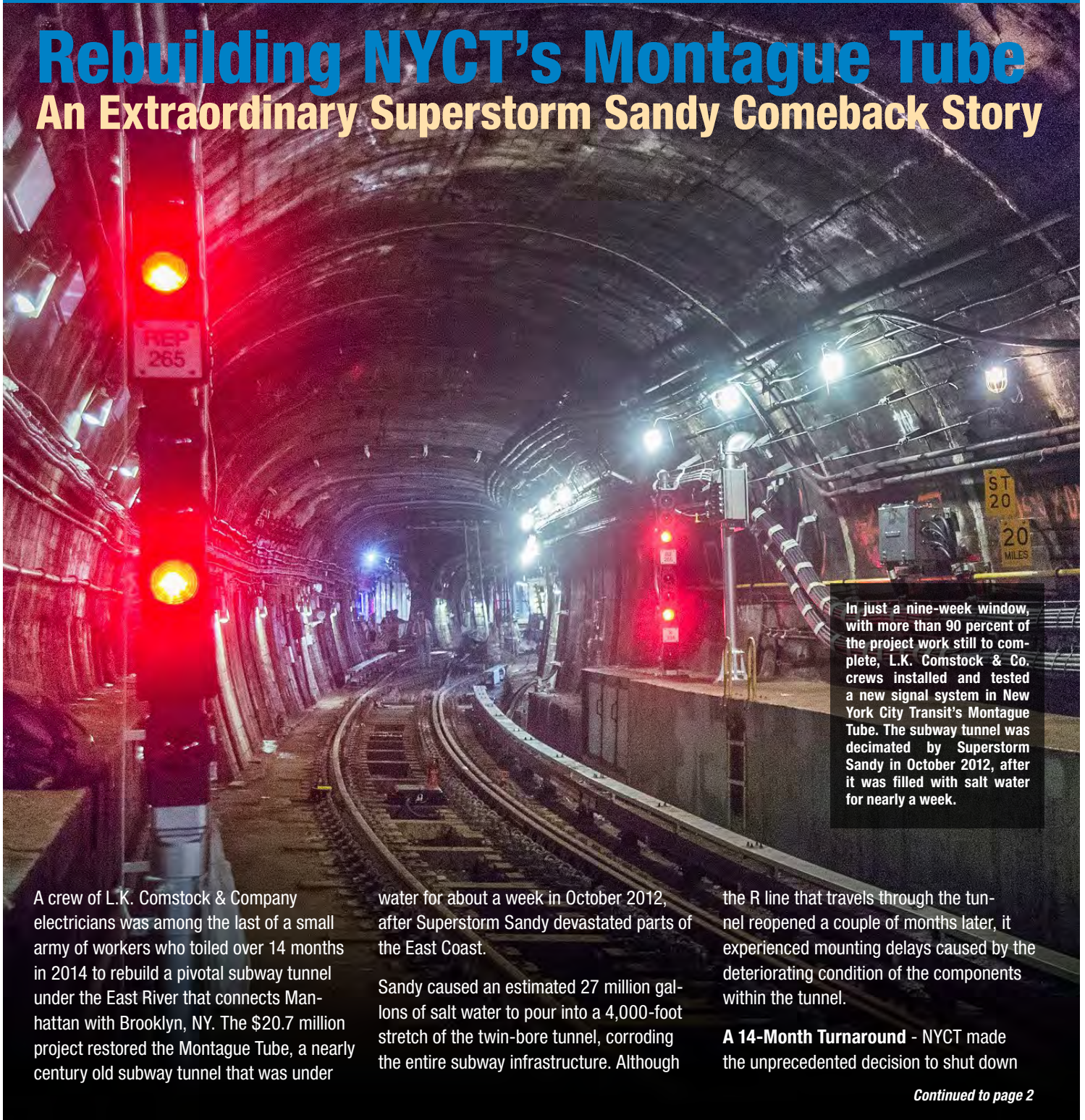


# RAILWORKS® TODAY

*A monthly newsletter for employees of  
RailWorks Corporation and its subsidiaries*

## Rebuilding NYCT's Montague Tube An Extraordinary Superstorm Sandy Comeback Story



In just a nine-week window, with more than 90 percent of the project work still to complete, L.K. Comstock & Co. crews installed and tested a new signal system in New York City Transit's Montague Tube. The subway tunnel was decimated by Superstorm Sandy in October 2012, after it was filled with salt water for nearly a week.

A crew of L.K. Comstock & Company electricians was among the last of a small army of workers who toiled over 14 months in 2014 to rebuild a pivotal subway tunnel under the East River that connects Manhattan with Brooklyn, NY. The \$20.7 million project restored the Montague Tube, a nearly century old subway tunnel that was under

water for about a week in October 2012, after Superstorm Sandy devastated parts of the East Coast.

Sandy caused an estimated 27 million gallons of salt water to pour into a 4,000-foot stretch of the twin-bore tunnel, corroding the entire subway infrastructure. Although

the R line that travels through the tunnel reopened a couple of months later, it experienced mounting delays caused by the deteriorating condition of the components within the tunnel.

**A 14-Month Turnaround** - NYCT made the unprecedented decision to shut down

**Rebuilding NYCT's Montague Tube** from page 1

the R line in August 2013 to give contractors complete access to the tunnel. After removing damaged equipment from the bores and demolishing the collapsed duct bank shell, a range of contractors, including L.K. Comstock, worked in tight quarters to completely rebuild the tunnel.

Before gaining access to the site, L.K. Comstock began engineering and procuring materials to install a new upgraded signal system. Then, once in the 13,000-foot tunnel, L.K. Comstock installed a new central instrument house (relay room), all the circuits for automatic signals, 315,000 feet of signaling cable, a 17,000-foot messenger system and 264 pieces of signal equipment.

**A Compressed Schedule, To Say the Least** - "When it became apparent the project was behind and we would not get access to the tunnel on schedule to begin installations, we began coordinating every moment of access with meetings twice a week to closely monitor any window we could utilize for our work," says Project Manager Robert ("Rob") Sceles. "Then the TA (Transit Authority) decided it wanted it completed a month earlier, so we had electricians working 24/7, from July 1 to August 10, to complete the project on an aggressively tight schedule."

By all accounts, General Foreman Leo Impastato, in charge of laying out the job, its schedule and applying manpower and materials, was responsible for the work coming together in the field. "Making everything happen in the time allotted was very difficult," reports Leo. "We received much support from our other jobs to make this one a success. Thanks to the skilled and dedicated members of IBEW Local Union #3, we were able to complete the project in an accelerated time without sacrificing quality or craftsmanship."



Because of the urgent nature of the project and the resulting tight schedule, L.K. Comstock performed site surveys while the demolition was taking place in the tunnel. Team members were trained and fitted for respirators to ensure a safe work environment in the tunnel.



An L.K. Comstock electrician installs a serve to reduce stress on the cables when routed off of the messenger bundles. This was a routine practice on this project to safeguard a lasting installation, projected to remain functional for up to 60 years.

**A 100-Year Old Tunnel ... Under a River** - With many employees and other contractors working simultaneously in bores that each is barely bigger than a subway train, conditions were crowded, attests Rob. "Because the tunnel is under the East River, crews had to enter the project site from points in Manhattan and Brooklyn, bringing in all equipment and tools through the tunnels themselves. With so little room, we had to carefully plan and schedule not only our work but also work with the other contractors. We had to make sure materials were available and properly staged throughout the installation sequence."

**A Big Undertaking That Demanded the Entire Team** - Once signal testing began in mid-August, L.K. Comstock had the tunnel to themselves, giving them more room to test the new system. On September 15, more than a month ahead of schedule, NYCT resumed R line subway service through the Montague Tube. That was a welcome achievement for more than 65,000 daily riders of the train.

The project was completed both ahead of schedule and under budget, a rare bragging right for NYCT and the associated contractors. "It took planning, hard work and dedication of everyone throughout the company to get the job done," affirms General Superintendent Salvatore DeMatteo. "This didn't happen by chance. The company became one team. We all realized the high visibility of this job and the importance of finishing on time."

Sal adds that other New York Transit projects – 7 Line Extension, Second Avenue Subway and CBTC, in particular – contributed to the success of this one.

"This was a full court press where we had meetings and received support from other projects. Our leadership made this happen – our

*Continued to page 3*

**Montague Tube - Leadership Team**

Chief Management	Project Management	
Larry Bean, Chief Signal Engineer	Leo Impastato, General Foreman	Joe Barbuscia, Lead Signalman
Frank Loffredo, Chief Engineer	Robert Sceles, Project Manager	Vinny Messina, Quality Engineer
Desmond McGoe, Chief Signalman	Anthony D'Alessandro, Close-out Project Manager	Mario Zallo, Safety Engineer

Rebuilding NYCT's Montague Tube from page 2

### Superstorm Sandy Projects

RailWorks' New York Transit division has worked on these Sandy recovery projects.

Projects	Value	Completion
Greenpoint Tube	\$2.7 million	August 2014
Montague Tube	\$21 million	November 2014
St. George Interlocking	\$79.5 million	March 2017 (anticipated)

Chief Signalman Desmond McGoey, Chief Signal Engineer Lawrence Bean, Chief Electrical Engineer Frank Loffredo, and Lead Signalman Joseph Barbuscia and their staffs," says Sal. "We are proud to see

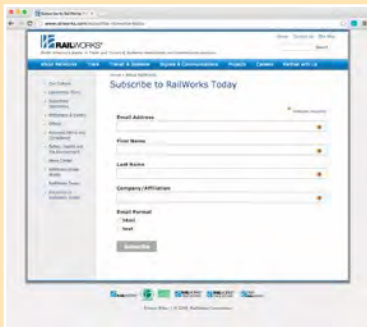
the loyalty and dedication of our foreman, electricians, signalmen, engineering, and office staff. This was the perfect storm and we came together and made the impossible happen."



## RailWorks Today Survey Results

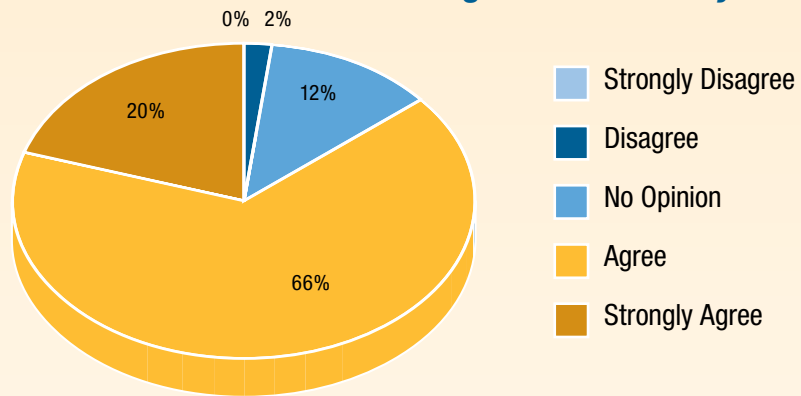
Thank you to the nearly 200 employees who completed the recent *RailWorks Today* survey. We've noted that generally, you're in agreement with the newsletter's content and frequency. You seem mostly interested in the company's projects and the people performing them. See all the survey results on the Communications Department page in SharePoint.

### RailWorks Today Subscription

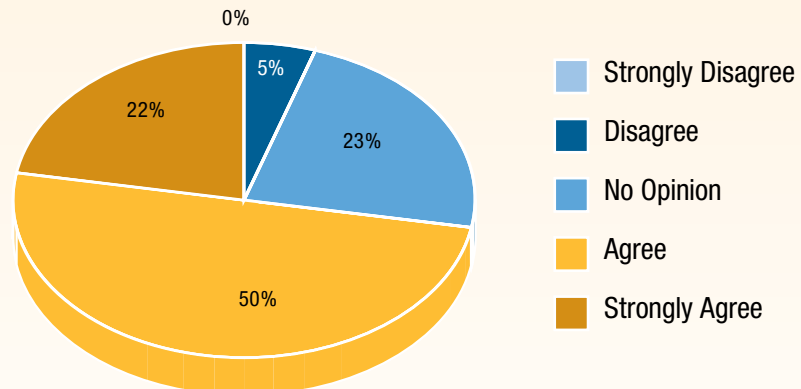


We're evaluating how to make the newsletter more easily accessible and to a greater number of people and will keep you posted. Meanwhile, we want to make you aware of the option of having the newsletter sent to an email address outside of RailWorks. Here's a link to set that up: <http://www.railworks.com/subscribe-railworks-today>

### I Look Forward to Reading *RailWorks Today*



### Employees Without Email Rarely or Never See *RailWorks Today*



## RAILWORKSMART RAILWORKSAFE

# Safety Training Is in Full Swing

RailWorks' annual Safety training meetings are in full swing in the United States and Canada. From January through about mid-spring-time, an estimated 1,500 employees are traveling to their home offices or nearby centralized locations for a day or two of company and industry training.

The meetings are an ideal opportunity for field employees to receive the benefit of annual group training for on-track safety such as hazard recognition and prevention; safety responsibilities and procedures for on-track protection and more. Additional training activities vary from location to location but typically cover health and safety policy and procedures; training in specialty areas such as driver rules and regulations; defensive driving; first aid and hand tools; a review of the company's drug and alcohol policy; and a presentation on respect in the workplace. Before the end of April, nearly 30 of the annual Safety meetings will have occurred.

Charlie King, a 41-year RailWorks employee and a supervisor for RailWorks Track Services based out of the Bridgeton, Mo., office, emphasizes the value of the annual training.



**Charlie King**  
Supervisor  
RailWorks  
Track Services

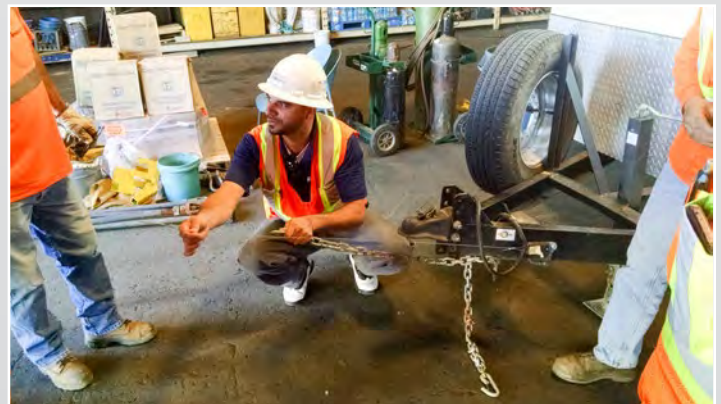
"A lot of things that the instructors bring into the meeting are things we might've overlooked or that we have learned, but we get to see it again," Charlie says. "Another reason I like this meeting is a lot of times, a supervisor or foreman has told the crew, 'This is RailWorks policy' or rules, but the crew thinks that's just a supervisor or a foreman saying that. But when our crew comes to a safety meeting, they hear it from instructors and can see how serious RailWorks is about being safe and about policies and rules, and how, if we didn't follow them, it would affect the entire company."



Employees who attended the first of the PNR RailWorks Signals & Communications Division meetings are shown during training February 9 in Guelph, ON.



RailWorks Track Services employees in the St. Louis Region practice creating arm slings as part of a hands-on exercise during Safety training. In front are Foreman David White (left) and Laborer Joshua Hannah. In back are Welding Foreman Matt Santos (left) and Regulator Operator Shawn Inman.



At the annual Safety meeting in the Southern California Region, RailWorks Track Services Supervisor Felipe Hernandez demonstrates a portion of a trailer inspection before hooking up a tool trailer.

RailWorks Values In Action: **Customer Focus**

## Achieving An Amazing Pace for GO Transit



(left to right) Project Manager Arash Barzager, Project Superintendent Brandon Berry, Project Coordinator Justin Duval and Foreman Ryan Homeniuk led a GO Transit job to change out thousands of ties on the Oakville Subdivision in Greater Toronto, ON. Working in confined work windows, a 26-man tie-change crew from the PNR RailWorks Track group, with support from the PNR RailWorks GO Transit Maintenance team, replaced an average of 550 ties per shift.

During a tie change-out job in Greater Toronto, ON, PNR RailWorks maintained such an impressive pace that customer GO Transit decided to up its order. And PNR RailWorks delivered.

Restricted to night and weekend work windows, a 26-person gang changed more than a third more ties than initially required over the duration of the project. And they did so during the originally allotted time frame of two and a half months.

The initial scope of the project involved changing 15,600 ties throughout the Oakville subdivision on main tracks 1, 2, and 3. "As this is an extremely busy subdivision running GO Transit, VIA Rail, and CN Railway freight trains, the work was performed on a night shift to obtain additional working time as compared to a day shift," notes Arash Barzegar, who served as project manager. "Shutting down any one of the main lines was not an option."

The initial plan was to change 325 ties per shift in between delays in GO, VIA and CN service. Once beginning the job, the crew discovered it

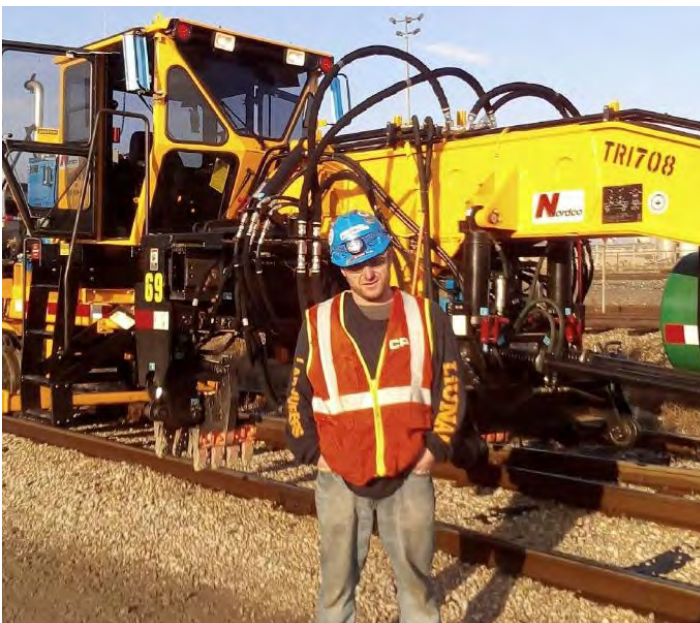
would experience significant delays while working on such a busy subdivision. "On a typical night, we were lucky to obtain 5 hours of working time between several hours of delays for trains passing on adjacent tracks within our working limits," says Arash. The mid-week work windows were limited to 6 hours, with 4.5 hours of productivity on average. Weekend work provided 8-hour work windows. Even with the erratic work windows, the crew was able to change significantly more ties per shift than planned. High productivity kept the project on schedule.

Based on this increased production, the scope of the project was revised to include additional ties within the same work period. By the time the project period had ended, the crew had changed 21,519 ties – nearly 38 percent more than initially planned, without a change in the initial time frame.

Effective organization and coordination between the working crew, protecting foremen and trains operating within the working limits allowed PNR RailWorks to average a surprisingly swift 550 ties per shift over the course of the project. Besides the tie-change crew, a three-man crew surfaced track, and GO Transit Maintenance performed constant flagging and crossing support.

The scope of the project also involved removing and disposing of all old ties from the subdivision.

Project leaders besides Arash included Project Superintendent Brandon Berry, Project Coordinator Justin Duval, Foreman Ryan Homeniuk; and for GO Transit Maintenance, Track Manager Greg Machado, Track Superintendent Roger Alves and Foreman Dan Bertram.



Operator Tim Dagenais (above left) stands in front of a tie remover/insertor used on the job for GO Transit. Besides the tie replacement, the scope of the project also involved removing and disposing of all old ties, a job that Operator Dan Springer (above right) helped to handle.

## News Across the Line

### RailWorks Track Systems

#### L.K. Comstock National Transit



In El Paso, TX, a group poses at a recent event for the public to meet the team of project engineers who are helping construct a streetcar system in El Paso. They represent Paso del Norte Trackworks, the joint venture of RailWorks Track Systems and California-based Granite Construction Company. Third from left, among Granite Construction employees, is RailWorks' Padideh Moghaddam, a track estimating engineer for the Track Transit Division.

The Camino Real Regional Mobility Authority in El Paso, TX, hosted a January 28 open house as part of the kickoff of its El Paso Streetcar Project. Representatives from RailWorks Track Systems and its joint-venture partner Granite Construction were on hand to talk to people from area businesses and other members of the public. The event featured merchandise giveaways and photo opportunities with a streetcar façade mockup.

Working under the name Paso del Norte Trackworks, the joint venture will construct a 4.8-mile system that runs in two loops between the Golden Horseshoe downtown retail district and the University of Texas at El Paso. The relocation of utilities has begun, and RailWorks Track Systems will begin track construction in July. L.K. Comstock National Transit will perform the systems work, including installation of four trac-

tion power substations, the overhead catenary system (OCS), signals and low-voltage feeder cables for the substations.

Vintage streetcars that last ran in El Paso in 1974 are currently being restored in Pennsylvania for future service in El Paso.

### PNR RailWorks

At Bombardier's Urban Transit Systems Testing Facility in Kingston, ON, PNR RailWorks extended Bombardier's existing track used for testing GO Transit/Metrolinx metro cars. Working in severe winter weather conditions, and in a week's time to minimize service disruption at Bombardier, the crew supplied and installed 85 meters of ballasted track and a No. 8 turnout. The new construction provides additional capacity to test transit vehicles and reduces the need to use a crane to hoist the equipment onto and off of the test track. The project manager was **Phil Kelly**, and **Joe Vaz** was the project superintendent.

The Bombardier facility, in operation since 1978, has four tracks for testing and qualifying metro, light rail and monorail vehicles.



During snowsquall conditions, a PNR RailWorks crew at a Bombardier transit-car testing facility constructed a #8 turnout and cut it into an existing spur to connect the spur to a test track.

## Calendar Notes

### Training

Feb. 29 - March 2	RailWorks Track Services – Chicago Region (partial group)	Minooka, IL
Feb. 29 - March 4	PNR RailWorks – Prairie Region	Calgary, AB
March 7 - 11	PNR RailWorks – Eastern Region Track Division	Guelph, ON
March 7 - 11	RailWorks Track Services – Chicago Region (partial group)	Minooka, IL
March 8 - 9	Front-line Supervisor Training	Guelph, ON
March 14 - 17	RailWorks Track Services – Chicago Region (partial group)	Minooka, IL
March 21 - 25	PNR RailWorks – Quebec Region	Delson, QC
March 17 - 18	RailWorks Track Systems – South Region Session 1	Houston, TX
March 31 - April 1	RailWorks Track Systems – South Region Session 2	Houston, TX