

The Municipal Pipeline

City of Summerside Takes Advantage of New Pipe Technology



As a PVC-friendly city, Summerside, Prince Edward Island (PEI), planned to use PVC pipe as it began Phase II of its Pope Road watermain expansion project. The project required 300 meters of 400 mm (16-inch) pipe, and was taking place in an area of the city with no existing water line.

"The pipe also serves another purpose," explains Tony Gallant, engineer/designer for the City of Summerside. "It is a direct interconnect between our two city standpipes, which is why it needs to be so large. It's a combination transmission/distribution project."

Conventional PVC pipe had been used in Summerside municipal systems before, including Phase I of the Pope Road project. Having worked well in the past, the team was comfortable with PVC pipe and didn't see a reason to make a material change for Phase II. But after Gallant learned about Bionax PVCO (molecularly oriented polyvinyl chloride) pipe from IPEX, and the advantages it offered, he realized that trying a new pipe technology might pay off.

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Tony Gallant
Engineer & Designer for the City of Summerside

When Bionax PVCO pressure pipe was first introduced in 2008, it set a new standard for municipal water distribution. The only company in Canada to manufacture PVCO pipe, IPEX expanded its 12-inch Bionax product line to include 350mm, 400mm and 450mm (14-, 16-, 18-inch) pipe. The 18-inch pipe is currently the largest PVCO pipe available in North America. With the introduction of larger-diameter pipe, municipal water transmission projects can now experience the benefits of Bionax, including low maintenance, corrosion resistance, lighter weight, increased impact strength and reduced pumping required for the same pressure rating through larger interior diameters.

New 14", 16" & 18" PVCO Pressure Pipe

- ✓ 40% Lighter than Conventional PVC
- ✓ 3 Times Toughest than PVC
- ✓ Easier to Install and Time Saving
- ✓ Corrosion Resistant



Trying a New Pipe Technology

To prevent changes in materials during a construction season, the City of Summerside only conducts spec reviews at the beginning of the year. As soon as he could, Gallant made the decision to add Bionax to the City of Summerside's approved list. "The moment the contractors heard, that's what they were pricing for this job," he explains.

Even though the first phase of the project was completed with 16-inch conventional PVC, Phase II would be completed with 16-inch PVCO, offering the City of Summerside a helpful comparison to see if the switch was worth it.

When working with 16-inch PVC pipe in Pope Road Phase I, machinery was needed to help contractors move the pipe around. Bringing heavy equipment onto the jobsite sometimes compounded traffic issues in already congested areas. In Phase II, a large tax center was located near the jobsite with a few thousand employees who rotate through shifts a few times every day. "There is a lot of traffic and congestion in this area of Summerside," says Gallant.

Because it is 40% lighter than conventional PVC, heavy equipment wasn't needed for contractors to handle the 16-inch Bionax pipe. "Once we got started, we found that Bionax was easier to install than PVC pipe," explains Gallant. "The contractors thought it was great. Based upon its size, it was a lot easier to work with than the 16-inch pipe we used in Phase I."

According to Gallant, two workers could easily pick up the pipe and place it in the hole, with another person moving it around in the trench. "Using Bionax made the project go that much better. It was easier to handle, easier to work with and easier to install," he says.

Even cutting the pipe to size and beveling the ends took much less time as compared to the pipe used in Phase I. "What we used in Phase I took twice as much time. That time savings really add up at the end of the day," Gallant explains.

Reducing the length of the project not only saved the City of Summerside money, but also allowed pedestrian and vehicle traffic to return to normal much sooner, minimizing disruption for nearby employees and residents.

Now that the pipe has been installed, tested and chlorinated, the project team agrees that everything went smoothly. Ron Arsenault, site foreman for AJL Contractors, served as the foreman for the Pope Road watermain project. He remembers Phase I of the Pope Road project eight years ago, and emphasizes a night-and-day difference by using Bionax PVCO.

"We've done all our testing on pressure and quality, and we've got it in operation as of May 2014," Gallant says. "No complaints here!"