

Construction Project Briefing

August 14, 2013



Today's Presentation

- Loop Track
- Farwell/Armitage/Hill Substations
- Red Line South Reconstruction Project (Track & Station)
- Bus Hoist Replacement Program
 - ✓ Phase 1 – Forest Glen, South Shops, 77th Street Bus Garage
 - ✓ Phase 2 – Kedzie Bus Garage
 - ✓ Phase 3 – North Park Garage
 - ✓ Phase 4 – Chicago and 103rd Garage



Project Title: Loop Track Renewal Project

Managing Department: Power & Way Construction

Justification of Need:	The existing track system and the components are beyond their useful life.
Priority of Project:	High
Total Project Budget:	\$53,026,306
Construction Contract Value:	\$34,545,713.56
Earned to Date:	\$30M
Percent Change Orders to Construction Contract:	2.2%
Percent Time Used to Date:	100% for Milestone A-1, 100% for Milestone A-2
Funding Source:	2010 State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 14, 2011, Milestone A-1: 476 days to Substantial Completion, Milestone A-2 (Tower 18 and Hubbard): 686 days to Substantial Completion
Designer of Record:	CTA In-House Design
Construction Manager/General Contractor:	PB America (CM), Ragnar Benson (GC)
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

- Detailed Overview of Scope:**
- The project consists of renewal of track on the Wells/Van Buren legs of the Loop, including Tower 18 and Tower 12 Junctions, and Hubbard Curve on the Brown Line.
 - New components shall include ties, running rail, rail fasteners, guard rail, restraining rail, other track material, contact rail, contact rail insulators and anchors, footwalk, track access stairs, control panels, switch machines, rail lubricators, traction power and signal cabling.
 - Special Track Work includes Tower 12 Junction, Tower 18 Junction, new double crossover near Washington/Wells and replacement of Left Hand & Right Hand crossovers near Adams/Wabash.



Project Title: Loop Track Renewal Project

Managing Department: Power & Way Construction

Impact on Customers:	16 Weekend line cuts and reroutes. 14 Nightly single tracks and reroutes. Work will also be completed during two extended line cuts for the CDOT Wells Street Bridge Project.
Benefit to System:	Reduced maintenance costs, improved headways for revenue service, and improved safety.
Benefit to Community:	Improved headways for revenue service and improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	140
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend and night work. Station signage and Customer Assistants will be needed to direct customers during weekend and night work.

Comparable Projects:
<ul style="list-style-type: none"> • Dearborn Track Renewal • Ravenswood and North Main Line Tie Renewal • Loop Signal Project (Track Renewal on Lake and Wabash)



Project Title: Loop Track Renewal Project

Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> ▪ Contractor requested substantial completion of milestone A-1 on December 4, 2012. CTA issued the notice of substantial completion for milestone A-1 on January 14, 2013 with the punch list. Punch list work was completed on . ▪ The first extended line cut for the Wells Street bridge took place March 1, 2013- March 11, 2013. The north and center sections of Tower 18 were completed. Track 2 (northbound) and the northern half of track 1 (southbound) at Hubbard curve were completed. CDOT’s contractor (Walsh/II In One JV) completed the south leaf of the Wells Street bridge. ▪ The second extended line cut for the Wells Street bridge took place April 26, 2013 – May 6, 2013. The east, west, and portions of the south sections of Tower 18 were completed. The southern half of track 1 (southbound) at Hubbard curve was completed. CDOT’s contractor (Walsh/II In One JV) completed the north leaf of the Wells Street bridge. ▪ The remaining work of the south section at Tower 18 was completed under a re-route of Wells/Van Buren the weekend of June 28 – July 1, 2013. 	Ongoing

Delay Explanation:
<ul style="list-style-type: none"> • Change Order 1 extended the substantial completion date from January 1, 2013 to May 15, 2013 for work at Tower 18. Tower 18 work will be coordinated with the two 9 day line cuts for the CDOT Wells Street bridge project. • Change Order 2 authorized Hubbard curve work to be completed during the two 9 day line cuts for the CDOT Wells Street bridge project.



Project Title: Loop Track Renewal Project

Managing Department: Power & Way Construction



Tower 18 South Completed July 1, 2013



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">▪ Farwell – Waterproofing of retaining wall ongoing. Excavation of embankment in preparation for the installation of the mat slab is complete. Concrete installation will commence once waterproofing installation is completed.▪ Armitage– Relocation of overhead traction power cables completed. Construction fence installed. Track level platforms installed. Further work pending permit by CDOT Office of Underground Coordination (OUC).▪ Hill – Saw cutting and demolition of abandoned foundations started. Installation of sheet piles for Earth Retention System (ERS) scheduled to begin 7/19/2013.	Ongoing

Delay Explanation:

- CDOT OUC reviewing earth retention permit requirements for Armitage. FHP coordinating with OUC as necessary.



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Contractor sandblasting and waterproofing sheet pile retaining wall at Farwell Substation



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Impact on Customers:	The Dan Ryan Red Line branch from Cermak to 95 th will be shutdown for 154 days from May 19 th , 2013 to October 20, 2013. There may be single track outages prior to the line cut to perform preparatory work.
Benefit to System:	Reduced maintenance costs; Improved reliability; New infrastructure
Benefit to Community:	Improved customer travel times by eliminating slow zones; New elevators at Garfield, 63 rd and 87 th
Impact on Accessibility:	Garfield, 63 rd and 87 th stations will be accessible.
Estimated # of Jobs Created:	1150
Customer Communication Need:	Preliminary outreach started last fall. A comprehensive outreach plan will be implemented to ensure all customers clearly understand travel alternatives and construction impacts.

- Detailed Overview of Scope:**
- The limits of the project are the South subway portal near 16th/Clark on the north to approximately 95th Street on the south and including portions of the 18th Connector.
 - Replacement of deteriorated track components, including new running rail, ties, fasteners, ballast, and drainage improvements. Structural work includes expansion joint replacement, new waterproofing, concrete repairs. Systems work includes contact rail replacement, new supplemental negative return, temporary relocation and/or replacement of existing signal and communications infrastructure.
 - Rehabilitation of various architectural, civil, structural, mechanical and electrical elements at eight (8) stations along the Dan Ryan Red Line branch: Cermak/Chinatown, Sox/35th, 47th, Garfield, 63rd, 69th, 79th, and 87th. This work includes interior and exterior painting, platform canopy repairs, lighting and window repairs, and station cleaning.
 - Construction of new elevators at Garfield, 63rd and 87th stations.
 - New railing at the 69th St. bus bridge.



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	<p>Red South is on schedule and budget with 80 days left as of 7/31. All track contractor demolition is on schedule and nearing completion. Signal/communication duct banks and drainage installation are showing increased productivity commensurate with the increase in contractor crew size and associated supervision. The primary center duct bank is complete from 95th Station through approximately half way between Garfield and 47th Stations, the drainage installation is complete from 95th through 63rd Station. New track ballast installation is complete through 79th and in progress between 79th and 69th. New ties and rail are in progress between 95th and 69th. The northern section of the project from 18th to 35th Station shows a similar level of completion.</p> <p>The station contractor is also on schedule and budget. Elevator and platform work are progressing with the steel elevator towers complete at Garfield, 63rd and 87th Stations. Painting continues throughout.</p>	Ongoing

Delay Explanation:
<ul style="list-style-type: none"><li data-bbox="73 1182 195 1206">• N/A



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



DRAINAGE TRENCH EXCAVATION

Project Title: Red Line South Reconstruction Project
Managing Department: Power & Way Construction



63rd Street Elevator Steel Erection

Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction

Justification of Need:	The existing bus hoists are beyond their useful life and many are not functioning.		
Priority of Project:	High		
Construction Phase	Phase 1	Phase 2:	Phase 3:
Bus Hoist Equipment Contract Value:	\$1,668,052	Phase 2: \$1,163,892	Phase 3: \$779,769
Construction Contract Value:	\$2,663,345	Phase 2: \$3,135,143	Phase 3: \$1,869,630
Construction Value Earned to Date:	\$1,640,328.20	Phase 2: \$641,048	\$0
Percent Change Orders to Construction Contract:	25%	0%	0%
Percent Time Used to Date:	78%	33%	0%
Estimated Start and Completion Date:	NTP 11/21/12 projected completion 8/16/13.	NTP 3/4/13 projected completion 11/30/13.	NTP 6/24/13 projected completion 12/31/13
Designer of Record:	TranSystems Corporation		
Contractor	Paul Borg	Kiewit	F.H. Paschen
Project Manager:	Steve Mascheri (GM); Shawn Riley (PM); Jacobs (CM)		
Funding Source:	FTA and RTA Grants		

Detailed Overview of Scope:

Replacement of bus maintenance lifts including drainage, electrical work, and maintenance pads.
 Project has been sequenced to mitigate interference to CTA Bus Operations.



Project Title: Bus Hoist Replacement Program – Phase 1

Managing Department: Facilities Construction

Impact on Customers:	N/A
Benefit to System:	Improved capacity for maintenance facilities and reliable equipment for bus operations.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	60 (phases 1 thru 3)
Customer Communication Need:	N/A

Comparable Projects:
<ul style="list-style-type: none">N/A



Project Title: Bus Hoist Replacement Program – Phase 1

Managing Department: Facilities Construction

Construction Progress

Phase	Description	Status
Phase 1	<ul style="list-style-type: none"> ▪ Project has been sequenced to minimize impact to Bus Operations and Maintenance. <p style="margin-left: 40px;">Forest Glen – 7 lifts installed. Close out in progress</p> <p style="margin-left: 40px;">South Shops – 4 lifts installed and operational. Close out in progress.</p> <p style="margin-left: 40px;">77th Garage – 7 lifts installed. Work at 4 of the 11 remaining pits in progress.</p>	Construction
Phase 2	<ul style="list-style-type: none"> ▪ Kedzie Garage - Work at 2 of the 12 pits is in progress. <p style="margin-left: 40px;">Work on the wash pit and inspection pit are in progress.</p>	Construction
Phase 3:	<ul style="list-style-type: none"> ▪ North Park Garage – Work on 4 of the 9 pits in progress 	Construction
Phase 4:	<ul style="list-style-type: none"> ▪ 103rd and Chicago Garages 	Bidding

Delay Explanation:

Phase 1: Elevation differential in underground drainage has resulted in the requirement to place new drainage lines as opposed to tying into existing drainage lines

Phase 2: No delay.

Phase 3: No Delay



Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction



North Park – Demolition



Kedzie Wash Bay & Inspection Pit Site Preparation

Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction



Kedzie – Hoist installation



Kedzie Bus Hoist- Installation