



American Institute of Professional Geologists Michigan Section

October 2013

From the President's Desk

Our September 19th meeting was a big success with over 80 in attendance. This meeting was held as a joint meeting of the Michigan Section and Michigan Basin Geological Society; we are looking forward to other opportunities for our two organizations to work together. John Esch of the MDEQ presented a web demonstration of the Michigan Department of Environmental Quality (MDEQ) GeoWebFace. This powerful GIS tool was originally built for MDEQ's Office of Oil, Gas, and Minerals and contains extensive geologic and hydrogeologic data that is easily accessible. Over the next three to six months, the MDEQ's GeoWebFace will be expanded to include 30 additional layers and data sources. The GeoWebFace can be accessed by the public through the MDEQ's website at http://www.michigan.gov/deq/0,4561,7-135-3311_60700---,00.html.

Our last meeting of 2013 will be held on December 5th, 2013 at the Kellogg Center in East Lansing, Michigan. Our speaker will be Dr. William Harrison, Director, Michigan Geological Repository for Research and Education. Dr. Harrison's presentation will focus on a very large Potash Deposit that was recently re-discovered in western Michigan.

Due to its potential value, this Potash discovery has been widely reported in the press. This Potash Deposit could be worth as much as \$65 billion, easily surpassing the State's historical oil and gas production revenues and triggering significant job growth in Osceola and Mecosta counties.

Dr. Harrison will discuss Potash Deposits that occur in the Silurian Salina A-1 Salt formation in the deep central Michigan Basin, approximately 7,500 feet below the ground surface. The Potash deposits are composed of nearly pure beds of Sylvite (potassium chloride) interbedded with Halite (sodium chloride). Commercial mining of this deposit has been ongoing since 1989, but at moderate to low levels in only one area of the basin near the town of Hersey. The re-discovery was made using the very large storehouse

of geologic core data that is housed at Western Michigan University's Michigan Geological Repository for Research and Education.

During September, the Michigan Section announced that planning has begun on the 2014 AIPG Work Shop. The theme of the 2014 Work Shop is Groundwater Surface Water Interface (GSI) Issues. This three day Work Shop will again be held at the Ralph A. MacMullan Conference Center in Roscommon, and will run from June 17-19, 2014.

Sara Pearson and Kevin Lund are coordinating presentations and speakers. The presentations will focus on the 10 ways to demonstrate compliance with GSI, including:

- Meet Generic GSI Criteria
- Apply for a Variance
- Apply for a Mixing Zone
- Develop Site-specific Criteria
- Conduct an Ecological Demonstration
- Conduct a Modeling Demonstration
- Evaluate Pathway Relevancy
- Demonstrate De Minimis Effect
- Request a Technical Impracticability Waiver
- Demonstrate Natural Attenuation of Hazardous Substances

Lastly, a quick reminder, the 50th Annual AIPG National Meeting will be hosted by the Colorado Section, and is scheduled for October 23-26th in Broomfield, Colorado. Craig Savage, this year's Michigan Section Vice President, will be attending this year as our official delegate. For more information, contact AIPG National at (303) 412-6205.

Don't hesitate to contact us with questions, comments, and ideas for future Section meetings. Feel free to contact me directly at jbarkach@glec.com.

Section Officers Reports

President: Information presented in the “From the President’s Desk” article above.

Vice President: No report.

Treasurer: All, dues notices have been sent by national. Please be sure to pay your dues prior to the deadline. Our section does not receive our portion for late payments. The section’s financial position is stable. We will continue to provide free meals to students in attendance at our meetings. We will also continue to provide member meals at a discounted rate of \$30.

Secretary: Message from the Secretary:

Last month I wrote about a chance meeting with a man who had just received notice of his impending lay-off. I described how I listened to his story, gave him an impromptu pep talk and offered advice on staying positive and moving forward. Since then I received this nice note from him:

“Hi Brian, We met down by the pond two months ago when I was [laid off] after almost 13 years. The conversation we had was a big help. Thank you for taking the time to hear me through my ordeal. I am looking forward to new and better opportunities.”

As I said in the last newsletter, times are still hard for many people. Take the opportunities that fate sends your way to provide encouragement to others in need until we’re all out of the woods. To that I would add this thought, “someone who takes the time to send out a thank you note, a rarity these days, is probably the kind of person who will find success despite adversity.” Best wishes to all. Be Thankful!

Minutes from September 19, 2013 Executive Committee Meeting

Participants: John Barkach, Brian Burke, Adam Heft, Dawn Prell, Craig Savage.

- I. Call to Order at 4:00 pm at the Johnson Center, Cleary College, Howell
- II. MI Section Contributions
 - AIPG National Scholarship, \$1,000 was awarded to Kase Knochenhauer and a matching amount from the Michigan Section to Karl Campbell of Grand Valley State University
 - The Section Executive Committee will decide annually on whether to provide the matching scholarship for that year depending on finances

- The Michigan Section pledged \$3,500 to the MDNR Academy of Natural Resources; only \$1,000 was needed this year
- A \$1,000 award was made to the Michigan Alliance for Environmental and Outdoor Educators
- National has instituted the AIPG Student Chapter of the Year Award (\$500 plus travel expenses); financial details are currently uncertain with regard to how it will be funded

III. AIPG Michigan Section Funding Sources

- Annual Golf Outing
- Summer Workshop
- Annual dues for the Section provided by National

IV. 2014 Summer Workshop

- The Executive Committee recommended that a committee be formed to help organize the Workshop
 - The committee will include current organizers Kevin Lund and Sara Pearson, and the current year’s Treasurer.

V. AIPG National Meeting

- Craig Savage will be the Michigan Section delegate to the Advisory Board meeting; he is planning to attend the Annual Meeting and will summarize the 2013 Michigan Section activities, plans, successes, and difficulties

VI. Adjourned at 5:30 pm

Coming Events

October 19, 2013: MBGS Field Trip to Alabastine Gypsum Mine (Michigan Natural Storage) in Grand Rapids, 9am-noon. Patricia Videtich and Kevin Cole, Grand Valley State University, will lead the trip. Cost yet to be determined, space limited. Check www.mbgs.org for the latest information as the details are finalized.

October 23-26, 2013: AIPG 50th Annual Meeting, Omni Interlocken Resort, Broomfield, Colorado. <http://www.aipg.org>.

October 24, 2013: MBGS-SPE Joint Meeting. “*Hydraulic Fracturing Myths, Reality and Environmental Stewardship through Better Chemistry*,” by Daniel J. Daulton, and Baker Hughes. Crowne Plaza Lansing West Hotel, Lansing. 5:00 – 6:00 pm social hour, dinner at 6:00, presentation to follow. \$30 for members, \$20 for students. RSVP by October 23 to Tom Hoane at hoanet@michigan.gov.

October 25-27, 2013: GSA 125th Annual Meeting & Exposition, Denver, Colorado.

November 21, 2013: Ohio Section AIPG Annual Meeting and Dinner Presentation – “Keeping the Pump Primed: Aquifer Sustainability,” by John Jansen, PhD, PG, <http://www.aipg-ohio.org/>.

December 4, 2013: MBGS’s Annual Family Membership Meeting. “The Geology of Mars” by Dr. Michael Velbel, Michigan State University, Natural Science Building. 7:00 pm. No charge for MBGS members.

December 5, 2013: Michigan Section AIPG Meeting, Kellogg Center, East Lansing. Dr. William B. Harrison III will be speaking about “Michigan Potash Resources.”

Location: The Kellogg Center, East Lansing.

Dinner: Italian Dinner Buffet with salad and bread.

Schedule: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM.

Cost: Students free, Members \$30.00, Non-members \$50.00.

RSVP by December 2, 2013: RSVP for the meeting on the Constant Contact website no later than December 2nd at:

<http://events.constantcontact.com/register/event?llr=hppwbcjab&oeidk=a07e8d07fif7aa8aadd>.

December 4 and 5, 2013: “Save the Date” Vapor Intrusion Training geared toward Part 213 sites is being planned by MDEQ-RRD. There will be two one-day training events offered in Grand Rapids and in Ypsilanti. A notice will be sent soon on DEQ’s listserver.

March, 2014: Michigan Section AIPG Meeting, meeting details TBD.

May 2014: MBGS Field Trip “Salem Limestone and Karst, Bedford Area, South Central Indiana.” Includes Victor Oolitic Quarry, Central Quarry, Crown Quarry, Blue Springs Cavern, and Sullivan or Donahue Cave.

June 17-19, 2014: Fourth Annual Michigan Section AIPG Workshop, Ralph A. MacMullen Center, Higgins Lake. This year’s topic is Groundwater Surface Water Issues. For information, please contact Kevin Lund at lundk@mi.gov.

August or September 2014: MBGS Field Trip “Silurian and Ordovician, Eastern Upper Peninsula, Michigan.” Trip to be led by Dr. Peter Voice, Michigan Geological Survey, Western Michigan University.

Welcome New Members

The Michigan Section is continuing to grow. Please welcome the following new CPGs, Professional Members, Young Professional Members, Associate Members, and Students:

Mitchell Adelman, Roswell Barranco, Benjamin Belill, Clara Brennan, Jacob Cadle, Trek Ciaravino, Stephanie Dow, Kathleen Dragos, Chris Droste, Ethan Earnest, Robert Fortney, Denisha Griffey, Rebecca Hart, Duane Hattem, Stephen Hoekwater, Cassie Johnson, Hans Lechner, Dominike Merle-Johnson, Amber Pontius, Stephen Shields, Kyle Siemer, Taylor

Sting, Kimberly Suchta, Neal Turluck, and Cody Whitman.

To each of our new members, the Michigan Section Executive Committee would like to welcome you to our Section, and encourage you to attend Section meetings and other events. You are also welcome to provide information for the Member’s Corner articles.

In Memoriam...

Tim Cullen, Michigan Section member, passed away suddenly on September 7, 2013. He leaves behind his wife Claire and daughter Abby.

Tim was a 25+ year member of the Michigan Section, having been a part of the Michigan Section since 1986. He arrived in Michigan in 1981 after spending his formative years as an Engineering



Geologist on the East Coast (DC, Baltimore and Boston). He had said that it was quite a shock to arrive in Ann Arbor after spending the previous 6 years on various rapid transit tunneling projects and not see a rock that qualified for outcrop status.

He became quickly immersed in various projects: Midland Nuclear Power Plant: site dewatering, Category I Structure underpinning (sort of tunneling); G-T-G Project in New Plymouth, NZ: pre-construction site dewatering to name only a few. This was followed by a variety of projects that kept him on the road and living out of a suitcase. Tim has worked for several consultants based in Michigan on projects that included foundation studies; soil and groundwater contamination and remediation; environmental site assessments; as a Field Geologist, Project Manager and Principal.

In 1995 Tim was offered a position at the University of Michigan (U of M) with the Occupational Safety and Environmental Health (OSEH) Department. During his tenure at U of M, he managed various programs, including: Hazardous Materials Management, Environmental Protection and Permitting, Hazardous Materials and Remediation Services. At the time of his retirement he concentrated his efforts into the environmental protection efforts at the University and was the Manager of the OSEH, Environmental Protection & Permitting Program. He was a great supervisor,

mentor, and friend to many throughout the university, consulting, and regulatory community.

Tim retired from the U of M OSEH Department on August, 30, 2013. He died a very short time later on September, 7, 2013.

Tim was a long-standing member of AIPG. He had served as Michigan Section Secretary in 2012. Tim also was a member of MAEP and served two terms as president of that organization.

He will be greatly missed...

The Power of Partnerships

The following article was reprinted from The DEQbicle (with permission). The original text can be found at:

<http://www.deq.state.mi.us/eforms/deqbicle/Summer2013/PowerofPartnership.htm>.

The power of partnership - owners, consultants, and regulators

"The most important single ingredient in the formula of success is knowing how to get along with people."

-- Theodore Roosevelt

The Power of Partnership concept is familiar to attendees of the Third Annual AIPG Workshop, the "Power of Partnership—Owners, Consultants, and Regulators," held June 18 -20 at the Ralph A. McMullen DNR Conference Center. More than 70 consultants, vendors, and owners participated in the three day workshop, along with more than 50 DEQ employees from the RRD, OWMRP, WRD, OOGM, and OEA.

This event was organized by the Michigan Chapter of the American Institute of Professional Geologists (AIPG). The workshop chairs, Kevin Lund and Sara Pearson, both past presidents of AIPG and current DEQ staff, developed a program that revisited the interpretation of light non-aqueous phase liquids site data. In addition, the program assessed the regulatory changes to Part 213 and Part 201 established by law in December 2012, discussed innovative and sustainable technologies that can be integrated with site closure, and fostered panel discussions between owners and regulators about how the changes to Parts 213 and 201 impact site closure strategies.

How did the idea to organize a workshop focused on partnerships evolve and how is the workshop concept connected to compliance assistance?

AIPG is not in the business of explaining compliance assistance tools to the regulated community. However, AIPG is in the business of creating events that provide opportunities for members to network

and openly discuss technical challenges related to compliance. Networking is the initial step to fostering a partnership. The format of the AIPG workshop was established several years ago and was built on a model to create a positive environment where all participants can gain a better understanding of the regulatory process by sharing compliance success stories. The evening networking opportunities facilitated further discussion of the technical challenges to achieve compliance, and provided an opportunity to identify common ground among people with different roles in the regulatory process. This networking also established foundations to nurture future partnerships. The AIPG event offers great value for both members and non-members and, not surprisingly, supports Director Wyant's objective to foster comfortable working relationships between the regulated community and the DEQ in a partnership where the shared goal is compliance.

It was early January when Sara and I began struggling with what the AIPG June 2013 event would look like, or if there would even be a 2013 event. With a few concepts in mind, I went to Bob Wagner, RRD Chief, for suggestions. He suggested the title Power of Partnership. At that point, we had a working title, some good ideas, support from management, and less than six months to pull together a workshop. The next step involved securing speakers and sponsorships. We recruited several firms, including ARCADIS, CRA, Dakota Technologies, ESC Laboratory Sciences, FMC Environmental Solutions, Fibertec Environmental Services, Stock Drilling, Somat Engineering, and Matrix Environmental, to sponsor the event. These sponsorships eased the financial challenges associated with hosting a 3-day workshop. With speakers and sponsorships in place, we recruited Joe Quinnan, the principal hydrogeologist at ARCADIS and national expert on remediation hydraulics and subsurface evaluation, to deliver the keynote address. He highlighted his experiences working with the DEQ by providing examples of how partnerships have developed from technical collaboration with DEQ.

"...The power of partnerships will leave the confrontational gridlock model behind – it is important to address issues of mutual concern collectively rather than individually. Partnerships, as alternatives to confrontation offer many advantages..." Joe Quinnan

The 2013 Power of Partnership workshop is over, but the story is just beginning. An incredible number of stories have yet to be told. I was particularly gratified to read from the questionnaire responses that attendees found the workshop very worthwhile and educational. I appreciate the workshop participation even more knowing how difficult it is to

coordinate a workshop and how difficult it is for attendees to commit to a 3-day workshop while juggling a busy workload and family life. Most important to me is the quiet confidence that DEQ management, attendees, and sponsors demonstrate in the value of this workshop, making plans to return each year without knowing exactly what the next workshop will offer. Without attendees representing the DEQ, owners, vendors, and consultants, we would have no opportunities for partnership.

If you are interested in finding out more about the 2013 AIPG workshop, if you have ideas for future workshops, or if you are interested in the 2011 or 2012 AIPG workshops, contact me at lundk@michigan.gov.

Michigan Department of Environmental Quality News

The following article was written by the DEQ for publication in the Michigan Petroleum Association's Marketer which is a quarterly magazine distributed to their members. This article will be published in the upcoming fourth quarter edition. It describes the qualifications for underground storage tank professionals. Since so many of our members work on underground storage tank sites, we thought it would be beneficial to share the same article in our newsletter...

The Consultant You Hire Matters

Underground storage tank system leaking? **Call a consultant.**

Which consultant do you hire? Does it matter? **Yes.**

From 1995 until 2012, owners and/or operators (O/O) of leaking Underground Storage Tanks (UST) could rely upon the Michigan Department of Environmental Quality (MDEQ), Qualified Consultant/Certified Professional (QC/CP) program to select a consultant to handle their environmental needs.

The QC/CP program was terminated with the enactment of the 2012 amendments to the Leaking Underground Storage Tank Act. Although the program has been eliminated, the requirements for qualified UST consultants remain the same. The requirements for qualified UST consultants are meant to provide protection for O/O by ensuring that the work is performed by professionals with expertise in the industry. The amendments describe the requirements which include years and areas of experience, professional certifications, educational background, insurance requirements, and compliance with the Occupational Health and Safety Act (OSHA). Consultants who were certified under

the QC/CP program meet requirements under the new amendments.

Qualified consultants must have:

1. Experience in all phases of UST work including removal oversight, site assessment, remediation, and closure.
2. All appropriate insurance policies, including workman compensation, professional liability errors and omissions, applicable contractor pollution liability, commercial general liability insurance, and automobile liability insurance.
3. Demonstrated compliance with OSHA as well as Michigan OSHA standards and associated regulations.

All consultants do not do UST work or meet these requirements, but there are consultants who specialize in UST work. All O/O are ultimately responsible for investigation and management of risks associated with releases from UST. Therefore, it is important that the consultant meet the qualifications to ensure that the investment in the environmental assessment and cleanup is not wasted because it was performed by an unqualified professional. The MDEQ recommends that an O/O interview and hire consultants as they would a new employee. There are some key pieces of information that can be useful in making the decision to hire a qualified consultant.

- Statement of qualifications that includes staff resumes, project summaries, and references (be sure to check those references).
- Do they offer professional and/or field services? Who are their subcontractors?
- Can they provide the necessary proof of insurance?
- Do they stay within their budget or do they often issue change orders?
- Ask about the approach they are using for the site. Be skeptical of those who hide behind technical jargon. If it sounds too good to be true, it probably is.
- Ask about their health and safety record.

One critical item of concern to the MDEQ is the proof of insurance that is required to be submitted by the qualified consultant with a closure report. The MDEQ frequently receives closure reports without the certificate of insurance and must request that this be provided. If the certificate is not provided, the closure report will not meet the requirements of the statute and cannot be approved. The O/O will want

to watch for this to ensure that their consultant has the appropriate insurance.

Mark Griffin, President of the Michigan Petroleum Association, has indicated that the association will post a list of their members who meet the qualified UST consultant requirements to help O/O identify them. This list will likely not include all consultants who meet the requirements, but will be a good place to start.

Sara Pearson, MDEQ RRD TAPS Team
Coordinator, CPG #10650

Support our Sponsors!

The Section Executive Committee would like to remind its members to support the companies that are advertisers in the newsletter. Consider working with these companies, and when you speak with their representatives, let them know that you saw their ad in the Michigan Section newsletter.

Newsletter Notice via E-mail

Please be sure that you continue to receive the Section newsletters and other announcements. Submit an updated e-mail address to Adam Heft at heft@pbworld.com. If you move or change places of employment, don't forget to send your new contact information to both the Section and to National. If you are not receiving announcements directly from the Editor, it is because your email address is not up to date.

Section Website Reminders

As you may have noticed, the Michigan Section is working on building a database of geologic photographs on our website. We would like to continue building this collection. Please submit photographs that you are willing to share to Adam Heft at heft@pbworld.com. Don't forget to include your name and a short explanation of what the photograph depicts. The photographs will be periodically uploaded to the website once several have been received.

You will also note that the Section website now has a history page. Currently, it includes information on Douglas Houghton, Michigan's first State Geologist. We will be including information on the Section's officers in the near future. If you have suggestions on other items that should be included on this page, please let a member of the Section Executive Committee know.

Member's Corner

The Member's Corner includes information about the Section's membership. This is your chance to provide information on where you are and what you

are doing. Simply send the information to the Editor for inclusion in this section.

No Member's Corner Articles were submitted for this edition of the newsletter.

Employment Opportunities/Seeking Employment/Member Opportunities

To serve our members, and provide added value, the Michigan Section Executive Committee has decided to allow ads for employment or other opportunities to be posted in the Section newsletters. Employment ads will run for one edition unless renewed. There is no cost to our members or sponsors for this service. Send your employment opportunities to the Editor.

Environmental Professional - Remediation

Environmental Resources Group, LLC (ERG), a leader in environmental consulting, has job opportunities at our Wixom and Muskegon, MI office locations for the positions of Geologist, Environmental Scientist and/or Engineer. These positions are responsible for managing the technical, administrative and regulatory compliance of site remediation projects. Interested applicants can send resume to info@ergp.net

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**Michigan Chapter
American Institute of Professional Geologists
MEETING ANNOUNCEMENT**

December 5, 2013

MICHIGAN POTASH RESOURCES

Featured Speaker

[Dr. William B. Harrison III](#)

Location: Kellogg Center, East Lansing, MI (Map attached)

Cost: Students Free, Members \$30.00, Non-members \$50.00. **Registration is payable electronically via constant contact (see link below) or at the door by cash or check; however, prepayment is preferred and speeds up the check-in process at the door. Please note: Cancellations made within 48 hours of the meeting and/or "No Shows" will be charged and expected to pay the registration fee.**

Dinner: Italian Dinner Buffet with salad and bread.

Time: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM

RSVP: On the Constant Contact website no later than December 2nd at: <http://events.constantcontact.com/register/event?llr=hppwbcjab&oeidk=a07e8d07fif7aa8aadd>. You can select your meal choice and pay online if you choose, or pay at the door by cash or check if you prefer.

Dr. Harrison is the Director of the MGREE Michigan Basin Core Research Laboratory. As Director of the Michigan Basin Core Research Laboratory since its inception in 1982, I maintain an ongoing interest in Stratigraphy, Sedimentology and Petroleum Geology of strata in the Michigan Basin. Current research activities are focused on reservoir characterization of old Devonian carbonate oil reservoirs in Michigan, with the principal aim of their redevelopment for additional oil recovery.

A very large Potash Deposit was recently re-discovered in western Michigan. Due to its unusual purity and size, this Potash Deposit could be worth as much as \$65 billion, easily surpassing the State's historical oil and gas production revenues and triggering significant job growth in Osceola and Mecosta counties. Potash Deposits occur in the Silurian Salina A-1 Salt formation in the deep central Michigan Basin. The deposits are composed of nearly pure beds of Sylvite (KCl) interbedded with Halite (NaCl). Commercial mining of this deposit has been ongoing since 1989, but at moderate to low levels in only one area of the basin near the town of Hersey. Analysis of cores from nearly 80 wells and additional wireline log data shows the deposit to be widespread throughout the north-central basin. Commercial potential is much greater than the current small mining activity." The re-discovery was made using the very large storehouse of geologic core data that is housed at Western Michigan University's Michigan Geological Repository for Research and Education.

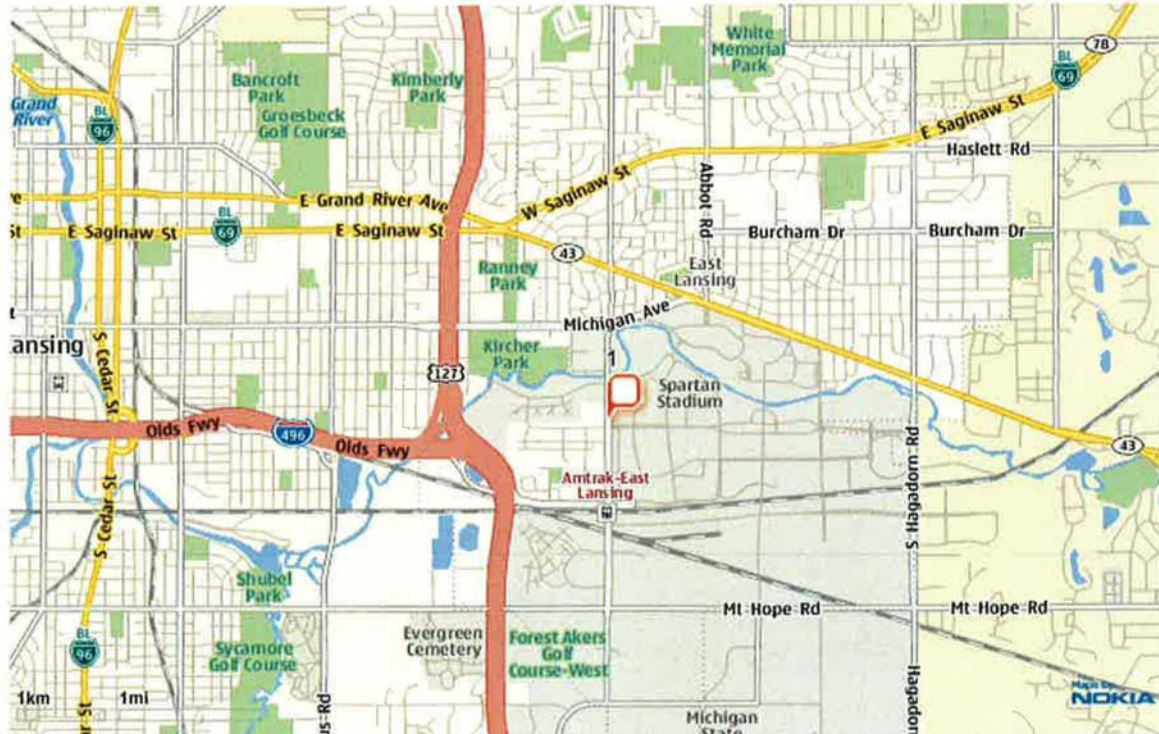
AIPG Section Meeting December 5, 2013

Kellogg Center, East Lansing

YAHOO! MAPS

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Kellogg Ctr, East Lansing, MI 48824



When using any driving directions or map, its a good idea to double check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning

From the East - I-96 West, to US-127 (exit 106) North (3.1 miles) to Trowbridge Road exit East (.5 miles) to Harrison Avenue; turn left North approximately 1 mile on the right (four traffic lights up).

From the Southwest - I-94 East to I-69 North, to I-496 East; East (5 miles) to Trowbridge Road (exit 9) East (.5 miles) to Harrison Avenue; turn left North approximately 1 mile on the right (four traffic lights up).

From the West - East on I-96 to I-496 (exit 95) East (9.7 miles) to Trowbridge Road (exit 9) East (.5 miles) to Harrison Avenue; turn left North approximately 1 mile on the right (four traffic lights up).

From the North - South on US-27 to US-127 South (8.5 miles) to Trowbridge Road exit East (.5 miles) to Harrison Avenue; turn left North approximately 1 mile on the right (four traffic lights up).