

concrete pipe journal

FALL 2020



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Dear Premiers: How Serious Are You About Supporting Canadian Manufactured Products and Canadian Manufacturing Jobs?



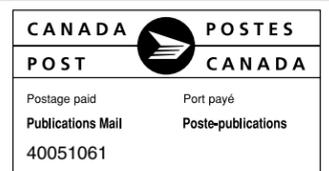
Concrete pipe plants provide well-paying manufacturing jobs

The Canadian Concrete Pipe & Precast Association (CCPPA) was established in 2013 to represent concrete pipe producers, precast concrete manufacturers, and suppliers to the precast concrete industry. As a not-for-profit association, our mission is to protect and advance our industry and the interests of concrete pipe and precast concrete products used in Canada. COVID-19 has created major challenges for our member companies and CCPPA is working hard to help our members through these difficult times. Our members have concrete pipe and concrete precast plants strategically located across Canada, and have a major

economic impact on their local communities; including providing employment to local residents. Some of these plants are operating well below capacity during COVID-19.

PROVINCE	NO. OF PLANTS
British Columbia	4
Alberta	5
Saskatchewan	1
Manitoba	2
Ontario	12

continued on page 2



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Dear Premiers: How Serious Are You...

continued from page 1

Transportation departments across Canada use large amounts of plastic pipe imported from the United States, and large amounts of corrugated steel pipes manufactured from steel imported from the United States. In the case of the steel pipes, the imported steel accounts for over 80 per cent of the total cost of the finished product. The practice of allowing these foreign products eliminates well-paying jobs in concrete pipe plants in Canada, as well as in Canadian cement plants, Canadian aggregate quarries and Canadian steel plants that manufacture reinforcing steel.

We noted with keen interest the recent response from Premier Ford to President Donald Trump's decision to reinstate 10 per cent tariffs on aluminum imported from Canada. Premier Ford stated, "We will come back swinging like they've never seen before." Premier Ford also called on Ontario manufacturers to more aggressively label their products as 'Made in Ontario' to enable customers to make local purchases.

In his fiscal update in mid-July, the then Federal Finance Minister, Bill Morneau, announced that Canada is likely to run a \$343 billion deficit in 2021, largely as a result of the Canada Emergency Wage Subsidy (CEWS) and the Canada Emergency Response Benefit (CERB), whose combined price tag is now \$160 billion. Ontario is projecting its budget deficit will jump to \$38.5 billion this year due to COVID-19. Alberta's deficit is on track to hit \$24.2 billion. We are all in this together and we will all be paying for it for many years to come.

The Canada Emergency Wage Subsidy (CEWS) is a subsidy that was initially available for a period of 12 weeks (made up of three four-week periods), from March 15, 2020 to June 6, 2020, that provided a subsidy of 75 per cent of eligible remuneration, paid by an eligible entity (eligible employer) that qualifies, to each eligible employee – up to a maximum of \$847 per week. The government has extended the wage subsidy for an additional 24 weeks (i.e., six more four-week periods)

On June 16, 2020 the Federal Government announced that eligibility for benefits under CERB would be extended by an additional eight weeks, bringing the maximum to 24 weeks total. The CERB is a taxable benefit that provides \$500 a week for workers who lose their income due to reasons related to COVID-19.

The Parliamentary Budget Officer (PBO) provides independent analysis on the state of the nation's finances, the government's estimates and trends in the Canadian economy. The PBO estimates the cost to extend the maximum duration of CERB benefits from 16 to 24 weeks under the CERB program to be \$17.9 billion. This would bring the total estimated program cost to \$71.3 billion.

Total number of applicants for CERB as of August 30th, 2020 across Canada was 8,697,910.

Ontario	3,451,570
Manitoba	269,580
Saskatchewan	234,670
Alberta	1,046,040
British Columbia	1,161,430

So again, our questions are : Why are Provincial Governments and Canadian municipalities not doing more to help create and protect well-paying Canadian manufacturing jobs amid this pandemic? When Canadians are working, we pay income taxes and sales taxes. We support local businesses, restaurants, and retailers. We support local charities, churches, and food banks. We do not rely on CERB. Our members pay taxes and support local charities, including the Canadian Cancer Society and hospitals.

**Dear Premiers:
How serious are you about supporting
Canadian manufactured products and Canadian
manufacturing jobs amid COVID-19?**



Why Concrete Pipe Was Solely Specified for MTO Project – Internal MTO Memo

The following internal Ministry of Transportation of Ontario (MTO) memorandum dated June 2009 explains why concrete pipe was solely specified for culverts under Highway 69 near Sudbury, Ontario, and why High-Density Polyethylene (HDPE) pipe and corrugated steel pipe (CSP) were not allowed. The memorandum was obtained under The Freedom of Information and Protection of Privacy Act. The memorandum clearly points to concrete pipe being the most reliable, safest and cost effective compared to HDPE and CSP.

The culverts listed in the table below (table omitted here for brevity) are recommended as concrete only because of the risks and impact of premature failure. Section 9.3 "Summary of Risk Factors for alternative Pipe Types" of the MTO Gravity Pipe Design Guidelines summarizes risk factors that may need to be considered in the selection of the most suitable pipes for a particular application.

One of the factors to consider is the repair costs and mitigation measures as a result of improper installation or premature failure.

The seventeen culverts listed above are situated on the mainline of Highway 69 (future 400) /Highway 637 interchange ramps/Highway 637 and are in areas of rockfill embankment where the depth from the top of pavement to pipe invert is in excess of 3m. Repair costs and mitigation measures as a result of improper installation and/or premature failure for these culverts are significant. Future replacement of these culverts would require full road closures or the construction of expensive

detours. Full road closures on Highway 69 in this area would severely inconvenience and compromise the safety to the traveling public.

For HDPE:

No research has been undertaken to establish criteria for establishing the EMSL for HDPE pipe for highway applications in Ontario. The ministry accepts an assumed EMSL of 75 years for HDPE pipe for RSC 250. However, where the application requires a DSL of 75 years, post-installation verification of the pipe integrity should be undertaken, such as by mandrel pull or video inspection and it should be verified that there are no unusual risk factors associated with the application. While Post-Installation Inspection will be performed as per SP 104S02, only 25 per cent of the pipes will be inspected.

For Polymer Laminated (PL) & Aluminized Type 2 Coated Steel Pipe (ALT2) – coated pipes:

The risk of premature pipe failure as a result of damage during the installation of a culvert in a rockfill embankment is significant for coated steel pipes. Damage to the coating will compromise its effectiveness; consequently, the estimated material service life for these culverts cannot accurately be determined.

"Therefore, only concrete culverts are acceptable at these locations because of the nature of the risk, the probability of occurrence, and most importantly, the consequences of premature failure."



Precast Concrete Box Culverts Used for Stormwater Detention in Maple Ridge, B.C.

Cormac Nolan, P.Eng.

Civil Engineer

Core Group Civil Consultants Ltd

Burnaby, British Columbia

Precast producer: **Langley Concrete Group, B.C.**

In 2019, Core Group Civil Consultants was awarded the design of the stormwater management system for the Bridle Ridge development site in Maple Ridge, B.C.

Maple Ridge is a large suburb area located adjacent to the Fraser River east of Vancouver, B.C. This area receives significant rainfall events which result in substantial stormwater runoff in this urban area. Recent rapid urban density growth for this area requires design engineers to include stormwater runoff calculations as part of their development plan. Preventing uncontrolled stormwater runoff into the Fraser River is a key requirement of the plan.

After careful analysis, it was determined that the development site would require two stormwater detention systems to address the potential runoff.

Given the site requirements with respect to the amount of cut and fill, live and dead loading requirements and the very tight timelines, precast box structures were the product of choice for this application.

Other key requirements of this system were:

1. Provide a watertight seal to prevent exfiltration
2. Store and control discharge water
3. Meet required industry design standards
4. Cost effective, timely and safe solution

Langley Concrete Group was the chosen precast producer for this project. The Langley Concrete Group recommended using ASTM C1433M precast boxes that are designs for BCL625/HS20 live loading while being able to accommodate a burial depth of 1.7m to 3.8m.

The ASTM C1433M standard contains predesign sizes for box culverts from 900mm span by 600mm rise up to 3600mm span by 3600mm rise. Since these boxes are standard sizes they can be readily manufactured by Langley Concrete Group.

In order to provide the required watertight seal, the precast box structures were shipped with prelubricated gaskets that meet the current ASTM standards.

The two systems were comprised of the following structures:

System 1 was comprised of 2430mm x 2430mm box sections with a total run length of 75 linear meters.

System 2 was comprised of 3650mm x 3430mm with two adjacent runs, side by side. The first run length was 16.05 linear meters and the second was 13 linear meters.

Based off our designs, the Langley Concrete Group provided structural engineering shop drawings for our review prior to casting.

Given the challenging soil conditions encountered on the project site along with the significant amount of earthwork, a rapid installation of these structures was critical.

Langley Concrete Group coordinated the deliveries to ensure the precast concrete box structures arrived on site and on time. There was excellent coordination between the Langley Concrete Group and the general contractor, B&B Contracting Group. System 1 was installed in 7.5 days which included base preparation, crane pad preparation, box culvert installation and backfilling. System 2 had a four day install.

Langley Concrete Group provided the precast concrete design, manufacturing and logistical expertise to help ensure the successful completion of the Maple Ridge stormwater detention project.



Installation of stormwater detention tank system

Precast Segmental Headwalls Accelerate Project Schedule

Brett McChesney, P.Eng.

Engineering Manager

M CON Products Inc., Carp, Ontario

M CON Products' precast Segmental Headwalls accelerated the construction of a new storm pond on River Road, Ottawa, ensuring the project was completed on time and on budget, despite the weather. Located across the road from the Rideau River and the pond, the new housing development in Riverside South required a storm pond with large diameter concrete storm pipe inflows. Construction of the storm pond would close the busy River Road for an extended period to allow for installation of the concrete storm pipe and complete road reconstruction. However, with construction planned for late fall/early winter, scheduling and the cold weather were major issues. Using cast-in-place concrete would have consumed up to three weeks for each headwall structure to allow for proper curing of the concrete. This would have caused unwanted disruption to the public and delays to the project.

Tomlinson Sewer and Watermain approached M CON for a precast solution to avoid the unpredictability and challenges of curing concrete in the winter elements. By choosing M CON's precast solution, Tomlinson was able to reduce time on site to a couple of days for complete assembly for each headwall. As well as time, labour and subtrade cost savings, Tomlinson also benefited from ease of assembly. "The installation of these headwalls went exceptionally well. It is an excellent system that you guys have," said, Garrett Fox, Project Coordinator, Tomlinson Sewer and Watermain.

When Tomlinson approached M CON, the precast manufacturer had recently come up with a design for a Segmental Headwall. Shop drawings



Segmental Headwalls

were then created for 1950mm, 2100mm, and 2400mm headwalls, so the alternatives could be approved by the contractor. Once Tomlinson approved the design, the concrete pieces for the Segmental Headwalls were quick and easy to produce in M CON's plant and were cast ahead of time so the products were ready for installation when needed.

PRODUCT: SEGMENTAL HEADWALL FOR LARGE DIAMETER CONCRETE PIPE

SITE: RIVER ROAD RECONSTRUCTION AND STORM POND OUTLET, RIVER ROAD, OTTAWA

CONTRACTOR: TOMLINSON SEWER AND WATERMAIN

OWNER: RIVERSIDE SOUTH DEVELOPMENTS

ENGINEER: STANTEC (OTTAWA) AND IBI GROUP (OTTAWA)



Colonel Talbot (London, Ontario) Pumping Station – Use of Precast Facilitates Rapid Construction

Dylan Gravisi
Estimator/Project Manager
Coldstream Concrete

On January 21st and 22nd, Coldstream Concrete Ltd. supplied an eight-piece custom precast concrete pump chamber to R. Russell Construction just south of Southdale Road in London, Ontario.

The City of London, Ontario, awarded the design of a large pumping/force main station to Stantec for the design and administration in the spring of 2019. Due to the winter schedule with respect to the construction of the pumping station structure, Stantec specified the use of precast concrete structural elements to construct the pumping station. The elements would be produced in a temperature-controlled environment ensuring the quality. In addition, the components will be assembled on site during the middle of winter which could have a negative impact on both the quality of the end product as well as the construction schedule. Utilizing precast allows the structure to be installed with minimal weather impacts.



Pumping station backfilled - Interior walkways and other components



Installation of pumping station

Coldstream Concrete was selected as the precast supplier for this project. Stantec worked closely with Coldstream's engineering/technical department to ensure both the structural design and manufacturing would meet both the timeline and the quality of infrastructure the City of London requested for this project.

The pumping station structure, which had internal dimensions of 7.0m by 4.0m by 10.0m deep, was comprised of eight separate precast elements. Each of these pieces weighed from 38.1 tonnes to 47.2 tonnes.

A number of walls and platforms were required as internal components for the pumping station. Coldstream was able to cast these details into the structural elements, thereby saving significant on-site construction time.

In terms of logistical support, Coldstream coordinated the required police escorts and permitting to allow for these structural components to be delivered on site when they were required.

The total assembly time was two days. This structure could have been assembled in one day, but due to a significant snowfall event, the installation took an additional day to complete.

Coldstream Concrete is Celebrating 75 Years in Business

Chester Brown started Coldstream Concrete 75 years ago. Concrete drain tile was one of the first products that he produced in his barn. The family owners have always been proud to produce precast concrete to improve Ontario's drainage and infrastructure systems.

It was not long before his sons, Bob and Ron Brown started helping him. Business boomed, and a plant was expanded and three Hydrotile Packerhead machines installed.

Bob Brown took over ownership in the 1990's growing the company and entering the Sewer and Watermain industry, manufacturing catch basins and manholes. Coldstream started producing reinforced concrete pipe in 2012 to complete that product line. In early 2000 the company



Coldstream Concrete's original production facility; Brown family barn

started building box culverts and headwalls. He quickly started using SCC (self-consolidating concrete) even though it was newer technology. His entrepreneurial mind allowed the company to work with engineers building culverts and boxes outside of the standard sizes traditionally produced. This led the company to become a leader in custom heavy precast work throughout Ontario.

Amy Koteles, Bob Brown's daughter, joined the company full time in 2002, becoming the third generation in the family business. Amy assumed the position of General Manager in 2018 and looks forward to leading Coldstream Concrete in the precast concrete industry.

Precast Concrete Circular Maintenance Hole Designs for Aircraft Loading

The CCPA has completed an update of its design standards for precast maintenance hole (MH) structures rated for aircraft loading. These structures have been designed to accommodate some of the largest aircraft touching down on Canadian international, provincial and regional airports.

Back in 2000, the concrete pipe industry created an option for precast concrete structures to replace the typical cast-in-place construction (at the time) of these types of structures used at airport fields. In knowing that cast-in-place concrete structures have their own application, it was time to give consideration to precast. Precast concrete products offer a solution for construction that is: a high quality product produced at a certified plant; a durable and engineered product; a standard geometry and structural design that is efficient; and lastly, an expedient means of construction in the field. Since 2000, current-day aircraft wheel loads from commercial and cargo aircraft have increased, prompting CCPA to review and update designs for the precast components.

Airport developments are no different than other site developments, in which surface flow from rain events require collection and an outlet. These aircraft rated MH structures by CCPA serve the purpose to connect the network of buried infrastructure that surround apron areas, taxiway areas and other areas on a runway and/or adjacent to runways. The structures are circular which differ from the conventional square or rectangular cast-in-place structures. The aircraft rated MHs are produced from the same standard formwork utilized by the precast industry to manufacture the similar precast components that build the buried infrastructure of our municipal sewer systems. This presents a precast option that is already familiar to sewer contractors involved in this sector of the industry. Structures are comprised of the typical MH components (base slab, riser(s) and flat cap) that are modified by the structural requirements dictated by the aircraft loading. The typical standard diameters of MH structure (1200, 1500, 1800, 2400, and 3000mm) are also available, and can be supplied with preformed openings to accommodate the junction of the pipe design, along with aircraft rated grate openings in the flat cap for surface catchment.

If you would like to learn more about these precast structures for airport applications, please contact us a CCPA, www.ccpa.ca

Kevin Baker Retires from Precast Group (M CON Products Inc.)



Kevin Baker

On May 8th, 2020, Kevin Baker retired from M CON Products after eight years with the Precast Group. Kevin started his career in 1984 at Boucher Precast, quickly moving into an active role in the office, running day-to-day operations in the plant. In 2012, Kevin moved to M CON Products where he was Plant Superintendent until his retirement this year. He was responsible for the day-to-day operations of the plant: hiring, procurement, Health and Safety, Quality Control, and management of the employees.

It has been an all-encompassing and rewarding career where he has made lasting friendships with customers, suppliers, and fellow employees. Kevin has had to adapt to major

developments in technology and plant operations and has always been an active member of the industry. "I consider myself extremely fortunate to have worked my whole career for two family-owned and well-respected companies. I have appreciated the fact that both companies were focused on a high standard of customer satisfaction." Now that he's retired, Kevin would like to travel once COVID-19 restrictions lift, but for now he says, "there's a lot of wax on the truck and no weeds in the garden!"

The CCPA would like to thank Kevin Baker for his support and involvement over the years. We wish Kevin the best in his retirement.

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Langley Concrete Group Completes New Lombard Pre-Cast Inc.'s Hillbank Production Facility on Vancouver Island, British Columbia

Gavin Geist, ASCT.
General Manager
Lombard Precast Inc.
Langley Concrete Group

In June 2018, site preparation began on the new Hillbank production facility which has been designed to replace Langley Concrete Group's (LCG) aging Metchosin production facility.

Located approximately 60km north east of British Columbia's capital city of Victoria, near the City of Duncan, the new Lombard PreCast Inc. Hillbank facility will provide over 40,000 ft² of manufacturing plant capacity, and utilize state-of-the-art production equipment to advance the quantity and quality of precast products that LCG supplies to the Vancouver Island marketplace and beyond.

Beginning production in June 2020, the Hillbank Production Facility will manufacture:

- Concrete Pipe: 600 – 2400mm diameter to meet and exceed ASTM C14, C76 and CSA A257.1 & 2. Gaskets to ASTM C1628 & CSA A257.3 specifications
- Precast Manhole: 900 – 2400mm diameter to meet or exceed ASTM C478, CSA A257.4 & 4 and ASTM C443 specifications
- Pre-benched Manhole Bases: structures for Inlet/Outlet pipes up to 1200mm diameter to meet or exceed ASTM C478, C923 and CSA A257.4 specifications
- Box Culvert / Manhole: 1800 x 900mm thru 4250 x 3050mm Span by Rise to ASTM C1433 and C1628 specifications
- Utility Chambers & Vaults: Structures for use in electrical, water & sewer, metering and other designs in various sizes
- Catch Basins, Lawn Basins, Perimeter Drains and Sumps: 250 – 1200mm diameter to meet all local municipal and district specifications
- Stormwater Treatment & Oil Water Separators: Stormceptor technologies including Enhanced Flow, Enhanced Flow Oil Removal, Jellyfish Filter, Filterra and traditional Oil/Water Separators with or without Coalescing Separation
- Stone Strong retaining wall systems
- Various custom precast applications including lined manhole/pipe, highway barriers, lamp pole bases, agricultural slatted flooring, etc.

The Hillbank facility boasts a fully computer operated new and robust Skako Apollo 3 mixer which will efficiently produce advanced concrete mixes with precise control. Mix designs will incorporate the use of reduced CO₂ Portland Limestone Cement, industrial by-product Ground Granulated Blast Furnace Slag and formulated admixtures to produce an environmentally conscious concrete with superior plastic and hardened properties.

The wire reinforcement requirements for precast at Hillbank are being met using an advanced MBK wire cage machine which is a PLC controlled wire welding system used to create cages for circular products from 300mm to 2400mm in diameter.

A Multicast 250 Pipe and Manhole machine has been installed to produce high quality dry-cast pipe, box culvert and manhole in a high-output format. All products manufactured on the Multicast 250 will meet ASTM and CSA specifications for pipe and manhole designs.



View of the new Hillbank production floor

Wet-cast production will capitalize on the Skako Apollo system to create Self-Consolidating Concrete (SCC), which modernizes traditional wet-cast concrete mix design to yield smoother finishes combined with robust strength while reducing the need for intense labour, refining product quality for structures like highway barriers, vaults, head walls, lamp pole bases, and other intricate designs.

An SCV250 SP Vibration Table will advance efforts to dry-cast products that traditionally were wet-cast thereby improving efficiencies in manufacturing and increasing daily production rates. Products like manhole lids, separate base slabs, vault lids, parking curbs and many other designs will be formatted for this efficient and advanced production platform.

The Hillbank Facility's 21st century approach to optimized manufacturing will benefit the Vancouver Island market and others for decades to come. The new facility's size, location and use of advanced batching and pre-cast manufacturing systems will satisfy expanding markets for both dry-cast and wet-cast products, as well as ensure seamless collaboration with industry designers, engineers and contractors. The Langley Concrete Group proudly continues the tradition of investment in the pre-cast civil infrastructure industry, providing essential products that are the foundation of the communities in which we live and work.

New Treasurer, CPWA Manitoba Chapter

Camilo Marquez, P.Eng., has been appointed as the new Treasurer of the Canadian Public Works Association (CPWA) Manitoba Chapter. Camilo is the Canadian Concrete Pipe & Precast Association (CCPPA) Regional Engineer for the provinces of Manitoba and Saskatchewan.

He is a professional engineer in the province of Manitoba with six years' experience in the fields of municipal and civil engineering. Camilo also has a Certified Engineering Technologist certification (C.E.T) and a Certified Associate in Project Management (CAPM) certification.



Camilo Marquez, P.Eng.

The Canadian Public Works Association (CPWA), or Association Canadienne des Travaux Publics (ACTP), was founded in 1986 to enhance the services of the American Public Works Association (APWA) to the Canadian public works community. Since that time, CPWA has become "the voice of public works in Canada." APWA's Canadian Chapters engage in educational, networking and public service activities close to home - where members can easily take advantage of them. Chapters offer members the opportunity to attend annual conferences, educational programs, and social events, as well as the chance to network with their colleagues and peers in a professional setting.

Souris Valley's Expertise Helps Keep Borea Project on Track

David Berubé, ing. P.Eng.
 Project Manager
Borea Construction
 General Contractor

Precast Producer: **Souris Valley Industries Precast, Weyburn, Saskatchewan**

The Golden South Wind Project, located approximately 175km south west of Regina, Saskatchewan next to the town of Assiniboia, can best be described by two words: tight deadlines!



Installed precast concrete transformer vault next to wind turbine base

In the works since 2009, this renewable project received final approval in 2019 and its groundbreaking ceremony took place in August of that year. The project was awarded to Borea Construction, which had a year – until the end of the year of 2020 – to complete it. Borea Construction was up to the challenge. With offices throughout Canada, it has constructed more renewable projects (wind and solar) in Canada than any other contractor.

The project itself consists of 50 turbines of 4.2 MW. The turbines are designed to be connected through a 34.5 kilovolt (kV) underground collector line system that converges at the proposed wind collector substation. A key component of this energy collection system are the transformer vaults. A total of 50 transformer vaults were required which included a riser and top slab. Each of the completed vault structures weigh in at just under seven metric tonnes.

To ensure the project respected the tight deadline, Borea knew that based on its construction expertise, it had to subcontract out a key component of

the wind turbine subsystem. It therefore turned to Souris Valley Industries, a Weyburn-based precast concrete producer with experience in both standard concrete pipe and structures as well as in-depth know-how in producing custom structural elements. Given the rapid installation characteristics of using precast concrete structures as the transformer vaults, Borea felt that Souris Valley Industries was the right partner for the job.

Notably this project was challenging but Borea was very satisfied with the precast concrete vaults that were produced by Souris Valley Industries.

Souris Valley Industries' ability to provide engineering and technical support, meet Borea's demanding production deadline, provide a high-quality product and ensure that the precast transformer vaults arrived on site when required, helped keep the project on schedule.

Borea Construction commends Souris Valley Industries for their contribution to the Golden South Wind Project. Their dedicated staff from the production floor, the engineering department and the management were all very involved throughout the process and were focused on timely delivery of high-quality precast structures.

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Coldstream Concrete Limited
 Location: Ilderton, ON
 Tel: 519-666-0604
 Fax: 519-666-0977
 Email: rsbrown@coldstreamconcrete.com
 Website: www.coldstreamconcrete.com
 Contact: Robert Brown

Con Cast Pipe
 Location: Puslinch, ON
 Tel: 519-763-8655
 Email: sales@concastpipe.com
 Website: www.concastpipe.com
 Contact: Jason Spencer or Mark Eaton

DECAST Ltd.
 Location: Barrie, ON
 Tel: 1-800-461-5632
 Fax: 705-734-2920
 Email: jtully@decastltd.com
 Website: www.decastltd.com
 Contact: Jim Tully

Forterra Pipe and Precast
 Locations: Whitby, Cambridge, Ottawa
 Tel: 1-888-888-3222
 Fax: 519-621-8233
 Email: Shane.Egan@forterrabp.com
 Website: www.forterrabp.com
 Contact: Shane Egan

Inland Pipe/Ocean Pipe
 Locations: Calgary, Edmonton, Regina, Winnipeg, Vancouver
 Tel: 1-800-268-0785
 Fax: 403-261-6751
 Tech Inquiries: Justin Arnott
 Email: Justin.Arnott@LehighHanson.com
 Website: www.inlandpipe.com

LafargeHolcim
 Locations: Calgary, Edmonton, Winnipeg, Saskatoon, Thunder Bay
 Tel: 780-479-5232
 Fax: 780-410-3699
 Email: ryan.finlay@lafargeholcim.com
 Website: www.lafarge.ca
 Contact: Ryan Finlay

Langley Concrete Group
 Locations: Langley, Victoria & Chilliwack, BC
 Tel: 604-533-1656
 Fax: 604-533-8191
 Email: pipeman@langleyconcretegroup.com
 Website: www.langleyconcretegroup.com
 Contact: Mark Omelianiec

M CON Products Inc.
 Location: Carp, ON
 Tel: 1-800-267-5515
 Fax: 613-831-2048
 Email: sales@mconproducts.com
 Website: www.mconproducts.com
 Contact: Carlo Taverna

M-Con Pipe & Products Inc.
 Location: Ayr, ON
 Tel: 519-632-9112
 Fax: 519-632-7440
 Email: dgalloway@mconpipe.com
 Website: www.mconpipe.com
 Contact: Doug Galloway

Rainbow Concrete Industries Ltd.
 Locations: Sudbury, ON
 Tel: 1-800-461-6281
 Fax: 705-566-4813
 Email: sales@rcil.ca
 Website: www.rcil.com
 Contact: Boris Naneff

Souris Valley Industries
 Locations: Weyburn, SK
 Tel: 306-842-5854
 Fax: 306-842-1011
 Email: dustin@sviprecast.com
 Website: www.sviprecast.com
 Contact: Dustin Bell

Gaskets and Connectors

Hamilton Kent
 Location: Etobicoke, ON
 Tel: 1-800-268-8479
 Fax: 416-674-6960
 Email: bernard.gregoire@hamiltonkent.com
 Website: www.hamiltonkent.com
 Contact: Bernard Gregoire

Press-Seal Corporation
 Location: Fort Wayne, IN
 Toll-free: 800-348-7325
 Cell: 617-803-1750
 Email: mtomkinson@press-seal.com
 Website: www.press-seal.com
 Contact: Matt Tomkinson

Reinforcing Steel

Laurel Steel
 A Division of Harris Steel ULC
 Location: Burlington, Ontario
 Tel: 800-265-6811
 Fax: 905-634-7888
 Email: grant.fraser@laurelsteel.com
 Website: www.laurelsteel.com
 Contact: Grant Fraser

Numesh Inc.
 Location: Laval, PQ
 Tel: 1-800-363-0847
 Fax: 450-663-9049
 Email: john.nesbitt@numesh.com
 Website: www.numesh.com
 Contact: John Nesbitt

StelCrete Industries Limited
 Location: Niagara Falls, ON
 Tel: 1-866-924-0837
 Fax: 905-735-3955
 Email: bhansen@stelcrete.com
 Website: www.stelcrete.com
 Contact: Bob Hansen

Precast Manufacturing Equipment and Accessories

GCI Pipe Products Inc.
 Québec, QC
 Tel: (418) 654-6569
 Email: p.rancourt@gcipipeproducts.com
 Website: www.gcigroups.com
 Contact: Pierre Rancour

HawkeyePedershaab
 Location: Mediapolis, IA
 Tel: 800-626-1453
 e-mail: rbeelman@hawkeyepedershaab.com
 website: www.hawkeyepedershaab.com
 Contact: Randy Beelman

Mel C. Marshall Industrial Consultants Inc.
 Location: Delta, BC
 Tel: 604-943-8512
 Fax: 604-943-2738
 Email: mel@mcmconsultants.ca
 Website: www.precastconcretebc.com
 Contact: Mel Marshall or Braden Marshall

J D Industrial Sales
 Location: Cambridge, ON
 Tel: 519-267-4340
 Cell: 519-841-2554
 Fax: 888-463-7598
 Email: drewblack@jdindustrialsales.com
 Website: www.jdindustrialsales.com
 Contact: Drew Black

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 506 S. Wapello Street
 Mediapolis, Iowa 52637 USA
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