

## **Special Interest Articles:**

- Climate Change
- Obstacle Courses
- Engineered Wood Products
- When Disaster Strikes

Welcome to Spring 2016 and the sixth edition of the Conduite Sauf Report

## **Climate Change**

From our humble perspective, it's been a terrific winter. December was mild. Good for late start earthworks and foundation projects and providing extra time to close-in and make ready for the cold to come. We've had a couple of cold snaps since but it hasn't been particularly cold and we didn't get much snow. Some might say it's been too mild especially if you are a ski hill operator or work to maintain the slopes and lifts but for the rest of us,

driving was safer, heating bills were lower and there was less snow to shovel.. I read on the National Oceanic and Atmospheric Administration (NOAA) web site that it's been a strong El Nino year. How the surface temperature of the Pacific Ocean translates into a mild winter for this part of the world, I don't know. Is this a sign of Climate Change? I have no idea. Someone told me, 'weather is what you see when you look out the window. Climate Change

is what will happen over the course of the next century'. I say, let's hope for the best and plan for the worst. And that's exactly what we do when we design your roof, walls, beams, columns and foundations. You can be confident because we make sure our designs meet or exceed the vast experience detailed in the Ontario Building Code. We make sure your building's future is ahead of it and not behind it.

## **Obstacle Courses**

I believe in the reciprocity norm. My mother used to say, "if you are nice to people, they will be nice to you in return". I'm grateful that so many people were nice to us this past year.

We started the season with a multi-unit residential complex. The project was a referral from an engineer colleague and involved assessment of foundation cracks. The repairs were necessary for waterproofing and structural integrity. We specified epoxy injection for most of the cracks and bolting for the larger

cracks with lateral displacement.

In July we were approached by an engineering firm in Kitchener-Waterloo to assist in the engineering of an outdoor obstacle mud run designed by women, for women, north of Barrie. The drawings depicted temporary wood framed structures with nets and suspended rubber tires similar to what you might find at an army boot camp or television reality based survival show. We hear they have plans for 2016

and we hope to be part of their team.

The most unusual project was the screeching steel beams located in the garage of a large and beautiful house located south of Barrie near Lake Simcoe. The corner of the second story over the garage was supported by two perpendicular steel beams, one contacting the other at a point. Differential movement and friction were likely the source of the noise. We are monitoring this on an ongoing basis.

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*“our engineer guided us through the whole process and made sure our project met the requirements of the building code ”*

## Engineered Wood Products

Engineered wood products (EWP) are composite materials made from two or more constituent materials with different engineering properties such that when combined, produce a new material with engineering properties different from the original, individual components. The components are not blended. They remain separate.

EWP covers a broad range of man made wood products such as PSL, LVL and OSB, with known engineering properties. Generally, the components are bound together using adhesives.

Manufacturing is to precise specifications. Quality is controlled with laboratory testing and certification to national and international standards as specified by ASTM, CSA and ISO.

EWP is used in residential, commercial and industrial applications as structural components such as beams and columns replacing traditional building materials such as steel and dimensional lumber.

Feel free to contact our office to discuss the advantages of EWP or have us design a span.

## When Disaster Strikes



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Conduite Sauf Inc. did its first post fire structural assessment this past year and it was fascinating. The fire started in the attached garage and spread up the wall cavity into the attic of the house. It spread down the common wall which was load bearing, leading to a partial collapse. Once in the attic it destroyed the rafters and collar ties and even a soffit beam

supporting the front porch roof over-hang.

Fortunately, no one was injured but it destroyed the garage and about one third of the main roof before it was extinguished. Repairs to the house included reconstructing the garage, replacing about a third of the roof and replacement of most of the finishes due exposure to the elements.

Conduite Sauf Inc. did its first post tornado assessment in June of 2014 after the tornado struck in Angus, Ontario. I’ve never seen anything quite like it. Whole roofs were torn off buildings. Fortunately our client faired better than most. Conduite Sauf deemed their house safe to occupy and they were able to move forward with repairs.



*Fire destroyed the roof and garage*

We are looking forward to the 2016 construction season and urge you to plan ahead. Call or drop by anytime or make an appointment.

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