

# CONCRETE PIPE NEWS

The Magazine of the American **Concrete Pipe** Association



**PRECAST BOXES AND RCP  
USED FOR NON POTABLE  
WATER SYSTEM AT  
OLDEST PUBLIC UNIVERSITY**



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Concrete Pipe News is published four times each year by the American Concrete Pipe Association. It is designed to provide information on the use and installation of precast concrete pipe products for a wide variety of applications, including drainage and pollution control systems. Industry technology, research and trends are also important subjects of the publication. Readers include engineers, specifiers, public works officials, contractors, suppliers, vendors and members of the American Concrete Pipe Association.

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## editorial

# TRUTH IN ADVERTISING



It is widely believed that US Senator Hiram Warren Johnson, a Republican from California was the first to have said, “The first casualty when war comes is truth.” It is purported that he made this statement in a 1918 speech as World War I was ending.

Organizations are often drawn into advertising wars over products and services to position themselves with the intent of gaining market share or address issues with a target audience. As with armed conflict, truth can be the first casualty in ad wars. Attack ads are prime examples where truth can be lost in the fog.

The use of attack ads in politics demonstrate just how effective an ad can be. Televised political attack ads had their beginning during the 1964 election between Lyndon Johnson and Barry Goldwater. In an ad titled “Daisy,” a little girl is seen counting petals while plucking them from a flower. As the camera zooms in on her eye, a nuclear bomb explodes. Johnson then provided a voice-over promoting peaceful means of addressing conflicts. Johnson’s voice-over reinforced public opinion that Goldwater was a war hawk that advocated the use of nuclear weapons in Vietnam and Russia. Truth was challenged in the foggy message of the ad, but the ad in itself was effective.

The American Concrete Pipe Association has used advertisements throughout its history to promote the characteristics of concrete pipe. ACPA reviews its ad messages and works with agencies with concrete pipe industry experience to design its ads. Ads are reviewed by an attorney before going public. For the most part, ACPA has steered away from the attack ad tactic, preferring to highlight the virtues of reinforced concrete pipe with direct messages to specifiers, designers, regulators, and contractors. Preference to use this approach was rewarded with an award from Civil Engineering Magazine (ASCE publication) for ACPA’s ad, Be Rigid In Your Principles that received the highest readership response to an ad in the May 2008 issue. Created in August 2005, the ad has been placed in several industry publications.



May 2008 Civil Engineering Winner

The Federal Trade Commission (FTC) is an independent agency of the United States government, established in 1914. The FTC is the only federal agency with both consumer protection and competition jurisdiction in broad sectors of the economy. Among its responsibilities is oversight

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Feature Story

## PRECAST BOXES AND RCP USED FOR NON POTABLE WATER SYSTEM AT OLDEST PUBLIC UNIVERSITY

By Curtis Carroll  
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Easily accessible fresh water resources have quickly become major assets to municipal, state and federal governments throughout America in the face of climate change and demand for sustainable development. The notion of fresh water as a single resource for sustainable development is an idea that will inspire innovation in design and product development for the use of stormwater and snow melt, treated sewage, and potable water. Americans need not look any further than the nation's oldest public university to observe a model that considers all water sources used in a recent expansion as a single resource. The University of North Carolina Chapel Hill Bell Tower project combines stormwater, reclaimed water, and asset management in sustainable initiatives. Precast concrete boxes and pipe are used in unique engineering designs for collecting, transporting, and reusing fresh water.

Key challenges confronting UNC as it initiated the Bell Tower project included:

- stormwater management
- Limited potable water supply due to increasingly frequent and severe droughts
- Incorporation of sustainable environmental design principles
- Planning for long-term, sustainable asset management

The Bell Tower project is located immediately upstream of the confluence of two small streams that form the headwaters of Meeting of the Waters Creek. These two streams are predominantly situated in a closed piping system that join in a very large junction box located immediately upstream of Kenan Stadium, the university's football facility.



Potable water for use by both the Town of Chapel Hill and University of North Carolina (UNC) is supplied by Orange Water and Sewer Authority (OWASA). OWASA's raw water is taken from the Cane Creek Reservoir, and University Lake. Both the Cane Creek and University Lake watersheds are located primarily in Orange County. The university's five centralized chilled water plants and UNC Hospital's two chilled water plants remained the largest users of potable water, with peak demands exceeding 1 million gallons per day. These peaks tend to occur in months when OWASA's overall peak demand and susceptibility to drought conditions are at their worst.

In 2004, UNC partnered with OWASA to design and build a new reclaimed water storage, transmission, and distribution system to convey treated wastewater effluent to the campus for reducing potable water demands. The design allows the university to reuse wastewater effluent for cooling tower makeup in support of the university's central chilled water production facilities. The initial phase will serve three chilled water facilities and is scheduled for completion by spring 2009.



Photos: Curtis Carroll

ply source for irrigation and toilet flushing. The entire stormwater management facility has the capacity to treat approximately 710,000 gallons of stormwater.

The concept of a non-potable water (NPW) system takes advantage of the ability to harvest clean roof water from new and existing buildings and use it as the primary source of water. However, because roof water harvesting can be periodically unreliable during extended droughts, the NPW concept also incorporates an automatic reclaimed water makeup system to provide a reliable secondary source of water. This secondary source is available from the precast box detention facility.

Reuse of roof top and paved surface storm water runoff is managed by a below grade 360,000-gallon concrete stormwater detention structure and a 350,000-gallon stone-filled cistern for storage and reuse of harvested roof water, located in a central park area. The facility provides for volume and peak flow reduction, water reuse, and significant water-quality improvements to the *Meeting of the Waters Creek*.

### Stormwater Management System

The stormwater management facility consists of five rows of 120-foot-long, 10 x 10 foot precast concrete boxes that provide for stormwater detention. All new and existing stormwater surface water pipe and culvert systems are connected to the detention facility. The surface water that falls on adjacent building rooftops is segregated from the water that falls on the ground surfaces by a separate piping system located in the same trench and on top of the surface drainage piping system.

The roof water discharges into a stone bed that contains the stormwater detention facility constructed with precast boxes. The two sources of stormwater remain segregated within the stormwater management facility by a 50-mil PVC membrane. During a storm event, the greater volume of surface water flow (a source of downstream flooding) will be eased, while the cleaner roof water will be captured in the cistern and reused as a water sup-

Upon completion, the reclaimed water/NPW systems will immediately reduce UNC's demand for OWASA potable water by an average of 1 million gallons per day, or about 10% of the average daily demand of the entire OWASA system. This volume reduction is expected to increase to 1.5 million gallons per day by the year 2028.

UNC intends to incorporate all non-potable water systems (including reclaimed water, roof water, groundwater, and stormwater sources) into one non-potable water utility, and each customer will be billed at the established NPW rate (regardless of water source). The combined revenue stream will ensure that UNC has sufficient funds for ongoing system maintenance and operation activities, which will reduce the incidence of emergency repairs.

The University of Northern Carolina has implemented a concept that it developed with the Town of Chapel Hill to consider all fresh water sources as a single resource. Combined with its treated water that draws raw water from Cane Creek Reservoir and University Lake, the University and Town are well advanced in a plan to efficiently use all available water to accommodate sustainable development while managing stormwater and downstream flooding.

# Gravity-Based Pipeline Constructed With Concrete Pressure Pipe



Installed 3-foot diameter C30.1 Class 10 concrete pressure pipe.

The most interesting feature about the aqueduct carrying raw water from the Arkell Spring Grounds and Carter Well supply to the water treatment plant in the City of Guelph, Ontario Canada is that the water is transmitted by gravity in a non pressurized transmission main. The main has been providing safe water to the residents of Guelph for more than 100 years. After a century of service, an upgrade of the aquifer was required.

Decommissioning of the existing 24-inch diameter concrete watermain and construction of approximately 5,577 feet of 36-inch diameter C301 Class 10 concrete pressure pipe was awarded to Xterra Construction Inc. of Kitchener. Xterra worked with Munro Concrete Products Ltd. to supply concrete pressure pipe commonly used for aqueducts.

The type of installation was a positive projection embankment where pipe is installed with the top of the pipe projecting above the surface of the natural ground and then covered with earth. The reason for this type of installation was the elevation of the bedrock. In several areas along the pipeline alignment, the bedrock is at, or near the surface. Burying the new aqueduct just below grade allowed for natural drainage and minimized the amount of bedrock excavation, as well as the risk of structural damage to the existing aqueduct. Because the condition of the existing aqueduct was unknown, it was too risky

By Bob Turnour  
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to remove the rock to install the new pipeline at a lower elevation. To achieve this type of installation, all existing ground material consisting largely of peat and organics, had to be removed and replaced with a layer of granular B and select sub-grade material. The B-bedding was installed to the underside of the pipe plus approximately 4 inches of lift. The select subgrade material (SSM) was placed on top of the B-bedding. The excavation crew completed the approximately 3-foot lift, then returned to the west end once again, placing more SSM over top of the pipe to create the 10 to 13-foot berm, which was covered by topsoil, seed, and erosion control blankets.

Since the aqueduct supplies 60 percent of the City's raw water supply, it could not be shut down for more than four hours. Part of the tender was to supply bypass pumping equipment to handle water in the event of a break, and for the final connections. The volume of water was significant and three 12-inch diameter pumps had to be on site and in position in the event that the watermain was jeopardized and the flow needed to be restored. The phased transition to the new aqueduct was seamless and carried out with precision. During final connections, the pumping system was put into operation and pumped continually for five days to ensure water supply was maintained.

The project demonstrates the versatility of concrete pressure pipe products in applications that may have been specified with a thermoplastic conveyance material.

Aquifer covered by 10 to 13-foot berm.



Photos: Paul Kusiar

# Concrete Pipe and Sustainable Concrete Pipelines

By Mike Beacham, P.E.,  
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The World Commission on Environment and Development has defined sustainable development as, *“Meeting the needs of the present without compromising the ability of future generations to meet their own needs”* (report to the United Nations General Assembly, August 1987)

There is an increasing need in America to replace transportation facilities that are becoming functionally obsolete. State Departments of Transportation (DOTs) and municipalities are being asked to build more with fewer resources. They are also under pressure from legislators, citizens, and bonding companies to account for their resource allocation decisions. It is imperative, therefore, that resources and infrastructure assets be managed so as not to compromise future needs.

When building transportation facilities, DOTs and municipalities must use materials and products that are of the safest and highest quality, perform as intended for the design life of a project, and have the best overall value. Sustainable reinforced concrete pipe (RCP) satisfies these imperatives. Because of the long life of RCP, it is an economical, cost-effective drainage solution that consumes minimal materials and energy with reduced maintenance and rehabilitation requirements. RCP, however, has much more intrinsic value. It is recyclable, conserves energy and is considered to inflict minimal or no harm on the environment.

## Recyclable

Concrete pipe mixtures incorporate industrial byproducts (fly ash and slag cement), which reduce the use of virgin materials, the amount of cement needed, the energy needed to manufacture the product and conserves natural resources. Concrete made with fly ash is more durable and has a higher ultimate strength. The



steel that is used in reinforced concrete pipe is made of nearly 100% recycled steel, and can again be recycled when the pipe is recycled.

Concrete pipe is reuseable and 100% recyclable. Construction and demolition waste in the U.S. (including concrete pipe) is approximately 135 million tons annually. Materials that can be recycled at the end of their intended use reduce the amount of waste that is diverted to a landfill and minimizes the need for virgin construction material. There are many reported cases where concrete pipe has been excavated to accommodate larger diameter concrete pipelines, and reinstalled to continue service as buried infrastructure.

## Conserves Energy

The long service life of concrete pipelines contributes to the reduction of traffic congestion with accompanying energy savings, and reduced vehicle pollutants due to the lower frequency of construction zones needed for replacement of buried pipe.

Concrete pipe exhibits a low energy footprint associated with production, delivery, and maintenance. Additional energy savings are realized, since the reduced rehabilitation and reconstruction works associated with concrete pipe do not continually consume energy.

Since concrete pipe does not deflect, pavements with concrete road bases can realize savings on maintenance costs while vehicles use less energy on bases that maintain grade throughout the design life.

### Environmentally Friendly

Concrete pipe inflicts minimal or no harm on the environment and is therefore environmentally friendly. Concrete pipe does not emit harmful volatile organic compounds (VOCs) into the air or leach them into the earth, is non-combustible, and has no off-gassing. It is used to control flooding and the spread of water born diseases. Concrete pipe is produced locally in close proximity to sources of aggregates, fresh water, and cement, thereby reducing transportation costs and with minimal or no environmental impact. In addition, RCP can be backfilled with native soil and does not require imported stone for a standard installation. Decommissioned quarries once used to mine aggregates can be rehabilitated for community use, thereby contributing to social progress. Among other things, social progress relates to health and quality of life, and protection of heritage and culture.

### Cement

Cement is considered by some to have a negative impact on sustainability. Cement manufacturing plants account for roughly 1.5% of U.S. carbon dioxide (CO<sub>2</sub>) emission (DOE 2006). Although cement is an energy intensive material to manufacture, most concrete is 90% sand, gravel, water, and industrial by-products, all of which require little energy to obtain.

Approximately 60% of the CO<sub>2</sub> emitted during the manufacturing of cement results from a process known as calcination, a chemical reaction among the raw materials in the cement kiln. Later when hardened and concrete is exposed to air, the calcination reaction reverses in a process called carbonation. Carbonation occurs naturally in all concrete, including concrete pipe, recapturing CO<sub>2</sub>. Eventually, exposure

of hardened concrete to the air will allow the recapture of all the CO<sub>2</sub> originally emitted from the cement during calcination (RMRC 2005).

A portion of Portland cement can be replaced in concrete pipe by supplementary cementing materials such as fly ash. The replacement can be at the concrete batch plant, or during the production of blended cements. The more fly ash used in concrete pipe the greater the reduction of greenhouse gas emission without negative impacts on the economy. More fly ash in concrete pipe can reduce demand for waste diversion to landfills, lower-cost concrete, reduction of energy used to manufacture the concrete, reduction of water needed to produce concrete, increased durability, and reduced fly ash disposal costs. Fly ash in concrete pipe increases service life, resulting in savings in repair and replacement of buried pipelines.

### Conclusion

Reinforced concrete pipe may be considered to be the best environmentally and economically sustainable choice for pipelines because of its longevity. Concrete pipelines do not require rehabilitation or reconstruction as often as pipelines made of other materials, thereby consuming fewer raw materials and energy. Pipelines made of concrete pipe are sustainable, contributing to social progress, economic growth and environmental balance, the three pillars of sustainable development.





## Piper's Briefing Room

# Concrete Pipe Joints - Your Best Choice

Detractors of concrete pipe for sewers and culverts will eventually discuss joints when debating performance of pipeline materials. Most, if not all, forget that because of the ability to use concrete pipe in a wide range of applications with a variety of concrete mixes to meet environmental conditions, there are also multiple joint choices to meet the design needs of the project. Even the length of standard concrete gravity pipe calling for more joints in an installation, works at an advantage over longer lengths of flexible pipe.

The function of a pipeline generally determines the performance requirements of the pipe joints. Whether the purpose is to convey sanitary sewage or storm water, joints are designed so that when sections are laid together they will make a continuous line of pipe with an interior free from irregularities. Joints can be designed to provide soil-tightness, or water-tightness, with the ability to accommodate lateral or longitudinal forces, and strength to handle shear or vertical movement.



**Performance Based** — Rubber gasketed concrete pipe joints meet the stringent requirements of ASTM C 443.

Concrete pipe manufacturers have developed joint designs to provide key performance characteristics:

- Resistance to infiltration of groundwater and backfill material
- Resistance to exfiltration of sewage or storm water
- Accommodation of lateral or longitudinal movement
- Strength to handle shear or vertical movement
- Pipeline continuity and smooth flow line;
- Infiltration of groundwater for subsurface drainage
- Ease of installation

Precast concrete pipe joints are manufactured as tongue and groove, and bell and spigot. Concrete surfaces with opposing shoulders on both ends, such as the bell and spigot joint, generally utilize a rubber gasket for sealing. Preformed flexible joint sealants or mortar are used for lesser performance requirements or where the product shape dictates the type of seal.

Rubber gasketed concrete pipe joints are frequently used where measurable infiltration/exfiltration and/or internal pressure is a factor in the design. They must meet requirements of ASTM C433, C361 or C1628. Preformed flexible joint sealants like bitumen and butyl are manufactured in accordance with ASTM C990. Joints utilizing mastic sealants typically perform as a soil-tight system unless higher performance expectations are specified. Joints employing mortar joint sealants are rigid. Mortar joints have been used successfully as a soil-tight joint for many years. External flexible sealing bands

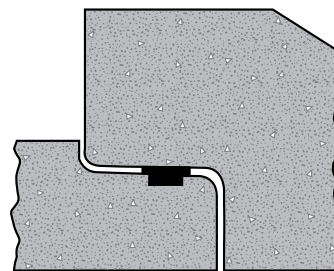
are produced to ASTM C877 and are to be wrapped around the exterior of the joint to provide resistance to infiltration and/or exfiltration.

When comparing the performance of pipe jointing systems of concrete pipe and alternate products, the standard specifications of each pipe material need to be reviewed. American Society for Testing and Materials (ASTM) standards are consensus-based standards that exist for both storm and sanitary sewer joints. American Association of State Highway and Transportation Officials (AASHTO) standards for storm sewers and culverts are developed by the fifty State Highway or Transportation Departments, the District of Columbia, and Puerto Rico. The AASHTO standards are intended to serve as a standard for the preparation of State DOT specifications, whereas ASTM standards are typically referenced in other applications.

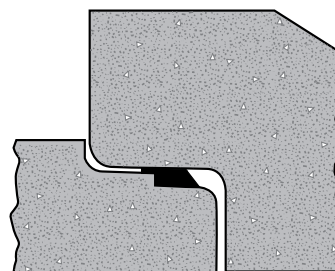
ASTM C443 (AASHTO M315) covers rubber gasketed, watertight joints for circular concrete sewer and culvert pipe and precast manhole sections. ASTM C443 requires acceptability of concrete pipe joints and gaskets based on the results of proof-of-design tests. ASTM C1628 covers rubber gasketed, leak resistance joints for concrete gravity sewer pipe where the design calls for measurable or defined infiltration or exfiltration, and requires acceptability of concrete pipe joints and gaskets based on the results of proof of design tests. ASTM C1103 covers procedures for testing the joints of installed precast concrete pipe sewer lines, when using either air or water under low pressure to demonstrate the integrity of the joint and the construction procedures.

The performance of concrete pipe and concrete pipe joints have changed considerably over the last century, as have infiltration and exfiltration standards. Concrete pipe offers several different joint types depending on the application.

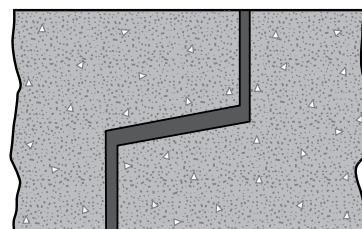
The two basic shapes of concrete pipe joints, and the choices for sealing joints, only add to the choices that make a precast concrete pipeline or culvert a valuable long-term asset. The advantages of concrete pipe joints are apparent when all the facts are considered, which are covered in detail in ACPA's publication, Concrete Pipe Joints – Your Best Choice, Reference #07-124.



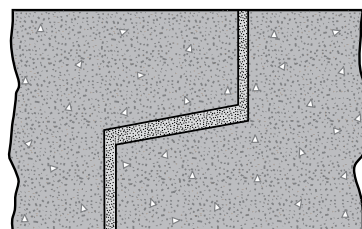
Typical cross-section of opposing shoulder type bell and spigot joint with a confined o-ring rubber gasket.



Typical cross-section of opposing shoulder type bell and spigot joint with a single offset rubber gasket.



Typical cross-section of tongue and groove joint with flexible mastic sealant.



Typical cross-section of tongue and groove joint with mortar packing.

## TECH TALK

## Culvert Replacements Made Easy with RCP and Standard Tunneling Methods

America began its chapter as an urbanized nation in earnest on June 29, 1956, when President Dwight D. Eisenhower signed the law launching a massive federal project that had been his dream for decades – the Interstate Highway System (officially known as “The Dwight D. Eisenhower National System of Interstate and Defense Highways.”) The 46,726-mile interstate highway system is now one of the nation’s greatest assets. The system and much of America’s secondary highway systems built in the 50s and 60s was constructed using corrugated metal and concrete pipe. Corrugated metal pipe (CMP) culverts have reached the end of their service lives

after approximately 50 years, and are in need of replacement. Automobile and truck accidents related to corrugated metal culvert failures and pavement collapses are being reported across the country.

The American Concrete Pipe Association has reported on the failure of CMP culverts and participated in research at the University of Utah on the life cycle (least cost) analysis of CMP installations and failures. A company called Tenbusch, Inc. builds job-specific tunneling equipment for contractors who are specialized culvert replacements and road construction. Tunneling was used



Photo of corrugated metal pipe.

in September 2008 to replace a 48-inch diameter CMP culvert that had been in service for more than 20 years on Route 4 in Newark, DE. The invert of the culvert was corroding and the seams had opened up to the extent that bedding material was migrating into the pipe. This is a heavily traveled stretch of roadway by Delaware Park, a commuter train stop that is located about one mile from I-95. Disrupting this section of Route 4 traffic was the last option in the eyes of Delaware DOT (DelDOT).

DelDOT first considered rehabilitation of the culvert using a lining method. This idea was rejected because the culvert carried a stream under Route 4 and the flow capacity of the crossing needed to be increased. In addition, the culvert had to be replaced to allow a delayed land development project to proceed. The initial plan was to open-cut Route 4 for the installation. Tunnel and replace methods were initially rejected due to lack of experience with this type of construction technique. Construction by open-cut would be costly to the local economy, a threat to access to the nearby hospital and cancer center, and a disruption to traffic. The best installation technique in this situation was tunneling the concrete pipe under Route 4. After value engineering the project, the cost savings to the state was approximately 30% of the original contract amount.

Tenbusch provided Eastern States Construction with a tunnel shield and a hydraulic jacking unit. The tunnel shield protected the men as they excavated the face in the tunnel and removed the CMP and excavated material. The hydraulic jacking unit supplied the necessary force to jack the 54-inch reinforced concrete pipe column under the highway. The contractor was able to construct a jacking

pit in the median to install the pipe in both directions. This plan satisfied the significant wetlands restrictions in the drainage area served by the culvert. The contractor took 75 days to complete the project, and within that period, only 15 days to jack the pipe. The tunneling progressed at a rate of approximately 8 feet per day. With the current emphasis on rebuilding America's infrastructure to boost the nation's economic recovery, tunneling reinforced concrete pipe and boxes to replace culverts under the nation's interstate and secondary highways is a cost-effective construction option.



## Robin Wolf First Woman To Win Longfellow Award

Robin Wolf, Marketing Director and Product Manager for the Premarc Corporation, is the 2008 winner of the Richard C. Longfellow Award. Robin is the first woman to receive the award in almost 60 years of publication of *Concrete Pipe News*, which first went to press on July 1, 1949.

Robin was honored at the Awards Luncheon of the 2009 American Concrete Pipe Association Annual General Meeting in Naples, Florida on March 17. Her article, *Concrete Pipe Used for Largest Stormwater Detention Facility in Michigan*, describes two large reinforced concrete pipe stormwater detention systems that were installed under a parking lot used by students and faculty at Star International Academy in the City of Dearborn Heights. The installations were part of an extensive renovation project, including storm sewers and the stormwater detention facilities. Together, the detention systems comprise the largest reinforced concrete pipe stormwater detention facility in Michigan.

Robin has been in the concrete pipe industry since 1999. She is active with the American Public Works Association, American Society of Civil Engineers, and Michigan Association of County Drain Commissioners chapters in Michigan. Robin serves on the ACPA's AASHTO and Marketing Committees. She has been a Member of the ACPA Fall Short Course School Task Group since 2004 and Chairperson for the Task Group in 2006 and 2007.

*CP News* is the creation of Richard C. Longfellow who had an outstanding career with Cretex Companies, Inc. based in Elk River, Minnesota. Every year, a *Concrete Pipe*

*News* author is honored with the Richard C. Longfellow Award. The tribute is presented to the author of an article that most effectively demonstrates innovative and effective use of concrete pipe. The award is presented in memory of Richard Longfellow who had an outstanding career with Cretex Companies, Inc. He significantly influenced the philosophy and goals of the ACPA, and played a leading role on technical matters. He was responsible for drafting a new concrete pipe design manual and initiated *Concrete Pipe News*. As a Director of the American Concrete Pipe Association, he was the force behind the establishment of the \$1 million concrete pipe test program at Northwestern University to establish industry-wide standards for product quality. For more than 20 years, Dick Longfellow was the spirit of the ACPA.



# CONCRETE PIPE NEWS ENTERING A NEW ERA OF COMMUNICATIONS

By Phil Gale, Geneva Pipe Company  
Chair, Media Task Group  
American Concrete Pipe Association  
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Concrete Pipe News was first published in 1949 to share knowledge and information with members, specifiers, designers, regulators and contractors. Throughout the history of the publication, it has changed to accommodate new technology for producing and distributing the publication and to meet the needs of its audience.

CP News is once again at a milestone where it is changing to accommodate web-based technology for sharing knowledge and information. With modern technology, it is now possible to introduce product application stories, innovation in product development, new technology for producing pipe and boxes, research and development, opinion editorials on industry issues, then link the overviews to more information on the Internet. This year, ACPA will begin a gradual transition of CP News from the format that members and industry have become accustomed to over the past decade to a format that includes limited mailed copies and an interactive digital format archived at [www.concrete-pipe.org](http://www.concrete-pipe.org). The third issue of 2009 will be an 8-page publication rich in links to detailed files archived on the ACPA site, the websites of member firms and those of associated concrete pipe associations, and other related industry sites. Articles in CP News will be gateways to information that, among other things, will help members

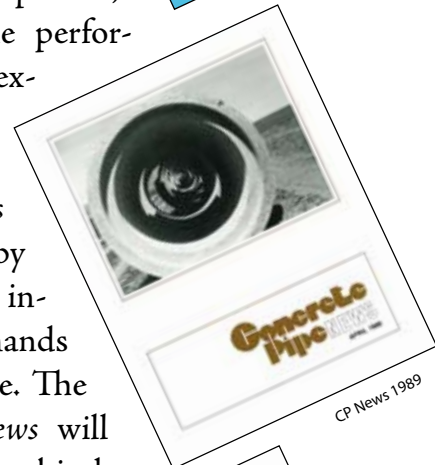
and other readers of CP News have much greater access to the knowledge that will assist in specifying concrete pipe, designing and constructing major pipelines, and differentiating the performance of rigid and flexible pipe.

Change to CP News is also being driven by the rebranding of the industry and the demands of members for change. The appearance of CP News will evolve this year into a graphic design that reflects ACPA's brand to reinforce the association's identity in the marketplace, that in turn strengthens the brands of its members.

CP News is beginning a new era where it will continue to be a relevant source of information using the latest technology for web-based communications and leveraging industry networks only accessible on the Internet.



CP News 1976



CP News 1989



CP News 1996



CP News 2009

## editorial

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of laws concerning advertising. According to the FTC, “advertising must be truthful and non-deceptive... advertisers must have evidence to back up their claims... and advertisements cannot be unfair.” According to advertising law, an advertisement is considered deceptive if it contains a statement or omits information that “is likely to mislead consumers acting reasonably under the circumstances; and is, ‘material’ - that is, important to a consumer’s decision to buy or use the product.” Essentially, the law states that your advertising cannot be misleading. You have to tell the truth, or clearly label your ads so that no reasonable person could mistake your intent. Advertisers (and their advertising agencies) need to have a reasonable basis for advertising claims before they are published. It is also very important to note that all of the truth in advertising laws apply to the Internet. The FTC is particularly concerned with disclosure statements and false advertising claims. All ads must be truthful and substantiated.

ACPA occasionally takes issue with the ads of companies that produce competitive products with materials other than concrete, and certainly takes issue with unsubstantiated claims on the Internet. Many engineers believe that flexible pipe products are a substitute for RCP because they believe the assertions stated in the publications of pipe manufacturers without consulting referenced standards, specifications and codes, reading the fine print, or the warranty information. The advertisements by flexible pipe manufacturers can be tempting to the engineer as a perceived means of achieving reduced cost and time of construction. In addition, assertions on service life may also provide the engineer assurance that the product specified will indeed last for the service life claim. Yet manufacturers’ own warranties and other disclaimers, along with standards, specifications and codes do not support the assertions.

ACPA continues to challenge the claims of producers of flexible pipe in public. The Association has always presented the characteristics of concrete pipe based on science and tested performance. In the heat of battle with competitive products, running truthful ads only reflects well on the quality and longevity of concrete pipe installations, when the claims are based on applied science and facts. ☺

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