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Laboratory Soils Testing

Environmental Site Assessments and Remediation

www.earthengineering.com

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QUALITY * COMMITMENT PERFORMANCE



UNDERSTANDING AND MANAGING YOUR RISKS WITH SINKHOLES

John T Pusey, Jr., Earth Engineering, Inc.

The discovery of a sinkhole on a homeowner or developer's property often leads to panic by the owner. Deciding what to do, who to call, and maybe most importantly, trying to figure out how much it is going to cost to fix, can be challenging. In my twenty years of experience at Earth Engineering Incorporated, I have heard the panic in people's voices when they call the office to report the presence of the earth swallowing feature on their property. If the sinkhole is simply filled back in with soil or concrete without any other modifications, the probability for re-occurrence is almost a certainty.

True geologic sinkholes form in areas underlain by carbonate bedrock composed typically of Limestone or Dolomite. In southeastern Pennsylvania, a relatively thin swath of carbonate bedrock extends from Lancaster County through central Chester County, and terminates in southern Montgomery County. Areas underlain by carbonate bedrock generally form a valley in between more weather-resistant rock types, such as the Great Valley situated along the Route 202 corridor between Malvern and King of Prussia, PA. Other known areas of sinkhole development extend from the greater Lehigh Valley through Reading and into Central Pennsylvania.

Sinkholes are commonly discovered after grading activities have occurred on new construction projects or where a concentration of stormwater flow has been occurring over time. One of the most common observable indications that a sinkhole is about to form is the presence of circular depression on the ground surface. Once the surface depression is identified, the area should be cordoned off before the remaining ground falls into the open void.

(Continued on page 58)



UNDERSTANDING AND MANAGING YOUR RISKS WITH SINKHOLES

(Continued from page 56)

The two most commonly utilized methods for repair of sinkholes are 1.) An excavation and replacement operation and 2.) a subsurface grouting operation. Overall, the excavation and replacement technique involves excavating the soft/loose overburden soil associated with the sinkhole activity, and replacing the area with a combination of quarried aggregates, geotextile fabric and compacted fine grained soils. The grouting method typically involves installing hollow steel casing around the sinkhole and pumping a fluid grout mix into the subsurface to fill in the voids at the soil/bedrock interface as well as densifying the overburden soils surrounding the sinkhole. Generally speaking, the excavation and replacement method is cheaper than a subsurface grouting operation but might not be the best alternative in many situations. A qualified geotechnical engineer or geologist should be on site to direct and document the chosen stabilization operation.

The method for repair of the sinkhole feature should be based on the risks associated with the given location in addition to its practicality. If a sinkhole forms below an existing or proposed building, the subsurface grouting method would most likely be the preferred option since this approach is expected to further reduce the potential for sinkhole re-occurrence compared to the excavation method. Conversely, stabilization of a sinkhole utilizing the excavation and replacement method below a parking lot or road may be just as effective as grouting for the long-term stability of the area.

By involving a geotechnical engineering firm to evaluate the sinkhole activity, cost based options for repair can be presented to the owner to reduce the risk for future sinkhole activity. The most challenging aspect of a property owner is deciding how much money to spend to reduce that risk. It is important to realize however, that risk for sinkhole can never be completely eliminated. Any property underlain by carbonate bedrock will always maintain some inherent risk for sinkhole development. If you have concerns for sinkhole activity on your property, please contact Earth Engineering Incorporated at 610.277.0880 and visit: www.earthengineering.com. Our professionals have extensive experience in providing sinkhole consulting services in the mid-Atlantic region

REGIONAL CHAMBER ROUNDUP

Please see pages 31-40 for the TriCounty Area Chamber of Commerce news and information section in this issue.

SPRING-FORD CHAMBER OF COMMERCE

Building a Better Community Through Business

• 313 Ridge Pike, 2nd Floor, Limerick, PA 19468 • 610.489.7200



The Spring-Ford Chamber of Commerce is a community-focused business advocate. We strive to help our member businesses grow while improving the community in which we all live and work.

The Chamber consists of local businesses whose main objective is to run a successful business. We are a great resource for members, not only because we offer the opportunity to network and brainstorm

with fellow members, but also to have exposure to the local community, your customer, through our continued involvement in community events and charitable endeavors. Visit www.springfordchamber.com for Chamber Events, Press Releases, Online Newsletters and more!



Chamber Notes

- Thank you to Representative Marcy Toepel and Senator Katie Muth for being a part of our 2019 March Legislative Lunch. (Photo above)
- Thank you to Cindy Harrington; The Center for Nutritional Healing, Lisa Hollenbach and Heather Bloodworth; Spring Valley YMCA for presenting at our Wellness in the Workplace workshop in February.
- The Spring-Ford Chamber has moved to a virtual office in an effort to be the most strategic chamber we can be. If you would like to contact Carla please call the chamber phone number and leave a message, you will receive a prompt reply.
- If you are interested in hosting a mixer or workshop in 2019 please contact the chamber at 610-489-7200 or email at info@springford-chamber.com
- Welcome our newest members **Swedeworks Automotive**

UPCOMING EVENTS

RSVP for all events online at www.springfordchamber.com

Tuesday, April 2 – Network Before Work

TriCounty Federal Credit Union

1550 Medical Dr, Pottstown 8:00 a.m. – 9:30a.m. Free for Members \$10 for Non-Members

Thursday, April 11 – Annual Fashion Show

*Benefitting Operation Backpack

Sunnybrook Ballroom

50 Sunnybrook Rd, Pottstown, PA 19464 11:00 a.m. to 1:30 p.m. \$30 Open to the Public Basket Raffle and 50/50

Thursday, May 2 – Network Before Work

Chick-Fil-A Royersford

70 Buckwalter Rd, Royersford 8:00 a.m. – 9:30 a.m. Free for Members \$10 for Non-Members

Thursday, May 16 – Chamber Mixer

Ambler Savings Bank, Limerick

438 W Ridge Pike, Royersford 5:00 p.m. – 7:00 p.m. Free for Members \$10 for Non-Members

SAVE THE DATE

Limerick Community Day Saturday, August 24th

4:00pm - 7:00pm Limerick Community Park

Spring-Ford Chamber Announces Annual Lunch – Thursday, May 9, 2019

On Thursday, May 9th the Chamber will be hosting our Chamber's Annual Lunch. Members will be honored for their Community Involvement, their volunteerism and as our Chamber Member of the year. Nominations for these awards are now be accepted on the chamber website.

This year in an effort to give the best return on your investment. The Chamber will welcome Disney Institute to address our members as our keynote speaker with a topyic of Disney's Approach to Customer Service.

Walt Disney parks and resorts is a recognized leader in delivering world-class experiences. Want to learn how they do it and uphold a culture of excellence? Join us and learn how they use time-tested business methods on Disney's Approach to Quality Service. For over 30 years, Disney Institute has helped organizations in a variety of industries apply these insights to enhance their own customer experiences. This is your opportunity to learn from Disney Institute and the business

insights behind Disney's success. You'll leave inspired and ready to unlock the magic inside your organization.

Disney Institute uses business insights and time-tested examples from Disney parks and resorts worldwide to provide relevant illustrations and engaging stories that help you deliver the type of results your organization is capable of delivering. This is your opportunity to learn from a true Disney "insider." Disney Institute facilitators have been immersed in the Disney culture firsthand and, as Disney leaders, draw upon personal leadership experiences from a variety of roles performed within The Walt Disney Company. Disney Institute facilitators routinely works with an array of clients across the private, public and social sectors and will excite and inspire you to take what you learn and apply it back at your own organization.

Sponsorships and Tickets are now available for purchase on the Spring-Ford Chamber Website.



Thursday, May 9 – 2019 Annual Lunch

Featuring Disney's Approach to Customer Serviced

Disney Institute
Copperfield Inn at Lakeside
594 W Ridge Pike, Limerick
11:00 a.m. to 2:00 p.m.
\$45.00 for Members
\$55.00 Non-Members

