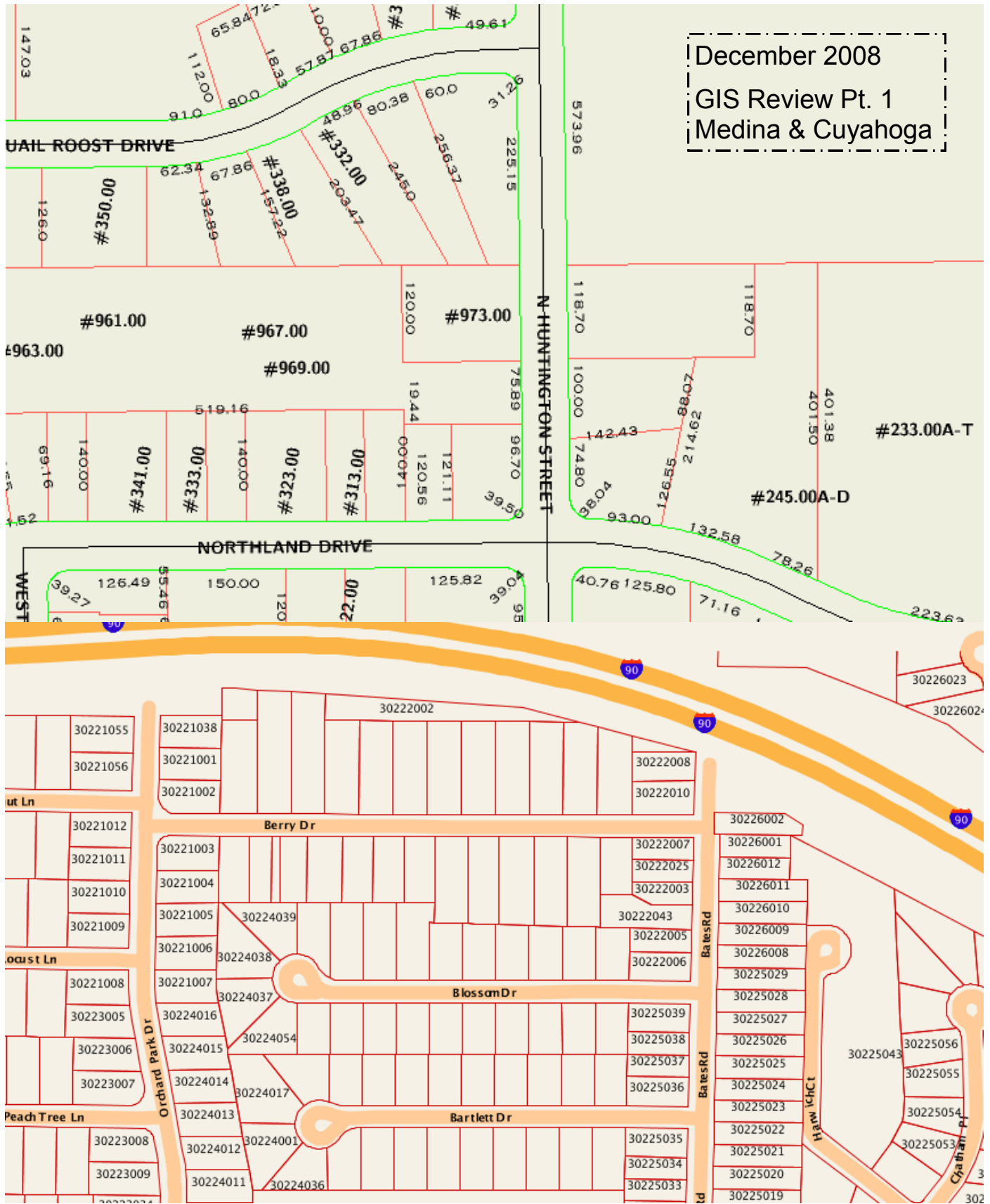


Cleveland Surveying News



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the Professional Land Surveyors of Ohio

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Editor's Message

I enjoy looking back and reflecting on things I've done in the past and how I've done them, often a year at a time, for my surveying methods, photography, and even this newsletter. My first issue as editor, March, was quite a large one to start with as it covered 30 pages. Yet I have added new functionality and updated layout continually throughout the year. You might not notice most changes until you read older issues again.

This December issue is my most ambitious edition of the year with reviewing and illustrating Northeast Ohio county GIS's. I had anticipated including all 6 GIS's in this issue but there is too much information to show. The GIS reviews will also span the next two issues.

You may have noticed I have been including more and more website hyperlinks (links you can click on which will take you a web page.) I am doing this to encourage on-line reading and interaction. This newsletter functions and flows best for on-line PDF reading with in-document links and the expanded content that is able to be offered since we took the newsletter on-line only.

Robert Hoy
CSN Editor

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Surveyors are Cheap (but not for long!)

Joe the Licensed Plumber charges anywhere from \$125 to \$175 per hour. Mack Industries charges \$150 per hour plus parts, plus a "fuel surcharge" when they send their two-man crew to fix our septic tank equipment. My new website developer (who works out of his house) charges \$115 per hour for "basic" services. None of the above occupations require a college degree, professional liability insurance or fifteen hours of continuing education yearly.

Simply put, surveyors should charge more – significantly more. We know it, but we are afraid to demand more (especially now in a recession). After surviving the Winter of 2008-2009, we should begin charging more in line with the value of our services.



**Peter Zwick
Chapter
President**

For those of us who are not responsible for setting prices, who are merely employed by surveying businesses, or who work in the public sector, take heed. A rising tide will lift all boats. If businesses lead the way, then your salary will eventually increase. However, if you fail to support business, then the converse will also be true. Let's not allow this to happen.

The Law of Supply and Demand is now working against us (very low demand); but we should be careful about lowering fees now because it will be hard to recoup lost ground next Spring. By the way, Joe the Plumber has not lowered his fees during this tough economy. In fact, Joe will tell you that his rates for next year will go up a little to cover his rising costs of doing business: insurance, rent, PVC pipe price increases, inflation, etc. Actually, Joe has raised his rates a little each year, and has not been ashamed to notify his customers of this fact of life.

The "supply" side of the equation is very encouraging, however. We Professional Surveyors are a very scarce resource – and therefore very valuable. In all of Ohio, there are approximately 1,000 of us who are active. In the Cleveland Chapter, there are only about 100 active registered P.S.'s. Listen to this: The supply of this already-scarce resource has been declining, and will drop noticeably in the near future. Therefore, we are sitting on a gold mine! Only a few new surveying graduates from Akron U. are likely to remain in Ohio over the next four years when they can qualify for professional registration. Last year alone, about thirty Ohio P.S.'s have retired or have dropped their registration because of the new continuing education requirements. For the foreseeable future, there will be a shortage of surveyors. Sometime soon, we will be presented with the golden opportunity to initiate significant fee increases. This trend will last for decades.

Surveyors and engineers are often not skilled in business techniques and social interactions – even though they are highly skilled in technical matters. Frankly, most surveyors are not as proficient at negotiating fees as they should be. We are very proficient at mastering hi-tech precision instrumentation with sophisticated computer software, at calculating with advanced trigonometry, at navigating through the maze of regulations and jurisdictions of the permit process, and at using professional judgment to legally locate boundary lines. Joe the Plumber, or Joe the Builder, or Joe the Land Owner will pay us to use these advanced skills to prepare topographic maps, boundary surveys and legal descriptions!

Step One: Learn how to negotiate fees. Go to a seminar, or merely discuss it over the holidays with your brother-in-law the used car salesman. If he can figure it out, then so can we.

Step Two: Educate or enlighten your clients and customers. Clearly explain what is required to "just pound in a few iron pins" for them. Tell them how many man-hours will be required. Tell them about Chapter 4733 of the State Code.

(Continued on Page 4)



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President's Message

(Continued from Page 3)

- Step Three: Overcome the natural reluctance to negotiate for money, and demand (yes, demand) to get paid what you are worth.
- Step Four: Communicate with your clients during and after the job. Report to them that you have performed as promised. Walk the boundaries and show them your stakes. Answer their questions about your Plat. Add an hour to your estimate to cover this important part of the job. Impress them with some technical jargon. Tell anyone who will listen what you do and why it is valuable.

Think about your 2009 target billing in light of these representative hourly rates of other state-licensed licensed professions:

Dental Hygienist	\$ 95 per hour
Landscape Architect	\$100 per hour
Private Investigator	\$100 per hour
Accountant/C.P.A.	\$150 per hour
Chiropractor	\$200 per hour

Don't expect anyone else to advertise the value of our professional services, because it is up to each of us. The PLSO can help. Come to a meeting to talk to your peers and to learn what they are doing. Plan to attend the Annual Meeting in Berea at Tony K's on January 22nd. Don't be afraid to informally discuss fees, to identify problem clients, and to brag about your successes.

Good luck in 2009 -- we'll need it. We deserve it, though.

Peter D. Zwick

www.PLSO.com

January 22, 2009

Tony K's
841 W. Bagley Road
Berea, Ohio 44017
tonyks.com Cost: \$25

Come start the New Year at our Annual Meeting, our most social meeting of the year!

Share your holiday stories and converse with colleagues about surveying in 2009. It'll be a good reason to get out of the house on historically Cleveland's coldest day of the year!

Mark your calendar and bring your spouse for an evening of fine food and good conversation.

Schedule

5:30 Social Hour
6:30 Dinner
7:15 Annual Meeting
7:45 Installation of Officers & Awards

Menu

-House Salad
(Choice of)
-Roast Beef- slow roasted, fork tender beef topped with beef gravy, served with roasted carrots, celery, onions and red skin potatoes.
Or
-Chicken Parmesan- two baked chicken breasts topped with marinara sauce and melted mozzarella, served with spaghetti marinara.
-Dessert: Cream Puffs, Éclairs

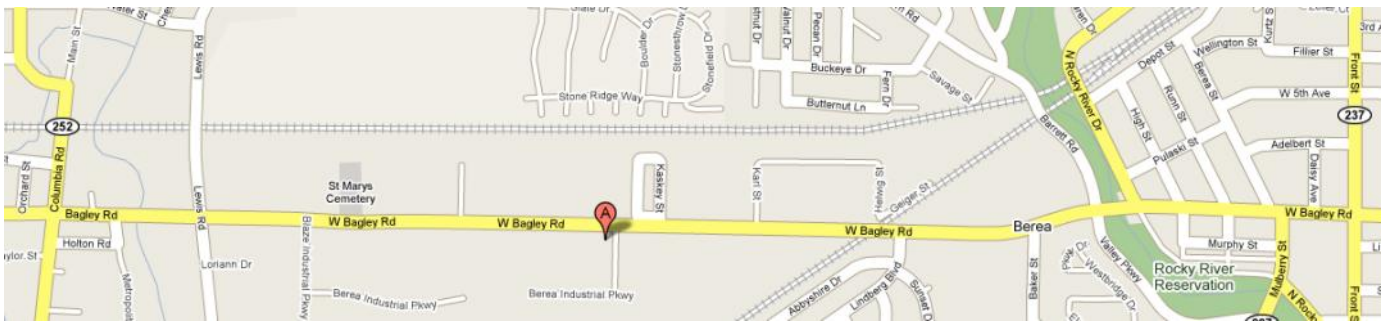
Reservations

Please RSVP by January 19, 2009

Contact: George A. Hofmann 440-234-7350

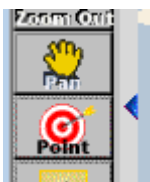
george_hm@ameritech.net

[Click Here](#) for a full map page for the restaurant.

**New Medina County Flood Maps**

Medina County has new FEMA issued flood maps with an effective date of 8/04/2008. These maps, unlike the new Lorain County maps (see [CSN September 2008](#) page 12) are not viewable via the internet and are only available in paper form. There are 2008 flood map layers in the Medina GIS, see [Page 14](#). If you need Medina County flood zone information, contact the city in which your work is in for access to the new flood zone maps.

The September newsletter showed one way to find flood zone map information. FEMA now has a map view that allows the viewer to pan around the country and zoom into areas of interest. You will see the Panel ID when zoomed in far enough. A portion of the left side of the map viewer is included below. If you select the Point tool (below left), you can then click on your area and information about that panel will appear in a new window telling you its effective date, if it is available to view, and its purchase price and medium (paper or CD).



FEMA Map Viewer: gis1.msc.fema.gov/Website/newstore/viewer.htm

[Click Here](#) for an interesting article from a Medina County commissioner on flood insurance.

We are closing in on the end of the year and sometimes it is good to look backwards to see where we have been. But let's not look at last year, let's look at 1908. This will boggle your mind. Only one hundred years ago. What a difference a century makes. Here are some statistics for 1908 :The average life expectancy was 47 years. Five leading causes of death were: 1. Pneumonia and influenza: 2. Tuberculosis: 3. Diarrhea: 4. Heart disease: 5. Stroke

Only 14 percent of the homes had a bathtub. Only 8 percent of the homes had a telephone. There were only 8,000 cars and only 144 miles of paved roads. The maximum speed limit in most cities was 10 mph. The tallest structure in the world was the Eiffel Tower! The aeroplane (old spelling) was only 5 years old. The main mode of cross country travel was the train.

The average wage in 1908 was 22 cents per hour. The average worker made between \$200 and \$400 per year .A competent accountant could expect to earn \$2000 per year, a dentist \$2,500 per year, a veterinarian between \$1,500 and \$4,000 per year, and a mechanical engineer about \$5,000 per year. Eighteen percent of households had at least one full-time servant or domestic help. Sugar cost four cents a pound. Eggs were fourteen cents a dozen. Coffee was fifteen cents a pound.

Most women only washed their hair once a month, and used Borax or egg yolks for shampoo. More than 95 percent of all births took place at HOME . Ninety percent of all doctors had NO COLLEGE EDUCATION! Instead, they attended so called medical schools, many of which were condemned in the press and the government as 'substandard. '

Canada passed a law that prohibited poor people from entering into their country for any reason. The American flag had 45 stars, The population of Las Vegas , Nevada, was 30!

Crossword puzzles, canned beer, and ice tea hadn't been invented yet. There was no Mother's Day or Father's Day. Two out of every 10 adults

could not read or write. Only 6 percent of all Americans had graduated from high school. Marijuana, heroin, and morphine were all available over the counter at the local corner drugstores. Back then pharmacists said, 'Heroin clears the complexion, gives buoyancy to the mind,

regulates the stomach and bowels, and is, in fact, a perfect guardian of health'. (Shocking? DUH!).There were about 230 reported murders in the ENTIRE United States.

In many towns, the Surveyor and the Lawyer were the best educated citizens. Surveyors had pretty much made the transition from Gunter chains to steel chains (tapes) and from compass to transit but the K & E catalogue still advertised both.

If this is what it was like only 100 years ago, try to imagine what it may be like in another 100.

THOUGHT FOR THIS MONTH:

John Ruskin, English writer, critic, artist and philosopher (1819 to 1900) said: .

"When we build, let us think that we build forever. Let it not be for present delight nor for present use alone. Let it be such work that our descendants will thank us for; and let us think, as we lay stone on stone, that at a time is to come when those stones will be held sacred because our hands have touched them, and that men will say, as they look upon the labor and wrought substance of them, " See! This our father did for us."

This had to do with builders and architects, but the underlying sentiment holds just as true for Surveyors. When you prepare a plat or legal description, think about how it will be looked at some time in the far future.



John E. Dailey

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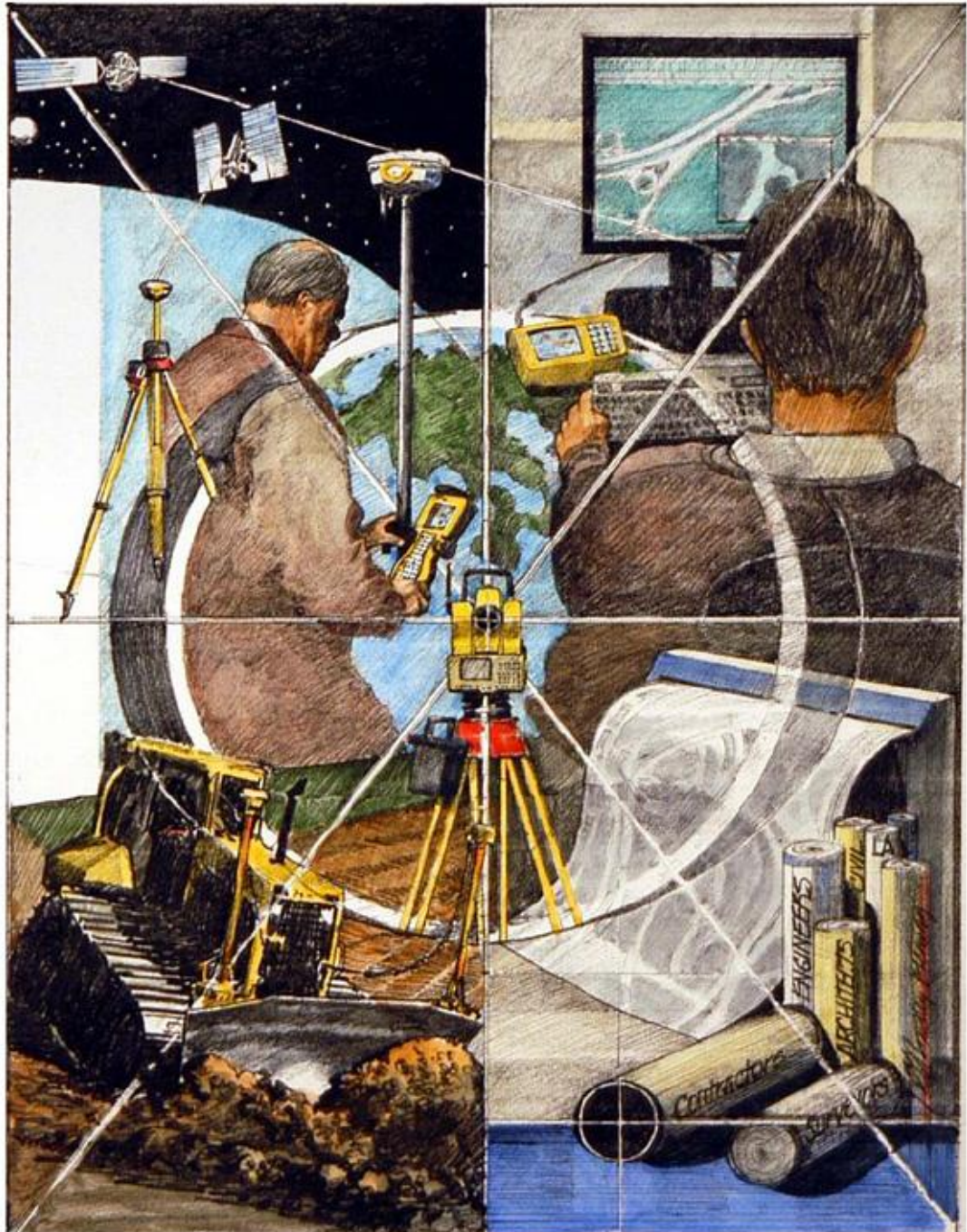
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Ohio Senate Bill No. 525 passed that added, in part, the included section (the entire bill can be found here: http://www.legislature.state.oh.us/bills.cfm?ID=127_HB_525)

Sec. 317.114. (A) Except as otherwise provided in division (B) of this section, an instrument or document presented for recording to the county recorder shall have been prepared in accordance with all of the following requirements:

- (1) Print size not smaller than a computer font size of ten;
- (2) Minimum paper size of eight and one-half inches by eleven inches;
- (3) Maximum paper size of eight and one-half inches by fourteen inches;
- (4) Black or blue ink only;
- (5) No use of highlighting;
- (6) Margins of one-inch width on each side of each page of the instrument or document;
- (7) A margin of one-inch width across the bottom of each page of the instrument or document;
- (8) A three-inch margin of blank space across the top of the first page of each instrument or document to accommodate any certification or indorsement of the county engineer, county auditor, or county recorder, as may be required by law, with the right half of that margin being reserved for the indorsement of the county recorder required by section 317.12 of the Revised Code; and
- (9) A one and one-half-inch margin across the top of each of the remaining pages of the instrument or document.

The county recorder shall accept for recording an instrument or document that does not conform to the foregoing requirements but shall charge and collect the following additional fees for each such instrument or document: an additional base fee for the recorder's services of ten dollars and a housing trust fund fee of ten dollars, which shall be collected pursuant to section 317.36 of the Revised Code.

For surveyors this will mainly apply to legal description documents provided by surveyors that are recorded on the same paper issued by the surveyor, although many times surveyor's legal descriptions are re-typed for recording. What does this section of H.B. 525 accomplish? It allows county recorders to collect more fees. If it were to be a serious effort to result in more readable recorded documents, it would not allow filing of documents that did not comply with items 1 through 9 above.

PLSO Personal Information

A reminder to check and update your personal information of your Members Only section of the State PLSO website: ohiosurveyor.org

Click on the *Members Only* button on the left side of the home page, and then your User ID will be your PLSO Member Number (found on your dues invoice), and your password will be the last 4 digits of your telephone number on-file with State PLSO.

If your mailing address is to your home, you don't need to fill out any business information fields. Do be sure to keep your email address current in your user information as State PLSO will use it to get information to you in a quicker manner than through the Ohio Surveying News.

Issue 2 of the Ohio Surveying News is available in your *Downloads* section, so hopefully Issue 3 will be placed there when it is finished as well.

Cleveland to Host Another Conference!

Our Cleveland Chapter is hosting the 2011 PLSO Annual Conference.

It seems like we just finished hosting a conference, which we did, but conferences are now on a three-city rotation due to the larger attendances that Continuing Education requirements have brought. (Conferences used to be on a 7-city rotation: Cleveland, Columbus, Cincinnati, Toledo, Dayton, Akron, Canton.)

Interested in volunteering to assist with conference planning? [Click Here](#) to email the Cleveland Chapter to offer your help and find out what you can do.



I'm adding something new to the Delegate's Report. I've received questions about the agenda item numbers listed in my reports. I didn't include them for a while but received comments from Chapter Members who have access to the agenda and were missing them. Now I'm including the agenda at the beginning of each report and color coding specific items.
RED - person or Chapter was not in attendance at the meeting and there was no report
GREEN - agenda items that had nothing to report even though a representative was present
PURPLE - should not have been on the agenda
ORANGE - individual was replaced by an alternate

Hopefully this will bring a clearer understanding of the delegate's report and the state executive committee meetings.



John G. Hoy
Delegate

MEETING AGENDA Friday, November 14, 2008

4.0 Unfinished Business

- 4.1 Change in Law Regarding Metes and Bounds - Brad Kramer
- 4.2 Surveyor of the Past Plaques - Barb Jones
- 4.3 Ephraim Brown Land Office - Mike Besch
- 4.4 Monumentation of Railroads - Brad Kramer
- 4.5 Website Proposal - Paul Dinan
- 4.6 2009 Budget (See Enclosure - **vote this meeting**) - Finance Committee

5.0 New Business

- 5.1 New Members (See Attached List) - Bob Akins
- 5.2 PLSO Purchase of Golf Shirts - Rion Myers
- 5.3 Appointment of Teller's Committee (officers ballots) - Paul Dinan
- 5.4 Request for Support from Akron Students - Mike Besch
- 5.5 Topo/Leachfield design Issue - Dean Frederick
- 5.6 Hiring of Temporary Employees

6.0 Inter-Association Delegates

- 6.1 CEOA - Dean Ringle
- 6.2 ODOT - Jim Kenyon/Brett Shearer
- 6.3 State Board of Registration - Paul Dinan
- 6.4 OGRIP - Stu Davis

7.0 Committee Reports

- 7.1 Special Committees
 - 7.11 Political Action - Brad Kramer
 - 7.12 Standards - Brad Kramer
 - 7.13 State Line - Dean Ringle
 - 7.14 PLSO Vision - Phil Rosebeck
 - 7.15 Executive Director Search - Frank Snyder
- 7.2 Newsletter Editor - Don Friemoth
- 7.3 NSPS Governor - Mike Besch
 - 7.31 Trig Star - Paul Dinan
 - 7.32 CST Coordinator - Pat Leonhardt
 - 7.33 Geocaching Coordinator - Bob Akins
- 7.4 Standing Committees
 - 7.41 Program - Bud Payne
 - 7.411 Annual Conference Updates
 - 2009 - Central Ohio Chapter at Hyatt Regency Columbus
 - 2/12-2/13 - Brad Patridge
 - 2010 - Miami Valley Chapter at Cincinnati Netherlands Hilton
 - 2/11-2/12 - Brad Kramer
 - 2011 - Cleveland Chapter
 - 7.412 Fall Seminar Updates
 - 2008 - Scioto Valley Chapter at Kings Island Resort, Mason

- 10/9-10/10 - Loren Purdom
- 2009 - Thomas Hutchins Chapter
- Youngstown HolidayInn North - Dan Susany
- 2010 - Firelands Chapter
- Kalahari Resort, Sandusky - 10/7-10/8
- 2011 - Tuscarawas Valley Chapter - Bob Akins
- 2012 - Toledo Chapter - Pat Leonhardt

- 7.42 Membership - Bob Akins
- 7.43 Interprofessional Affairs - A. J. Myers
- 7.44 Education - George Armstrong
- 7.45 Legislation - Mark Cameron
- 7.46 Finance - Bob Ernsberger
- 7.47 Past Presidents Council - Brad Kramer, et al.
- 7.48 Scholarship - Rion Myers
- 7.49 Scholarship Fund Board
- 7.50 Management Review - Paul Dinan

8.0 Chapter Delegate Reports

- 8.1 Askega Chapter - Jim Donathan
- 8.2 Central Ohio Chapter - Brad Patridge
- 8.3 Cincinnati Chapter - Bob Heidkamp
- 8.4 Cleveland Chapter - John Hoy
- 8.5 Congress Lands Chapter - Brett Tieben
- 8.6 Firelands Chapter - Ray Foos
- 8.7 Miami Valley Chapter - Brian Hoblit
- 8.8 Mohican-Killbuck Valley Chapter - Jim Kenyon
- 8.9 Muskingum Valley Chapter - Scott Johnson
- 8.10 Northwest Ohio Chapter - Don Friemoth
- 8.11 Ohio State University Student Chapter - Dan Sanford
- 8.12 Ohio Valley Chapter - Larry Gardner
- 8.13 Scioto Valley Chapter - George Seymour
- 8.14 Southwestern Chapter - Rose Coors
- 8.15 The Thomas Hutchins Chapter - John Francis
- 8.16 The Univ. of Akron Student Chapter - Andrew Kis - Ann Besch
- 8.17 Toledo Chapter - Tom Silva - Pat Leonhardt
- 8.18 Treaty Lands Chapter - John Jauert
- 8.19 Tuscarawas Valley Chapter - Dave Bodo, Sr.
- 8.20 Western Reserve Chapter - Gary Schuller

9.0 President-Elect's Report - Dean Frederick

- 10.0 Executive Director's Report -
- 10.1 Assistant Executive Director's Report - Barb Jones
- 11.0 President's Report - Paul Dinan

Call to order at 6:10 p.m. Upon completion of a roll call, determination of a quorum, acceptance of the October minutes (**September Minutes still missing**) and Treasurers report the meeting turned to **Unfinished Business**.

- 4.1 The current initiative is require by law that any legal description must be prepared by a surveyor. Brad spoke with the State Board and they are not looking to make this change a part of their current review. They have no specific deadline to act on our request.
- 4.4 Enclosure of email on Legislative Affairs Update
- 4.5 Fee is \$400.00 to allow statewide balloting. Constitution will need to be changed from mail ballots to

(Continued from Page 9)

allow email/web balloting. Now spending over \$600.00 for balloting. Issue tabled until next year.

- 4.6 Proposed Budget was amended to balance and then adopted.

New Business

- 5.1 Acceptance of a new Student member to Western Reserve/U of A.
- 5.2 Central Chapter has 47 golf shirts left over from an event. Is making them available to PLSO or any chapter for \$23 each.
- 5.3 Paul Dinan appointed Barb Jones and Brad Patridge to the Tellers Committee.
- 5.4 Enclosure. Request for donation to Akron Student chapter for the 2009 ACSM competition, \$2,500.00 approved.
- 5.5 Dean Frederick distributed examples of Soil Scientists creating topo and site plans for leach field/mound septic systems. Their plot was so bad it would not fit on the property. State Board needs more examples in order to take any action. Please keep an eye out.
- 5.6 Temporary office help already hired.
- 6.1 88 County Engineers elected, 7 non-incumbents.
- 6.3 18% of all PE/PS are expected did not renew. Office fees to be adjusted in 2010. Verify license \$24. Exam \$75. Renewal \$50. Copy documents \$10 to \$20.

Committee Reports

- 7.11 Political Action Committee: Balance in the fund of \$1,484.85 has not changed.
- 7.12 A survey was disciplined for preparing easements. See enclosure.
- 7.13 Dean Ringle reported that work was done on all three state lines with minimal progress.
- 7.15 Executive Director Search Committee: Frank reported no progress. Plan is to narrow field to 12.
- 7.2 Newsletter Editor Absent. Barb reported the decision was made to abandon Issue 4 this year. Issue 3 still open. She has no time to do any more.
- 7.3 Mike Besch appealed for more membership in NSPS and distributed promotional info.
- 7.31 Paul Dinan outlined the Trigstar schedule: Contact schools now, hold tests in March/April, report the results by April 30, 2009.
- 7.32 Pat Leonhardt said not much was done this year. He wants to hold the CST exam at conferences again. Mike Besch said that U of A now requires a Level 1 CST for an Associates Degree.
- 7.33 Bob Akins reported that NSPS is documenting sites around the country forming a database of Geocaching sites. The first one in Ohio is a monument visible from a bike/hike trail. They are looking for more. Contact him with suggestions.
- 7.411 Program Chair Bud Payne: 2009 Conf. Mailing registration package Dec. 1st, 2010 no report, 2011 – Cleveland waiting for final report and \$3000.00 payment for 2008.
- 7.412 Fall Seminars: 2008 very successful, set attendance record.
- 7.45 Mark Cameron reported on H.B. 525 which set standard format requirements for documents recorded by a county recorder. See enclosure.
- 7.48 Rion Myers and Brad Kramer are proposing a fundraising event to benefit the Scholarship Fund and the PAC Fund at the 2009 Conference during the Exhibitor's Cocktail party Thursday night.

Chapter Reports

- 8.3 The Cincinnati and Southwest Chapters are hosting a one-day seminar featuring Jeff Lucas on Dec. 12th for 8 CPD credits costing \$150.00. See the enclosure.
- 8.16 Resumes are available for Akron Students and can be requested from Mike Besch.
- 10.1 Barb Jones reported that information from our accountant concerning tour 501.C.6 status confirmed we cannot hold any type of raffle or game of chance. Also we can donate to any person or event as long as it is not a Member of PLSO.
- 11.0 Paul Dinan thanked everyone in attendance for a productive meeting.

Motion to adjourn at 9:50 p.m.

Respectfully submitted,

John G. Hoy, P.S.

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Executive Meeting Highlights

Meeting highlights from 11/17/08, office of John R. Hoy & Associates:

All officers were present for the 6:00 PM meeting at the office of John R. Hoy & Associates except Chuck Flanigan. John Dailey and Jack Hoy also attended.

Bob Papotto reported that the Trig Star Program is starting to gear up for next year.

Tony K's will host the Chapter's Annual Meeting on January 22nd.

A motion was made and accepted to invite Rob Krause, who has hosted the Chapter website, to the meeting at the Chapter's expense.



Michael A. Straub
Secretary



John Hoy volunteered to be the Chairman for the 2011 PLSO Annual Conference here in Cleveland.

The Chapter Budget for 2009 was accepted as amended.

The Chapter is considering offering all 15 hours of needed CPDs locally. More discussion on that subject will be forthcoming.

Our final seminar for continuing education in 2008 was held on Thursday, November 6th at the Marriott Hotel in Cleveland. The topic was "Enhancing Business Skills" as presented by Carl Gedeon and Graceann Kramer of SCORE and Bob Fenn from P.T.A.C. One and one-half professional development hours were obtained by those in attendance.

For those of us that are not familiar with "SCORE", it is officially the Service Corp. of Retired Executives. Carl Kramer was a former executive with BP Oil and Graceann Kramer runs her own Insurance Agency. The mission of the SCORE agent is to assist any business, whether new or existing, using their past business experience, to advise and



**Graceann
Kramer**

help them grow and excel. A sound business plan was stressed as a necessity. What are your marketing plans? How can you retain your key employees in times of economic downturns? What are the core strengths of your company? How can you build on these strengths? These are questions we should be asking and answering about our companies. A sound business plan will do this. Go to www.bplans.com for assistance in creating yours if you don't have one already.

Another issue touched on by Carl and Graceann is to be a good listener when dealing with your clients. What are their problems and needs? Can you show them how your company is the better firm to address these needs?



John Bischof
Past President

All attendees at this meeting qualified as having a SCORE consultation and therefore are **entitled to one free hour of legal advice**. SCORE has free business plans to download. Click the following links for: [Startup Business Plan](#) and [Established Business Plan](#). Another source for business plans is www.bplans.com.

Bob Fenn is the program director for P.T.A.C. which is the acronym for the U.S. Procurement Technical Assistance Center. Bob is based at Lake Erie College but they have numerous offices around the country. P.T.A.C. is here to assist you with obtaining government work. It was interesting to hear him speak of a client of ours that was on the brink of closing until he obtained a multi-million dollar contract with the federal government with the assistance of P.T.A.C. His company had 15 employees at the time and has now grown to over 300 employees. Bob would be happy to help you work with the government to obtain some of the lucrative contracts that are available. The government stresses awarding contracts to small businesses whenever possible. Visit www.fbo.gov (FedBizOpps) for opportunity information.

You can reach our speakers at the following:

Bob Fenn at 440.357.2294 or bobfenn@lcedc.org
Carl Gedeon at 216.522.4194 or carl.gedeon@scorecleveland.org
Graceann Kramer at 216.522.4194 or
graceann.kramer@scorecleveland.org
www.scorecleveland.org and www.score.org

During these trying economic times, this is when we should be implementing these ideas and taking advantage of the help that is available.

The next seminar is scheduled for March, 2009. The Executive Committee will review hosting these seminars in April of 2009 if it is found that attendance is affected by the fact that the Conference will be providing the required fifteen credit hours.

Hopefully, I will see you at the Chapter Annual meeting on January 22, 2009, for the installation of the new board.



**Bob
Fenn**



Robert Hoy
CSN Editor

G.I.S. stands for Graphic Information System, although some call it *Get It Surveyed*, and will hereafter be referred to as GIS. Our Chapter had representatives from these same counties speak at our dinner meetings a few years ago demonstrating their GIS. This review, spanning this and the January 2009 issue, will show the current state of each GIS and also explain features and tools of each. I contacted each county GIS department asking questions and seeking information about their GIS. I hope this hand-on review will be of benefit to you and something you can turn to for reference.

Back in June the long awaited Cuyahoga County G.I.S. became available at gis.cuyahogacounty.us after being surrounded by counties with an online GIS for quite some time. The features, tools, layers, interface, and performance of each GIS vary surprisingly much.

(Continued on Page 14)

2008-2009 Cleveland Chapter Calendar

January 9, 2008 State Executive Committee Meeting
January 12, 2008 **Executive Committee Meeting**
January 13, 2008 Cleveland Surveying News Deadline
January 22, 2008 **Annual Meeting**

March 5, 2009 Seminar Meeting

April 2, 2009 Seminar Meeting

May 7, 2009 Seminar Meeting

Executive Committee Meetings

are held at the office of :

John R. Hoy and Associates
4562 W. 130 St., Cleveland
at 6pm and are open to all Chapter
members who want to attend.

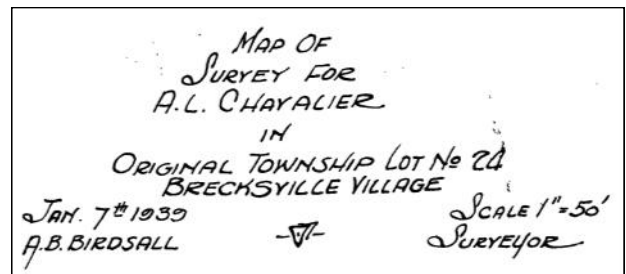
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All proceeds of these donations will go towards the scholarship endeavors the Chapter has recently embarked upon.

Note: These items can be purchased only by PLSO members, must be picked up at Chapter meetings only, and have to be ordered in advance.

5 members have already received theirs, so request yours today!

For information and ordering contact:

Robert Hoy at 216-389-7677 or k666@cox.net

Medina County

(Continued from Page 13)

Medina's GIS is headed by the County Highway Engineers Office with several other county agencies taking active roles in governing and updating the data specific to their office. The GIS was implemented in 1993 with the first internal Public Access on October 1, 1995. Its first web-based maps went on-line in June 2001.

Medina County currently has 647 vector data layers, amounting to 11GB in size. There are also 40,321 raster tiles and 37,663 scanned images, adding up to around 300GB of raster data. In addition, there are roughly 127,000 polygons in the parcel data layer, comprised of 80,000 individual parcels and 88,000 owners. A yearly snapshot of the parcel data has also been maintained for the past 10 years.

The Medina County GIS should be entered here: <http://www.highwayengineer.co.medina.oh.us/cgi-bin/query.cgi> (Avoid entering the GIS from the Medina County Auditor's site because some functions will not work)

Navigation

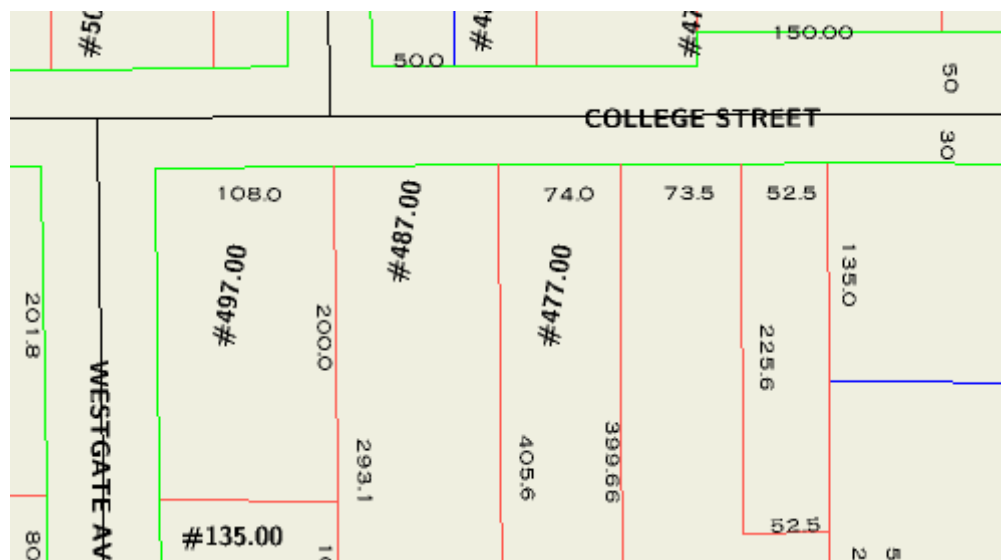
There are several types of items you can zoom to by filling in the appropriate field along the right edge of the GIS home page. Zoom in/out and pan controls are at the bottom right corner of the screen and is shown below. Select any of these buttons, then click on the portion of the map for which you want that

☒ Zoom In
☐ Pan
☐ Zoom Out
10 x Zoom
Factor

command to be centered on. The "zoom factor" setting will determine how far you will zoom in or out. There is no dynamic zoom window or clicking and dragging the map to pan as is common with other map systems. Lastly there are no special GIS command buttons for view previous zoom extents. Instead simply use the back and forward buttons on your web browser. The map does not enlarge if you maximize your browser and use a large monitor. (I use a 24" wide screen monitor at home)

Tax/Parcel Map

Medina's GIS shows good information for Surveyors after zooming in close enough to see individual parcels. You will see data expected to be on a Tax Map such as right-of-way widths and parcel dimensions. Street addresses are also visible, but permanent parcel numbers cannot be shown and the labels cannot be turned on or off.



Parcel Selection

A parcel can be selected, to obtain more information, two ways. The first option is entering a parcel number as shown below left. Click the Parcel # button, enter your parcel number (with or without

☒ Parcel # (PPN)
040-20C-03-170


hyphens), and hit enter or the Query button at the bottom right of the page. The other method is clicking in the parcel on the map after clicking the *Point & Click* button as shown at right.





☒ Point & Click

(Continued on Page 16)

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PARCEL:

Parcel Number: 040-20C-03-170
 Location: Wadsworth City
 School District: Wadsworth City
 City Lot: 4641
 Transfer Dates: 1990/01/09, 1900/01/01
 Address(es): 487.00-COLLEGE STREET-(Field), CH97
 Latitude/Longitude (of map center): 41.0249399320375/-81.7438737057016

Medina County

(Continued from Page 14)

OWNER:

Name: ROBERT R BAULT
 Percentage: 100.00

The typical information will be shown (at left) for the parcel you select. Seeing the latitude and longitude expressed to such extensive decimal places makes me cringe with my education of significant figures.

Selecting a parcel will also offer you more data viewing options.

Additional Parcel InformationScans (surveys, tax-maps, road records)

As the link shows, you will be shown scanned county Survey field book pages, old tax map pages, and road records dating as far back as the early 1800's for original lot that the parcel selected resides. Surveys will pull up a list of private surveys done in the same original lot. These surveys are similar to the (TM) taxmap surveys index recently started in Cuyahoga County to clarify a legal description. Medina County has been collecting and storing these surveys for over a hundred years. When selected, the survey map appears on the screen with the selected parcel drawn in red line and referenced to scale. Rather impressive free information that is easily accessible.

AIRPHOTO & CONTOURS

Contours are Spring 2002. Obliques are 2007.

Spring: 2000 - 2004 - 2006 - 2007

Buzzards-Eye Obliques

When in this *Parcel Selection* mode, you can turn on aerial photography which will include 2002 contours for your enlarged parcel view. I am glad to see Medina offering visitors the ability to view historic aerial photography as well as the most current photography of

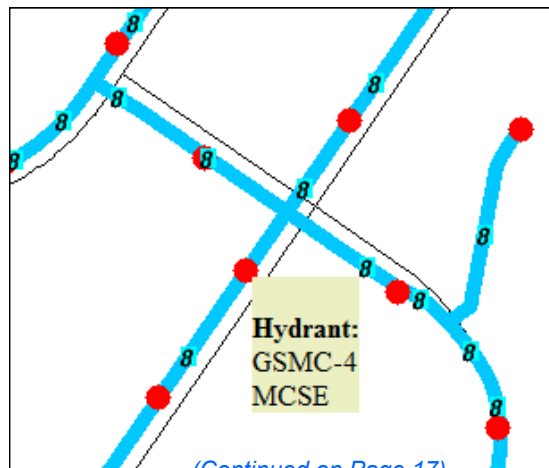
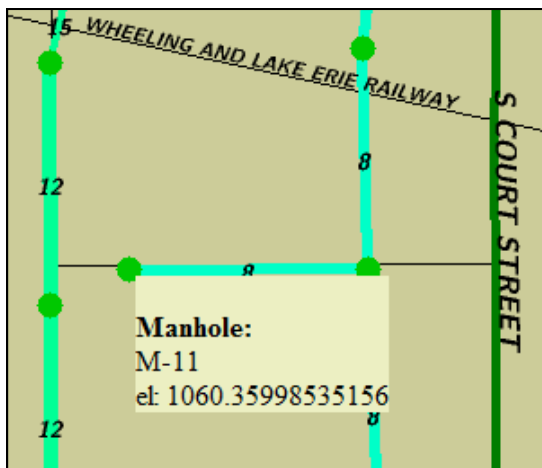
the county. Buzzards-Eye Obliques are similar to *Bird's Eye* option found on maps.live.com, though after clicking on the Buzzards link you will then need to click on a direction link on the next page to get an oblique view. Oblique views are rather slow to view because they are large high quality images that you can zoom into a bit with good resolution. No GIS linework is visible in these obliques.

MCSE RECORDS

Water Lines : Sewer Lines

Medina County Sanitary Engineer

Water and Sewer Lines links bring up a wider map view showing low detail location information and pipe diameter of water lines and sanitary sewers. Hover your mouse pointer over a green dot, which represents a manhole location, manhole designation and rim elevation will appear (again with far too many decimal places). As with all GIS data, consider it to be approximate and don't rely on it alone for critical work. It is very good to see Medina offering utility information through their public GIS.



When looking for sewer and water information, keep in mind this is Medina County and its overall development is rather low. These utilities will not appear everywhere.

(Continued on Page 17)

Layers (Continued from Page 16)

Medina County

Layer Control

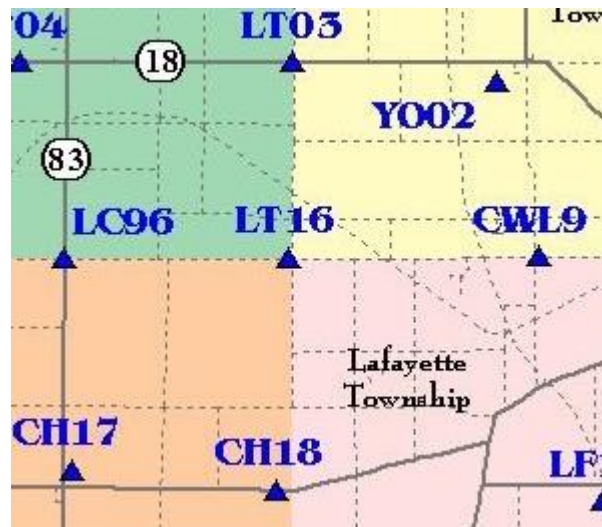
Found at the bottom of the map, this button allows you to turn on/off 2007 aerial photographs, 2002 contours, 2008 FEMA flood information and some land division labels. Please read the disclaimers for this information Medina provides and follow the instructions at the beginning of the Layer Control box to properly apply layers to your map.

Downloads

Medina County provides most of their GIS data free at: www.highwayengineer.co.medina.oh.us/tax-maps/sales_std.html They used to sell their data on a disc, but stopped at the beginning of this year. Their downloads include parcel lines, contours, aerial photographs, and water & sewer lines. Downloading one of their aerial photos in TIFF format may take about 2 hours (about 600MB), but that speed is likely controlled by Medina's servers to limit how much of their bandwidth can be consumed.

Survey Monumentation

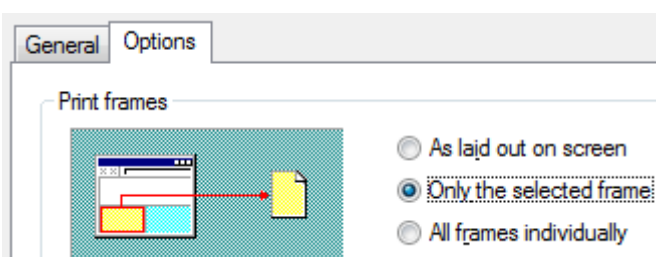
Medina County has 71 geodetic survey monuments installed through the county, as a joint project between the survey departments of the Highway Engineers and the Sanitary Engineers, of which 41 are blue-booked by the NGS. In addition, all of the monumentation follows the standards set by the 2007 NGS readjustment. Their map can be found here: www.sanitaryengineer.co.medina.oh.us/maps/web_page/gps_map.html Geodetic monuments, blue triangles at left, can be clicked on to view its information sheet; however, these data sheets are being updated by the Sanitary Engineer's Office and are not available at this time.



(Continued on Page 19)

Printing

The simpler method to make a print of the GIS map is to use the [PDF of This Map](#) link at the bottom of the map. You can "Open" the PDF when prompted and the result is a letter size PDF you can print. If you use your browser's Print function, you will need to choose *Only the Selected Frame* from the options tab of your print dialogue box as shown below. (your print dialogue box may look different). There are no options to select your print size or orientation.



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Contact CSN Editor:

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Cuyahoga County (Continued from Page 17)

The showcase of Cuyahoga's GIS will be part review and part interview. Since Cuyahoga has the newest GIS in our area, just six month old, I asked Mr. J. Kevin Kelley, Information Technology Administrator, of the Cuyahoga County Engineer's office a list of questions to see what plans they have after their initial release.

The Cuyahoga County GIS is a partnership between the Cuyahoga County Engineer, Auditor, Commissioners, and the Information Service Center. The Commissioners have funded the infrastructure, i.e. Server farm, application servers, aerial photography. County Agencies must use their respective budgets for individual GIS needs.

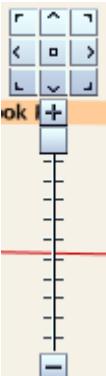
I strongly suggest, as does Cuyahoga's website, you install the Firefox web browser before you enter the GIS website. [Click Here](#) to download the current version. Using Firefox makes the GIS run faster, print better, and items in the panels left and right of the map will appear smaller which will help those with smaller screens. Running the Firefox browser, you can enter the Cuyahoga GIS here: gis.cuyahogacounty.us

CSN: The "under construction" label has been on the GIS since it came on-line in June. Do you have an anticipated date that label will be removed?

Kelley: The Under Construction Label will remain until the Oracle development software is officially released. The software is a pre-release version. Cuyahoga County was offered this software and a Oracle development team free of charge. Oracle benefit is their software is tested in real life scenarios and our benefit is the site is state of the art and the County does not pay for the software until it is released and working.

Navigation

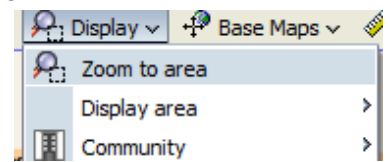
The first thing I do each time I start the GIS is to push back the *Locate a Parcel* and *Layers and Locations* panels on the left and right side. Resize the panels the same way you resize a column in a spreadsheet program by clicking on its interior edge and dragging it towards the edge of your browser. I also click *collapse all* for the *Locations* on the left panel since they are mainly items that the Auditor manages throughout the county such as gas stations



Your mouse will always default to *click & drag* pan mode. Zooming can be accomplished four different ways. 1. The sliding zoom scale at the upper left corner of the map, shown at left. 2. *Zoom to Area*, shown above right, is a standard dynamic window; however, you must re-select this command each time to zoom window. For a recently created GIS, there should be a zoom window and pan button easily accessible. 3. *Display Area* offers views

on a scale of miles which in reality are standard scales such as 1"=1000', 1"=50' (notice the graphic scale at the bottom left corner of the map).

4. *Community* which allows the user to select a city to zoom to. The map does expand if you maximize your web browser.



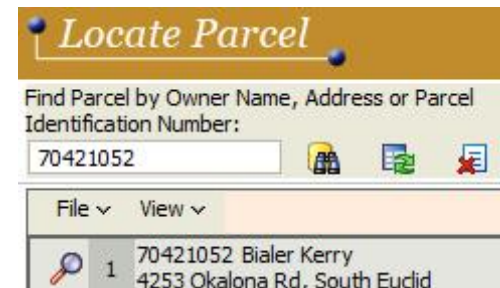
Tax/Parcel Map

The Cuyahoga GIS shows by default shows street names, but will also show permanent parcel numbers (when *Parcel* layer turned on), and addresses (when *Addresses* layer turned on). Permanent parcel number labels cannot be turned off when the *Parcel* layer is on. This is more of a parcel map, and is disappointingly lacking tax map information. Overall refresh speed is slow even when only displaying the *Parcel* layer.



Parcel Selection

Parcels cannot be selected graphically by clicking within your parcel lines. When the GIS first came online in June, clicking in a parcel invoked a popup with parcel information; however, that feature has been removed. You may enter a permanent parcel number that you see on the map or by entering your parcel number as you begin using the GIS. Use *Locate Parcel* at the upper



right corner of the page and click the binoculars (1st icon). Next click on the magnifying glass

shown on the bottom shown at left. This will place a blue flag on your parcel and zoom to your parcel; however, if you are already zoomed in close to your parcel the GIS will zoom out back out to a 1 mile view. This is probably an error. All five other GIS's I am reviewing will shade your selected parcel making it easy to identify especially when plotted.

[\(Continued on Page 20\)](#)

www.PLSO.com

(Continued from Page 19)

Cuyahoga County

You will notice information for your parcel appears in the bottom right corner of your browser after clicking the magnifying glass shown at right. Pull-down menu items, also shown, will open in a new browser window or browser tab depending on your browser. This allows for "one-stop shopping" for county parcel information. Remember that every deed ever recorded in Cuyahoga County all the way back to Volume 1 Page 1 is available from the recorder's website: recorder.cuyahogacounty.us, though recorded plats from the recorder's office are still only available in print form at a rather expensive price.

Layers

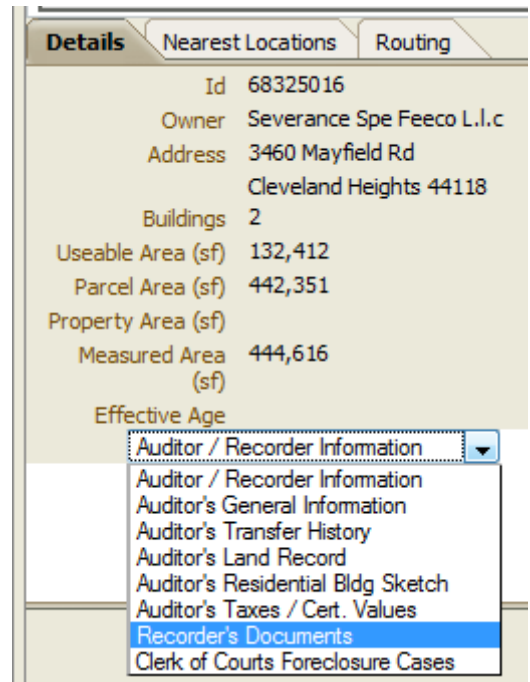
We've already discussed the *Parcel* and *Addresses* layers, and the other surveying related layers are *Hydrology* and *Contours* which are found under *Natural Features* at left. Be prepared for a bit longer refresh times when having the 2 foot contours shown (see screen capture, next page).



CSN: In most other GIS I have visited, aerial photography is a layer option yet the CEGIS lists it above the map under "basemaps". The average person may not know what a basemap is, but they will know what aerial photography is. Will the aerial imagery option be moved to the layer section?

(Continued on Page 21)

Kelley: We have street base map and aerial base maps they are not layers. Layers are polygons on a base map. There are no plans to change this but in our final release the instruction will hopefully address this.



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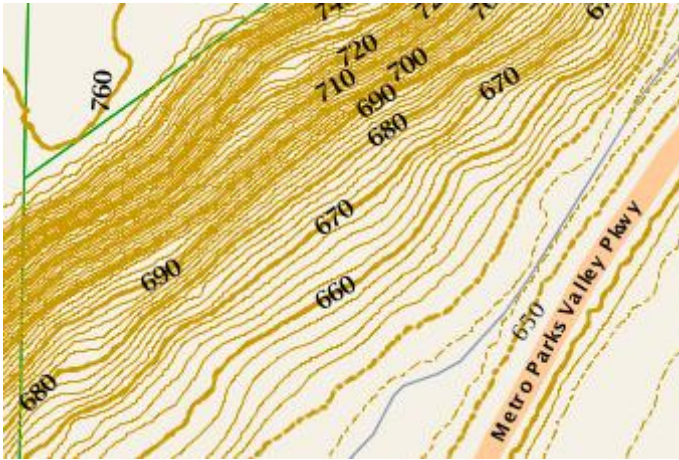
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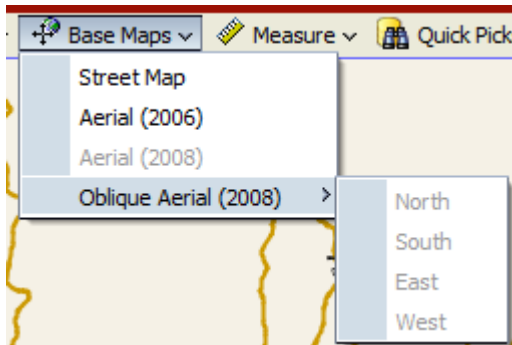
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Cuyahoga County

(Continued from Page 20)



Cuyahoga's GIS puts aerial photography controls under the *Basemaps* tool above the mapping (see below).



Features not available yet area grayed out.

CSN: I was told that new aerial photography had been flown for the county back in the Spring 2008 and that the new aerial imagery and the oblique photography would be part of the GIS this fall. Do you have an anticipated date the 2008 aerials and oblique photography will be an option of the GIS?

Kelley: In the spring of 2008 the County contracted for new 2008 aerial photography. This contract includes Oblique imagery. The aerial nadir view was delivered and is currently on our test servers and we expect to have the imagery available in the next 30 days. The Oblique imagery and viewer will not be on the public site until the 1st quarter of 2009. (Note: these questions were received 11/19 so the 2008 photography should appear any day on the GIS.)

CSN: Other GIS in northeast Ohio have historic aerial photography options taken before their GIS system came on-line. Are there plans for the CEGIS to have options for older aerial photography such as the 2002 black and white aerials?

Kelley: (Question not answered)

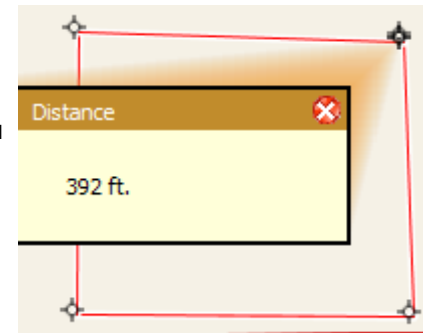
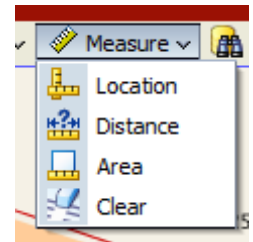
Tools

Cuyahoga provides a few useful graphic tools under the *Measure* pull-down shown at right.

Distance allows the user to measure a distance or a perimeter.

A tick mark will be placed at your selected locations. Simply double-click your mouse when you are ready for the distance to be calculated (shown at right).

Area lets you calculate and approximate area based upon graphic selection. Again the command is ended by a double-click. You do need to select *Clear* after each command for the tool to be reset. I have used area calculation tools with other GIS's to get approximate drainage area calculations.



Downloads & Updates

CSN: The Cleveland Water Department and the Northeast Ohio Regional Sewer District are working with their utilities in a GIS. Will their information of waterlines, sanitary and storm sewers be part of the CEGIS as a layer? These utility departments know where their utilities are located and how their structures connect, yet they give only the original construction plans to engineering and surveying consultants who then have to recreate the picture. Showing these utilities in the CEGIS would be a helpful tool for planning and to have everyone on the same page as to which utility goes where.

Kelley: The County currently has this information but they will not be part of the public layers at the request of the Water department and NEORS.

CSN: . County External Hard Drive. The latest request form I have for the GIS hard drive shows the price at \$350 which is divided \$200 for the external hard drive and \$150 for the data. 500GB external hard drives can easily be bought now for \$100 or less.

Can people bring their own external hard drive to the County Engineer to have the data transferred to eliminate buying the drive from the County? \$150 for the data is a notable cost. The Summit County engineer will transfer all their County Engineer's electronic documents, e.g. surveys, plats, subdivision as-builts, etc., to a hard drive someone brings in for just \$10. Are there any plans to lower the price of \$150 for the GIS data?

(Continued on Page 22)

*(Continued from Page 21)***Cuyahoga County**

Kelley: We can look into the cost of the data and hard drive. The County ISC handles these transaction and will not allow and outside hard drive brought into their system.

CSN: The files that make up the CEGIS are likely large, but internet download speeds continually get faster. Downloading a 500MB file with a cable internet connection is viable. Are there any plans to put all or some portions of the CEGIS in a download section? This would be helpful for those who rarely need aerial photographs for drawings and could download one imagery tile without having days of delay or driving to obtain the County hard drive.

Kelley: As our site progresses we will be looking into FTP sites and other options for downloading data. The hard drive was temporary solution until we had other solutions.

CSN: I have been informed that new FEMA flood zone maps are in the review and comment phase. These maps may be finalized 2 or more years from now. Will new flood zone maps be a layer of the CEGIS when they are finalized and become effective?

Kelley: The FEMA flood map has been developed from Cuyahoga County data. We provided it to FMSM (a FEMA contractor) and they have promised to provide us a copy prior to their release and it is our hope to put that

on our map as a layer.

CSN: How often is the Parcel layer updated and how soon after the recording of parcel split or consolidation will the change appear in the GIS?

Kelley: Parcel information is updated on a weekly basis, including parcel splits. Please remember the Auditor/Engineer may be working on splits over an extended period of time but once it is committed to the database it falls into the weekly update.

I am hopeful the Cuyahoga County Engineer's Office/ GIS/ISC will build a well filled *Download* page. Cuyahoga, the most populated county in the state, currently has no downloads available on their Engineer's site; though they sell discs of the taxmaps and GIS data. I also have heard that many older county engineer records and maps have already been scanned. Let's hope they end up as Downloads too.

(Continued on Page 23)

Annual Meeting

January 22nd 2009

Tony K's

841 W. Bagley Road

Berea, Ohio 44017

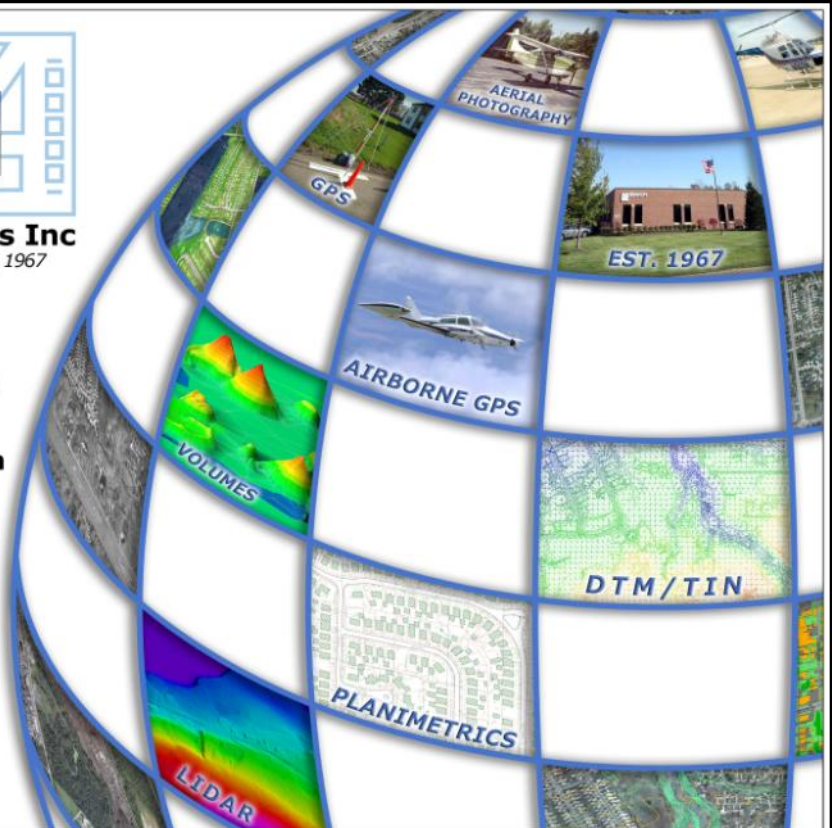
Don't Miss It! See [Page 5](#) for details



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(Continued from Page 22)

Cuyahoga County

Survey Monumentation

CSN: I do not see a Survey Monumentation layer. Are there plans to show where USGS and CRGS Survey monuments are located throughout the county?

Snezek (County Surveyor): We have nearly completed the 2008 inventory of all existing County Original Monuments, (O.M.s). There are approximately 1700 remaining of the original 3000. Once cross-checked, we will provide this data to the Record Room's so they can update their data-base. It is our intention to populate a new feature on the C.E.G.I.S. system with the monument identifier icons. When clicked on, we envision that a pop-up will provide the user with the location descriptors, condition of the monument and its current published values. We would like to begin this process early in 2009 and hopefully have it completed in one year.

CSN: The county's CRGS (Cleveland Regional Geodetic Survey) monuments are based upon NAD27 and NGVD29 datums. There is no translation between NAD27 and NAD83 coordinate systems. Are there plans to make a concerted effort, i.e. subcontract, to have a significant number of CRGS monuments GPS observed and network adjusted?

Snezek (County Surveyor): Unfortunately, we do not have funding at our disposal to re-observe all 1700 monument and publish them with the new NGS standard, which is NAD83 with the NSRS2007 adjustment. As to the verticals, the accepted NGS values are still in NAVD88. Additionally, there has been insufficient demand from the engineering, construction or infrastructure development sectors in the county to warrant or fund this effort. The development of the C.O.R.S. system has undoubtedly allowed those agencies that are regularly in need of geodetic footprints to utilize that system to meet their needs. As a member of the state's Geodetic Task Force, I have been in communication with Dave Connors, our NGS representative and chair of the task force. He is currently exploring the possibility of incorporating the City of Cleveland's 500 plus re-observed points that they developed with a consulting company called "Geonix" back in the 90's. Those points have NAD83 with NAVD88 verticals on them. But they were not all on OM's. Many were on centerline/centerline boxes. If you recall we provided those points to our GIS consultant Baker, back when we were developing our base-mapping. Dave said he will get back to me with his thoughts on publishing those points on our system.

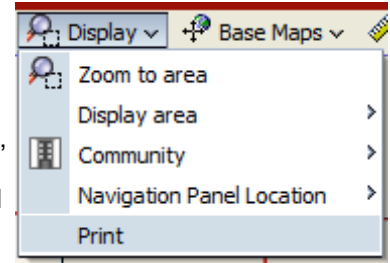
What does this mean? If you want to tie your survey into the Cuyahoga GIS, you will need either 2 GPS

receivers to observe a small network, or a GPS rover and data-capable mobile phone with data package subscription with access to the ODOT VRS CORS network to observe a few points in your survey. But there's always a slim chance your survey will be near two NAD83(2007) adjusted geodetic monuments.

You can use benchmarks.scaredycatfilms.com/OH.html (originally featured in the [Sept. 2007 CSN](#) on page 11) to find adjusted geodetic survey monuments in Cuyahoga county. They are few and far between.

Printing

The print command is found under the *Display* pull-down, shown at right. The GIS does not offer any printing options, such as scale, aside from your paper size and orientation selections in your printer driver.



Although choosing *landscape* letter or tabloid paper will cut off part of the map sending it to a second page. The print does not include a written or graphic scale even though the GIS appears to have its zoom slider (map upper left corner) to be in standard 1"=50', 1"=100' settings.

In conclusion I am impressed with what Medina and Cuyahoga counties have to offer. I have very happy to see the amount of free downloads that Medina has to offer such as utilities, surveys, road records, aerial imagery and I have high hopes that Cuyahoga county will follow the lead that other counties have provided for available downloads. To keep an eye on how Cuyahoga's GIS is progressing, I will be checking in with them from time to time. Also am requesting of each county GIS I review to be notified when new features, data, or announcements are available so I can get the news out to you.

Lastly I would like to thank the individuals, from the counties of which I reviewed in this issue, for supplying information to me and answering my many questions.

Medina County

[Lowell Filak](#), Computer Operations Supervisor

Cuyahoga County

Robert Klaiber, County Engineer

[J. Kevin Kelley](#), Information Technology Administrator

Next Month: Lorain GIS & Summit GIS

Robert G. Hoy, P.S.
CSN Editor



DATE: 4 November 2008

TO: Executive Committee PLSO
6465 Reflections Dr.
Dublin, OH 443017

FROM: Thomas (Mike) Besch P.S.
Professor and Program Director
Surveying and Mapping Technology
The University of Akron

SUBJECT: Request for Financial Support for the 2009 Surveying Student Annual Competition.

The 2009 ACSM Conference, to be held in Salt Lake City UT, February 20 – 23, 2009, will be the site of the 8th Annual NSPS Surveying Student Competition.

The technical theme for the 2009 competition is “Calculating Devices & Methods for Surveyors – Past to Present”. The competition will consist of three parts:

1. A publishable research paper dealing with the announced problem. This research paper serves as the competition entry paper and will count for 50 (of 100) points.
2. Field exercise (40 points). The 2009 Student Competition “Field Exercise is designed to expose students to the way surveyors have completed various tasks in the past. It is broken into 5 parts and, for the most part, will take place indoors. The five parts are:

Slide Rule – Students will be given several problems that will require the solution to be derived using a slide rule.

Subtense Bar – Students will be required to use a subtense bar and Wild T-2, to measure one or more distances.

Taping Reduction/Corrections – Several problems will be presented that will require students to calculate corrections with non-electric calculating devices.

Engineering and Science Technology Department
Summit College
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Read Transit Verniers – Several pictures of transit verniers will be provided and each team will be expected to read them.

Logarithms – Several problems will be presented that will require the use of log books/table to be used.

3. Poster Session (10 points). Each team shall prepare one poster describing one of the calculating devices mentioned in the paper or the general theme of their paper if this is more appropriate.

No costumes this year but team clothing would be appropriate.

As you already know financial support for this extra-curricular activity comes from student fund-raising activities (as you well know from past PLSO Conferences), as well as tax-deductible contributions from individuals, professional organizations and the surveying industry.

The expenses for travel, lodging, registration and meals are expensive and go up each year. The University has already committed to over half of the required funds, but I need to raise the other half from the surveying industry/profession. I believe that this is an excellent opportunity for the surveying profession to both honor its past, and to support those students who represent not only its future but the honor of OHIO.

If I can provide you with any further information, please feel free to call me at (330) 972-7059 or e-mail me at besch@uakron.edu.

If you would like to contribute to this worthy cause, please send your tax-deductible check, made out to "The University of Akron Foundation" to:

Prof. Thomas (Mike) Besch, PS
The University of Akron
Schrack Hall South, Room 123
Akron, Ohio 44325-6104

On behalf of the 2009 Student Surveying Team Members of the University of Akron, I thank you for your time and consideration. And, as always, we thank you for all of your past support.



Thomas M. Besch