what can get into the storm sewer as surface water migrates into the system. Hydrocarbons that have leaked as well as any other chemicals that may have found their way into the surface drainage system can create a hazardous atmosphere. Any sewer system must be considered as a Permit Required Confined Space until such a time as you can prove otherwise. In general, most surveyors will be exposed to the hazards of sewer related Confined Spaces. However, there may be other Confined Spaces that occasionally could creep up on your employees. Tanks, vaults, caissons, and even excavations could be considered as PRCS. It is imperative for all employees to understand the definitions listed above. If they encounter a situation that falls into the PRCS category it should cause a red flag to fly for everyone who may be exposed. There is one basic premise that everyone should remember:

NO TRAINING...NO ENTRY!

Without the proper training no one should enter a PRCS. Couple along with that a Written Permit Required Confined Space Program for your company, all required safety equipment, and an Attendant and you are ready to enter. One of the more frequent questions I receive is "how much training is required by OSHA?" There aren't a specific number of hours, but OSHA would review your training to make certain that it appears to be adequate. I always advise our clients that at least a full day is needed just to cover the material for employees who will be involved in entries. If they have their confined space entry equipment we would then do another ½ day on use of the equipment. We always give a written test to verify the students have retained an adequate amount of information. As PRCS entries get more complicated there may need to be a higher level of training. We have had situations where there were multiple changes in direction when entering a manhole because the entry point was offset during a street widening project. Consideration must be given for changing conditions while the entry is in progress. Say there is rain four or five miles away and yet you have clear skies overhead. There may be a sudden rush of water that could engulf an entrant. A similar situation could occur if a lift station is upstream and decides to pump while the entrant is in harms way. Even factories dumping materials into sewers can create very hazardous situations for the entrant. Entering tanks can get complicated if hazardous materials have been in the tanks. Other gases may have to be placed into the tank to purge all of the "bad stuff". Unfortunately, when doing this another hazard is then created by the purge gas. PRCS entries can go from relatively low hazard to extremely hazardous.

When the hazard level goes up a determination must be made if entry is absolutely necessary. With any PRCS entry you should always look for cost effective alternative means. When the hazard level goes up it may become more cost effective to spend additional money if an entry can be eliminated. This is a good time to discuss exactly what constitutes a PRCS entry. OSHA has sent memos to their field personnel that indicate their definition of an entry. An entry has been made if any portion of the body breaks the outermost plane of the Confined Space. In most situations that would be a plane equal to the outer edge of the cover. (This definition covers both vertical and horizontal entry points.) I have heard some OSHA personnel extend that by saying if a tool or other extension of the body breaks the plane that an entry has been made. That could mean every time a rod is placed into a manhole you have entered a potential PRCS. In California a few years back a company was cited for Confined Space hazards even though the entrant had no intention of entering the space. A manhole lid was removed by a worker to view the contents of a sewage storage tank. A bird's nest or other debris had clogged the tank's vent system. When he opened the lid a rush of Hydrogen Sulfide caused the worker to become unconscious. He then fell into the tank and drowned in the sewage. Here is a case where no entry was planned, but the Confined Space actually created a situation where a fatality occurred.

Many steps have to be followed to safely enter a PRCS. Your Written Program should outline all of the steps. Your training must reinforce the program and management must make certain employees adhere to the policies.

CALENDAR

December 10, 2005

ISPLS Board of Directors meeting, Headquarters, Indianapolis January 18-20, 2006

54th Annual ISPLS Convention, (sponsored by Northeast Chapter) Indianapolis Marriott East Hotel, Indianapolis, Indiana

April 21-26, 2006

ACSM Spring Conference, Caribe Royale Resort, Orlando, FL, www.acsm.net

May 9-11, 2006

GeoSpatial World 2006, New Orleans, LA. Sponsored by Interpgraph Mapping and Geospatial Solutions for Intergraph customers and individuals. www.geospatialworld.com

August 7-11, 2006

26th ESRI User Conference and 4th Survey and GIS Summit, San Diego, CA www.esri.com

September 26-29, 2006

URISA (Urban and Regional Information Systems Association) Annual Conference and Exposition. Vancouver, Canada. www.urisa.org

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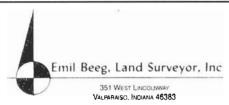
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