

# ***Construction Project Briefing***

**November 10, 2010**



# ***Today's Presentation***

- **Cermak Station Project**
- **Howard Signals Project**
- **Loop Signals Project**
- **Blue Line Signals Project**



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

Justification of Need:	Reconstruct station entrance after vehicle accident and fatality; make station fully accessible.
Priority of Project:	High
Project Budget	\$12.5M
Earned to Date:	\$7.9M
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	86%
Funding Source:	ARRA (Federal Stimulus Funds)
Procurement Status:	<ul style="list-style-type: none"> <li>• Archer auxiliary entrance open for customer use.</li> <li>• Cermak under construction; long lead items in fabrication.</li> </ul>
Estimated Start Date/Estimated Length of Project:	Started in November 2009, with a 15 month construction duration.
Project Manager:	Steven Mascheri (GM); Chris Mulcrone (PM)

- Detailed Overview of Scope:**
- New auxiliary entrance at Archer Avenue.
  - New station house with new revenue equipment, elevator, escalator, and bike racks at Cermak entrance.
  - Station will become ADA compliant upon project completion.



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

Impact on Customers:	Cermak entrance is closed during construction. CTA built new entrance at Archer Ave. to keep station open.
Benefit to System:	<ul style="list-style-type: none"> <li>• Station will become ADA-compliant.</li> <li>• Third means of egress from platform for station access &amp; exiting.</li> </ul>
Benefit to Community:	<ul style="list-style-type: none"> <li>• Station will become ADA-compliant.</li> <li>• New Archer Avenue auxiliary entrance.</li> </ul>
Impact on Accessibility:	Station will become ADA-compliant.
Estimated # of Jobs Created:	50 on-site jobs (Contractor, CM, PM).
Customer Communication Need:	Cermak entrance is closed during construction and is rerouting customers to Archer auxiliary entrance .

### Comparable Projects:

- Brown Line Capacity Expansion Project.



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

### Construction Progress

Phase	Description	Status
Design	<ul style="list-style-type: none"> <li>Complete. Engineering providing design support.</li> </ul>	Complete.
Archer Construction	<ul style="list-style-type: none"> <li>Station opened for customer use June 4, 2010.</li> </ul>	Closeout.
Cermak Construction	<ul style="list-style-type: none"> <li>Elevator and escalator in fabrication.</li> <li>Utility relocation &amp; excavation underway.</li> <li>Pouring foundation of stationhouse and demolishing stairs.</li> </ul>	Scheduled completion - January 21 <sup>st</sup> , 2011
Cermak Redesign	<ul style="list-style-type: none"> <li>East side of Station House was redesigned to avoid conflict with location of an unanticipated underground gas main.</li> </ul>	

**Delay Explanation:**

- The construction at Cermak – Chinatown continues. But, as often happens with major construction projects, we have to change our scheduled completion date. The engineer’s strike over the summer caused some delays. In addition, we have to make a modification to the design for one entrance due to the location of some underground utility pipes. This will change the completion slightly from the end of 2010 to the first quarter of 2011.



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

### Construction Progress



**East wall formed and ready for concrete pour.**



**South, west walls poured. Elevator pit poured as well. Backfilling has begun.**



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

Justification of Need:	Restore Reliability and Improve Performance of the Train Control System.
Priority of Project:	High
Total Project Budget:	\$7M
Construction Contract Value:	\$5.5M (Signal); \$355K (JOC); \$555K* (Additional JOC work funded)
Earned to Date:	\$2.5M (Signal); \$320K (JOC)
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	58% (Signal); 100% (JOC); 20% (Additional JOC)
Funding Source:	CTA Bonds
Estimated Start Date/Estimated Length of Project:	NTP issued August 6, 2009; Completion by July 27, 2011.
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

### Detailed Overview of Scope:

- Upgrade existing Vital Processor Interlocking (VPI) systems at interlockings near the Howard Street Station. Upgrades to Communication hardware and software. Also includes replacement of faceplates for Howard Control Panel, new CTC Workstation, and new Maintainer's overview displays.
- Project also includes supplemental JOC work at Howard Tower. Roof replacement, HVAC replacement, and new fire suppression system is included.
- Additional \$555K in JOC work includes Jarvis wall and abutment repair and backup generators.

\*Additional \$555K JOC work will be paid out of separate funds allocated by Capital Finance department.



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

Impact on Customers:	During non-rush periods, reduced train speeds when workers are on the Right-of-Way.
Benefit to System:	Improve signal system at Howard Interlocking to prevent delays to service.
Benefit to Community:	More consistent travel times due to increased reliability.
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	N/A
Customer Communication Need:	<ul style="list-style-type: none"> <li>• Courtesy notification to the Alderman and Community about the project.</li> <li>• Train announcements about reduced speeds due to workers on ROW.</li> </ul>

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• Blue Line Signals Project</li> <li>• Loop Signals Project</li> </ul>



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

### Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> <li>Printed circuit boards (PCBs) received and installed at Jarvis East, Jarvis West and Howard South. Installation of CSEX3 (for communication upgrade) boards completed in April 2010. New Control Panel in Howard Tower to be installed October 2010.</li> </ul>	Ongoing
JOC Construction	<ul style="list-style-type: none"> <li>Wight-Hill started work 6/10/09, HVAC and roof work is substantially complete.</li> </ul>	Close-Out
Additional JOC Construction	<ul style="list-style-type: none"> <li>Paul Borg Construction began work on Jarvis Wall Replacement and Abutment Repair.</li> </ul>	Ongoing

Delay Explanation:
<ul style="list-style-type: none"> <li>Installation of the control panel has been rescheduled from October 2010 to December 2010 because the faceplates had to be redone. The rescheduled installation is still within the Milestone 1 requirement.</li> <li>The DBO PCBs were returned to Alstom due to a defective component. These PCB will be replaced with new boards.</li> </ul>



# Project Title: Loop Signals Project

## Managing Department: Power & Way Construction

Justification of Need:	Upgrade Towers and Interlocking Control Systems to current technology; Tower 18 past useful life.
Total Project Budget:	\$103.2M
Construction Contract Value:	\$67.9M
Earned to Date:	\$52.7M or 77.6%
Percent Change Orders to Construction Contract:	40.7%
Percent Time Used to Date:	100%
Funding Source:	FTA, RTA and Bond Funds
Estimated Start Date/Estimated Length of Project	NTP 2/21/07; Original Completion Date 9/2009; Revised Substantial Completion Date 12/2010.
Project Manager:	Barney Gray (GM); Brittany Dyra (PM); John Titzer (interim PM)

- Detailed Overview of Scope:**
- New Bi-directional Cab Signal System for the Loop.
  - Construction of new Control Tower at Lake/Wells.
  - New control panel with remote controls for Tower 12 and Jefferson.
  - Installation of a new Signal Facility Building at Randolph/Wells.
  - Installation of a new Tower 12 Relay House.
  - Installation of new interlocking at Jefferson.



# Project Title: Loop Signals Project

## Managing Department: Power & Way Construction

Phase	Description	Original Completion Date	Revised Completion Date	Actual Completion Date
Milestone 1	Approved Signal Block Design	8/20/07	4/2008	3/18/08
Milestone 2	Approved Cable Plan	9/4/07	5/2008	5/21/08
Milestone 3	Approved Tower 18 Circuit Design	9/19/07	6/2008	12/2/08
Milestone 4	Audio Circuit Cutover	9/2008	N/A	9/14/08
Milestone 5	Tower 18 Relay Room	3/20/09	11/2009	TBD*
Milestone 6	Tower 18	None Provided	5/25/10	5/28/10
Milestone 7	Tower 18 Interlocking	8/2009	12/2010	
Milestone 8	Tower 12 Interlocking	8/2009	12/2010	
Milestone 9	Substantial Completion	9/2009	12/2010	

### Delay Explanation:

- Original project schedule to be complete 9/2009; current project schedule shows completion for 12/2010. See dates above for details.
- Signal testing between Roosevelt and 14<sup>th</sup> relay houses was delayed due to unanticipated issues with communications between both locations. The new date for the South AF and core cutovers are 10/31/10 and 11/5/10, respectively.

*•Tower 18 Relay Room cutover was completed 11/16/09; testing still remains related to this milestone.*



# Project Title: Blue Line Signals Project

## Managing Department: Power & Way Construction

Justification of Need:	Signal system is beyond expected service life and upgrades needed for compatibility with new AC-powered railcars. Traction Power upgrades needed to reduce power shutdowns and service disruptions.
Total Project Budget:	\$243M
Construction Contract Value:	\$185.6M
Earned to Date:	\$178.8M or 96%, Retainage withheld \$6.7M
Percent Change Orders to Construction Contract:	7.4%
Percent Time Used to Date:	100% of original time, 100% with new date of 11/22/09.
Funding Source:	CTA Bonds, RTA, FTA, IDOT
Estimated Start Date/Estimated Length of Project	NTP 12/1/05; Original Scope Completion Date 7/1/09, Substantial Completion Date for Additional Work 11/22/09.
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

- Detailed Overview of Scope:**
- Blue Line Signal and Traction Power Upgrades.
  - Replace and upgrade signals systems, power distribution, and associated components at various facilities in the Dearborn Subway, the Congress and Kennedy Branches of the Blue Line and State Street Subway. Upgrades to communication facilities to include new fiber optics and copper wiring and emergency telephones in the Dearborn Subway.



# Project Title: Blue Line Signals Project

## Managing Department: Power & Way Construction

### Construction Progress

Phase	Description	Status
Punch List	<ul style="list-style-type: none"> <li>▪ Punch list work continues from Jefferson Park to Forest Park. As of October 12, 2010, 83% of the items on the Punch List have been completed.</li> </ul>	Ongoing
Construction	<ul style="list-style-type: none"> <li>▪ Additional Work: Automatic Vehicle Identification Upgrades Testing</li> <li>▪ Testing of 13<sup>th</sup> and 17<sup>th</sup> Towers started 1/25/10 and was scheduled for five weeks. Various problems have extending testing, currently forecast for completion is end of October 2010.</li> </ul>	Ongoing Started 1/25/10

**Delay Explanation:**

- Contract Completion date extended from July 1, 2009 to November 22, 2009 for the completion of additional work. Final Acceptance and Punch List items will continue after November 22, 2009.
- Contractor is delayed in achieving Final Acceptance. Contractor continues to make progress on Punch List work and is working to resolve open NCRs. No contract cost increase currently projected.

