



# THE SHIELD

JULY 2008



Our office was a school house in the early 1900's!

## NEW PROJECTS:

### **Calgary Board of Education (CBE)**

903- 13<sup>th</sup> Avenue SW  
ELLIS DON CONSTRUCTION MANAGEMENT



Calgary Board of Education

### **Keynote- Site Services**

11<sup>th</sup> Ave & Macleod Tr.  
PCL Construction Management Inc.

KEYNOTE

## RENOVATIONS!

Our renovations are really coming along! The garage is almost completed, and the changes to the remainder of the office have already begun.



# JULY BIRTHDAYS:



- Jeff Rogers- July 1
- Daniel Poirier- July 5
- Dave Maggrah- July 15
  - Brian Smart- July 17
  - Ed Olson- July 22
- Jacob Andrews- July 26
  - Tracy Cross- July 27
- Peter Zolotas- July 29

## Message from the Vice President

Summer is upon us and we are in full swing. As summer draws to a close you will notice a sense of urgency to get our projects completed. Now our customers are worried about winter! It seems we are always one season short! I would like to thank everyone for their continued effort and excellence.

I hope everyone had fun at the Roadhouse during Stampede, I know my liver hasn't forgiven me yet!!! To all our summer students, good luck in school and we hope to see you next summer.

As most of you know, Andrew Harich, is leaving us to become a teacher. The teaching profession is a test of patience, and we know Andrew's patience is just what the teaching world and our children need. Good luck to you my friend, I know the children that pass through your classes will benefit from your wisdom.

**RON CLAXTON**



## New Employees

- Kamaldeep Sandhu- Driver
- Sandeep Saini- Driver
- Darren Anderson- Driver
- Andrew Cox- Driver
- Daniel Poirier- Driver
- Chris Goetken- Driver
- Barry Porter- Operator
- Nicole Walker- Labourer
- Crystal Downing- Labourer
- Stephanie Hall- Labourer
- Jason Castator- Labourer
- Mike Gryckiewicz- Shop
- Danny Larson- Shop
- Joey Gryckiewicz- Shop

## RECENTLY BID ON:

- \* Airport Parkade Expansion
- \* Corporate Centre on Mcknight Blvd.
- \* EMS Services Building in Saddleridge
- \* New Condo Building by the Elbow River
- \* Large Warehouse Expansion
- \* Okotoks Strip Mall

## Housekeeping:

- Remember to contact the office or the rental company directly when your rental equipment is no longer needed.
- Unless BlueTooth is being used, cell phone use will not be tolerated when driving or operating equipment.
- Remember to gather signs from flaggers at the end of each day (if the site foreman has left, an operator can keep them until the next day of work)



## PART 32 EXCAVATING & TUNNELLING

### Methods of Protection

**450(1)** Before a worker begins working in an excavation that is more than 1.5 metres deep and closer to the wall or bank than the depth of the excavation, an employer must ensure that the worker is protected from cave ins or sliding or rolling materials by:

- (a) cutting back the walls of the excavation to reduce the height of the remaining vertical walls, if any, to no more than 1.5 metres for “hard and compact soil” and “likely to crack or crumble soil,”
- (b) installing temporary protective structures, or
- (c) using a combination of the methods in clauses (a) and (b)

**(2)** Subsection (1) does not apply if a trench is constructed in solid rock throughout the entire trench.

### Cutting Back Walls

**451** if the walls of an excavation are cut back, an employer must ensure that:

- (a) if the soil is classified as “hard and compact soil” the walls are sloped to within 1.5 metres of the bottom of the excavation at an angle of not less than 30 degrees measured from the vertical
- (b) if the soil is classified as “likely to crack or crumble soil” the walls sloped to within 1.5 metres of the bottom of the excavation at an angle of not less than 45 degrees measured from the vertical, and
- (c) if the soil is classified as “soft, sandy or loose soil” the walls are sloped from the bottom of the excavation at an angle of not less than 45 degrees measured from the vertical.

Although the economy seems to be getting back to a more normal point, in comparison to last year, we are still receiving invitations to bid on several projects with a wider range of scopes than we usually are involved in. From January to July 2008, we had sent out more quotes than we did through the entire year in 2006 and 2007. We expect that we will continue to be this busy for the remainder of 2008.

We are also very excited with the acquisition and implementation of a new estimating software package that will facilitate the tender process and allow us to bid on more projects in a competitive way. This software will improve the flow of information between the estimating department and the job foreman, when reviewing the scope of work for a job at tender and/or execution stage and will provide invaluable tools to receive feedback from the field in the intent of improving the estimates.

On a sad note, one of our estimators, Andrew Harich, will be leaving the company in the middle of August to pursue a teaching career. We wish him the utmost of success in whatever his path may be from now on. Jiming Yu, who started with us last month, will be taking over Andrew’s responsibilities in the office.

We expect to continue on being as busy as we have been, and continue to play a large role in the growth of our City.

**DIEGO PENATE**  
ESTIMATING DEPARTMENT



## FACTORS AFFECTING

## HOW **HOT** we feel

**1. Air Temperature-** measured with a normal thermometer, this is the temperature of the air around us. Although it is the easiest factor to measure, it is the least important under hot conditions. If air temperature is the only measurement taken, it is difficult to predict how workers will be affected by the heat.

**2. Humidity-** this is the amount of water in the air. Under hot conditions, people feel even hotter when the air is more humid than when it is drier. Although a person will sweat, the sweat will not evaporate as quickly if the air is filled with moisture. Less evaporation means less cooling.

**3. Radiant Heat-** this is heat given off by anything that is hot, such as the sun, molten metal, hot pipes, or a heater. It eventually heats the air, but heats people more quickly. Radiant heat affects any person working in sunlight or near a work process that radiates heat. By simply moving from sun to shade, a person can feel the difference that radiant heat makes.

**4. Air Speed-** also known as wind speed, moving air that is cooler than the skin, cools a person.

**5. Physical Activity-** body temperature increases with physical activity. Under warm or hot conditions, physical activity can increase the effect of heat on a person.

**6. Clothing-** clothing can shield a worker from radiant heat, prevent sweat from evaporating, or help to transfer heat. Protective clothing that is not appropriate under hot conditions can be a problem. This includes clothing that does not allow air or moisture to pass through it (air-or-water-vapor-impermeable clothing), or multiple layers of clothing.

Other factors that may affect a person's ability to work in the heat include their age, health status, level of fitness, body weight, level of hydration, and their use of prescription and non-prescription drugs.

## HEAT STRESS

Heat stress happens when hot working conditions have the potential to harm a worker. This harm is of

### TWO TYPES:

- Non life threatening- includes conditions such as dehydration and heat exhaustion.
- Life threatening- heat stroke, a condition during which the body is unable to regulate its temperature.

All workers who work or supervise work in hot conditions should be trained to recognize the symptoms of these problems, particularly the more serious ones.

Heat stress is unlikely for a person wearing the appropriate clothing, performing light to moderate physical activity, and with the sun being the only heat source. Heat stress is possible if, in addition to the weather, the work involves one or more of the following factors:

- **high radiant heat-** e.g. from a dryer, oven, furnace, or molten metal
- **high humidity-** e.g. from a kitchen or laundry
- **intense physical activity**
- **clothing-** e.g. including protective clothing, that reduces the rate at which sweat evaporates and cools a person.

### PROBLEMS AND SYMPTOMS RESULTING FROM HEAT EXPOSURE

**Heat Rash-** tingling and burning of the skin, red and itchy rash. Sweat glands plugged due to prolonged exposure of skin to heat and sweat.

**Heat Cramps-** painful spasms of muscles that do the hardest work i.e. in the arms, legs and abdomen

**Fainting-** increased flow of blood to the skin to get rid of heat means less blood to the brain

**Heat Exhaustion-** tired, weak, dizzy, clammy skin, slow weak pulse. Pale or flushed skin color. Higher than normal heart rate (160-180 beats/min)

**Heat Stroke-** person usually stops sweating, body core temp. is high (40-43 degrees Celsius), skin is hot and dry. Person experiences headache, dizziness, confusion, may lose consciousness or have fits. Fatal if treatment is delayed

All information retrieved from WORK SAFE ALBERTA:  
[http://employment.alberta.ca/documents/WHS/WHS-PUB\\_mg022.pdf](http://employment.alberta.ca/documents/WHS/WHS-PUB_mg022.pdf)  
on July 15, 2008



## SAFETY BULLETIN

Recently, we performed formal safety inspections on all of our jobsites and over all things looked really good. With the exception of adherence to our eyewear policy. There was at least one eyewear infraction at each of the sites we visited. As a result, we would like to remind all employees that CSA certified safety glasses are mandatory in all work areas with the exception of lunch rooms, offices and closed cabs of equipment. "Oakley's", although virtually indestructible, aren't CSA certified and can't be a substitute for proper safety glasses. "Raybans", although they look really cool, aren't CSA certified and can't be a substitute for proper safety glasses. If you don't have proper safety glasses, let your foremen know and they'll get you set up with what you need.

In addition to our own company inspections, our OHS rep has been spending some time with us in order to better understand our work. When I spoke with him last, he was very pleased with the effort all of you folks have been putting toward safety. Well done.

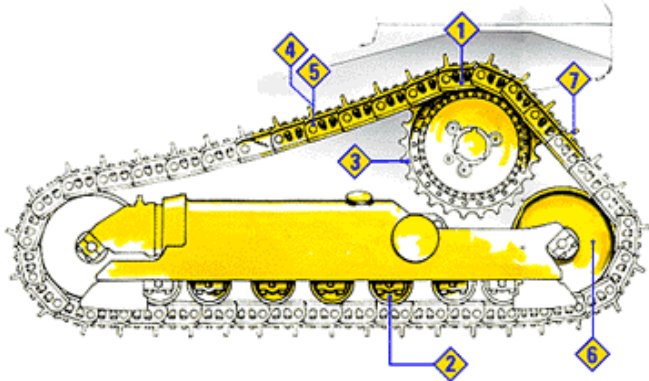
**Richard Evans**  
Safety Officer

One item that often falls through the cracks is the regular inspection of fire extinguishers. Whether you're running a machine, or a truck, your fire extinguisher should be a part of your regular checks. Here's a list of things you should be checking on your extinguisher on at least a monthly basis:

- 1. Extinguisher**
  - a. proper placement
  - b. clean
  - c. physical damage
  - d. corrosion/rust
  - e. proper pressure
  - f. proper amount of agent (weight)
- 2. Nameplate**
  - a. legible (type of extinguisher)  
(A), (B), (C)
- 3. Safety Seals/Indicators**
  - a. intact
  - b. proper placement
- 4. Hose**
  - a. cracked, cut, or worn
  - b. coupling intact
- 5. Nozzle**
  - a. clear of all obstructions
- 6. Mounting Bracket**
  - a. firmly attached
  - b. easy to release
- 7. Inspection Record**
  - a. dated and initialized
  - b. current and maintained

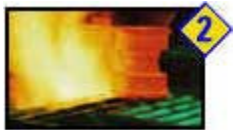


# Undercarriage Terminology



## **Links**

Special heat treat processes give Cat links consistent surface hardness, superior hardening depth, and strong core hardness. This results in excellent wear resistance, strength, and durability for unmatched sealability and long life.



## **Rollers**

Cat rollers are through hardened for long wear life, unmatched structural support, and resistance to deformation. Cat's Duo-Cone seals help ensure lifetime lubrication to extend life, permit roller reshelling, and lower your costs.



## **Segments**

High surface hardness and excellent hardened depth and core hardness mean Cat segments provide long wear life, resistance to bending and breakage, and maximum hardware retention. The bolt-on design reduces replacement time.



## **Pins & Bushings**

Cat pins and bushings are dimensionally matched to the links and manufactured to provide excellent track joint integrity. This design helps ensure maximum sealability. High surface and core hardness translate into increased strength and wear resistance.



## **Seals**

To keep abrasives out and oil in, the Caterpillar rigid seal design combines high wear resistance and load protection. The result is a "wet" joint at turn time, which extends bushing life and lowers your cost.



## **Idlers**

Special heat treat processes help ensure proper hardness levels, providing wear resistance. Duo-Cone seals help ensure lifetime lubrication, eliminating idler maintenance and lowering operating costs.



## **Track Shoes**

Caterpillar track shoes are furnace hardened and tempered for strength and resistance to bending and breakage. We offer a variety of track shoe options to meet the requirements of your work environment.

Information retrieved from [www.finning.ca](http://www.finning.ca) on July 30, 2008

