

# **Construction Project Briefing**

**January 16, 2015**



# Today's Presentation

- **Traction Power**
  - ✓ **Farwell/Armitage/Hill Substations**
  - ✓ **Kimball/Princeton/State Substations**
- **O'Hare Blue Line Station Improvements (Damen, Western, California)**
- **95<sup>th</sup> 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Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan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:	81.3%
Percent Change Orders to Construction Contract:	1%
Percent Time Used to Date:	100.0% (as of 12/10/2014)
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 1522 368">▪ Farwell – Substation was turned over to CTA on September 9, 2014. Substation began powering system on September 12, 2014. Punch list work is ongoing.</li><li data-bbox="324 411 1464 482">▪ Armitage – All Traction Power gear delivered to site. Interior work, wiring, and commissioning activities ongoing.</li><li data-bbox="324 525 1464 596">▪ Hill – Substation was turned over to CTA on September 30, 2014. Punch list work is ongoing.</li></ul>	Ongoing

### Delay Explanation:

- 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: Concrete and Bollard Installation (West Face)**



# 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:	14%
% 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 <sup>st</sup> , 2013 Start of Construction (240 days after NTP) – May 29 <sup>th</sup> , 2014 Substantial Completion (800 days after NTP) – December 10 <sup>th</sup> , 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"><li>▪ Kimball – Roof installation ongoing.</li><li>▪ Princeton - ComEd underground installation complete. Masonry restoration work ongoing. Overhead door installation complete. Roof installation complete. Fabrication and testing of traction power equipment ongoing.</li><li>▪ State – Exterior masonry rehabilitation work continues. Lead based paint abatement proceeding on building interior. Fabrication and testing of traction power equipment ongoing.</li></ul>	Ongoing

### Delay Explanation:

- NA



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



**Princeton New Overhead Door**



# 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:	61% thru November 2014
Percent Change Orders to Construction Contract:	4%
Percent Time Used to Date:	100% thru January 6, 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><b>Detailed Overview of Scope:</b></p> <ul style="list-style-type: none"> <li>• <b>California and Damen:</b> 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.</li> <li>• <b>Western:</b> New entrance canopy, paint stairs, LED lighting, bike racks and art work.</li> <li>• <b>Damen Tower:</b> Replace roofing, doors, windows, tuck point masonry and install new station electrical service.</li> </ul>
---



# 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 3<sup>rd</sup> quarter 2014.</p> <p>Damen Station will be closed for a period of 63 days in the 4<sup>th</sup> 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>

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



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

## Construction Progress

Phase	Description	Status
Design	<ul style="list-style-type: none"> <li>▪ Milestone A – RFP validation and presentation boards</li> </ul>	Complete
Design	<ul style="list-style-type: none"> <li>▪ Milestone B – 90% Design</li> </ul>	Complete
Pre-Construction	<ul style="list-style-type: none"> <li>▪ Contractor soliciting and awarding bids for various trades.</li> </ul>	Complete
Construction	<ul style="list-style-type: none"> <li>▪ California Station reopened on October 16, 2014</li> </ul>	Complete
Construction	<ul style="list-style-type: none"> <li>▪ Damen Station reopened on December 22, 2014</li> </ul>	On-going
Closeout	<ul style="list-style-type: none"> <li>▪ Issue and perform project punch list</li> <li>▪ Closeout project</li> </ul>	On-going On-going

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





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



2014. 12. 22 10:45





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



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





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



# Project Title: 95<sup>th</sup> 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 December:	Advance Package 1: 94% Advance Package 2: 28%
Percent Change Orders to Construction Contract:	0%
Percent Time Used Through End of December:	Advance Package 1: 100% Advance Package 2: 53%
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: 95<sup>th</sup> 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 <sup>th</sup> 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.

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



# Project Title: 95<sup>th</sup> Terminal Improvement Program

## Construction Progress

Phase	Description	Status
<b>Design</b>	<ul style="list-style-type: none"> <li>90% Design – 1/20/15</li> </ul>	Ongoing
<b>Pre-Construction Services</b>	<ul style="list-style-type: none"> <li>Walsh/II in One JV participates in design meetings and provides constructability reviews, schedules, and estimates for each design phase.</li> </ul>	Ongoing
<b>Construction</b> Advance Package 2: Dan Ryan Retaining Walls	<ul style="list-style-type: none"> <li>Continued work on the southwest retaining wall.</li> <li>Installed support of excavation (SOE) for northwest retaining wall.</li> <li>Jacking pits are being excavated for the jack and bore of fiber optic and electrical ducts under 95<sup>th</sup> Street on the east and west sides.</li> </ul>	Ongoing
<b>Close-Out</b> Advance Package 1: Dan Ryan Tower Lights and Sign Relocation	<ul style="list-style-type: none"> <li>Walsh/II In One JV achieved substantial completion by the milestone 1 date of December 3, 2014.</li> <li>Punch list work is in progress.</li> </ul>	Ongoing

**Delay Explanation:**

Work on Advance Package 2 is currently behind schedule and the contractor did not meet the milestone 1 date of November 25, 2014. CTA Construction is reviewing this delay. This delay is not anticipated to affect the main construction schedule on the project.





# Project Title: 95<sup>th</sup> Terminal Improvement Program





# Project Title: 95<sup>th</sup> Terminal Improvement Program





# Project Title: 95<sup>th</sup> 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:	\$ 153,547,000
Earned to Date:	1.5% (through October 2014)
Percent Change Orders to Construction Contract:	(0.8 %)
Percent Time Used:	13%
Funding Source:	Federal, State, Bond and TIF
Estimated Start Date/Estimated Length of Project:	1265 days construction duration
Designer of Record:	HNTB
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 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 the new station platform and the necessary infrastructure to support the new track alignment.





# 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"> <li>• New modern, more spacious and accessible stationhouse with three (3) entrances</li> <li>• Upgraded track structure infrastructure and signals for more reliable service</li> <li>• New transfer point between Red and Purple express rail lines</li> </ul>
Benefit to Community:	<ul style="list-style-type: none"> <li>• Modern facility with new system upgrades</li> <li>• Easy access entrances through three (3) entry points</li> <li>• Bigger platforms that will accommodate higher capacity for passengers to avoid overcrowding</li> <li>• Platform canopies to protect customers from elements</li> <li>• New ADA accessible station</li> </ul>
Impact on Accessibility:	Station will be fully accessible upon completion
Estimated # of Jobs Created:	560
Customer Communication Need:	<ul style="list-style-type: none"> <li>• Construction activity notices will be provided to inform businesses and residents regarding temporary stations and construction impacts (noise, dust, street/alley impacts) throughout the project.</li> </ul>

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



# Project Title: Wilson Transfer Station, Track & Structure Reconstruction

## Construction Progress

Phase	Description	Status
<b>Construction</b>	<ul style="list-style-type: none"><li data-bbox="367 278 1420 349">• Terracotta facade removal from Majestic Bldg. has been completed and stored for restoration.</li><li data-bbox="367 392 1294 428">• Four caissons completed on North side of Wilson in December</li><li data-bbox="367 471 1284 506">• Old freight track structure demolition south of Wilson complete</li><li data-bbox="367 549 1449 621">• Building demolition activities at Majestic Men's Wear Store started in Mid-December</li><li data-bbox="367 664 1449 699">• Demolish and remove wood platform and canopy on track 1 (Purple Line)</li><li data-bbox="367 742 1284 778">• 18 caissons south of Wilson scheduled to start mid December</li></ul>	Complete  Complete  Complete  Ongoing  Ongoing  Planned

**Delay Explanation:**

N/A



# Project Title: Wilson Transfer Station, Track & Structure Reconstruction





# Project Title: Wilson Transfer Station, Track & Structure Reconstruction

