

Construction Project Briefing

December 10, 2014



Today's Presentation

- **Traction Power**
 - ✓ **Farwell/Armitage/Hill Substations**
 - ✓ **Kimball/Princeton/State Substations**
- **O'Hare Blue Line Station Improvements (Damen, Western, California)**
- **95th Street Terminal Improvement Program**
- **Wilson Transfer Station, Track, and Structure Reconstruction**



Project Title: Traction Power Systems Upgrades and Improvements Farwell/Armitage/Hill Substations

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan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:	74.86%
Percent Change Orders to Construction Contract:	1%
Percent Time Used to Date:	98.68% (as of October)
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued August 30, 2012; substantial completion 833 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 Farwell/Armitage/Hill Substations

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:

- NA



Project Title: Traction Power Systems Upgrades and Improvements Farwell/Armitage/Hill Substations

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"><li data-bbox="324 297 1528 368">▪ Farwell – Substation was turned over to CTA on September 9, 2014. Substation began powering system on September 12, 2014. Punchlist work is ongoing.<li data-bbox="324 411 1528 518">▪ Armitage – AC building enclosed, doors installed, AC equipment delivered to site. Foundations for transformers continue in courtyard. DC building interior work ongoing.<li data-bbox="324 561 1528 632">▪ Hill – Substation was turned over to CTA on September 30, 2014. Punchlist work is ongoing.	Ongoing

Delay Explanation:
<ul style="list-style-type: none"><li data-bbox="59 1011 1702 1082">• 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.



Project Title: Traction Power Systems Upgrades and Improvements Farwell/Armitage/Hill Substations



Armitage Substation: DC Building Doors Installed

Project Title: Traction Power Systems Upgrades and Improvements Farwell/Armitage/Hill Substations



Armitage Substation: AC Equipment Set in Place

Project Title: Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan
Priority of Project:	High
Total Project Budget:	\$34,726,123.00
Construction Contract Value:	\$25,634,144.25
Earned to Date:	11%
% Change Orders to Construction Contract:	0%
Percent Time Used to Date:	29%
Funding Source:	Bonds
Estimated Start Date/Estimated Length of Project:	Design NTP - October 1 st , 2013 Start of Construction (240 days after NTP) – May 29 th , 2014 Substantial Completion (800 days after NTP) – December 10 th , 2015
Designer of Record:	Parsons Transportation Group
Construction Manager/General Contractor:	STV (CM), / Clark Construction
Project Manager:	Barney Gray (GM); Premal Vora (PM)

Detailed Overview of Scope:

Rehabilitation of existing buildings and building envelopes to a state of good repair at Kimball, Princeton and State. Replace existing AC/DC conversion equipment, getaway cables, enclosures, and switches with new equipment, cables, enclosures, and switches.

Perform an existing conditions survey of feeder cables and section tie switches within the Kimball Yard.

Enhance the negative return system on the ballasted portion of the Brown Line between Kimball Yard and the Western Avenue Incline.



Project Title: Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects

Impact on Customers:	Three single tracks, and two reroutes. Street and lane closures around worksites, Brown Line Crossing impacts.
Benefit to System:	Improve traction power capacity reduced traction power related train defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved reliability and safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	49
Customer Communication Need:	Construction activity notices will be needed to alert businesses and residents to weekend, night work and power outages.

Comparable Projects:

- NA



Project Title: Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">▪ Kimball – Contractor mobilization ongoing.▪ Princeton -- Fabrication and testing traction power equipment ongoing. ComEd installation complete. Masonry replacement work complete. Roof installation ongoing.▪ State – Exterior masonry rehabilitation work continues. Started lead abatement on building interior.	Ongoing

Delay Explanation:

- The Design-Build Contractor did not complete the design by the expected milestone, delaying the start of construction-phase activities by approximately one month.
- The traction-power equipment being supplied for the project did not pass its required design-level tests at KEMA Labs. Rectifier redesign is in progress, with a re-test tentatively scheduled for early December.



Project Title: Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects



Princeton Substation Roof work



Project Title: Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects



Masonry Removed to Inspect Structural Steel (State St. Substation)

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:	\$26,613,238 (Design/Build)
Earned to Date:	46% thru October 2014
Percent Change Orders to Construction Contract:	4% (raising platforms)
Percent Time Used to Date:	91.5% thru December 12, 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:	<p>70</p>
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. 	On-Going
Construction	<ul style="list-style-type: none"> ▪ California Station closed for 42 days on September 4th. GC is on schedule to reopen station on October 16th. 	Complete
Construction	<ul style="list-style-type: none"> ▪ Close Damen Station 63 days for construction work (10/20-12/22/14) 	Ongoing

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



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



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



Project Title: 95th Terminal Improvement Program

Justification of Need:	The Terminal is functionally obsolete and does not allow for optimal bus operations and pedestrian flow.
Priority of Project:	High
Total Project Budget:	\$240 M
Construction Contract Value:	Advance Package 1 (AP1): \$2,491,291 Advance Package 2 (AP2): \$23,058,838
Earned to Date Through End of November:	Advance Package 1: 75% Advance Package 2: 9%
Percent Change Orders to Construction Contract:	0
Percent Time Used Through End of November:	Advance Package 1: 98% Advance Package 2: 43%
Funding Source:	Federal, State, Bond
Estimated Start Date/Estimated Length of Project:	Advance Package 1: NTP Issued June 6, 2014 / 180 days Advance Package 2: NTP Issued July 24, 2014 / 300 days
Designer of Record:	Parsons Brinckerhoff
Construction Manager/General Contractor:	Walsh/II In One JV
Owners Representative:	Jacobs/SQN JV
Project Manager:	Grace Ohs (PM), Brittany Dyra (GM)

Detailed Overview of Scope:

The 95th Terminal Improvement Project will create new South and North Terminal Buildings at 95th on the Dan Ryan Red Line. The new terminal buildings will create a functional and efficient intermodal facility to enhance bus service and improve pedestrian safety. Scope includes the replacement and expansion of the terminal and platform and the addition of bus and pedestrian bridges. New administrative office space will be built and new bus bays will be provided around the terminal buildings.



Project Title: 95th Terminal Improvement Program

Impact on Customers:	Track closures and weekend station closures during construction. Temporary relocation of certain bus operations to nearby streets during construction phasing.
Benefit to System:	Improved customer circulation and safety by relieving congestion. Improved bus service and improved pedestrian safety.
Benefit to Community:	Improved pedestrian safety with new pedestrian bridge over 95 th Street, longer train platform extending to the new South Terminal Building.
Impact on Accessibility:	New South and North Terminal Buildings with improved accessible routes to buses.
Estimated # of Jobs Created:	3,120 (Direct, Indirect and Induced), 652 (Direct)
Customer Communication Need:	Requires periodic track closures and possible station closures with bus shuttle service. Bus Operations may be relocated to adjacent streets during certain phases of construction.

Comparable Projects:
<ul style="list-style-type: none"> Wilson Station



Project Title: 95th Terminal Improvement Program

Construction Progress

Phase	Description	Status
Design	<ul style="list-style-type: none"> ▪ 85% Design Submittal – 10/10/14 ▪ 90% Design – 12/12/14 	Complete Ongoing
Pre-Construction Services	<ul style="list-style-type: none"> ▪ Walsh/II in One JV participates in Design Meetings and provides constructability reviews, schedules, and estimates for each Design Phase. 	Ongoing
Construction Advance Package 1: Dan Ryan Tower Lights and Sign Relocation	<ul style="list-style-type: none"> ▪ Installation of the high mast light towers is complete ▪ Installation of the cantilever signs is in progress ▪ Work is scheduled to be complete by the Milestone 1 date of December 3, 2014. 	Ongoing
Advance Package 2: Dan Ryan Retaining Walls	<ul style="list-style-type: none"> ▪ West Retaining Wall footing has been poured. ▪ Installation for the support of excavation (SOE) for North West Retaining Wall is in progress ▪ Installation of the secant pile wall for the South Retaining Wall is scheduled for December ▪ Restoration of expressway lanes to standard width by December 1, 2014 	Ongoing

Delay Explanation:
 Work on Advance Package 2 is currently behind schedule and the contractor will be unable to meet the Milestone 1 date of November 25, 2014. CTA Construction is reviewing this delay.



Project Title: 95th Terminal Improvement Program



Project Title: 95th Terminal Improvement Program



Project Title: 95th Terminal Improvement Program



Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Justification of Need:	The Station is functionally obsolete and does not allow for optimal transit operations
Priority of Project:	High
Total Project Budget:	\$206 M
Construction Contract Value:	Construction contract value 154 M
Earned to Date:	.5%
Percent Change Orders to Construction Contract:	0
Percent Time Used to Date:	0
Funding Source:	Federal, State, Bond and TIF
Estimated Start Date/Estimated Length of Project:	1265 days construction duration
Designer of Record:	HNTB corporation
Construction Manager/General Contractor:	Arcadis/Walsh/II In One JV
Project Manager:	Pedro Hurtado (PM), John Titzer (GM)

Detailed Overview of Scope: The station will replace the badly deteriorated station that was built in 1923. The station will have multiple entrances/exits and will include the following features:

- Two (2) new 26 foot – 10 car concrete island platforms with full canopies
- New Main station is located on the south side of Wilson Ave, new auxiliary entrance/exit at Sunnyside Ave. and a new auxiliary entrance/exit on the north side of Wilson
- New elevators, escalators, lighting, signage, fare control, security cameras and art work
- Replace old existing elevated track structure with new track structure to accommodate a new station platform and the necessary infrastructure to support the new track realignment.



Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Impact on Customers:	There will be minimum impact to CTA customers
Benefit to System:	<ul style="list-style-type: none"> • New modern, more spacious and accessible stationhouse with three (3) entrances • Upgraded track structure infrastructure and signals for a better and safer ride • New transfer point between Red and Purple express rail lines
Benefit to Community:	<ul style="list-style-type: none"> • Modern facility with new system upgrades • Easy access entrances through three (3) entry points • Bigger platforms that will accommodate higher capacity for passengers to avoid overcrowding • Platform canopies to protect customers from elements • New ADA accessible station
Impact on Accessibility:	None
Estimated # of Jobs Created:	It will be provided later date
Customer Communication Need:	<ul style="list-style-type: none"> • Construction activity notices will be needed to inform businesses and residents regarding temporary stations and construction impacts (noise, dust, street/alley impacts)

Comparable Projects:
<ul style="list-style-type: none"> • 95th Station – Red Line



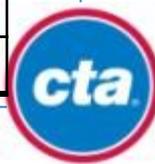
Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">• Carpenter shop building demolition completed• Concession building demolition completed• Broadway Mall building demolition continues• Old freight structure demolition south of Wilson continues• Obtained building demolition permit for Majestic building• Demolition activities at Majestic building to start. Contractor will start by removing the existing Terracotta facade. After removal it will restore and refurbish it to the original conditions and place new facade per IHPA requirements.• Caisson only permit has been issued• Contractor to start caissons operations in late November, rebar caging, drilling, and permanent/temporary casing installation. Activity will start on the north side of Wilson.	Ongoing Ongoing Complete Ongoing Ongoing Ongoing

Delay Explanation:

N/A



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



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