

Construction Project Briefing

January 7, 2013



Today's Presentation

- **Traction Power - Farwell/Armitage/Hill Substations**
- **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: 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Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan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:	24%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	57%
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); 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

Managing Department: Power & Way Construction

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

Managing Department: Power & Way Construction

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> ▪ Farwell – Structural work for the substation is complete. Work will continue with masonry and site utilities. Roofing work and exterior framing work will continue. The interior work is proceeding with painting and dielectric flooring installation. Equipment testing, followed by delivery and installation, is scheduled for the beginning of the year. ▪ Armitage – CTA track column replacement work continues with earth retention installation, excavation, lagging and bracing installation followed by temporary shoring in order to remove and replace twenty-seven column foundations. Initial drilling and H-Pile installation has revealed unknown existing conditions that requires the contractor to re-sequence the work, but has not stopped progress at the site. ▪ Hill – Masonry work has progressed with the concrete block 1st floor structural wall installation. The masonry work will continue with the façade brick and stone finishes. While the building is progressing, site work will also be completed for utilities. The pre-cast roof plank installation will be completed while masonry is being finished. The ductbank work will continue with earth retention installation and excavation, followed by conduit installation. 	Ongoing

Delay Explanation:
<ul style="list-style-type: none"> • Unforeseen underground conditions have been encountered within CTA Right of Way at Armitage Substation. • High water table on site at Armitage caused CDOT to request a site dewatering plan for future excavation work.



Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Farwell Substation: stripped east wall

Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Farwell Substation: 1st floor painting

Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Armitage Substation: excavation around column base

Project Title: Traction Power Systems Upgrades and Improvements

Managing Department: Power & Way Construction



Hill Substation: transformer pad concrete pour

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: 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	\$3,878,131	\$2,251,989	\$0
Percent Change Orders to Construction Contract:	25%	0%	0%	0%
Percent Time Used to Date:	99%	90%	85%	0%
Estimated Start and Completion Date:	NTP 11/21/12 Projected completion 10/18/13.	NTP 3/4/13 Projected completion 12/20/13.	NTP 6/24/13 Projected completion 3/05/14.	NTP 9/10/13 Projected completion 7/09/14.
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 – 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:	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 – Phase 1

Managing Department: Facilities Construction

Construction Progress

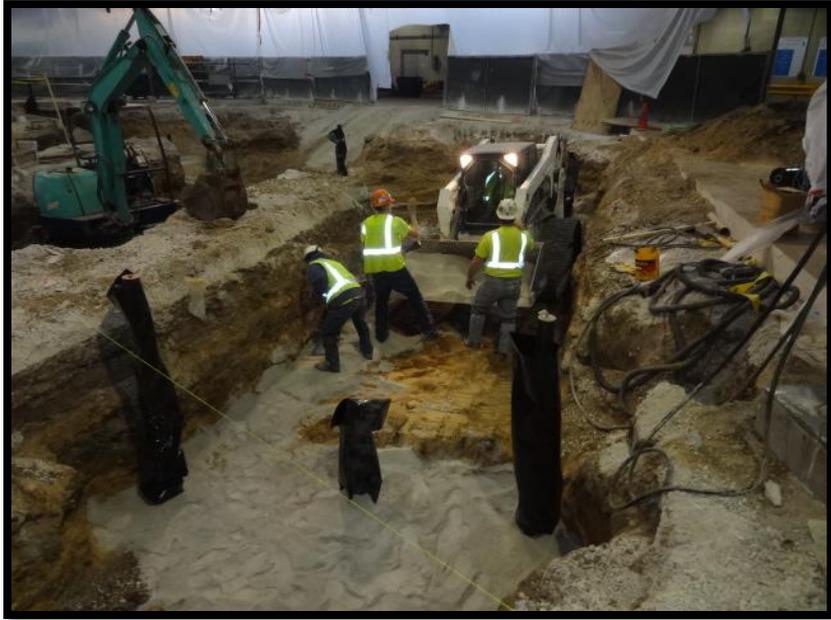
Phase	Description	Status
Phase 1:	<ul style="list-style-type: none">▪ Forest Glen – Close out in progress.▪ South Shops – Close out in progress.▪ 77th Garage –Close out in progress.	Closeout
Phase 2:	<ul style="list-style-type: none">▪ Kedzie Garage – 12 lifts total: 8 lifts installed, working on the last 4 lifts. Work on the wash pit and inspection pit are 85% Complete. Concrete pits at the last 4 bays are being completed. Lifts scheduled to be installed by Mid-December 2013.▪ North Park Garage – 13 lifts total: 5 lifts installed, work ongoing at 4 more lifts. Lifts at bays 6-9 will be installed by Mid-December.▪ 103rd and Chicago Garages – NTP issued 9/10/13. Demolition for phase 1 has started.	Construction Construction Construction

Delay Explanation:
Phase 1: Due to the elevation of the existing drainage lines they could not be reused and new lines needed to be installed.
Phase 2: Equipment installation dates were extended to better accommodate installation of hoists and minimize impact to bus operations.



Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction



Chicago- Excavation



Chicago- Pits Formed

Project Title: Bus Hoist Replacement Program

Managing Department: Facilities Construction



103rd- Demolition



Kedzie – High Speed Door