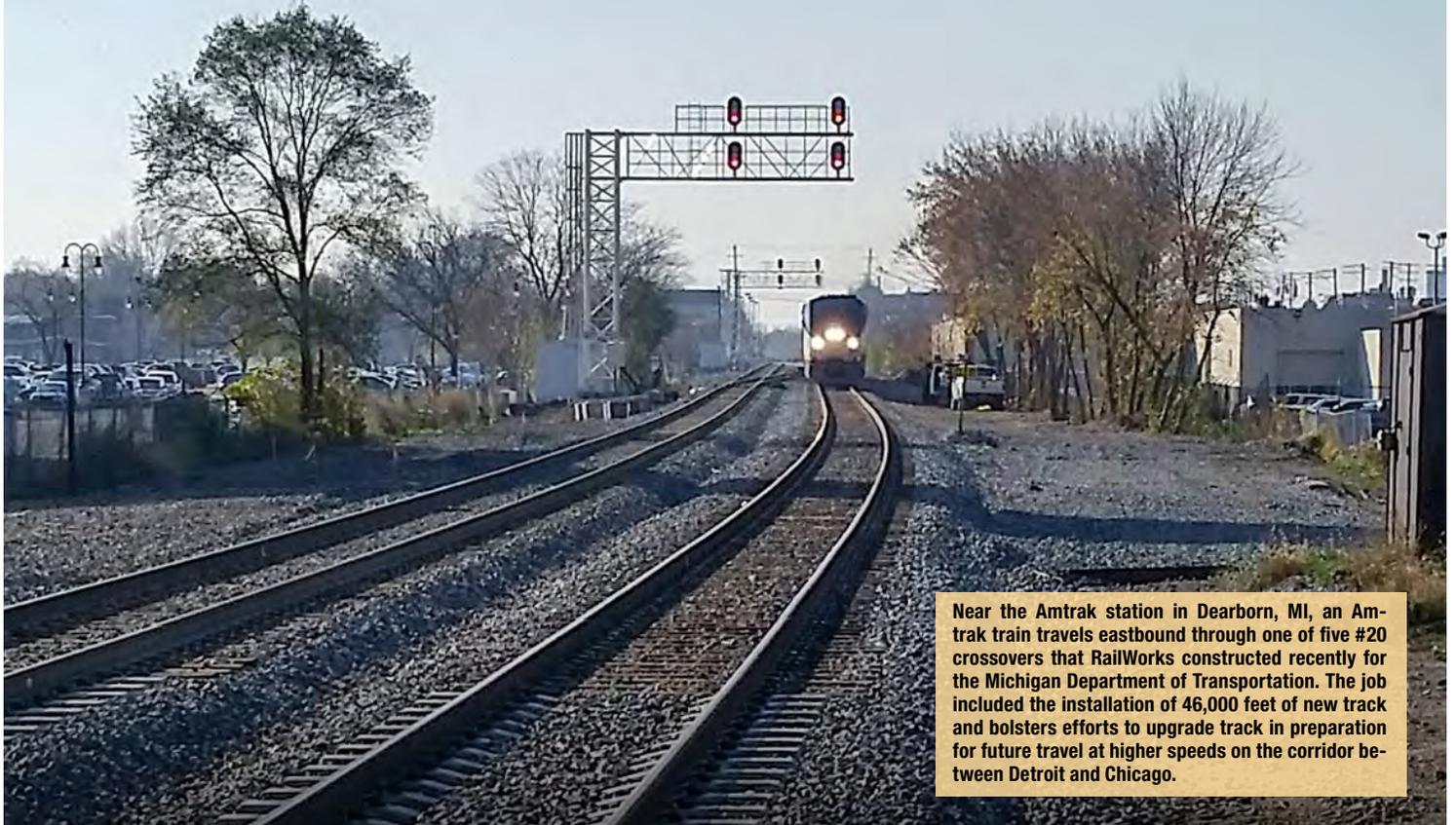


RAILWORKS® TODAY

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

Honing High-Speed Rail Expertise



Near the Amtrak station in Dearborn, MI, an Amtrak train travels eastbound through one of five #20 crossovers that RailWorks constructed recently for the Michigan Department of Transportation. The job included the installation of 46,000 feet of new track and bolsters efforts to upgrade track in preparation for future travel at higher speeds on the corridor between Detroit and Chicago.

Building upon three years spent in Illinois creating track infrastructure improvements to allow for higher-speed trains, RailWorks Track Services has since moved into Michigan, where crews are currently finishing a job that's providing equally important upgrades.

Work in Michigan – between Ypsilanti and Dearborn west of Detroit – began last October for the Michigan Department of Transportation (MDOT), along the 300-mile high-speed rail (HSR) corridor between Detroit and Chicago. Like the Illinois work that began in 2012 and continues between St. Louis and Chicago, the Michigan job improves track conditions to allow increased train speeds of up to 110 miles per hour, shaving travel time for Amtrak passenger trains and freight trains.

The \$20 million project called for track construction and installation of crossovers, turnouts and grade crossings on a 16-mile segment of

MDOT-owned track used by Amtrak for its Wolverine Line as well as by Norfolk Southern Railway (NS). “On our project, the primary objective was to provide a second track for freight trains so that Amtrak and the NS do not have to run on the same track,” says Mark Brown, manager – special projects. “In addition, curves on our new track were designed for higher speeds, and we modified curve geometry on the existing track to accommodate higher speeds.”

During peak periods last summer, as many as four crews of 30-plus employees based out of RailWorks Track Services' Chicago Region were hard at work, as were subcontractors who handled asphalt and concrete installation and other non-track tasks. RailWorks built 46,000 feet of new track, of which 5,000 feet were through-crossings. Crews installed five new #20 crossovers, a #15 turnout and a #10 turnout.

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Honing High-Speed Rail Expertise *continued from page 1*

From the outset, RailWorks was prepared for MDOT's exacting standards. "The project officially began the first week of October in 2014 with a kickoff meeting with the state," says Project Manager Brian Leuck. "Then there was grade work through last winter. They have very, very exact grading plans and specifications for high-speed rail, which required us to complete much more excavation underneath our track work here than we do for most of our projects."

While the new track construction work was typical, it nevertheless presented tests that kept things interesting, like installing crossovers into active mainline track.

"Each crossover was different," Brian says. "In one location we installed a universal crossover in existing double track; here we were able to use the two tracks to our advantage and reroute trains to get our work done. Another of the crossovers that we cut in was only about 200 feet away from the diamonds where a CSX line runs north and south."

This crossover installation required a 15-hour outage. "We did that work from 10 p.m. on a Monday to 1 p.m. the following day," notes Brian. "We got the work done about an hour and a half ahead of schedule." This part of the job included working around the schedule of operations in Norfolk Southern's Wayne Yard, located near the middle of the project. "They are constantly serving industries in the area or building trains on the main, all of this directly affected our ability to work."

Maintaining a project schedule is a challenge, especially when devising plans among multiple entities. RailWorks personnel David Galvan and Nicholas Volker coordinated daily with Amtrak and NS. Brian and Mark met every other week with the affected county or city, and weekly with the state.

At one crossing, there were four tracks to manage: the existing Amtrak main line, the new RailWorks-constructed main line, and two NS-owned tracks that RailWorks upgraded. "The city owned the road, we worked for the state, and Amtrak and Norfolk Southern run on this section of track. So a lot of coordination had to happen for us to get anything done. It definitely was challenging with all the parties involved."

Work on the current project wraps up in November. In April, RailWorks Track Services will resume the preparation for faster trains in Michigan, working west of its present location. Under a separate MDOT contract, crews will install about 26,000 cross ties and 500 switch ties between Jackson and Battle Creek.

Personnel from this office also will continue to provide track improvements under multiple contracts on the Illinois High Speed Rail Corridor.

MDOT Dearborn-to-Ypsilanti Double-Track Project Leadership Team

Mark Brown, Manager Special Projects

David Galván, General Superintendent

Brian Leuck, Project Manager

Nicholas Volker, Project Engineer



L.B. Foster employees are ready to help a RailWorks crew unload quarter-mile-long strings of continuous-welded rail (CWR) from this work train. Because CWR features fewer joints, it helps provide the necessary rail strength for handling trains at higher speeds and creates a smoother ride for passengers.



Since 2013, RailWorks Track Services has been at work on multiple new construction and upgrade projects across Michigan and Illinois to facilitate faster train travel on the United States' growing high-speed rail network.



RailWorks Track Services employees in Lincoln, IL, bed concrete ties to be used to construct a new siding there as well as a #11 turnout.

Illinois HSR Highlights

In Illinois, RailWorks Track Services has undertaken extensive work for Union Pacific Railroad to prepare track for higher speeds. RailWorks crews from the St. Louis and Chicago regions started out a few years ago near St. Louis and are generally working their way northeastward toward Chicago, somewhat parallel to Interstate 55.

They have been busy with multiple contracts in 2014 and 2015 (and carrying into 2016) that total about 48 miles. Much of their work involves constructing new sidings to provide capacity to accommodate slower trains so that faster trains can pass on the main line. Highlights of this work include:

- Auburn to Lincoln (14.5-plus miles) – Three sidings are completed and in service. Track work continues on a new double-main, and upon its completion, a fourth and final siding will be completed in the spring of 2016.
- McLean to Chenoa (7 miles) – Crews are removing and

replacing three sidings. They are currently at work on the second and anticipate the final one will be completed next spring.

- Dwight to Joliet (15 miles) – The largest undertaking, this job includes four sidings and a double-main line. Work at Plaines to reconfigure the main, the siding lead and the adjacent yard, was finished in November. A siding in Mazonia (5.5 miles) is currently in progress. Construction of a new double-main line (6 miles) in Joliet and the removal and replacement of a siding in Dwight (2.5 miles) will occur in the spring.
- Braidwood – (2.5 miles) Work on this siding was completed last summer. Under a new contract, RailWorks will install a turnout and build a set-out track in 2016.

RailWorks also has a pending contract to construct another siding in Illinois that will be about 2.5 miles.

Off the Clock



In the case of PNR RailWorks Assistant Project Manager Graeme Lue Qui, patience and persistence are paying off as he works to advance as an amateur triathlete. Read about what Graeme and other employees are up to outside of work at www.railworks.com/off-the-clock.

Is your coworker a serious hobbyist, volunteer, craftsman, athlete or artist who's doing something interesting during time away from the job? Please tell us about their pursuits; send an email to railworkstoday@railworks.com.



RAILWORKSMART RAILWORKSAFE

Recycling Is the Safe, Smart and Right Thing to Do

After 35 years, PNR RailWorks Materials Manager Grant Sweetnam knows a thing or two about recycling.

This longtime recycling advocate has been spearheading efforts to recycle scrap metal from rail lines in Canada since 1980, almost as long as he's been in his job with PNR RailWorks. Along the way, Grant's recycling efforts have expanded from retired rail, spikes and OTM (other track materials) to include wood ties. Health and Safety Advisor Helen Aherne and Office Manager Judy Tiefenbach also have taken a leadership role. The Pacific Region's recycling program now includes office materials, such as aluminum cans, paper and plastic and even Keurig beverage "pods."

Grant's early focus on recycling scrap metal was motivated by money, plain and simple. His knowledge of the scrap metal market – refined over several decades – has taught him to constantly gauge prices on local and world markets along with seasonal fluctuations to get the best prices. His efforts created a small but welcome revenue stream.

"Most of our customers have just wanted us to tear out the old rail and get rid of it," says Grant, who takes pride in knowing scrap metal is re-used to produce common metal items we see every day, from rebar and traffic signage to metal bed frames.

But over the years, this expansive recycling effort has picked up momentum for a range of safety and environmental reasons. The most basic is the need for good housekeeping at project sites. Clearing sites of extraneous scrap metal eliminates potential slips, trips and falls. As environmental practices have come into favor and are even mandated by the government and many railroads to protect the environment, recycling



Materials Manager Grant Sweetnam shows off scrap metal in PNR RailWorks' yard in Abbotsford, BC, that is staged for recycling. Grant has championed recycling in the Pacific Region since 1980. His leadership in coordinating recycling initiatives has contributed to safer jobsites and better operating practices that protect the environment.

and other new jobsite practices are simply the right thing to do.

In the old days, "if you had a hydraulic hose break, the mechanic just fixed it. Now we use spill kits, clean up the soil and even recycle oil," notes Grant. "In the 1970s, it was common to burn old ties. Now, we take old ties from private industry and our Keurig pods to a tie-grinding operation where they are chipped into boiler fuel. This approach enables us to give our customers a certificate verifying that the ties were disposed of in an environmentally safe manner."

Grant acknowledges PNR RailWorks' Pacific Region has been out front for decades when it comes to recycling. "Yes, we're a leader. We're showing how others should do it. It's a new environment we live in. We're trying to handle (these materials) correctly. . . . (We want) to be environmentally conscious, because it's the right thing to do – for the safety of our employees, for our customers and for the environment."

News Across the Line

RailWorks Track Systems

L.K. Comstock National Transit

RailWorks Track Systems and joint venture partner Granite Construction have been awarded a \$61 million contract by the Camino Real Regional Mobility Authority (CRRMA) to build a new electric streetcar system in El Paso, TX. Working under the name Paso del Norte Trackworks, the joint venture will construct a 4.8-mile system linking the international border, El Paso downtown business district, local hospitals, residential districts and the University of Texas at El Paso.

Sean McCray will serve as the project manager for the 32-month project, which gets under way in December. The scope of the work includes construction of the approximately 4.8 mile single-track corridor, 27 streetcar stops,



related street improvements, underground drainage, water, and sewer improvements, two bridge modifications, and a vehicle maintenance and storage facility near the existing Sun Metro Downtown Transfer Center.

RailWorks Track Systems will perform the track construction. L.K. Comstock National Transit will perform the systems work,

including installation of four traction power substations, the overhead catenary system (OCS), signals, and low-voltage feeder cables for the substations.

RailWorks and Granite Construction are teaming up again following the successful completion of the Tucson Modern Streetcar, which opened in July of 2014.

News Across the Line *continued from page 4*

Moving Ahead on Sound Transit

RailWorks companies continue to make progress on two ongoing light-rail projects for Sound Transit in the Greater Seattle area.

University Link (U830) - L.K. Comstock National Transit crews are in the final stages of work on the new \$1.9 billion extension of the existing Central Link from downtown north to the University of Washington.

Under the direction of Project Manager **Juan Estrada**, L.K. Comstock is responsible for installing and testing the communications systems for the tunnels and two new stations for the new 3.15-mile light rail extension as well as the new supervisory control and data acquisition (SCADA) system, radio systems, optical fiber and emergency and visual message systems. HSQ Technology designed the communication systems for the tunnels and new stations.



University Link (U830)

Project Manager Juan Estrada (center) reviews installation documents with Foreman Patrick Ritter (left) and Quality Assurance/Control Manager Scott Rafferty in the Fire Command Center (FCC) room in the Capitol Hill station. To equip emergency response personnel in managing emergencies at the station and along the line, L.K. Comstock installed a range of equipment, including the emergency ventilation system and control panel, building management system, train control system workstations, and emergency and PBX telephones.



200th Street Extension

Lineman Foreman John Lugo, left, and Apprentice Jeremy Anderson install an OCS hanger at Angle Lake Station, the new south terminus for the light rail line, where crews are currently installing the communications system.

Additionally, HSQ designed a replacement for the SCADA system on the existing Central Link line. Their solution features three distinct but integrated systems: the train control system (TCS), emergency ventilation system (EVS), and building management system (BMS).

Originally scheduled to open for revenue service in the third quarter of 2016, the extension opening may be moved up to the first quarter.

200th Street Extension - L.K. Comstock is installing the overhead catenary system (OCS), train control, and signal and communications systems on the 1.6-mile, 200th Street light-rail extension in Greater Seattle. Project Manager **Ben Neeley** and Construction Manager **Mike Akin** lead the project to connect the current SeaTac Airport station and the newly built Angle Lake Station at South 200th Street in SeaTac, WA. Revenue service is targeted to start in September of 2016.



University Link (U830)

Electricians install the monitors for the variable message system (VMS) that are displayed at all levels of the Capitol Hill station, one of two new stations on the extension. This signage works in conjunction with the train schedule and public address system to provide updates to passengers.



200th Street Extension

The 200th Street Extension project features two areas of special track, a diamond crossover and pocket track, which allows L.K. Comstock's hi-rail equipment to work simultaneously on both northbound and southbound track on the aerial guideway. Here, Apprentice Ray Kranzusch lines the switch so Journeyman Lineman John Seiler can bring the high rail truck into position to install the OCS components.