

Construction Project Briefing

July 15, 2013



Today's Presentation

- Loop Track
- Farwell/Armitage/Hill Substations
- Dan Ryan Track Project
- Bus Hoist Replacement Program
 - ✓ Phase 1 – Forest Glen, South Shops, 77th Street Bus Garage
 - ✓ Phase 2 – Kedzie Bus 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, 93% 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:	
<ul style="list-style-type: none"> 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"> <li data-bbox="324 297 1510 396">▪ 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 is in progress. <li data-bbox="324 439 1491 611">▪ 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. <li data-bbox="324 654 1522 825">▪ 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. <li data-bbox="324 868 1522 925">▪ The remaining work of the South section at Tower 18 is scheduled to be completed under a Reroute of Wells/Van Buren the Weekend of June 28 – July 1, 2013. 	Ongoing

Delay Explanation:
<ul style="list-style-type: none"> <li data-bbox="54 1092 1690 1156">• 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. <li data-bbox="54 1163 1622 1199">• Hubbard Curve work will also be coordinated with 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 12 South After



Project Title: Loop Track Renewal Project
Managing Department: Power & Way Construction



Tower 18 After



Project Title: Loop Track Renewal Project

Managing Department: Power & Way Construction



Hubbard Curve After



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan
Priority of Project:	High
Total Project Budget:	\$56,918,563.00
Construction Contract Value:	\$46,684,000.00
Earned to Date:	4%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	34.69%
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 30, 2012
Designer of Record:	Laramore, Douglass and Popham(LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); David Heard (PM)

Detailed Overview of Scope:
Construct Three (3) New Traction Power Substations namely, Farwell, Armitage, Hill Modify Orleans Switch Room Modify Weed Switch Room Modify Sedgwick Substation



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction

Impact on Customers:	59 Tracks Out of Service. 9 Single Tracks, and 6 Reroutes. Street and lane closures around worksites, Curtailed access to resident garages(at Armitage)
Benefit to System:	Reduced Traction Power related Train Defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved reliability for revenue service and improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	40
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend, night work and power outages.

Comparable Projects:
<ul style="list-style-type: none">• NA



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 – Completed demolition of retaining wall and excavation of embankment to prepare for the installation of the bottom row of tie backs and whalers. Started the installation and testing of bottom row of tie backs, testing scheduled for completion in June. Started pavement demolition for Mat Slab excavation.▪ Armitage Tie House – Relocation of overhead cable planned. Further work pending permit by CDOT Office of Underground Coordination (OUC).▪ Hill – relocation of City electric overhead cables, Saw cut and demolish wedding cake foundation planned along with the installation of sheet pile ERS. Further work pending permit by CDOT Office of Underground Coordination (OUC).	Ongoing

Delay Explanation:

- Contractor did not complete City of Chicago permits on schedule and did not initially coordinate utility relocations. Contractor submitting recovery schedule. CDOT OUC reviewing earth retention permit requirements for both Armitage and Hill. FHP coordinating with OUC as necessary.



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction

Justification of Need:	The existing ties, rail and track components, as well the underlying ballast and drainage systems have reached or exceeded their useful life. In addition, this project is necessary to provide accessibility at all of the Dan Ryan stations and to improve customer experience at these stations.	
Priority of Project:	High	
Total Project Budget:	\$425M	
Funding Source:	RTA/IDOT CTA-2012-LI	
Designer of Record:	T.Y. Lin International; TranSystems Corporation	
Construction Manager:	Parsons Brinckerhoff	
Project Manager:	Robert Wittmann (GM); Brittany Dyra (PM)	
	Track Renewal	Station Improvements
Construction Contract Value:	\$220,166,000	\$43,875,000
Earned to Date:	\$41.0M	\$6.4M
Percent Change Orders to Construction Contract:	(-2.1%)	0.0%
Percent Time Used to Date:	35.9% (as of June)	66.1% (as of June)
Estimated Start Date/Estimated Length of Project:	Notice To Proceed: October 4, 2012 Substantial Completion: October 24, 2014	Notice To Proceed: December 21, 2012 Substantial Completion: October 6, 2013
General Contractor:	Kiewit Infrastructure Co.	F.H. Paschen, S. N. Nielsen & Associates, LLG



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>Track Renewal Work:</p> <p>3rd Rail/Signal/Comm Cable Removal (LF) 80% Actual Complete, 34% Schedule Complete</p> <p>Track Removal (TF) 90% Actual Complete, 22% Schedule Complete</p> <p>Mass Excavation (CY) 34% Actual Complete, 35% Schedule Complete</p> <p>Ductbank Demo (LF) 11% Actual Complete, 9% Schedule Complete</p> <p>Ductbank Installation (LF) 0% Actual Complete, 0% Schedule Complete</p> <p>Drainage Installation (LF) 0% Actual Complete, 0% Schedule Complete</p> <p>Signal/Comm Cable Installation (LF) 0% Actual Complete, 0% Schedule Complete</p> <p>Track Work (Running Rail) (TF) 0% Actual Complete, 0% Schedule Complete</p> <p>3rd Rail Installation (LF) 0% Actual Complete, 0% Schedule Complete</p> <p>Testing 0% Actual Complete, 0% Schedule Complete</p> <p>Station Improvements Work:</p> <p>Demolition 39% Actual Complete, 34% Schedule Complete</p> <p>Elevator Foundation 0% Actual Complete, 0% Schedule Complete</p> <p>Elevator Structural Steel & Enclosure 0% Actual Complete, 0% Schedule Complete</p> <p>Elevator Cab, Shaft and Controls 0% Actual Complete, 0% Schedule Complete</p> <p>Elevator Testing 0% Actual Complete, 0% Schedule Complete</p> <p>Platform Foundation 3% Actual Complete, 45% Schedule Complete</p> <p>Platform Construction 0% Actual Complete, 0% Schedule Complete</p> <p>Canopy Installation 0% Actual Complete, 0% Schedule Complete</p> <p>Painting 5% Actual Complete, 5% Schedule Complete</p>	Ongoing

Delay Explanation:

- N/A



Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



BALLAST STOCKPILING

Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



SYSTEMS EQUIPMENT REMOVAL

Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



TRACK DEMOLITION PREPARATION

Project Title: Red Line South Reconstruction Project

Managing Department: Power & Way Construction



Work at Garfield Elevator Pit

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	
Bus Hoist Equipment Contract Value:	Phase 1: \$1,668,052	Phase 2: \$ 2,129,450
Construction Contract Value:	Phase 1: \$2,663,345	Phase 2: \$3,135,143.09
Construction Value Earned to Date:	Phase 1: \$1,640,328.20	Phase 2: \$150,000
Percent Change Orders to Construction Contract:	Phase 1: 25%	Phase 2: 0%
Percent Time Used to Date:	Phase 1: 75%	Phase 2: 15%
Funding Source:	FTA and RTA Grants	
Estimated Start Date/Estimated Length of Project:	Phase 1: NTP 11/21/12 and the anticipated completion date is 8/16/13.	Phase 2: NTP 3/4/13 and substantial completion projected to be 11/30/13.
Designer of Record:	TranSystems Corporation	
Construction Manager/General Contractor:	Jacobs (CM), Stertil-Koni (Equipment) Phase 1 GC: Paul Borg Construction	Jacobs (CM), Stertil-Koni (Equipment) Phase 2 GC: Kiewit
Project Manager:	Steve Mascheri (GM); Shawn Riley (PM)	

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:	40 (phases 1 and 2)
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. Forest Glen – 2 lifts installed. Installation of 5 are in progress. South Shops – 4 lifts installed and operational. Close out in progress. 77th Garage – 3 lifts installed. Work at 4 of the 11 remaining pits in progress.	Construction
Phase 2	<ul style="list-style-type: none">Kedzie Garage - Work at 2 of the 12 pits is in progress. Work on the wash pit and inspection pit are in progress.	Construction
Phase 3:	<ul style="list-style-type: none">North Park Garage	Routing
Phase 4:	<ul style="list-style-type: none">103rd, Chicago, 74th Hoist	In Design

Delay Explanation:

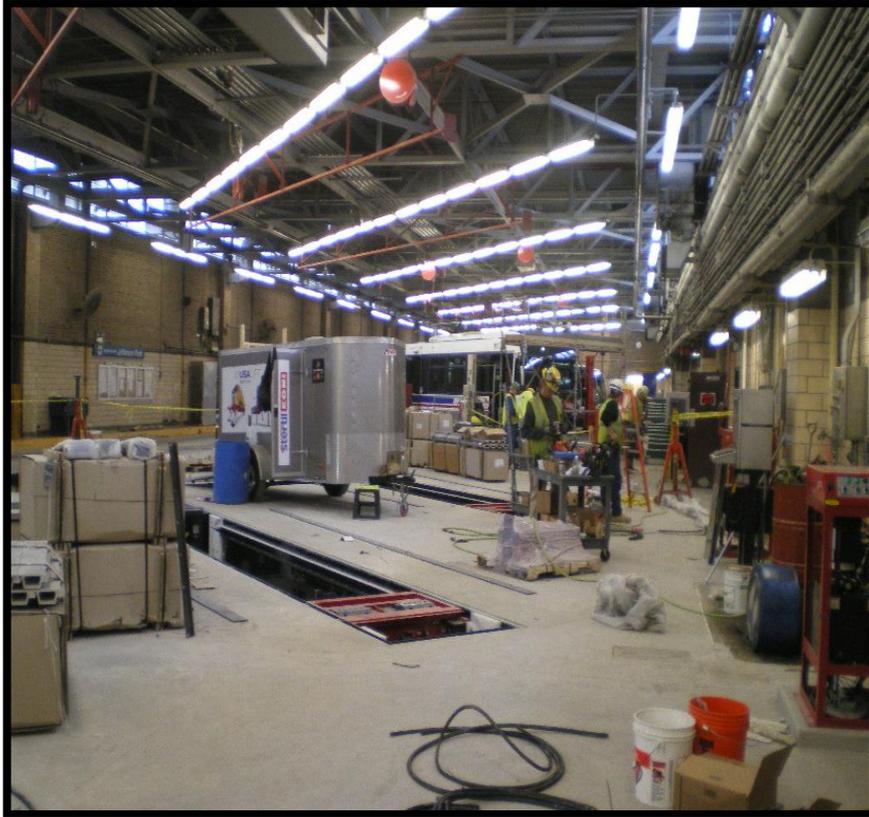
Phase 1: Elevation differential in underground drainage has resulted in the requirement to place new drainage lines as opposed to tying into existing drainage lines

Phase 2: No delay.



Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction



Forest Glen – Hoist installation



Kedzie Bus Hoist- Demolition