SUMMER 2016 QUARTERLY REVIEW

BUILDING PLAN REVIEW | FIRE SAFETY PLAN REVIEW | CONSULTING SERVICES

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OUR GOAL IS TO COMPLETE ALL PLAN REVIEWS WITHIN 10 BUSINESS DAYS

PRESIDENT'S MESSAGE

An FSCI update from Keith Frangiamore, FSCI President

Thank you to all FSCI's loyal clients and customers for your patience and understanding!

When we started the year, we planned for growth. Our first quarter was the second busiest in the 33 year history of FSCI, and the busy pace has continued through the summer. Thank you to our clients and customers for relying on FSCI to perform your key plan reviews, inspections, and consulting projects.

I am very proud of all our staff members who worked tirelessly through this very busy time. Although stretched to the maximum, they never compromised on quality of service. FSCI performed a record number of field inspections and consulting projects in both the Illinois corporate office area and the Michigan Regional Office area. While several of our plan reviews took longer than planned, the staff worked over-time to reduce the plan review and field services schedule back to normal.

FSCI is making every effort to make sure we can continue to meet our commitments to our clients and customers:

- FSCI has hired one plan reviewer and began interviewing for a second plan reviewer, and added one field service inspector in the Illinois office.
- FSCI has promoted Angie Dayfield to a full-time plan reviewer and field service inspector in the Michigan office.
- As new staff complete their training, existing senior staff members will expand their mentoring, leadership and other skills to all divisions of the business, including consulting.

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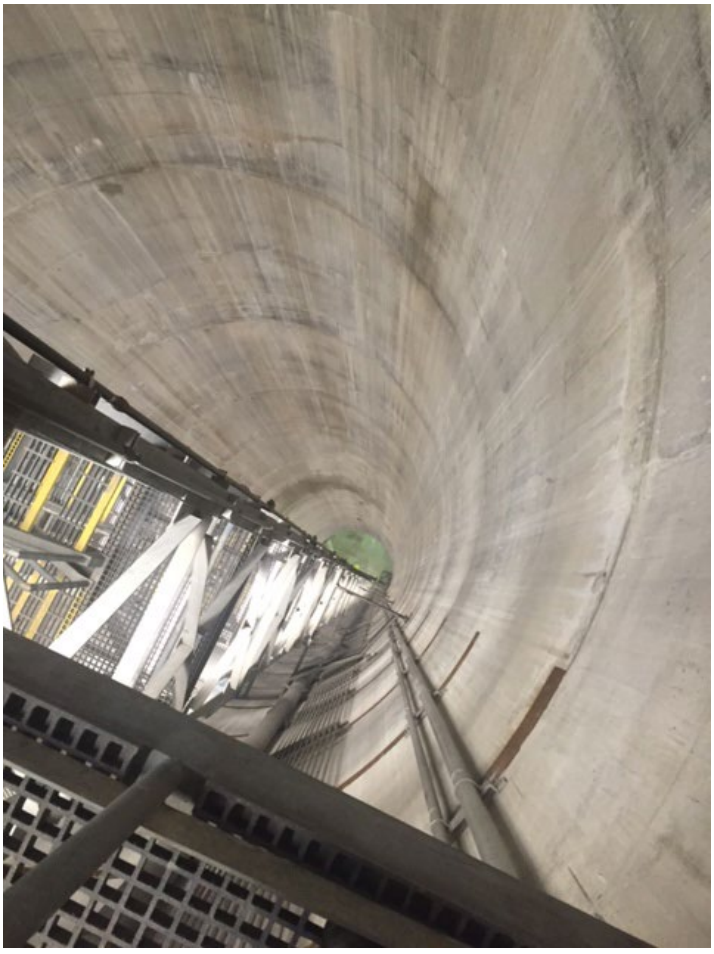
PROTECTION FOR DEEP TUNNEL PROJECTS

By Harrison Bradstreet, Fire Protection Consultant

Fire Safety Consultants, Inc. primarily reviews and inspects fire alarm systems in buildings and structures for hundreds of municipalities. Recently, FSCI was requested to assist with a particularly interesting project in a deep tunnel storm water detention system. The inspection was not the typical basement 10 or 20 feet below grade but rather it was more than 300 feet below grade.

Based on the specific edition of the International Building Code adopted by the local municipality, a manual fire alarm system was required to activate the occupant notification for the underground building. The surface building was connected via an open shaft. The buildings are considered a U, or Utility group, given that they are nothing more than a mechanical/pump building with no indicated requirements in Chapter 907.

The tunnel project fire alarm system was intended to replace an existing system. The existing inoperative system provided complete automatic detection, manual fire alarm boxes, and occupant notification. When the new fire alarm system was designed it was intended to be equivalent to the existing system thus providing complete automatic detection and manual fire alarm boxes to activate the occupant notification appliances.



Addressing the underground environmental conditions were the most difficult part of the fire alarm review. The moisture level was so high that average devices and appliances would be adversely affected. So, weatherproof appliances were used in conjunction with metal sheets hung above the appliances in an attempt to block falling water from landing directly on the appliances. As these sheets were not a hindrance in any way to the appliance's performance, they were not attached directly to the appliances they were allowed to remain. The manual fire alarm boxes were weatherproof and appeared to be maintaining their seals.

The interesting portion of the review and inspection was the automatic detection in the area. With a metal corrugated ceiling several feet below where the rock was mined, combined with the ambient temperature and moisture, a fog would appear at certain times of the day which would hang at the ceiling level, which proved to be the greatest design challenge.

The greatest design challenge among all stakeholders was addressing the high moisture environment that caused fog within the tunnel structure. FSCI reviewed three options presented by the designer:

- Explosion proof smoke detectors designed to withstand the moisture that collected on the ceiling

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EMPLOYEE SPOTLIGHT

Who is Abby Lawyer?

Abby Lawyer will celebrate her second year anniversary with Fire Safety Consultants in September. Abby works as an administrative assistant in the Illinois corporate office. Prior to coming to FSCI, Abby worked for Idealease, Inc. providing support for more than 400 affiliates in the United States, Canada and Mexico. Abby has more than 8 years of administrative experience.

When contacting the Illinois office, you've probably spoken with Abby to schedule a fire protection inspection, including ITM annual inspections. In addition, Abby logs in reviews, channels the plans to the appropriate divisions, creates invoices, and contacts contractors for payment. She holds a Bachelor's Degree in Communications and English from Indiana University.

Abby is a single mom who is devoted to raising an amazing son which includes spending time with him at the pool, carnivals, and other seasonal events. Abby is a big White Sox fan and enjoys music and live concerts. When able, Abby enjoys traveling with her son to Arizona (where she hopes to live one day) to visit with her parents.

EMPLOYEE SPOTLIGHT

Who is Paul Sullivan?

Paul Sullivan has been with Fire Safety Consultants for more than 4 ½ years. Paul works as a fire protection consultant in the Illinois corporate office. Prior to coming to FSCI, Paul worked for Fox Valley Fire and Safety as a fire alarm technician and for Advantage Ambulance as a paramedic.

Paul's day to day duties at FSCI are varied. He routinely performs plan reviews of fire sprinkler, fire alarm and wet chemical systems. Paul conducts a majority of FSCI's waterflow tests and also conducts necessary hydrostatic tests as well as final sprinkler and fire alarm final acceptance testing.

Paul holds an Associate's Degree in Fire Science and Safety from Elgin Community College and has a NICET II certification in water-based systems layout.

In his spare time, Paul enjoys watching sports, playing softball, camping, hiking, reading and spending time with his son and his girlfriend Sara. He recently finished coaching his six year old son in T-ball.

Paul has spent nearly a decade working in fire and EMS related professions. He strives to continue learning in the fire protection industry to further his career and to provide quality service to FSCI's clients and contractors.

SEMINAR INFORMATION

Stay up to date on the latest Fire, Building and Life Safety code changes and equipment by attending one of our seminars. FSCI is teaching seminars throughout the United States, led by our experienced staff of Matt Davis, Keith Frangiamore, Brent Gooden, George Michehl & Warren Olsen.

Whether you are a Contractor, Architect, Technician, Engineer or an Authority Having Jurisdiction, each seminar is full of practical insights and first-hand experiences to help you comply with applicable codes and standards. FSCI can also provide custom seminars at your location. Be sure to check out our schedule of upcoming seminars on our website. Contact us to learn more by emailing info@firesafetyfsci.com or by calling our office at (847) 697-1300.

Click Here to See the Current Seminar Schedule

LITTLE KNOWN FACTS

NFPA 25 - 2014 edition

NFPA 25 (2014), section 5.3.4. provides the testing requirements for antifreeze systems. With few exceptions, antifreeze systems installed after September 30, 2012 are required to contain listed antifreeze solutions. As of the date of this publication there are no listed antifreeze solutions available. It is important that antifreeze systems installed before September 30, 2012, be tested to verify the type of solution and concentration comply with all requirements. The standard requires that antifreeze solutions be tested annually and before the freezing temperatures occur. Before testing, records such as prior inspection reports, maintenance reports, and chemical tests shall be used to determine the acceptability of the solution. If these records do not reliably conclude that the solution is acceptable, test samples shall be taken at the top and bottom of each system. Additional samples may need to be taken at the connection to the water supply and the most remote point of the system, if these points are not near the top or bottom of the system. Testing shall be conducted using a hydrometer with a suitable scale, or a refractometer, having a scale calibrated for the antifreeze solution. If any samples result in concentrations above or below what is allowed by NFPA 25, the system shall be drained and refilled with an acceptable, manufactured pre-mixed solution.

Brent Gooden, Fire Protection Consultant

NFPA 13 – 2016 Edition

Sprinklers can be used to protect glass in fire rated wall assemblies. Section 8.15.26 of the 2016 edition of NFPA 13 lists seven requirements for sprinkler use with glass in certain building scenarios. The requirements include:

1. Sprinklers being used shall be listed as a “specific application window sprinkler” unless a standard spray sprinkler is allowed by the building code. Note: The building code requirements vary by code edition. Check your locally adopted code to verify this requirement.
2. Only a wet pipe sprinkler system shall be used. Dry and pre-action systems cannot supply sprinklers used for the protection of rated assemblies.
3. The glazing shall be of a specific listed type for rated assemblies and must be fixed in place.
4. When both sides of the assembly are required to be protected by sprinklers, both sides of the glazing shall be protected by window sprinklers.
5. The protected assembly shall not be load-bearing or in a load-bearing wall.
6. The glazing assembly shall not have any horizontal members that would obstruct the flow of water from the top of the glass to the bottom.
7. The water supply shall be of a duration equal to the required rating of the wall, meaning that if a two-hour wall is required the water supply shall account for a minimum flow of two hours.

Matt Davis, Senior Fire Protection Consultant

NFPA 13D – 2013 Edition

NFPA 13D does not require sprinklers in unoccupied spaces. This includes, but is not limited to, garages, attics, or crawl spaces. Sprinklers were always allowed to be installed in these areas if desired, but no thermal sensitivity was required. Section 7.5.3 now states, “Listed residential, or quick-response standard spray dry pendents or dry sidewall sprinklers, shall be permitted to be extended into unheated areas not intended for living purposes.” This section designates that a sprinkler provided in an unheated area must be either residential or quick response thermal sensitivity. It provides clarity and conformity to areas that were not previously discussed in the code. This allowance gives added protection to these areas which, although not typically occupied spaces, will be beneficial to the home owner.

Paul Sullivan, Fire Protection Consultants

WE’RE LISTENING!

Tell us what you are interested in learning about!

Email us at: info@firesafetyfsci.com