

Construction Project Briefing

August 13, 2014



Today's Presentation

- **Traction Power - Farwell/Armitage/Hill Substations**
- **Harrison Station Rehabilitation**
- **Bus Hoist Replacement Program**
 - ✓ **Phase 1 – Forest Glen, South Shops, 77th Street Bus Garage**
 - ✓ **Phase 2 – Kedzie Bus Garage**
 - ✓ **Phase 2 – North Park Garage**
 - ✓ **Phase 2 – Chicago and 103rd Garage**
- **Milwaukee Blue Line Track Renewal**
- **O'Hare Blue Line Station Improvements (Damen, Western, California)**



Project Title: Traction Power Systems Upgrades and Improvements

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan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:	61%
Percent Change Orders to Construction Contract:	0.5%
Percent Time Used to Date:	84% (as of July)
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued August 30, 2012; substantial completion 810 days after NTP
Designer of Record:	Laramore, Douglass and Popham (LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); Premal Vora (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

Impact on Customers:	Nine single tracks, and six reroutes. Street and lane closures around worksites, curtailed access to resident garages (at Armitage).
Benefit to System:	Additional traction power capacity reduced traction power related train defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	89
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

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">▪ Farwell – Traction power equipment is installed. Connection to rails continues; once complete, substation can be energized. ▪ Armitage – The last of the CTA track column replacement work began with earth retention installation, excavation, lagging and bracing installation followed by temporary shoring. Building foundation work continues. ▪ Hill – Traction power equipment is installed and is being tested. Site utilities are installed. Ductbank work is continuing, with cable pulling and splicing from the substation.<ul style="list-style-type: none">▪ Subway ductbank installation began.	Ongoing

Delay Explanation:
<ul style="list-style-type: none">• Unforeseen underground conditions and a high water table have been encountered within CTA Right of Way at Armitage Substation, creating a delay and requiring site dewatering prior to interior column excavation work.• Unsuitable soils and unforeseen underground conditions have been encountered within CTA Right of Way in the Hill Ductbank installation.



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Farwell Substation

Project Title: Traction Power Systems Upgrades and Improvements
Managing Department: Power & Way Construction



Farwell Substation interior



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Hill Substation

Project Title: Traction Power Systems Upgrades and Improvements

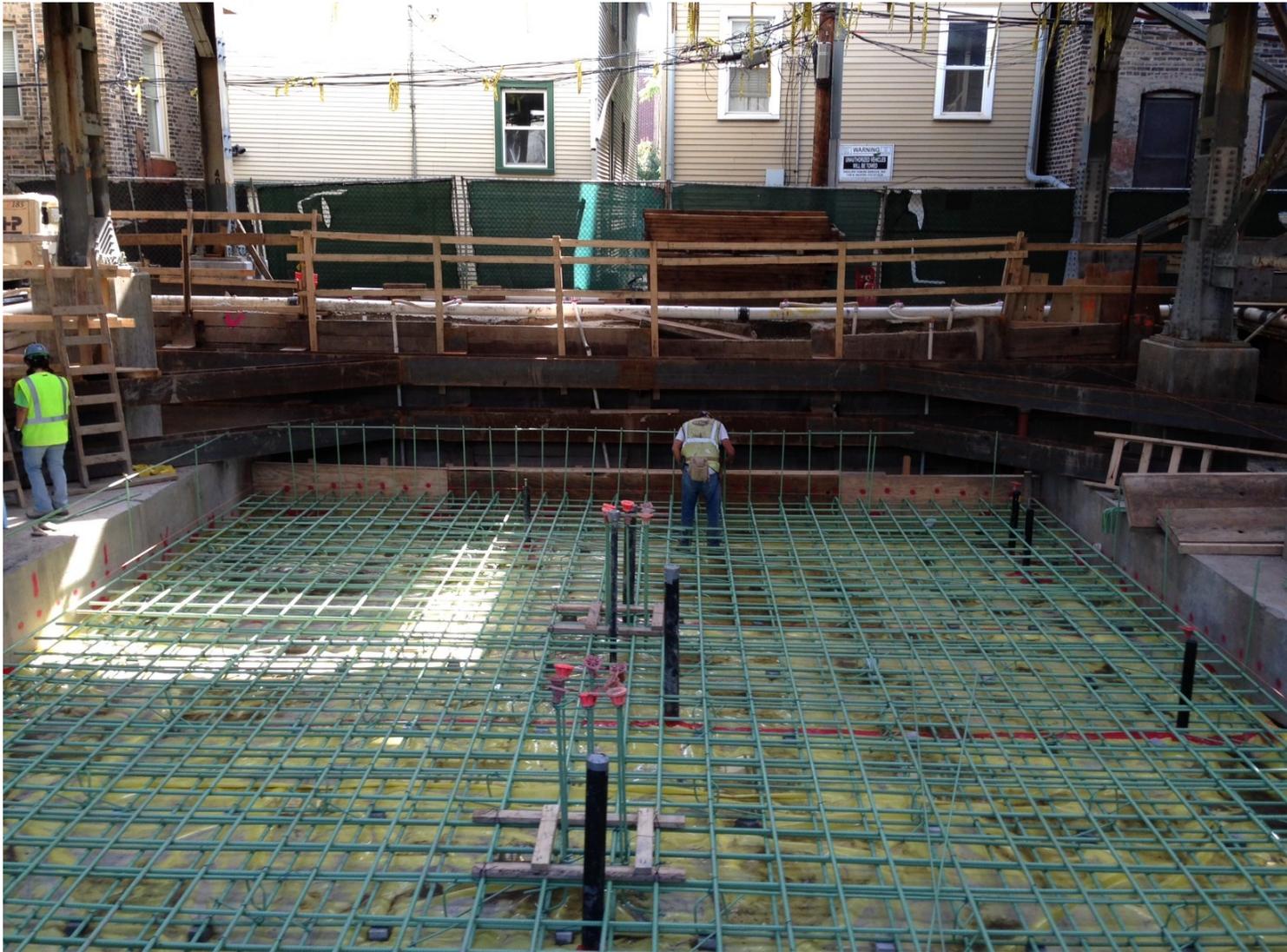
Managing Department: Power & Way Construction



Hill Substation interior

Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Armitage Substation: building foundation rebar installation

Project Title: Harrison Station Rehabilitation

Justification of Need:	The station is old and suffers from extensive leaking and water damage
Priority of Project:	High
Total Project Budget:	\$10,000,000
Construction Contract Value:	\$6,400,000
Earned to Date: (thru June)	59.65%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	68.79%
Funding Source:	TIF
Estimated Start Date/Estimated Length of Project:	NTP issued November 26 th , 2013; Final Acceptance scheduled for October 2014
Design/Build Contractor	Kiewit Infrastructure (DBC) Altus Works (Lead Design Subconsultant)
Construction Manager:	Parsons Brinkerhoff (CM),
Project Manager:	Steven Mascheri (GM); Charles Freeman (PM)

Detailed Overview of Scope:	
<p>New station finishes including:</p> <ul style="list-style-type: none"> • New flooring, wall finishes, signage upgrades • Lighting replacement (LED), lighting backup system fed from CTA substations • New stair enclosures at Harrison entrances 	



Project Title: Harrison Station Rehabilitation

Impact on Customers:	One 42 day Polk entrance closure from April thru May One 42 day Harrison entrance closure from June thru July Various weekend station closures
Benefit to System:	This project will mitigate the water infiltration problem at both entrances to the station platform and provide a safer, more user friendly fare control design.
Benefit to Community:	Improved safety/customer comfort/finishes
Impact on Accessibility:	None.
Estimated # of Jobs Created:	72
Customer Communication Need:	Construction activity notices will be needed to alert businesses, schools, and residents to weekend work, night work, and service interruptions.

Comparable Projects:
<ul style="list-style-type: none"> Station renovation portion of the North Main Line Station Renovation Project (2012)



Project Title: Harrison Station Rehabilitation

Construction Progress

Phase	Description	Status
Construction	<p>Polk Street Entrance –</p> <ul style="list-style-type: none"> ▪ Re-Opened and is being used as the primary entrance <p>Harrison Street Entrance –</p> <ul style="list-style-type: none"> ▪ Began the 42 day closure on June 16th, 2014 ▪ Demolition in progress ▪ Kiosk installation has begun on the West Entrance ▪ Electrical and Communications layouts complete ▪ Tile installation has begun ▪ Water mitigation and crack injections complete ▪ Granite installation for the platform is complete ▪ New benches installed 	<p>Complete</p> <p>Polk entrance opened: May '14</p> <p>Harrison entrance closure: June – July '14</p>

Delay Explanation:
<ul style="list-style-type: none"> • N/A



Project Title: Harrison Station Rehabilitation



Harrison – New granite tiles and lighting



Project Title: Harrison Station Rehabilitation



Harrison – New stair entrance canopy



Project Title: Harrison Station Rehabilitation



Harrison – Fare array in new mezzanine



Project Title: Harrison Station Rehabilitation



Harrison – New wall tiles and lighting



Project Title: Bus Hoist Replacement Program

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: 77 th /SS/ Forest Glen	Phase 2: Kedzie	Phase 2: North Park	Phase 2: Chicago/103 rd
Bus Hoist Equipment Contract Value:	\$1,668,052	\$1,163,892	\$779,769	\$1,066,901
Construction Contract Value:	\$2,663,345	\$3,145,143	\$1,869,630	\$2,820,651
Value Earned to Date (Construction and Hoists):	\$4,288,084	\$4,227,808	\$2,551,989	\$3,126,492
Percent Change Orders to Construction Contract:	25%	3%	0%	6%
Percent Time Used to Date:	99%	99%	99%	80%
Estimated Start and Completion Date:	NTP 11/21/12 Projected Final Completion 8/1/14.	NTP 3/4/13 Projected Final Completion 8/1/14	NTP 6/24/13 Projected Final Completion 8/30/14	NTP 9/10/13 Projected Substantial Completion 8/29/14.
Designer of Record:	TranSystems Corporation			
Contractor	Paul Borg	Kiewit	F.H. Paschen	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

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:	80 (phases 1 thru 4)
Customer Communication Need:	N/A

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



Project Title: Bus Hoist Replacement Program

Construction Progress

Phase	Description	Status
Phase 1:	▪ Forest Glen – Close Out, paperwork pending.	Close Out
	▪ South Shops – Close Out, paperwork pending.	Close Out
	▪ 77 th Garage – Close Out, paperwork pending.	Close Out
Phase 2:	▪ Kedzie Garage – Close Out, paperwork pending.	Close Out
	▪ North Park Garage – 2 Punch List items remain, Substantial Completion has been issued.	Close Out
	▪ 103 rd and Chicago Garages –9 lifts total: 9 have been installed. Phase 2 for wash and inspection is 60% complete. Substantially complete with wash bays and inspection bays by August 2014.	Construction

Delay Explanation:
Phase 1: Work Complete
Phase 2: Earth retention system constraints for Bays 13 & 14 forced Phase 2 work at 103 rd to be split into two separate phases which added an estimated 5 weeks to the final schedule.



Project Title: Bus Hoist Replacement Program



Chassis Wash Excavation – 103rd Garage

Project Title: Milwaukee Blue Line Track Renewal

Justification of Need:	The existing ties and track components have reached or exceeded their useful life, resulting in slow zones between Damen Station and Kimball Subway.
Priority of Project:	High
Total Project Budget:	\$30,264,684
Construction Contract Value:	\$20,395,680 (Design/Build)
Earned to Date:	63% (design and construction) thru May 2014
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	67% thru August 13, 2014
Funding Source:	FTA/IDOT
Estimated Start Date/Estimated Length of Project:	NTP Issued August 30, 2013; Substantial Completion January 31, 2015 (NTP + 519 Days)
Designer of Record:	HW Lochner (for Kiewit Infrastructure Co.)
Construction Manager/General Contractor:	Parsons Brinckerhoff (CM), Kiewit Infrastructure Co. (DBC)
Project Manager:	John Titzer (GM); William Polacek (PM)

<p>Detailed Overview of Scope:</p> <ul style="list-style-type: none"> • Improvements to 18,680 track feet along the elevated portion of the Logan Square Connector on the O'Hare Blue Line. • Scope includes replacement of ties, plates, timber guard, other track material and footwalk from North of Damen Station to the Kimball Subway Portal. • Damen/North Ave reverse curves will be reconstructed to increase speed through the curve.



Project Title: Milwaukee Blue Line Track Renewal

Impact on Customers:	Ten line cuts and two single tracks. Street and lane closures around worksites, curtailed access to resident garages under the right of way. Bus shuttles required on line cut weekends.
Benefit to System:	Reduced maintenance costs; Improved reliability; New infrastructure
Benefit to Community:	Improved customer travel times by eliminating slow zones
Impact on Accessibility:	None.
Estimated # of Jobs Created:	82
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"> • Englewood Green Line Track work • Ravenswood-Loop Connector Project 	



Project Title: Milwaukee Blue Line Track Renewal

Construction Progress

Phase	Description	Status
Design Design Design	<ul style="list-style-type: none"> ▪ Milestone 1 – RFP Validation ▪ Milestone 2 – 90% Design ▪ Milestone 3 – 100% Design 	Complete Complete Complete
Construction	<ul style="list-style-type: none"> ▪ Contractor has completed eight of ten weekend line cuts to date. Approximately 87% of track work has been completed or 16,259 track feet. 	Complete
Construction	<ul style="list-style-type: none"> ▪ Contractor is preparing for the final two line cuts in August. 	Ongoing

Delay Explanation:
<ul style="list-style-type: none"> • N/A



Project Title: Milwaukee Blue Line Track Renewal



Clipping Rail to New Plates – SB California Station



Project Title: Milwaukee Blue Line Track Renewal



Completed section of track north of Damen Station



Project Title: O’Hare Blue Line Station Improvements (Damen Western California)

Justification of Need:	The existing stations have undergone varying degrees of repair since they opened in 1895. The objective of this project is to bring the stations up to a state of good repair while retaining historic elements.
Priority of Project:	High
Total Project Budget:	\$33,000,000
Construction Contract Value:	\$25,585,000 (Design/Build)
Earned to Date:	6% (design) thru May 2014
Percent Change Orders to Construction Contract:	4%
Percent Time Used to Date:	50% thru August 13, 2014
Funding Source:	IDOT (Jump Start)
Estimated Start Date/Estimated Length of Project:	NTP Issued March 19, 2014; Substantial Completion January 6, 2015 (NTP + 293 Days)
Designer of Record:	Ross Barney Architects (for F.H. Paschen)
Construction Manager/General Contractor:	Parsons Brinckerhoff (CM), F.H. Paschen (DBC)
Project Manager:	John Titzer (GM); William Polacek (PM)

<p>Detailed Overview of Scope:</p> <ul style="list-style-type: none"> • California and Damen: Replace platform decking, station house roofing , interior flooring, structure painting, interior station house renovation, sidewalk/plaza paving, tuck point masonry, LED lighting, new signage, bike racks, CA Booth, additional fare turnstiles and new art work. • Western: New entrance canopy, paint stairs, LED lighting, bike racks and art work. • Damen Tower: Replace roofing, doors, windows, tuck point masonry and install new station electrical service.



Project Title: O'Hare Blue Line Station Improvements (Damen Western California)

Impact on Customers:	<p>California Station will be closed for a period of 42 days beginning in 3rd quarter 2014.</p> <p>Damen Station will be closed for a period of 63 days in the 4th quarter of 2014. Western will remain open during construction.</p> <p>Only one station will be closed at a time to minimize customer impacts.</p>
Benefit to System:	<p>Reduced maintenance costs; New infrastructure, improved lighting and customer interfacing, including train tracker system</p>
Benefit to Community:	<p>Modern, well lit station with additional security cameras that will improve safety and security.</p>
Impact on Accessibility:	<p>None.</p>
Estimated # of Jobs Created:	
Customer Communication Need:	<p>Construction activity notices will be needed to alert businesses and residents regarding station closures and construction impacts (noise, dust, street/alley impacts)</p>

Comparable Projects:	
<ul style="list-style-type: none"> • North Main Line Seven Station Renovations • Harrison Station Renewal Project 	



Project Title: O'Hare Blue Line Station Improvements (Damen Western California)

Construction Progress

Phase	Description	Status
Design Design	<ul style="list-style-type: none"> ▪ Milestone A – RFP Validation and presentation boards ▪ Milestone B – 90% Design 	Complete Complete
Pre-Construction	<ul style="list-style-type: none"> ▪ Contractor Soliciting and awarding bids for various trades (June through August) 	On-Going
Construction	<ul style="list-style-type: none"> ▪ Mobilize for construction work late 2nd quarter 2014 	Planned
Construction	<ul style="list-style-type: none"> ▪ Close California Station 42 days for construction work (3rd quarter 2014) ▪ Close Damen Station 63 days for construction work (4th quarter 2014) 	Planned Planned

Delay Explanation:
<ul style="list-style-type: none"> • N/A

