The Digital Pipe Digest

CCPA ACTB

Canadian Concrete Pipe Association
Association canadienne des fabricants de tuyaux de béton

Editor: A. Grant Lee, MCIP, RPP, FCInst.M July 2004

Alberta Branch of CCPA/ACTB Established

Lafarge Canada Inc, and Inland have partnered with the Canadian Concrete Pipe Association and Ontario Concrete Pipe Association to form The Alberta Chapter of the Canadian Concrete Pipe Association (ACCPA). Using the administrative resources of the CCPA/ACTB and OCPA, the producers were able to capitalize on organizational structure of the two pipe associations to enhance their marketing activities in Alberta with the appointment of Jim Poole, P.Eng. to the position of Marketing Manager, effective June 7, 2004.

Photo courtesy of Randy Giberson, Lafarge

Jim's many years of experience in varied engineering positions will be an asset to Alberta producers' ongoing efforts to promote the use of precast concrete drainage products. Jim will report to the ACCPA chapter committee comprised of Alberta-based concrete pipe producers.

This is a significant move by the Alberta concrete pipe producers to enhance the promotion and use of concrete pipe not only in Alberta but also across the Nation. CCPA/ACTB members will be informed of successes and any innovative marketing initiatives that would work in other jurisdictions.

Contact Dennis Lattimore for information at 780.468.5910, or dennis.lattimore@lafarge-na.com.

Hamilton Kent hires Director of Sales & Marketing

HK Hamilton Kent

Hamilton Kent is pleased to announce the appointment of **Dan Driscoll** in the newly created position of ***Director - Sales & Marketing***. Dan will be responsible for all HK sales, marketing, and product engineering functions. Dan is an engineer that comes to HK with an extensive background in the management, sales, marketing, and engineering fields.

He started his career with an engineering firm specializing in tunneling, then in sales for a large United States plastic pipe company and most recently as V.P. and General Manager of Cretex Specialty Products, a manufacturer of chimney seals for manholes. Dan has moved from Wisconsin to Toronto with his family, and started in his position May 18. His addition to HK team will allow the company to improve even further its commitment to respond to all its customers' technical needs, while substantiating HK sales efforts with the level of marketing that the industries HK serves deserve.

Contact Dan at dandri@hamiltonkent.com, or 416.675.7822

CCPA/ACTB donates to Samaritan's Purse and United Way of Toronto

CCPA/ACTB has donated $200 to Samaritan's Purse located in Calgary on behalf of Miceli & Fréres. The donation was made on Miceli's behalf because of their sponsorship of two new producer members at our annual general meeting; Hyprescon, Stouffville, Ontario and Anchor Concrete Products Ltd., Kingston, Ontario.

One hundred dollars were donated to the United Way of Toronto on behalf of Hamilton Kent who sponsored S&B Technical Products as an associate member.

As an incentive to attract new members to the CCPA/ACTB, $100 will be donated to a charity of choice on behalf of a member once a new member is sponsored and joins the CCPA/ACTB.

Thank you to Miceli & Fréres, Hamilton Kent, Hyprescon, Anchor Concrete Products Ltd., and S&B Technical Products.

Start thinking about the joint 2005 AGM of the Canadian Concrete Pipe Association and Ontario Concrete Pipe Association

Mark February 18, 2005 on your calendar and begin to plan for a weekend piggy backed onto the annual general meeting in Niagara-on-the-Lake, Ontario. The venue is the Pillar and Post Inn, Spa and Convention Centre. For those who wish to remain and enjoy the amenities of the Region during February,

Niagara-on-the-Lake has a British theme throughout the village with stage shows and shops. There are two world-class casinos in nearby Niagara Falls, wineries, numerous tourist attractions including the "Falls," and historical battlegrounds of the War of 1812. You may also want to tour the Butterfly Conservatory and see concrete pipe used for ventilation. Although the Maid-of-the Mist won't be sailing, the view of an icy falls is remarkable. The United States border is about 15 to 30 minutes away, depending upon traffic and road conditions in February. Niagara-on-the-lake is about 1.5 hours from Pearson Airport, and about 45 minutes from Hamilton's Munro Airport on a good day! Toronto is a two-hour drive.

Details about the annual meeting will be published as they become available.

Concrete pipe and box applications and industry developments in print

Concrete pipe in North America has a long history of dependability and performance. The quality of product and performance standards have taken a giant leap forward over the past quarter century, making concrete a preferred material for many traditional sanitary and storm sewer applications. Precast reinforced concrete pipe

and boxes are finding niche markets where never before envisioned such as ventilation tubing (Earth Rangers Centre and Niagara Falls Butterfly Conservatory), buried utility galeries, groynes for current control and fish habitat in harbours, animal and pedestrian crossings of rail lines and highways, stormwater storage and retention chambers, small bridge structures, jacking and tunneling applications, and marine outfalls. New applications are limited only by the imagination of infrastructure designers.

The concrete pipe industry and its associations regularly publish applications of interest in many trade and professional publications throughout Canada and the United States. Many published articles become archived on various Web sites for access via the Internet. Following is a compendium and summary of some of the articles published over the past six months.

Concrete Pipe News

Calgary Uses Specially-Designed Precast Concrete Boxes for Stormwater Duct

Construction of the *Rundle Underground Storage Duct* in Calgary, Alberta consisted of a two-cell precast concrete box system (each box unit measuring 2400 mm wide x 3000 mm high), 550 meters long with cover up to 5.65 meters. The boxes were designed using BoxCar to support an American 5299 fifty-ton crane used to place the two parallel lines of box units.

Lesson Learned About Making the Right Choice in Culvert Material

Residents of the River's Edge Street Subdivision in Jupiter Florida banded together to replace a failing high density polyethylene (HDPE) pipe installation with a reinforced concrete box culvert. Residents had taken a contractor's advice to install HDPE pipe instead of concrete because of a lower initial cost of the culvert material.

A Study Into The Economic Costs of Culvert Failures

Actual replacement cost and the cost of roadway user delays due to road closures and detours are often not considered in the Life Cycle Cost Analysis (LCCA). Since the Nation's highway infrastructure is in need of billions of dollars to simply maintain current assets, it is very important to include these costs in any LCCA. Supported by a literature review and survey, a study team developed a new equation for LCCA that includes total cost of installation.

RCP drains provide immediate health, safety, and economic benefits, by Robin Woodbury, Premarc Corporation, Durand, MI.
(RCP system designed to intercept existing combined flows from a 60-inch and 72-inch line that previously discharged directly into a retention treatment facility without benefit of pre-treatment.)

RCP Receives Rave Reviews, by Ron Almquist, North Dakota Concrete Products, Bismark ND.
(A 1.17 - mile segment of South Broadway [a major traffic artery in Minot, North Dakota] was reconstructed using RCP for storm sewers.)

Choice of Major Culvert Material Based On Proven Performance, by Ryan Finley, Lafarge Canada, Inc., Calgary AB.
(Use of precast concrete box units under the TransCanada Highway was based on the proven performance of concrete and the expected service life of precast reinforced concrete box culverts.)

Precast concrete pipe and box sections installed close to home, by Dale Pruden, Hanson Pipe & Products, Grand Prarie, TX
(1,500 feet of Class III RCP of various diameters and approximately 1,000 feet of precast reinforced concrete box sections installed within view of ACPA headquarters.)

Institute of Religion campus built on rock-Solid Infrastructure by Phil Gale, Geneva Pipe Company, Orem, UT.
(Specification for a stormwater detention system [originally specified as a 72-inch diameter concrete pipe] was changed to four rows of box sections (13-feet x 6-feet x 8-feet) approximately 120 feet in length.)

Concrete Pipe Journal

Concrete pipe debuts under Highway 401 medians, by Mark Eaton, Con Cast Pipe, Guelph, ON. (New special provisions in the Ministry of Transportation contracts for major highways address the quality standards for the acceptance of drainage product specifications. Highway 401 between Regional Road 97 and Homer Watson Boulevard in the

Regional Municipality of Waterloo was the first contract that specified reinforced concrete pipe for median drainage.)

Environmental Science & Engineering Magazine

Recycled concrete pipe services fuel depot, by Hanson Pipe & Products Canada Inc., Cambridge, ON. (Four pieces of 450 mm RCP removed, cleaned and re-installed to accommodate an oil/sediment separator at fuel site.)

Research suggests conservative design of concrete box culverts by Paul Smeltzer, P.Eng., and Evan Bentz, Ph.D. (Article discusses University of Toronto research expected to have a significant impact on the cost of buried infrastructure and the use of resources for producing precast concrete boxes. The research will have a profound impact on design methodology and principles used in industry and academia for concrete structures).

Daily Commercial News and Construction Record, March 12, 2004 "Concrete" Special

A model for product quality programs, by Paul Smeltzer, OCPA.
(The Plant Prequalification Program for precast Concrete Drainage Products is discussed. The product quality testing program now includes not only circular pipe, but also elliptical pipe, maintenance holes, catch basins, valve chambers, box units, three-sided boxes and headwalls.)

Concrete pipe association wants to see more money invested in underground infrastructure, by Mark Sabine, OCPA.
(A point is made about the continued under funding of infrastructure by governments, and a call for proper consideration of design life of projects.)

Study provides information on concrete box culverts, by Paul Smeltzer, OCPA.
University of Toronto research on box culverts reported that develops an understanding of the shear resisting mechanisms for box structures. The crack development, reinforcement strains, and specimen deformation were compared to the results of extensive nonlinear finite element analysis using the computer modeling techniques developed at the University of Toronto. Discussion presented in the report called, "Shear Behaviour of Concrete Box Culverts: A Preliminary Study" by R.A. Yee, E.C. Bentz, and M.P. Collins, identifies areas of weakness and lack of clarity in the current codes governing box culvert design.

Sustainable Society

The Canadian cement industry is committed to developing creative solutions to sustainability issues and will continue to work actively with government and other stakeholders to achieve this goal. The Canadian Concrete Pipe Association is partnering with the Cement Association of Canada (CAC) in its initiative to promote concrete as the building material of choice within the context of sustainable development. The following information was downloaded from CAC's Web site. It places the issue of sustainability into context that industry leaders can easily understand.

A growing realization of the ecological limits of the biosphere, combined with the need to improve international competitiveness and overall efficiency, has caused a rethinking of the manner in which business operates. For some time now, the Canadian cement industry has been a participant in the evolution towards a more sustainable society.

Gray Matter for a Greener World

In contrast to building materials dependant on endangered natural resources, the ingredients of cement and concrete are

readily available around the world. Limestone, a key ingredient in cement, is in abundant supply while aggregates such as sand and gravel are also plentiful.

Moreover, the extraction of raw materials required to produce cement and concrete causes less damage to the environment than comparable building materials and ultimately, quarries can be reclaimed for recreational or commercial development.

Precast or cast-in-place concrete is made to measure and any remaining materials are used for new concrete mixtures so that nothing is left to waste. On a housing site, this translates into 21% less waste using concrete walls as opposed to wood products.

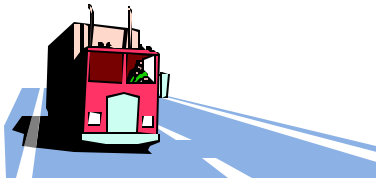
Concrete's strength and impermeability improves groundwater protection and is ideal for large-scale composting and livestock facilities.

In another environment-friendly application, cement stabilization and solidification (S/S) technology can neutralize harmful toxins and restore contaminated sites for new uses.

Finally, at the end of its long life, concrete itself can be recycled.

Conserving Fossil Fuel

Concrete highways can save up to 20% of fuel use by heavy trucks and "insulating concrete form" (ICF) houses can reduce energy requirements by up to 40% compared to conventional wood structures.



Significant investment in modern cement manufacturing technology has reduced energy requirements by more than 30% over the past few decades.

Finding new uses for waste materials has become a progressively common practice in the manufacturing of cement-based products.

Because of the sustained high temperatures and long residence time within the cement kiln, the residual value of alternative fuels such as tires, paint, cleaning solvents, used oil and chemically treated wood can be recovered as a supplement to conventional fuels.

Capturing the energy potential of what would otherwise become ecological problems conserves fossil fuels such as coal, oil and natural gas in addition to reducing CO_2 emissions.

Waste materials can also be substituted for some of the raw materials used in both cement and concrete. Apart from alleviating pressure on landfills, reclaiming industrial by-products such as fly ash, silica fume and blast furnace slag results in even less energy consumption. As well, this trend reduces the need to quarry raw materials and lowers greenhouse gas emissions.

To find out more about sustainable development, visit the CAC Web site at www.cement.ca.

Concrete Alliance

In November 2004, at the Cement Association of Canada Sustainable Development meeting held in Toronto, there was broad agreement to discuss the creation of a "Canadian Concrete Alliance".

The CAC remains very interested in moving this initiative forward and set a meeting for July 13 to explore the possibility with a group of stakeholders, including the Canadian Concrete Pipe Association.

The meeting explored the value and role of such an alliance and areas of common interest such as government relations, more recognition of the economic importance of the

cement/concrete industry, advocating more government spending on infrastructure, advocating the use of life cycle analysis in decision making and taking, advocating sustainable development and construction materials, the promotion of concrete, strategic partners, training and education, and research and development.

The CCPA is participating to ensure that the proposed Alliance be an effective forum of the concrete pipe industry, and to share with stakeholder's expectations for this alliance.

Contact Grant Lee for information at 905.877.5369, or info@ccpa.com

Computer tip – restarting without rebooting

There are times when every second counts. If you must restart your computer but don't want to "waste" time, or need a complete reboot, try this.

1. Go to Start, Shut Down and select Restart.

2. Press and hold the Shift key while you click OK.

Windows will restart in half the time it takes for a complete reboot.

Cold calling techniques

The Banff Academy for Business is presenting a one-day workshop on cold calling techniques in Toronto on September 30. This may be useful for industry personnel involved in establishing contact with municipal and government specifiers/regulators, and consulting engineers. The workshop will be held at the Holiday Inn Select near Pearson Airport. The cost is $249 per person and there is a discount for 3 or more people from the same company.

Contact the Banff Academy for Business at 1.877.334.4454 for information.

Power of Branding

Federated Press is holding a conference October 6 to 8 in Toronto on the subject of brands, called "Power of Branding." This is a hot marketing topic currently, and likely to remain hot for the foreseeable future. The concrete pipe industry is branding many of its products, and the industry itself has taken on a brand of technical excellence and knowledge provider over the past few years.

Promotional material for the conference says that the conference will take you beyond marketing basics and give you a behind-the-scenes look how heavy-hitters in the corporate world are building their brands.

The Canadian Institute of Marketing has endorsed the conference. For information, contact Grant Lee at 905.877.5369, or info@ccpa.com

Concrete Pipe Industry Billboard

2004

AWWA Conference & Exposition
Orlando, Florida
June 13 to 17

STORMCON
Palm Desert, California
July 26 to 29

ASCE Pipelines 2004 Conference
San Diego, CA
August 1 to 4

ACPA Committee Week & CPU 301
Nashville, Tennessee
August 8 to 9

APWA Congress & Exposition
Atlanta, GA
September 12 to 15

Transportation Association of Canada (TAC) Annual Conference
St. John's, Nfld.
September 21-24

WEFTEC 2004
New Orleans, Louisiana
October 2 to 6

ACPA Fall Marketing Short Course School
Las Vegas, Nevada
November TBA

International NO-DIG 2004
Hamburg, Germany
November 15 to 17

Construct Canada
Toronto, Ontario
December 1 to 3

Canadian Public Works Expo
Mississauga, Ontario
December 1 to 2

2005

TRB 84th Annual Meeting
Washington, DC
January 11 to 15

World of Concrete 2005
Las Vegas, Nevada
January 18 to 21

ACPA Production Short Course School/MCPX
Indianapolis, Indiana
February 9 to 11

NUCA 2005
Orlando, Florida
February 8 to 12

CCPA/OCPA Annual General Meetings
Niagara-on-the-Lake, Ontario
February 18

Ontario Good Roads Association Conference
Toronto, Ontario
February 20 to 23

97th Annual Meeting of the ACPA
Las Vegas, Nevada
March 13 to 16

CONEXPO-CON/AGG
Las Vegas, Nevada
March 15 to 19

Water Environment Association of Ontario
Huntsville, Ontario
April 17 to 19

Ontario Water Works Association Conference and Trade Show
Ottawa, Ontario
May 8 to 11

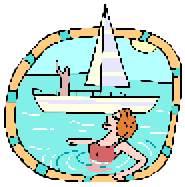
Ontario Environmental Tradeshow and Environmental, Compliance & Engineering Conference & Workshops
Toronto, Ontario
May 11 to 12

Canadian Society for Civil Engineering Annual Conference
Toronto, Ontario
June 2 to 4

Federation of Canadian Municipalities 66th AGM and Municipal Expo
St. John's, Newfoundland
June 3 to 6

AWWA Conference & Exposition
San Francisco, California
June 12 to 16

BAUMA
Munich, Germany
2007 (every 3 years)



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