



LIGHT RAIL PROGRESS REPORT

Central Phoenix/East Valley Light Rail Transit Project

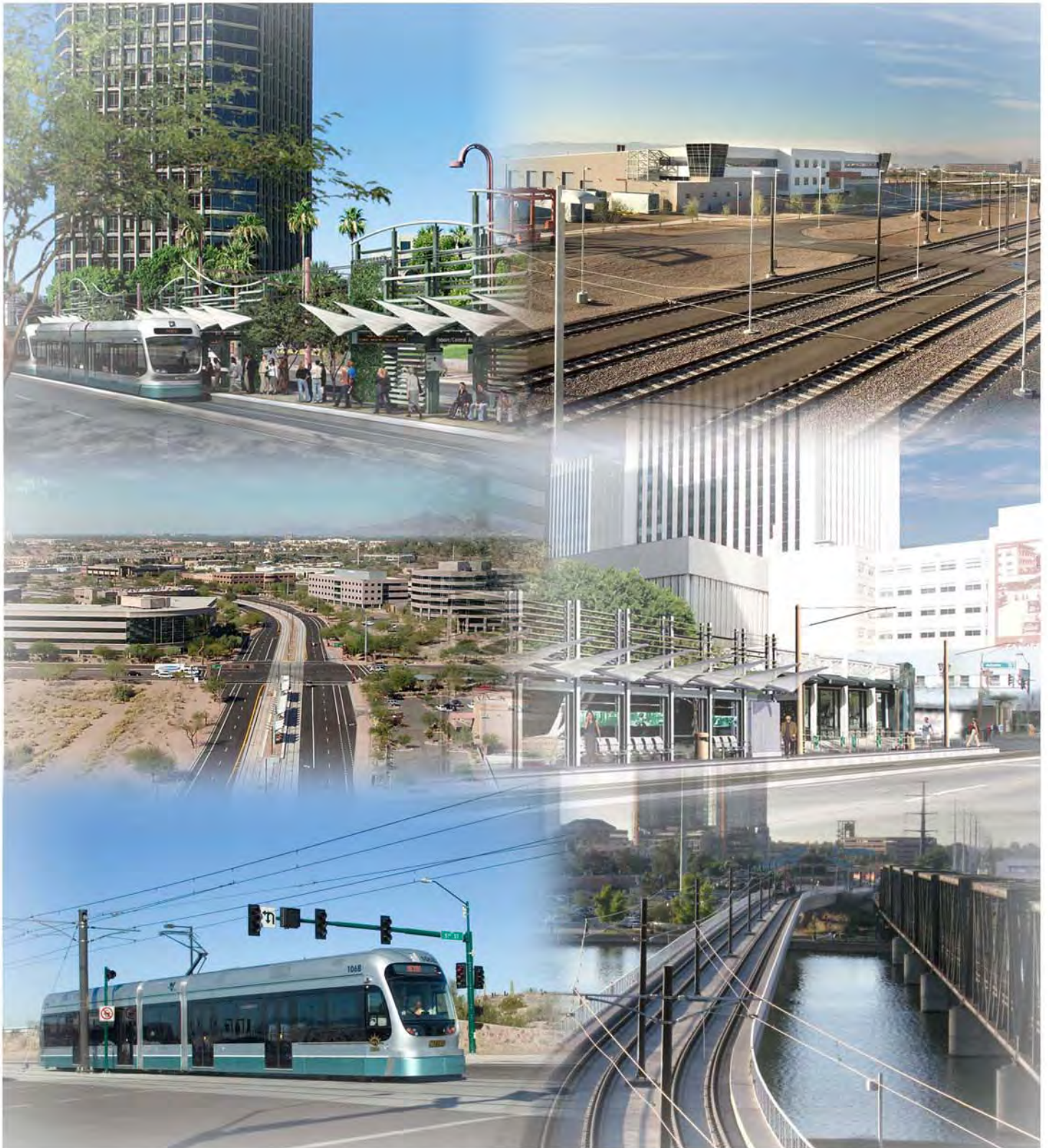




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1. Executive Summary

The Central Phoenix/East Valley (CP/EV) Light Rail Transit Project includes the design and construction of a 19.6 mile, double track, Minimum Operable Segment that extends from 19th Avenue near Bethany Home Road in North Central Phoenix through the downtown area to and through the City of Tempe, then crosses into the City of Mesa where the project terminates at Main Street and Sycamore. The track alignment is mostly in-street median and includes 27 passenger stations and eight surface parking lots, seven of which are newly constructed, and one existing lot owned by the City of Tempe near an LRT station site that will be dedicated to transit use at no cost to the Project. An initial fleet of 36 LRVs is part of the Project. The Project also includes an Operations and Maintenance Center (formally known as the Maintenance and Storage Facility) to support the 36 light rail vehicles located South of Washington Street and East of 48th Street in Phoenix. Propulsion power for the LRVs will be delivered by a Traction Electrification System consisting of wayside substations distributing propulsion power through an Overhead Catenary System (OCS). The Project will also include a Signals and Communications System consisting of both wayside and traffic signals. The entity responsible for project delivery, Valley Metro Rail (METRO), is a sub-recipient to the grantee, the City of Phoenix. The Project has a budget of \$1,412,000,000, with a Revenue Operations Date of December 2008.

During the month of October the project continued to progress and surpassed 94 percent completion of construction. The Park-and-Ride contracts continued with completion of civil work and station finishes continued to work on punchlist items. The Traction Power contract also continued to work on their punchlist items including touching up paint and installing OCS base covers. Work also continued on the installation of permanent power to two substations on the north end of the project. Over 50 percent of the ticket vending machines have been installed at the station platforms and testing continues on the fare collection system.

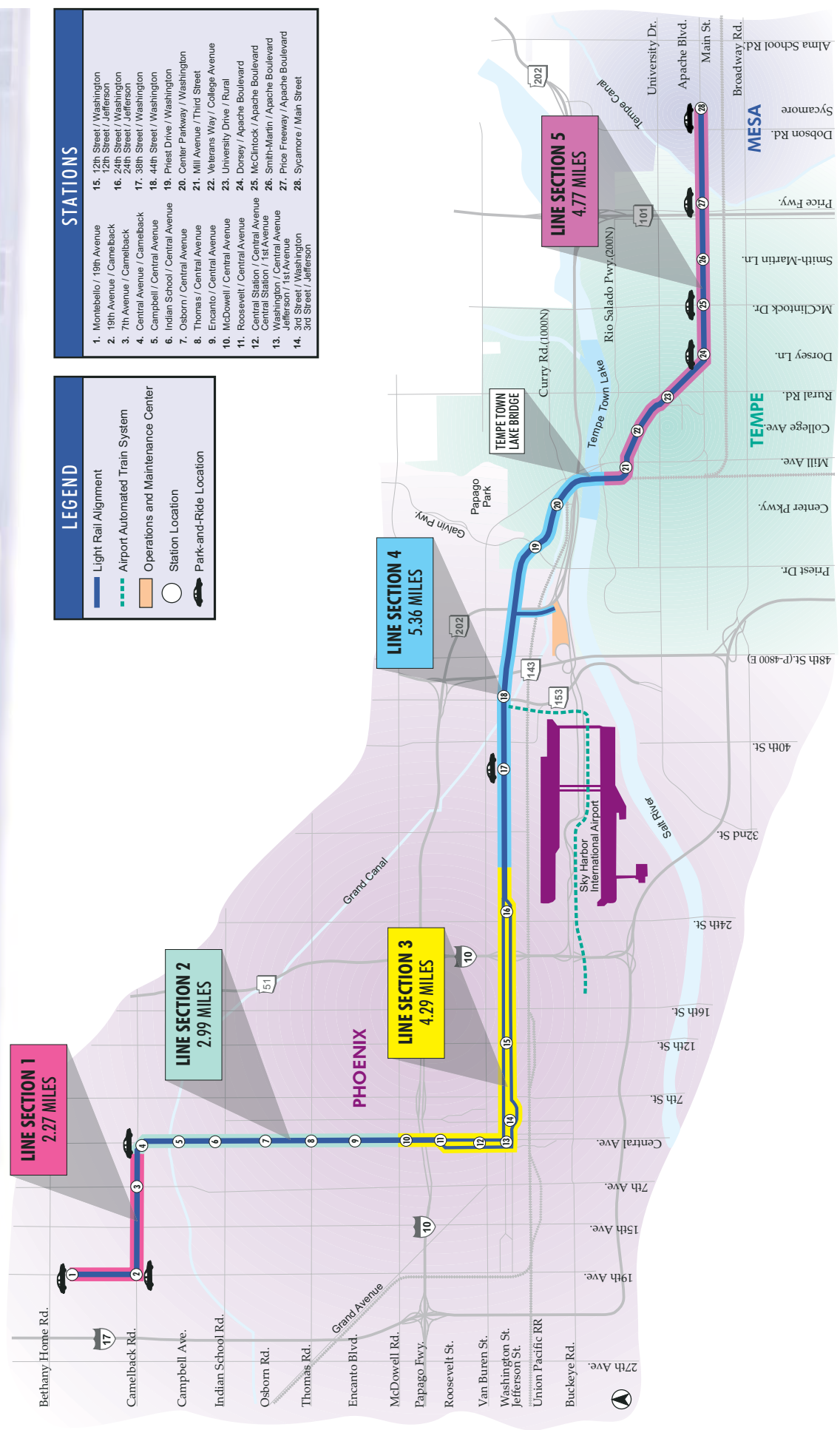
Vehicle assembly and testing continue to progress on schedule. Only two LRV's remain to be assembled for the initial fleet of 50. Forty-five LRV's have been accepted as delivered. Multiple vehicles including two and three car trains can be seen along the entire alignment on a daily basis. The Operations Control Center continues to be outfitted with software and computer equipment and testing continues from the Operations Control Center to various wayside elements along with the light rail vehicle. Major software upgrades have been made during the month of October bringing the software development of the OCC to a level where major testing will begin.

With construction activities winding down and operations and testing commencing, operator hiring and training has begun. Three to four operating training classes will be held over the next two months training operators and preparing for revenue service operations.

The project remains on schedule for a December 27, 2008 opening.



METRO LIGHT RAIL STARTER LINE



STATIONS

1. Montebello / 19th Avenue	15. 12th Street / Washington
2. 19th Avenue / Camelback	16. 24th Street / Washington
3. 7th Avenue / Camelback	17. 24th Street / Jefferson
4. Central Avenue / Camelback	18. 38th Street / Washington
5. Campbell / Central Avenue	19. 44th Street / Washington
6. Indian School / Central Avenue	20. Priest Drive / Washington
7. Osborn / Central Avenue	21. Center Parkway / Washington
8. Thomas / Central Avenue	22. Mill Avenue / Third Street
9. Encanto / Central Avenue	23. Veterans Way / College Avenue
10. McDowell / Central Avenue	24. University Drive / Rural
11. Roosevelt / Central Avenue	25. Dorsey / Apache Boulevard
12. Central Station / Central Avenue	26. McClintock / Apache Boulevard
13. Washington / 1st Avenue	27. Smith-Martin / Apache Boulevard
14. Jefferson / Washington	28. Price Freeway / Apache Boulevard
	29. 3rd Street / Jefferson
	30. 3rd Street / Jefferson

LEGEND

- Light Rail Alignment
- Airport Automated Train System
- Operations and Maintenance Center
- Station Location
- Park-and-Ride Location

CONTRACT LOG - OCTOBER 2008

ITEM	CONTRACT NUMBER	CONTRACT DESCRIPTION	CONTRACTOR
1. PROGRAM MANAGEMENT & ENGINEERING			
1	LRT-99-001	GEC - DEIS/FEIS/PE	PB Americas, Inc.
2	LRT-02-001	GEC - Final Design	PB Americas, Inc.
3	LRT-02-001	GEC - DSDC	PB Americas, Inc.
4	LRT-98-001-PMC	Project Management Consultant	HDR, Inc. and Parsons Transportation Group, Inc., a Joint Venture
5	LRT-03-005-CAC	Construction Administration Services	Post, Buckley, Schuh & Jernigan, Inc., and PGH Wong Engineering, Inc., a Joint Venture
2. CONSTRUCTION			
6	LRT-03-007-B48	48th Street Bridge Replacement	FNF Construction, Inc.
7	LRT-04-017-MSF	Maintenance & Storage Facility (MSF)	Sundt/Stacy & Witbeck, Joint Venture
8	LRT-04-020-LS1	Line Section 1	Kiewit Western Co
9	LRT-04-019-LS2	Line Section 2	Herzog Contracting Corp
10	LRT-04-021-LS3	Line Section 3	Archer Western Contractors
11	LRT-04-018-LS4	Line Section 4	Sundt/Stacy & Witbeck, Joint Venture
12	LRT-04-022-LS5	Line Section 5	Sundt/Stacy & Witbeck, Joint Venture
13	LRT-05-042-PNR	Park and Rides Montebello & 19th Avenue 19th Avenue & Camelback Central & Camelback 38th St. & Washington	Kiewit Western Company Kiewit Western Co. MRM Construction Services MRM Construction Services
14	LRT-05-042-PNR-RB	Park and Rides (Re-Bid) Price & Apache Sycamore & Main	Sundt / Stacy and Witbeck, Joint Venture
15	LRT-04-028-SF	Station Finishes	Archer Western Contractors
16	LRT-04-040-TLB	Town Lake Bridge	PCL Civil Constructors, Inc.
17	LRT-05-036-WPM	Wheel Profiling Machine	Simmons Machine Tool Corp
3. SYSTEM ELEMENTS			
18	LRT-03-001	Light Rail Vehicles (LRV)	Kinkisharyo International, L.L.C. and Mitsui & Co. (U.S.A), Inc., CPEV Joint Venture
19	LRT-04-039-S&C	Signals and Communications	Mass Electric Corp.
20	LRT-04-014-TES	Traction Electrification System	Mass Electric Corp.
21	LRT-06-053-FCS	Fare Collection System	Scheidt & Bachmann USA, Inc.
22	LRT-06-071-LCM	Light Rail Car Mover	Brandt Road Rail Corp
23	LRT-07-076-MSFF	Modular Furniture for MSF	Southwest Business Furnishings
24	LRT-06-060-MMIS	Maintenance Management Information System	Mincom, Inc.
4. PUBLIC ART			
25	02-002-04	LS4 Design Team Artist/Station Artist	Laurie Lundquist
26	02-002-03	LS2 Design Team Artist/Station Artist	Ilan Averbuch
27	02-002-04	LS1 Design Team Artist/Station Artist	Robert Adams
28	02-002-05	LS5 Design Team Artist/Station Artist	Norie Sato/Bill Will
29	02-002-01	LS3 Design Team Artist	Janet Zweig
30	05-041-ART	Bridge Design Team Artist	Buster Simpson
31	02-002-07	LS3 Design Team Artist	Laurie Lundquist
32	02-002-08	LS3 Design Team Artist	Robert Adams
33	02-002-09	44th Street Station Artist	Mona Higuchi
34	02-002-10	38th Street Station Artist	Stuart Keeler/Michael Machnic
35	02-002-11	Central / Roosevelt Station Artist	Peter Richards
36	02-002-12	Central / McDowell Station Artist	Michael Maglich
37	02-002-13	First Street Station Artist	Stephen Farley
38	02-002-14	Third Street Station Artist	Cliff Garten
39	02-002-15	Central Station, Station Artist	Ries Niemi
40	02-002-16	12th Street Station Artist	Victor Zaballa
41	02-002-17	Fifth Street / College Station Artist	Tad Savinar
42	02-002-18	Central / Campbell Station Artist	Al Price
43	02-002-19	Central / Indian School Station Artist	Mary Lucking
44	02-002-20	Central / Osborn Station Artist	Thomas Sayre
45	02-002-21	Central / Thomas Station Artist	Brian Goldbloom
46	02-002-23	Third Street / Mill Station Artist	Catherine Widgery
47	02-002-24	Apache Stations - Lighting Artist	Dan Corson
48	02-002-25	Apache Stations - Cultural Weave Artist	Christine Bourdette
49	02-002-26	Apache Stations - Vertical Objects Artist	Suikang Zhao

CONTRACT LOG - OCTOBER 2008

ITEM	CONTRACT NUMBER	CONTRACT DESCRIPTION	CONTRACTOR
50	02-002-27	Apache Stations - Paving Artist	Benson Shaw
51	02-002-28	Longmore Station Artist	Brad Konick
52	02-002-29	19th Avenue / Camelback Station Artist	Josh Garber
53	02-002-30	7th Avenue / Camelback Station Artist	Nubia Owens
54	02-002-31	24th Street Station Artist	Kevin Berry
55	02-002-32	Central / Encanto Station Artist	Jamex & Einar de la Torre
5. MISC. CONSTRUCTION & SERVICES			
56	LRT-05-046-ERS	Environmental Remediation Service	Environmental Response Inc
57	LRT-04-031-PCS	Power Consulting Services	RW Beck
58	LRT-06-052-MF	Modular Furniture	Facilitec, Inc.
59	LRT-06-065-TCS	Telecom Carrier Services	Time Warner Telecom
60	LRT-06-057-WLI	WAN/LAN and IPT Voice Sys Equipment	Calence, Inc.
61	LRT-04-034-SPC	Strategic Planning Consulting Services	Davis Consulting
62	LRT-05-045-DCS	Document Control Services	LKG-CMC, Inc
63	LRT-05-037-ACS	Audit Consulting Services	Clifton Gunderson LLP
64	LRT-05-038-RMS	Risk Management Services	Ashton Tiffany, LLC
65	LRT-06-069-SSC	Safety & Security Certification Services	Booz Allen Hamilton, Inc.
66	LRT-06-067-ITS	Info Technology-Office Network Support	World Wide Technology, Inc.
67	LRT-07-082-TCS	Telecommunications Services for MSF	Qwest Communications
68	LRT-07-073-TS	Transportation Services	Alternate Concepts, Inc.
69	LRT-07-086-MSFM	Interim Maintenance Services for MSF	DMS Facility Services
70	LRT-07-088-PALS	Policy and Advisory Legal Services	Thompson Coburn, LLP
71	LRT-07-095-MAC	Marketing & Advertising Consulting Services	Park & Co.
72	LRT-08-096-EPGO	Grand Opening Event Planning Consulting Services	Entertainment Solutions, Inc.
73	LRT-08-104-ORS	Offsite Records Storage Services	Archive Systems, Inc.
74	LRT-08-109-FMSO	Facilities Maintenance Services	DMS Facility Services
75	LRT-08-111-FMCL	Cleaning Services	DMS Facility Services
76	LRT-08-112-FMLK	Lands Keeping Services	DMS Facility Services
6. OWNER FURNISHED MATERIALS			
77	LRT-04-009-MP1	Rail (MP1)	Progress Rail Corporation
78	LRT-04-010-MP2	Concrete Crossties (MP2)	CXT Inc
79	LRT-04-030-MP5	Ballasted Special Trackwork (MP5)	VAE Nortrak North America Inc
80	LRT-04-032-MP8	Girder Rail (MP8)	VAE Nortrak North America Inc
81	LRT-04-033-MP9	Girder Rail Special Trackwork (MP9)	VAE Nortrak North America Inc
82	LRT-04-015-MP3	Traffic Signal Hardware (MP3)	Various
83	LRT-06-072-SE	Shop Equipment for Maintenance Facility	Wissota Supply Company, Inc
84	LRT-07-078-MLE	Spray Paint Booth Manlifts at MSF	MGM Equipment Source
85	LRT-08-108-ADV	Aerial Device Vehicles	Altec Industries, Inc.
7. FUTURE LIGHT RAIL EXTENSIONS			
86	LRT-06-050-DCS	Design Criteria & Standards	Stantec Consulting
87	LRT-06-055-PSS	Planning Support Services	HDR Engineering, Inc.
88	LRT-07-077-PCES	Planning, Conceptual Engineering & Environmental Studies for Future Light Rail Extensions - Mesa-Tempe	HDR / S.R. Beard & Associates
89	LRT-07-077-PCES	Planning, Conceptual Engineering & Environmental Studies for Future Light Rail Extensions - I-10/Glendale	URS Corporation
90	LRT-07-075-PENW	Northwest LRT Extension Engineering Services	DMJM+Harris, Inc.
91	LRT-07-091-PICS-HDR	On-Call Public Involvement Consulting Services	HDR, Inc.
92	LRT-07-087D-CMNW	Northwest LRT Extension Construction Manager at Risk Design Phase Services	Sundt/Stacy & Witbeck, Joint Venture
93	LRT-07-089-NWA	Northwest LRT Extension Public Art for Glendale Station	Merge Conceptual Design, LLC
94	LRT-07-089-NWA	Northwest LRT Extension Public Art for Northern Station	Deborah Mersky
95	LRT-07-089-NWA	Northwest LRT Extension Public Art for Dunlap Parking	PhenomenArts, Inc.
96	LRT-07-089-NWA	Northwest LRT Extension Public Art for Dunlap Station	Colab Studio, LLC
97	LRT-08-102-GIS	On-Call Geographic Information Systems Consulting Services	Jacobs Carter Burgess



2. Cost Overview

The project budget for the Federal 5309 program is \$1,412,125,346. Known pending and executed change orders are valued at \$98,224,606 of the available \$108,584,774 planned contingency.

Including Project Reserve, this leaves \$11,431,761 of budgeted contingency funds available to the project.

The project is 93.5 percent complete, which is a 0.8 percent increase from the last reporting period. Construction is 94.1 percent complete, which is a 0.6 percent increase.

At the October Board meeting budget transfers were approved to align budgets with anticipated funding needs. In summary, the following line items were affected:

- \$2,000,000 to LS1 Contingency,
- \$3,300,000 to LS3 Contingency,
- (\$750,000) from Miscellaneous construction budget,
- (\$100,00) from Wheel Profiling Contingency,
- (\$380,000) from Crossing Panel Budget and Contingency,
- (\$2,500,00) from the Management/Administration Budget;
- (\$1,570,000) from Project Reserve.

Program Management and Administration

Forecast is within budget.

Program Management Consultant

Staffing plan for fiscal year 2009 has been incorporated within the overall forecast of this contract unit; the forecast is projecting and under-run to the budget.

City Administration

Forecasts are per agreements with the cities.

Right of Way Acquisition

Forecast and budget are currently at \$126,500,000.

PE/FEIS Engineering

Activity is complete.

Engineering

Forecast for the remaining work is slightly above the budget. The costs are being monitored.



Owner Furnished Equipment/Materials

Forecasts are within budget.

Light Rail Vehicles

Contingency appears to be sufficient to fund the remaining work.

Facilities

Facilities work is 96.8 percent complete, which is a 0.3 percent increase from the previous reporting period. Executed and pending change orders are expected to utilize \$69,246,590 of the \$77,626,400 available contingency.

Systems

Systems work is 79.8 percent complete, which is an increase of 2.2 percent since the last reporting period. Executed and pending change orders are expected to utilize \$12,412,734 of the \$13,139,720 available contingency.

Construction Administration Services

Budget and forecast for remaining work is consistent with the negotiated staffing plan.

Testing and Startup

Forecast appears sufficient to complete the work. Current detail expenditures are tracking favorably with annual budget and forecast.

Art Program

Forecast appears sufficient to complete the work.

Unallocated Design Contingency

Budget was utilized to fund variances between bid amounts and original budgets.

Project Reserve

The budget is currently at \$1,100,000.

Financing Costs

The budget and forecast are \$118,400,000.

Concurrent Non Project Activities Project

The budget for Concurrent Non Project Activities is \$121,347,000, based on the Valley Metro Rail Board approved amount contained in the Five Year Capital Program and Operating Forecast document.

During the reporting period the following CNPA budgets were added to this report:

- Phoenix Public Transit Additional Point of Interest Signs,
- Phoenix Streets Department 3/8-inch AC Leveling Course,



- COT Miscellaneous Directed Changes;
- COT Landscape island at Terrace/Apache.

Phoenix Water Services budgets were reduced as a result of close-out actions associated with Line Sections 1, 3 and 4.

Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
Federal 5309 Project

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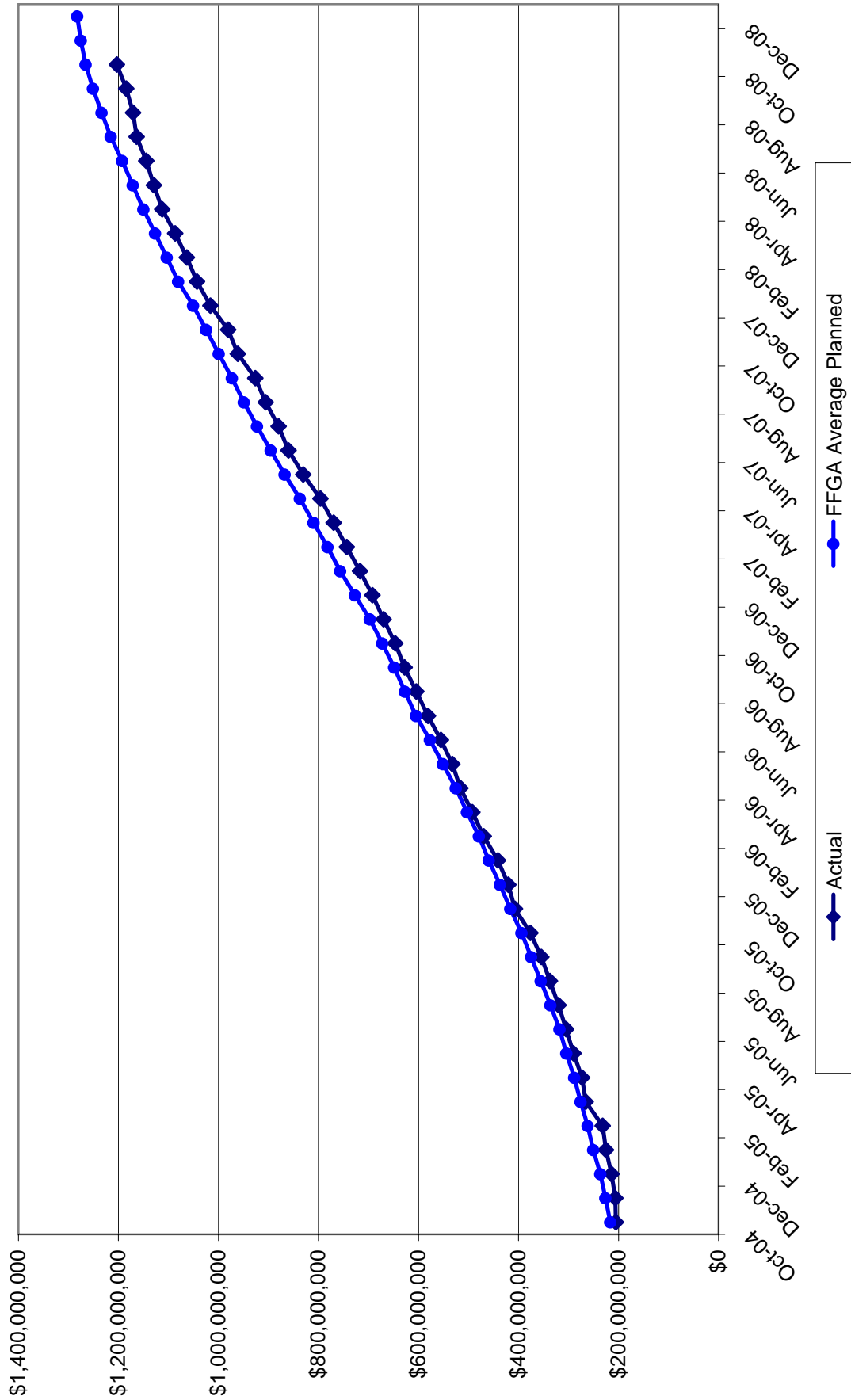
Element	Description	FFGA Attachment 3	Board Revised Budget	Current Actual \$ (To Date)	Forecast	Variance
50	LS1 19th Ave/Bethany - Camelback/Central	\$27,130,856	\$48,683,884	\$45,309,849	\$48,670,503	\$13,381
51	LS2 Camelback/Central - McDowell Road	\$38,004,059	\$53,587,841	\$52,315,508	\$53,671,763	(\$83,922)
52	LS3 McDowell Road - 28th Street	\$63,981,654	\$97,922,521	\$98,317,295	\$102,258,831	(\$4,336,310)
53	LS4 28th Street - N Approach to Town Lake	\$46,622,020	\$52,948,076	\$52,350,356	\$52,350,356	\$597,720
54	LS5 1st Street - Sycamore	\$49,680,435	\$78,883,457	\$78,904,895	\$79,010,144	(\$126,687)
55	Station Finishes	\$38,701,950	\$53,176,103	\$52,500,529	\$53,176,102	\$1
56	Park and Ride Facilities	\$15,104,339	\$22,623,610	\$19,730,037	\$22,623,610	\$0
57	Miscellaneous Construction	\$7,505,200	\$850,659	\$485,402	\$850,659	\$0
5K	Archaeological Investigations/Hazardous Material Removal	\$0	\$7,572,689	\$5,456,407	\$7,362,309	\$210,380
58	MSF Construction/Equipment Installation	\$57,637,721	\$65,400,000	\$65,400,000	\$65,400,000	\$0
5G	MSF Underfloor Wheel Profiling System	\$0	\$989,232	\$967,069	\$976,194	\$13,038
59	48th Street Bridge Restoration	\$2,014,013	\$2,824,232	\$2,837,136	\$2,837,136	(\$12,904)
5A	Town Lake Bridge	\$15,529,600	\$21,759,753	\$21,759,751	\$21,759,751	\$2
5B	Prior Rights Utility Relocations	\$22,938,000	\$25,739,684	\$28,571,746	\$31,393,519	(\$5,653,835)
81	Contingency	\$37,491,841	\$15,280,766	\$0	\$1,814,871	\$13,465,895
	Facilities	\$422,341,688	\$548,242,507	\$524,905,980	\$544,155,748	\$4,086,759
4A	Rail Procurement	\$1,306,200	\$1,273,506	\$1,279,492	\$1,279,492	(\$5,986)
4B	Concrete Crosstie Procurement	\$900,000	\$903,395	\$870,575	\$870,575	\$32,820
4C	Traffic Signal Hardware	\$8,060,100	\$8,063,587	\$8,479,381	\$8,495,383	(\$431,796)
4D	Ballasted Special Trackwork Procurement	\$2,532,414	\$2,291,497	\$2,257,456	\$2,257,456	\$34,041
4E	Crossing Panel Procurement	\$380,100	\$0	\$0	\$0	\$0
4F	Girder Rail Procurement	\$15,079,742	\$14,696,119	\$14,710,119	\$14,714,519	(\$18,400)
4G	Girder Rail Special Trackwork Procurement	\$0	\$5,712,656	\$5,628,848	\$5,712,656	\$0
81	Contingency	\$1,412,863	\$519,344	\$0	\$0	\$519,344
	Owner Furnished Materials/Equipment	\$29,671,419	\$33,460,104	\$33,225,871	\$33,330,081	\$130,023
5D	Automated Fare Collection System	\$10,755,800	\$7,704,571	\$1,855,765	\$7,704,571	\$0
5E	Traction Power Substations/Overhead Catenary System	\$62,141,100	\$61,271,721	\$54,526,501	\$61,275,159	(\$3,438)
5F	Communications/Signals	\$38,220,002	\$43,708,033	\$34,114,843	\$43,708,034	(\$1)
81	Contingency	\$8,674,000	\$726,987	\$0	\$723,548	\$3,439
	Systems	\$119,790,902	\$113,411,312	\$90,497,109	\$113,411,312	\$0
	Sub Total, Construction	\$571,804,009	\$695,113,923	\$648,628,960	\$690,897,141	\$4,216,782
4K	Vehicle Contract	\$115,501,823	\$118,391,301	\$99,720,828	\$118,391,301	\$0
4N	LRT Vehicle Contract Contingency	\$5,775,001	\$31,264	\$0	\$31,264	\$0
	LRT Vehicles	\$121,276,824	\$118,422,565	\$99,720,828	\$118,422,565	\$0
22	ROW Acquisition	\$116,214,150	\$117,181,379	\$125,198,087	\$126,500,000	(\$9,318,621)
23	ROW Contingency	\$20,081,000	\$9,318,621	\$0	\$0	\$9,318,621
20	ROW	\$136,295,150	\$126,500,000	\$125,198,087	\$126,500,000	\$0

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CP/EV LRT Project
Project Budget Status
Federal 5309 Project**

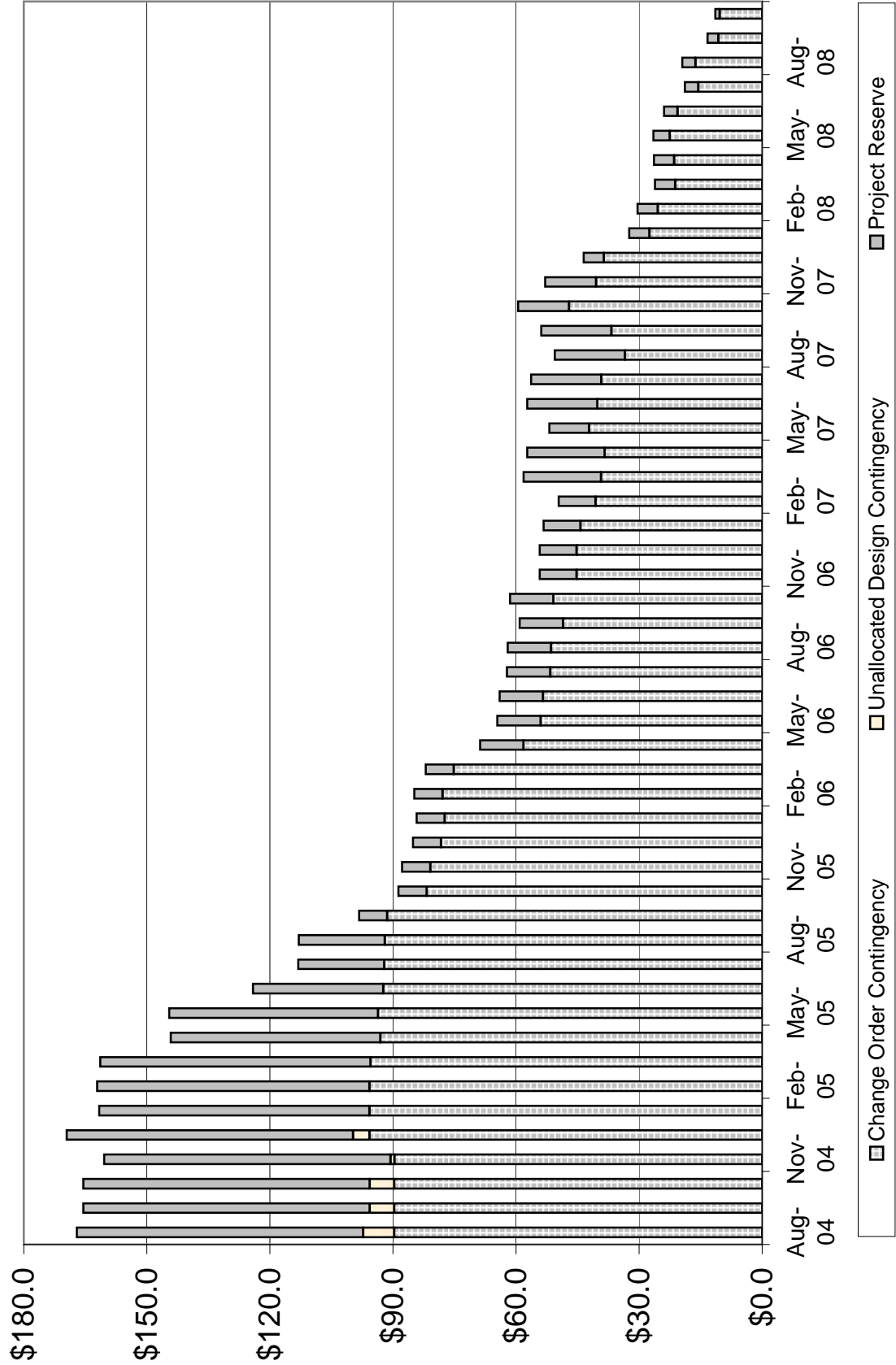
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Element	Description	FFGA Attachment 3	Board Revised Budget	Current Actual \$ (To Date)	Forecast	Variance
30	PE/FEIS Engineering	\$25,054,938	\$25,054,938	\$25,169,700	\$25,169,700	(\$114,762)
31	Engineering	\$76,780,935	\$76,346,255	\$77,255,373	\$77,321,047	(\$974,792)
4L	Vehicle Engineering	\$5,432,358	\$7,305,671	\$6,083,294	\$6,343,125	\$962,546
20	ROW Engineering	\$1,016,370	\$1,321,163	\$1,266,226	\$1,266,226	\$54,937
32	Design Services During Construction	\$14,160,426	\$22,674,151	\$22,112,068	\$23,368,803	(\$694,652)
33	Engineering Contingency	\$0	\$0	\$0	\$0	\$0
34	DSDC Contingency	\$0	\$0	\$0	\$0	\$0
	Engineering	\$97,390,089	\$107,647,240	\$106,716,961	\$108,299,201	(\$651,961)
60	Construction Administration Services	\$37,759,127	\$54,311,124	\$52,285,652	\$55,500,000	(\$1,188,876)
61	CAC Contingency	\$15,244,622	\$0	\$0	\$0	\$0
	Construction Administration Services	\$53,003,749	\$54,311,124	\$52,285,652	\$55,500,000	(\$1,188,876)
10	PE Administrative/Management Costs	\$4,363,526	\$4,363,526	\$8,388,002	\$8,388,002	(\$4,024,476)
11	Administrative/Management - VMR	\$43,915,047	\$42,729,717	\$34,047,771	\$37,776,723	\$4,952,994
62	Construction Administration Services - VMR	\$1,697,232	\$2,067,564	\$1,672,550	\$1,866,428	\$201,136
67	CAB Program	\$0	\$2,500,000	\$2,486,057	\$2,500,000	\$0
21	Administrative ROW Costs	\$696,712	\$557,660	\$677,414	\$707,350	(\$149,690)
76	Administrative/Management Art Program Costs	\$414,632	\$414,632	\$0	\$414,632	\$0
16	Administrative/Management - ADOT	\$420,000	\$1,087,676	\$623,342	\$708,342	\$379,334
17	Agency Insurance Cost	\$7,000,000	\$7,000,000	\$7,226,766	\$7,500,000	(\$500,000)
18	Administrative/Management Contingency	\$0	\$388,523	\$0	\$1,247,821	(\$859,298)
	Program Management	\$58,507,149	\$61,109,298	\$55,121,902	\$61,109,298	\$0
10	PE Administrative/Management Costs	\$12,832,472	\$12,832,472	\$12,255,028	\$12,255,028	\$577,444
21	Administrative ROW Costs	\$1,016,571	\$828,502	\$791,139	\$791,139	\$37,363
76	Administrative/Management Art Program Costs	\$549,061	\$464,266	\$255,988	\$255,988	\$208,278
12	Administrative/Management - PMC	\$32,736,326	\$32,115,900	\$31,471,468	\$33,236,784	(\$1,120,884)
4M	Administrative Vehicle Costs	\$1,337,322	\$561,908	\$553,400	\$553,400	\$8,508
63	Construction Administration Services - PMC	\$4,581,527	\$6,250,231	\$4,423,276	\$5,402,661	\$842,570
	Program Management Consultant	\$53,053,279	\$53,053,279	\$49,750,299	\$52,500,000	\$553,279
10	PE Administrative/Management Costs	\$3,158,439	\$3,158,439	\$2,171,317	\$2,942,289	\$216,150
13	Administrative/Management - COP	\$2,986,000	\$5,448,000	\$3,913,776	\$3,985,343	\$1,462,657
64	Construction Administration Services - COP	\$8,347,000	\$5,885,000	\$7,563,807	\$7,563,807	(\$1,678,807)
14	Administrative/Management - COT	\$6,797,000	\$6,797,000	\$6,797,000	\$6,797,000	\$0
15	Administrative/Management - COM	\$897,000	\$897,000	\$552,458	\$897,000	\$0
	City Administration	\$22,185,439	\$22,185,439	\$20,998,358	\$22,185,439	\$0
75	Public Art Contracts	\$5,284,133	\$6,251,829	\$5,092,332	\$6,251,829	\$0
77	Art Program Contingency	\$999,000	\$31,304	\$0	\$31,304	\$0
	Public Art	\$6,283,133	\$6,283,133	\$5,092,332	\$6,283,133	\$0
70	Start-Up and Testing	\$31,000,000	\$23,000,000	\$14,422,593	\$23,000,000	\$0
80	Unallocated Design Contingency	\$7,575,241	\$0	\$0	\$0	\$0
85	Project Reserve	\$69,829,000	\$1,071,593	\$0	\$3,886,055	(\$2,814,462)
SUBTOTAL		\$1,253,258,000	\$1,293,752,532	\$1,203,105,672	\$1,293,752,532	\$0
90	Financing Costs	\$158,867,346	\$118,372,814	\$49,018,379	\$118,372,814	\$0
TOTAL CP/EV PROJECT		\$1,412,125,346	\$1,412,125,346	\$1,252,124,051	\$1,412,125,346	\$0

Plan versus Actual Costs



CP/EV LRT Contingency Drawdown



**Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
CNPA Project**

Element	Description	Board Approved Total	Revised Budget/Estimate	Current Actual \$ (To Date)	Forecast	Variance
A1	Bus Bays (LS2)	\$985,000	\$984,756	\$639,422	\$999,470	(\$14,714)
A2	Phoenix Art Museum Left Turn Signal	\$99,000	\$99,083	\$66,442	\$99,083	\$0
A5	19th/Montebello Transit Center (SF)	\$6,317,000	\$6,250,345	\$5,824,337	\$6,250,345	\$0
A6	117 Central/Camelback Transit Center (SF)	\$7,101,000	\$7,174,904	\$8,850,279	\$9,532,203	(\$2,357,299)
A7	44th Street/Washington Transit Center Real Estate	\$4,650,000	\$4,649,580	\$4,467,450	\$4,649,580	\$0
B1	Washington Street Bike Lane (LS4)	\$867,000	\$834,912	\$770,240	\$842,830	(\$7,918)
F4	Civic Plaza Track Support System	\$340,000	\$340,044	\$340,045	\$340,045	(\$1)
F5	Additional Water Services to the Pueblo Grande Museum - LS4	\$82,000	\$89,285	\$81,792	\$81,792	\$7,493
F6	Central/Camelback Bus Bays Relocation	\$180,000	\$180,435	\$62,357	\$171,435	\$9,000
F7	COP Landscape Irrigation Restoration Central Ave	\$92,000	\$93,413	\$91,807	\$91,807	\$1,606
H2	Fiber Optic COP	\$490,000	\$440,926	\$272,570	\$485,742	(\$44,816)
J6	Washington/Jefferson 16th to 26th Street, Property Access	\$3,559,000	\$3,290,749	\$2,372,457	\$2,521,427	\$769,322
K7	11th Street Loop Track	\$4,652,000	\$5,122,370	\$3,448,622	\$5,118,259	\$4,111
L8	PPT CNPA-3rd St/Washington APD Medallions	\$0	\$6,850	\$6,782	\$6,850	\$0
G8	PPT CNPA Additional Point of Interest Signs	\$0	\$67,245	\$0	\$67,245	\$0
	Sub Total Public Transit Department	\$29,414,000	\$29,624,897	\$27,294,602	\$31,258,113	(\$1,633,216)
A3	6th Lane - Camelback (LS1)	\$8,955,000	\$8,954,921	\$8,475,848	\$8,954,921	\$0
D1	Additional Street/Pedestrian Lighting (LS3)	\$540,000	\$521,724	\$514,091	\$540,330	(\$18,606)
E3	Seal Coat versus Rubber Overlay (LS 1)	\$264,000	\$264,342	\$218,964	\$244,342	\$20,000
E4	Seal Coat versus Rubber Overlay (LS 3)	\$1,607,000	\$1,595,287	\$1,544,073	\$1,495,385	\$99,902
E5	Seal Coat versus Rubber Overlay (LS 4)	\$380,000	\$430,896	\$378,590	\$380,003	\$50,893
G9	38' AC Leveling Course	\$61,000	\$166,000	\$166,000	\$166,000	\$0
K3	Red Light Enforcement	\$6,000	\$59,753	\$49,782	\$59,753	\$0
M1	Removable Steel Curb at 7th/Jefferson	\$6,000	\$5,989	\$5,989	\$5,989	\$0
	Sub Total Streets Department	\$11,813,000	\$11,998,912	\$11,353,337	\$11,846,723	\$152,189
A7	44th Street/Washington Transit Center (SF)	\$3,019,000	\$3,016,433	\$2,927,805	\$3,016,434	(\$1)
C6	APM Utility Connections	\$23,000	\$22,717	\$22,717	\$22,717	\$0
D2	44th Street Station People Mover Foundation (LS4)	\$756,000	\$783,003	\$756,400	\$756,400	\$26,603
D6	People Mover - APS Duct Bank @ 40th Place	\$327,000	\$326,527	\$356,944	\$356,944	(\$30,417)
E9	10" Water Line at 42nd/Washington LS 4	\$57,000	\$61,159	\$57,389	\$57,389	\$3,770
F3	Archaeological/Hazardous Material Testing (CAC)	\$60,000	\$60,000	\$57,471	\$60,000	\$0
	Sub Total Aviation Department	\$4,242,000	\$4,269,839	\$4,178,726	\$4,269,884	(\$45)
B3	LS 1 Water/Sanitary Sewer	\$14,354,000	\$13,821,778	\$9,158,685	\$13,852,581	(\$30,803)
B4	LS 2 Water/Sanitary Sewer	\$8,647,000	\$8,640,407	\$4,882,386	\$8,163,811	\$476,596
B5	LS 3 Water/Sanitary Sewer	\$20,602,000	\$20,920,533	\$14,791,169	\$20,926,980	(\$6,447)
B6	LS 4 Water/Sanitary Sewer	\$7,208,000	\$6,962,340	\$6,962,341	\$6,962,341	(\$1)
B7	Water and Sanitary Sewer Lines - 48th St. Bridge Replacement	\$156,000	\$155,767	\$142,862	\$155,767	\$0
J1	Catholic Protection for Waterlines LS1	\$744,000	\$743,645	\$480,199	\$743,645	\$0
J2	Catholic Protection for Waterlines LS2	\$505,000	\$504,657	\$385,368	\$504,657	\$0
J3	Catholic Protection for Waterlines LS3	\$29,000	\$0	\$0	\$29,192	(\$29,192)
J5	Catholic Protection for Waterlines LS4	\$350,000	\$85,620	\$85,620	\$85,620	\$0
	Sub Total Water Services Department	\$52,595,000	\$51,834,747	\$36,888,630	\$51,424,594	\$410,153
	Total - Phoenix	\$98,064,000	\$97,728,395	\$79,715,295	\$98,799,314	(\$1,070,919)

Valley Metro Rail Program Control
 CP/EV LRT Project
 Project Budget Status
 CNPA Project

Element	Description	Board Approved Total	Revised Budget/Estimate	Current Actual \$ (To Date)	Forecast	Variance
A8	5th/College Transit Center	\$635,000	\$630,730	\$618,258	\$630,730	\$0
AA	COT SRP Prior Rights TC Relocation	\$232,000	\$235,400	\$235,400	\$235,400	\$0
B8	Terrace / Apache Waterline Coordination (Design Only)	\$35,000	\$35,611	\$35,295	\$35,295	\$316
C1	Additional Communications Conduits	\$28,000	\$32,499	\$27,775	\$27,775	\$4,724
C2	COT ASU Pedestrian Signal	\$122,000	\$122,000	\$107,754	\$122,000	\$0
C7	Parking Facility 5th/Farmer	\$112,000	\$110,701	\$85,740	\$112,187	(\$1,486)
C8	COT Waterline @ Cremery Route	\$82,000	\$94,081	\$82,061	\$82,061	\$12,020
D4	COT Additional Street Lighting (LS5)	\$280,000	\$323,894	\$279,956	\$279,956	\$43,938
D7	COT Additional Conduit @ McClintock/Apache	\$8,000	\$7,990	\$7,990	\$7,990	\$0
E6	Rubberized Asphalt LS5	\$625,000	\$633,406	\$537,949	\$633,406	\$0
F2	McClintock / Apache Storm Drain	\$116,000	\$123,153	\$114,689	\$114,689	\$8,464
F9	Rubber Asphalt - Tempe	\$489,000	\$522,165	\$464,026	\$487,911	\$34,254
G1	McClintock Park and Ride - CNPA	\$5,581,000	\$5,580,729	\$5,580,729	\$5,580,729	\$0
G3	Tempe Admin Costs	\$723,000	\$0	\$722,808	\$722,808	(\$722,808)
G5	Misc Changes directed by COT	\$0	\$15,690	\$0	\$15,690	\$0
G7	Apache/McClintock Par & Ride Garage	\$176,000	\$466,033	\$0	\$466,033	\$0
H3	Fiber Optic COT	\$397,000	\$431,644	\$354,908	\$421,521	\$10,123
J4	Catholic Protection of Waterline LS4 CO#15	\$140,000	\$158,638	\$139,620	\$139,620	\$19,018
J9	University Drive Station Bus Interface	\$0	\$0	\$0	\$0	\$0
K1	Veteran's Way- 5th/College TC	\$8,000	\$7,645	\$6,772	\$6,772	\$873
K2	Bus Shelter Electrification	\$10,000	\$11,076	\$9,766	\$9,766	\$1,310
K4	Washington/Center Parkway Station	\$4,734,000	\$4,693,456	\$3,986,226	\$4,663,722	\$29,734
L1	TLB 4th of July Electrical	\$25,000	\$19,350	\$12,089	\$19,350	\$0
L2	COT CNPA - Additional Mill/Overlay	\$466,000	\$574,377	\$521,935	\$574,377	\$0
L3	Price.Apache PnR Modifications (PnR-RB)	\$0	\$57,743	\$57,743	\$57,743	\$0
L5	COT McClintock Park & Ride (see G7)	\$0	\$0	\$0	\$0	\$0
L7	COT CNPA Prince/Apache PnR Waterline	\$0	\$116,844	\$102,480	\$116,844	\$0
L9	Landscape Island at Terrace/Apaxhe	\$0	\$7,776	\$0	\$7,776	\$0
N1	Replace Bougainvilleas on Stadium Drive	\$0	\$21,771	\$0	\$21,771	\$0
N4	Tempe Market Analysis	\$44,000	\$44,378	\$43,728	\$43,728	\$650
XX	Tempe Miscellaneous Force Account Work LS5	\$21,000	\$20,000	\$20,000	\$41,480	(\$21,480)
	Sub Total Tempe	\$15,089,000	\$15,098,780	\$13,942,297	\$15,679,130	(\$580,350)
A9	Main Sycamore Transit Center	\$5,355,000	\$5,384,431	\$4,418,458	\$5,341,439	\$42,992
H4	Fiber Optic Backbone LS-4 (Mesa portion)	\$879,000	\$808,175	\$574,422	\$863,188	(\$55,013)
M2	Mesa Additional Grind & Overlay	\$281,000	\$281,383	\$246,792	\$281,383	\$0
M3	Mesa Additional Grind & Overlay on Dobson	\$233,000	\$232,677	\$204,073	\$232,677	\$0
N3	Mesa Market Analysis	\$19,000	\$18,542	\$18,542	\$18,542	\$0
XX	Mesa Miscellaneous Force Account Work LS5	\$5,000	\$5,000	\$4,399	\$5,000	\$0
	Sub Total Mesa	\$6,772,000	\$6,730,208	\$5,466,686	\$6,742,229	(\$12,021)
C9	ASU Logo Additions	\$73,000	\$72,010	\$72,010	\$72,010	\$0
E2	ASU Steam Line	\$8,000	\$8,189	\$8,189	\$8,189	\$0
H1	Fiber Optic ASU	\$1,182,000	\$1,128,673	\$762,906	\$1,146,633	(\$17,960)
	Sub Total ASU	\$1,263,000	\$1,208,872	\$843,105	\$1,226,832	(\$17,960)
AB	Cityscape CNPA in LS3	\$5,000	\$34,643	\$23,846	\$34,643	\$0
E1	(AP/S) Duct Bank at 48th St. Utility Bridge, Archaeological Support	\$72,000	\$76,309	\$57,870	\$57,870	\$18,439
F8	Rojo Lofts Property	\$82,000	\$81,998	\$20,185	\$81,998	\$0
	Sub Total Other	\$159,000	\$192,950	\$101,901	\$174,511	\$18,439
	Grand Total CNPA	\$121,347,000	\$120,959,205	\$100,069,284	\$122,622,016	(\$1,662,811)



3. Schedule Overview

The current Status of the Master Schedule is based on a data date of November 1, 2008. The current forecast continues to be an on-time Program completion date of Saturday, December 27, 2008.

Design and Construction continues to work with Metro Operations and Mass Electric to accelerate completion and testing activities in the Signals and Communications contract in an effort to minimize the impact to Metro Operations Integrated Startup.

Track Installation							
Line Section	Bid Quantity		Installed		Remaining		% Complete
	LF	Miles	LF	Miles	LF	Miles	
Total	224,968	42.61	224,968	42.61	0	0.00	100.0%
OCS Pole and Down Guy Anchor Foundations							
Line Section	Bid Quantity		Installed		Remaining		% Complete
	LF	Miles	LF	Miles	LF	Miles	
Total	1,400		1,400		0		100.0%
Station Finishes							
Stations to S&C	Bid Quantity		Complete		Remaining		% Complete
Total	33		33		0		100.0%
Traction Electrification							
Area	Description		U/M	Bid Quantity	Installed	% Complete	
TPSS # 1 Thru 15	Feeders & Negative Returns		LF	135,580	134,600	99.3%	
Yard	500 kcmil Feeder Cable		LF	2,175	2,175	100.0%	
Line Sections/Yard	OCS Pole Assemblies		EA	1,478	1,478	100.0%	
Line Sections/Yard	OCS Wire		LF	259,790	259,790	100.0%	
Line Sections/Yard	OCS Cantilever Assemblies		EA	2,027	2,027	100.0%	
Signals and Communications							
Area	Description		U/M	Bid Quantity	Installed	% Complete	
Stations	Local Wire Installed		EA	33	33	100.0%	
Stations	Communications Cabinet Equipment Installed		EA	33	33	100.0%	
Stations	Communications Device Kits		EA	33	33	100.0%	
Stations	Terminate Devices		EA	33	33	100.0%	
Line Sections	Backbone Fiber		LF	262,873	261,900	99.6%	
Line Sections	Street Traffic Fiber		LF	159,803	158,763	99.4%	
Line Sections	City Use Fiber		LF	245,991	222,000	90.3%	



Major Milestones

Civil:

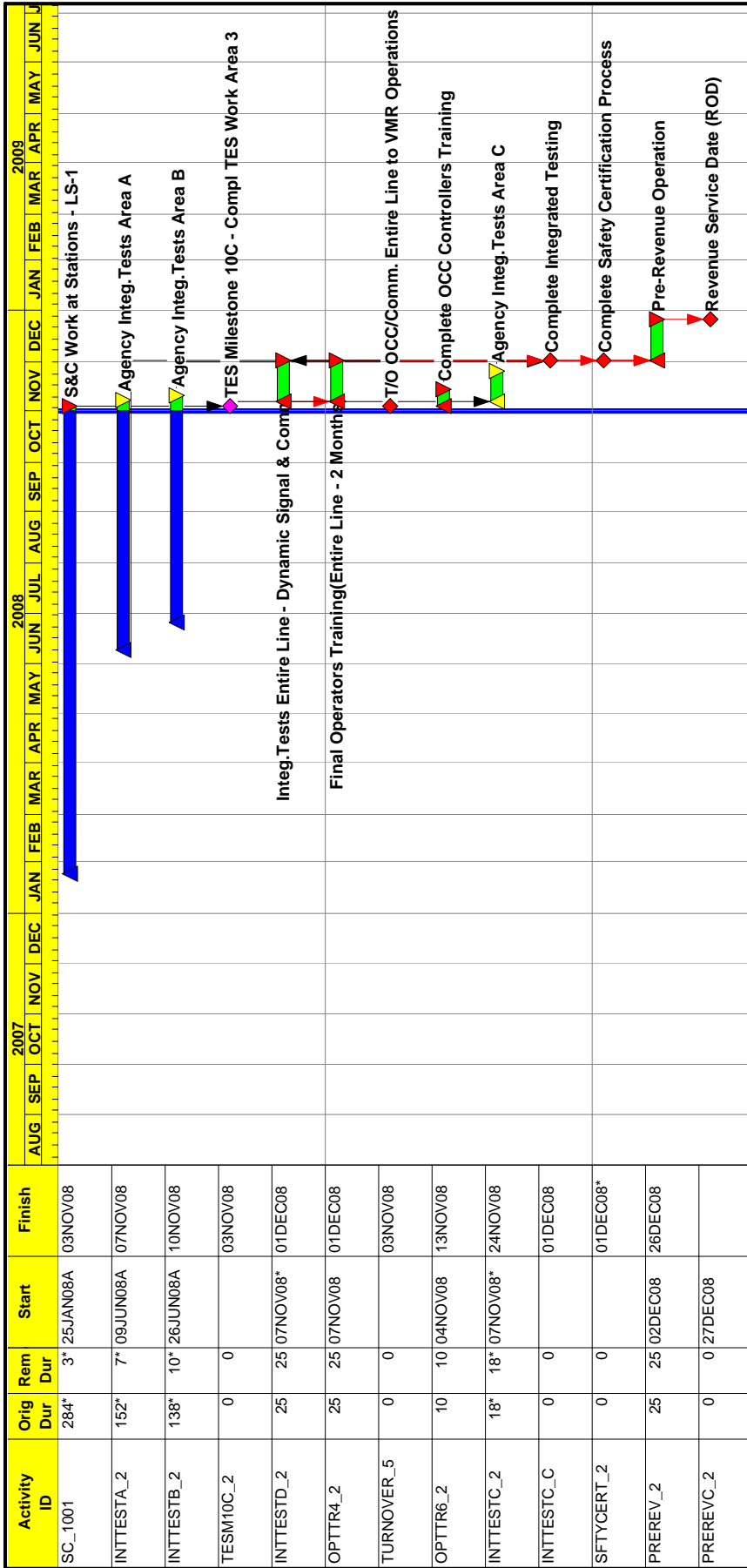
Line Section 1 Completion	October 2008
Line Section 2 Completion	October 2008
Line Section 3 Completion	October 2008
Line Section 4 Completion (Complete)	December 2007
Line Section 5 Completion (Complete)	March 2008
Station Finishes	December 2008
Park and Ride	December 2008

Systems:

Signals and Communications	November 2008
Fare Collection	November 2008
Traction Electrification	November 2008

Startup:

Start Int. Testing Area 1 (24 th Street to the Mill Pocket Track)	May 2008
Start Int. Testing Area 2 (LS3 and Balance of LS5)	September 2008
Start Integrated Testing Area 3 (All of LS2 and LS1)	November 2008



8011

Valley Metro Rail
Central Phoenix/East Valley LRT

Sheet 1 of 1

Critical Path

Start Date: 01AUG04

Finish Date: 26DEC08

Data Date: 01NOV08

Run Date: 27OCT08 07:45

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Procurement Bid Status Report as of 10/30/08						
Title	Issue Date	Pre-Bid Conf	Bid Opening	Board Award	NTP (Anticipated)	
PART I – CP/EV LRT PROJECTS						
Insurance Brokers Services	TBD	NA	TBD	TBD	TBD	
Armored Transport Service	5/27/08	6/18/08	7/10/08	10/15/08	11/1/08	
Advertising on Trains	9/7/08	NA	10/2/08	11/12/08	TBD	
Industrial Tools & Equipment Supply Agreement	10/20/08	NA	10/29/08	NA	11/5/08	
Electrical Supply Agreement	11/7/08	NA	TBD	NA	TBD	
PART II – LONG RANGE DEVELOPMENT PROJECTS						
Architectural/Engineering On-Call Consultant Services - Future Extension Projects	1/21/08	2/12/08	3/17/08	Reactivated (Evaluations Ongoing)	Reactivated (Evaluations Ongoing)	



4. Quality Assurance

Description

The METRO Quality Assurance Manager is responsible for the establishment and implementation of a Quality Assurance Program for the Valley Metro Rail organization that meets the requirements of the Federal Transit Administration and provides adequate confidence that procured materials and services meet the technical and quality requirements of the project. The METRO Quality Assurance Manager is assisted by the Quality Assurance Managers for the GEC for design, the GEC for LRT Vehicle procurement and the CAC for construction, installation, inspection and testing.

Individually and collectively, the Quality Assurance Managers are responsible for ensuring the effective implementation of the Quality Assurance Programs for their respective organizations and contractors. The Quality Assurance Managers are responsible for approval of quality programs, assessment of compliance with quality programs through inspections, audits and surveillances and for identifying nonconforming materials, parts and services and assuring effective corrective action.

Progress

METRO Activities

Civil and Systems

- Attended various CAC/Contractor weekly progress and coordination meetings.
- Attended weekly rail progress and schedule review meetings.
- Continue to review field activities at the various Park-and-Ride Facility sites, stations and transit centers.
- Participated in Pre-final inspections for eight Stations on Central Avenue.
- Attended meetings to review seating and landscape issues at Stations and Transit Centers.
- Conducted inspection of ganged seating at stations and transit centers. Prepared Key Plan for each site identifying defective seating for follow-up/correction by CAC and Contractor.

Light Rail Vehicle

- Audits
 - Updates to the Engineering Change Notice books
 - Car History Books for LRV 146 and 147



- Inspections
 - Continuing inspections of the assembly and testing process, for example;
 - Mainline and yard load testing
 - Final vehicle inspections
 - Interior and exterior inspections
 - Truck inspections
 - Wiring checks and testing of communications equipment
- Vehicle Final Assembly
 - Accepted delivery; LRV 146 and 147
 - All 50 LRV's have completed final assembly

Construction Administration Consultant Activities

Quality Manuals Reviewed

- All required Contractor Quality Assurance Manuals have been submitted and accepted. No other Contractor Quality Control manuals are to be submitted for this project.

General

- Attended weekly Resident Engineer meetings.
- Continued review of quality related submittals as required.
- Continued to provide assistance in regards to the metal artwork of a structural nature. In this regard, Roosevelt and Central Station dome canopy structure has finally been completed. Others are presently under construction or in the installation process.
- Installation of the 11th Street crossover track is in progress with approximately 60 percent of the thermite welds have been completed and inspected. This work is expected to complete by November 15, 2008.
- Repairs to two rails damaged by electrical arc near the canal west of 44th Street have been completed. MEC, which accidentally caused the damaged, has changed their grounding magnets to ones which use greater magnetic force which should mitigate any further arc burns should the same situation occur.



NCR and QAR Logs show all NCR's and QAR's for all contracts, including Material Procurement contracts, presently open. Columns for "New" and "Closed" represent changes in quantity(s) for this months report. Mass Electric has a total of three (3) NCR's open on subcontractor work, one (1) on the S&C contract, and two (2) on the TES contract.

CAC Nonconformance Report Log (NCR):

Total NCR's Written	New NCR's	Closed NCR's	Remaining NCR's	NCR's Projected to be Closed in November
224	1	11	12	12

CAC Quality Action Request Log (QAR):

Total QAR's Written	New QAR's	Closed QAR's	Remaining QAR's	QAR's Projected to be Closed in November
38	0	0	13	13

Cost and Schedule – Variance Analysis

- Quality Assurance activities remain within budget and on schedule.

Issues and Solutions

- Discrepancies regarding track switch machines continue to be addressed with representatives from Nortrak and Contec onsite (November 3, 2008) to complete installation of mechanical switches (vs. proximity switches) inside the track switch machines. Presently there are no malfunctioning units. MEC has completed cleaning the interior of the machines and waterproofing the conduits which initially caused the water leakage problems. During the cleaning process all drain systems were cleaned and flushed.
- Punch list items continue to be addressed at the Station Finishes Contract. Issues regarding the station seating are ongoing.
- Monitoring of the Park-and-Ride contracts continues as construction progresses. A pre-final walk through and punch list of 19th Avenue and Montebello, 19th Avenue and Camelback, Price and Apache, and Central and Camelback locations have been completed.

5. Public Involvement



Description

The Public Involvement Section is responsible for sharing information on the Project with stakeholders along the light rail alignment, documenting questions and concerns expressed by these stakeholders and ensuring that appropriate Project staff addresses them, and providing answers and feedback to those stakeholders on the outcome. At this stage of the Project, PI Area Coordinators are working with stakeholders in their respective line sections to provide the latest information on construction status, traffic circulation, landscaping finishes, and follow-on contract progress/impacts. They are also sharing information on business assistance programs with the owners and managers of businesses located along the light rail corridor.

Progress

- METRO conducted a Community Advisory Board Focus Group to receive feedback on the overall success of the CAB Program. Fifteen CAB members representing all five CAB's participated in the exercise. Megan Davis, Davis LLC, facilitated the session to ensure CAB members were able to communicate any concerns or improvements for future CAB programs. Some of the key comments expressed by the participants were:
 - Maintain monetary incentive for program,
 - Ensure balanced participation from community members,
 - Eliminate "special" interest participant;
 - Amend Rating System to better define "above and beyond" activities.
- Collection of the Courtesy signs provided by METRO during construction has concluded. "A" frame signs will be re-used for Grand Opening efforts.
- Over 2,427,328 Safety materials have been distributed via presentation/handout or e-mail communication by both Community Relations and Public Involvement Staff.
- Public Involvement staff continues coordination with the METRO's Grand Opening Team to support station celebrations that will be held on December 27th. Public Involvement staff distributed packets inviting adjacent stakeholder to participate in station celebrations. Stakeholders will have a varied opportunity to participate based on physical space constraints.



- Public Involvement is working closely with Central High School to conduct a “safety” exercise the week of November 10th. METRO Staff will allow students to board rail vehicles at the Columbus/Central Station and instruct students on proper behavior while on the platform. Over 1100 students currently use Public Transit service to arrive and depart from CHS. Phoenix Union School District Administration, Phoenix Police, METRO Transit Police Bureau, and METRO Operations staff will assist with the exercise.
- Public Involvement staff is finalizing logistics for a training session for the ADA Community on November 15th and 22nd. METRO will provide ADA Community with opportunity to board METRO vehicles. Multiple ADA Organizations will partner with METRO to provide hands on experience of both the station and vehicles.
- Public Involvement staff is coordinating a “Breakfast” Community Milestone Event at the Sycamore and Main Station in Mesa on November 22nd. METRO will coordinate public tours of vehicles and educated potential riders of basic features of the park and ride facility, station, and Light Rail Vehicle.
- The Community Advisory Board Program will conduct a final meeting on Thursday, November 13th in the METRO Board Room for Line Section 3.

Schedule Status

- Public Involvement activities remain on schedule.

Issues and Solutions

- None.



6. Disadvantaged Business Enterprise Program

Description

It is the Disadvantaged Business Enterprise (DBE) Program Section's responsibility to administer the DBE participation requirements mandated by the Federal Government as a condition of the receipt of funding. These participation requirements are established by the City of Phoenix Equal Opportunity Department through the DBE Program Plan and are conveyed to Valley Metro Rail, as a sub-recipient, through the Civil Rights Office of the Public Transit Department.

The DBE Program Section is responsible for ensuring that procurement and contract language, specific to the program, accurately reflects current requirements. During the procurement process, the DBE Program Section is responsible for responding to Requests for Information, presenting the DBE documentation requirements at pre-bid conferences, and conducting contractor and DBE subcontractor training sessions. At Bid Opening, the accuracy of DBE documentation submitted with each bid must be verified and each bidder must be found either responsive or non-responsive. Upon contract execution, pre-construction meetings are held and reporting/compliance requirements are addressed in more detail. Monthly utilization reports are submitted by each prime contractor and are reviewed by the DBE Program Section. Field issues and variances in the planned utilization are addressed on an on-going/as-needed basis. In order to ensure adequate DBE participation and the availability of DBE contractors, on-going outreach activities are also conducted to facilitate networking of DBEs with prime contractors and to encourage DBE certification of non-certified small businesses.

Progress

- Overall DBE participation is unchanged from the last reporting period. Based on amounts originally awarded is 14.44 percent, participation including change order work is at 15.16 percent and DBE's have been paid 15.20 percent of construction dollars to date.

Procurement Activities

- There were no DBE related procurement activities this period. However, METRO committed to providing opportunities to the small business community for participation in the Grand Opening celebration activities. As a result, the event planner provided a list of vendor opportunities, METRO staff research certified firms in each area, and provided a list of companies to the planner. During the procurement of vendors for the grand opening, the small, women, and minority certified firms will be provided with an opportunity to provide services on a low-bid basis.



Contract Compliance

The summary below does not include DBE participation for professional services contracts related to future extensions or METRO's DBE vendors.

- Line Section 1 - Kiewit Western Contractors
 - 12.10 percent Minimum DBE Participation
 - 13.77 percent Committed at Bid
 - 15.81 percent Current DBE Participation (adjusted contract amounts)
 - \$9,185,101 Total DBE Subcontracted Amount
 - Currently processing final contract closeout. Outstanding Labor Compliance issues need to be addressed before this can be completed.
- Line Section 2 - Herzog
 - 12.10 percent Minimum DBE Participation
 - 15.69 percent Committed at Bid
 - 19.79 percent Current DBE Participation (adjusted contract amounts)
 - \$11,845,156 Total DBE Subcontracted Amount
- Line Section 3 - Archer Western Contractors
 - 12.30 percent Minimum DBE Participation
 - 13.59 percent Committed at Bid
 - 15.99 percent Current DBE Participation (adjusted contract amounts)
 - \$16,543,403 Total DBE Subcontracted Amount
- Line Section 4 – Sundt, Stacy and Witbeck
 - 11.50 percent Minimum DBE Participation / 12.03 percent Committed at Bid
 - 12.32 percent Final DBE Participation
 - \$7,776,591 Total DBE Subcontracted Amount
 - Contract Closed



- Line Section 5 – Sundt, Stacy and Witbeck
 - 14.90 percent Minimum DBE Participation / 16.73 percent Committed at Bid
 - 17.64 percent Final DBE Participation (adjusted contract amounts)
 - \$13,990,411 Total DBE Subcontracted Amount
- Station Finishes - Archer Western Contractors
 - 12.20 percent Minimum DBE Participation
 - 12.98 percent Committed at Bid
 - 14.45 percent Current DBE Participation (adjusted contract amounts)
 - \$9,501,543 Total DBE Subcontracted Amount
- Operations and Maintenance Center – Sundt, Stacy and Witbeck (Contract Closed)
 - 7.34 percent Minimum DBE Participation
 - 7.54 percent Committed at Bid
 - 8.21 percent Current DBE Participation (adjusted contract amounts)
 - \$4,973,643 Total DBE Subcontracted Amount
- Traction Electrification - Mass Electric
 - 10.00 percent Minimum DBE Participation
 - 11.17 percent Committed at Bid
 - 11.05 percent Current DBE Participation (adjusted contract amounts)
 - \$6,421,080 Total DBE Subcontracted Amount
- Signals and Communications - Mass Electric
 - 11.00 percent Minimum DBE Participation
 - 11.67 percent Committed at Bid
 - 11.05 percent Current DBE Participation (adjusted contract amounts)
 - \$4,524,834 Total DBE Subcontracted Amount
- Construction Administration Consultant - PBS&J/PGH Wong Joint Venture
 - 21.00 percent Minimum DBE Participation
 - 25.35 percent Committed at Bid
 - 32.29 percent Current DBE Participation (adjusted contract amounts)



- \$12,288,109 Total DBE Subcontracted Amount
- Program Management Consultant - SRBA/Parsons Joint Venture
 - 1.5 percent Minimum DBE Participation (established post contract award)
 - 0 percent Committed at Bid
 - 4.25 percent Current DBE Participation (based on adjusted contract amounts)
 - \$1,704,758 Total DBE Subcontracted Amount
- General Engineering Consultant - Parsons Brinckerhoff
 - 13.00 percent Minimum DBE Participation
 - 13.89 percent Committed at Bid
 - 16.06 percent Current DBE Participation (adjusted contract amounts)
 - \$11,392,061 Total DBE Subcontracted Amount
- Fare Collection System - Scheidt Bachmann
 - 8.20 percent Minimum DBE Participation
 - 8.39 percent Committed at Bid
 - 8.39 percent Current DBE Participation (adjusted contract amounts)
 - \$627,000 Total DBE Subcontracted Amount
- Material Procurements - Multiple Suppliers
 - 3.00 percent Minimum DBE Participation
 - 3.00 percent Committed at Bid
 - 3.00 percent Current DBE Participation (adjusted contract amounts)
 - \$1,770,322.77 Total DBE Subcontracted Amount
- Tempe Town Lake Bridge - PCL Civil Constructors – Contract Closed Out
 - Final Participation 20.80 percent (adjusted contract amounts)
 - \$4,559,765.58 Total DBE Subcontracted Amount
- Archaeological Services; DBE Prime, Archaeological Consulting Services Inc.
 - \$3,240,597 Total DBE Amount



- Park-and-Rides; DBE Prime, MRM Construction
 - 20.50 percent Minimum DBE Participation
 - 53.00 percent Committed at Bid
 - 70.21 percent Current DBE Participation (adjusted contract amounts)
 - \$3,913,359 Total DBE Subcontracted Amount
- Park-and-Rides; Kiewit Western Contractors
 - 20.50 percent Minimum DBE Participation
 - 23.68 percent Committed at Bid
 - 23.68 percent Current DBE Participation (adjusted contract amounts)
 - \$1,850,777 Total DBE Subcontracted Amount
- Park-and-Rides; Sundt, Stacy and Witbeck
 - 20.50 percent Minimum DBE Participation
 - 31.79 percent Committed at Bid
 - 32.28 percent Current DBE Participation (adjusted contract amounts)
 - \$2,860,170 Total DBE Subcontracted Amount

Outreach Activities

- During the month of October, outreach activities were limited to the following:
 - Coordinating group photo sessions for the Prime Consultant/Contractors and DBE subs for recognition at the 2008 AMCA Awards Ceremony and Profiles in Diversity events
- On November 20, 2008 METRO will host its third annual Profiles in Diversity event. The 2008 event will highlight the contributions the DBE sub-consultants and subcontractors have made to the 20-mile Central Phoenix/East Valley project. Commemorative project photos will be provided to DBE program participants.

Cost and Schedule – Variance Analysis

- DBE activities remain within budget and on schedule.

Issues and Solutions

- There are no issues to report this period.



7. System Safety and Security

Description

The System Safety and Security Department is responsible for establishing requirements for the identification, evaluation, and minimization of safety and security risks throughout all phases of the project, including revenue operations.

The Section has developed and is administering provisions of the System Safety Program Plan, the System Security Program Plan, and the Safety and Security Certification Plan.

Progress

- Two hundred fifty-one METRO, consultant, contractor, utility company, and City personnel received track access safety training.
- Issued Safety Certificates for Line sections 1 and 2, the light rail vehicle maintenance training program, the wheel truing machine, and the four core safety and security plans.
- Issued Occupancy and Test Permits for, light rail vehicles 102 to 146, Test Zone C, and McDowell/Central to Bethany Home/19th Avenue.
- A concentrated effort was made to verify safety checklist items for light rail vehicles.
- Participating in the ongoing planning for the Grand Opening.
- Began working with the Tempe and Mesa Police Departments and Wackenhut to develop training programs, procedures, post orders, etc. for fare inspection, patrol and park-and-ride security in Tempe and Mesa.
- Presented a safety briefing for new train operator's class.
- Conducted a tabletop training exercise for METRO, and area emergency services personnel.
- Developed a light rail vehicle familiarization training program in conjunction with the Phoenix Fire Department. Twenty seven sessions will be conducted during October and November
- Conducted the August Fire/Life Safety and Security Committee, and Safety and Security Certification Review Committee meetings.



Safety and Security Certification Status

Contract	No. of Checklist Items	No. of Checklist Items Complete	Percent Complete	Estimated Certification Date	Comments
Town Lake Bridge	41	41	100%	Aug 2006	CLOSED. Certificate of Compliance is completed.
Operations and Maintenance Center	353	353	100%	Sept 2007	CLOSED. Certification is completed. Supplemental report submitted by RE.
Line Segment 1	121	121	100%	Oct 2008	CLOSED. Certificate of Compliance was approved at the October 2008 SSCRC Meeting.
Line Segment 2	127	122	96%	Oct 2008	CLOSED. Certificate of Compliance was approved at the October 2008 SSCRC Meeting.
Line Segment 3	214	150	70%	Nov 2008	Verification and documentation of items is continuing.
Line Segment 4	125	125	100%	May 2008	CLOSED. Certificate of Compliance was approved at the May 2008 SSCRC Meeting.
Line Segment 5	107	107	100%	August 2008	CLOSED. Certificate of Compliance was approved at the August 2008 SSCRC Meeting.
LRV	205	85	10%	Dec 2008	Concentrated effort to verify checklist items.
Ticket Vending Machines	38	17	45%	Nov 2008	Milestone 12 (ready for revenue service) is November 2008.
Station Finishes	55	38	70%	Oct 2008	Verification and documentation of items is continuing.
Signals and Communications	254	227	89%	Dec 2008	Signal system acceptance test reports submitted and under review. Verification of items continuing.
Traction Electrification System	233	163	70%	Nov 2008	Final test reports will close out majority of remaining items.
Park-and-Ride 1	43	13	30%	Nov 2008	Verification of items will begin after Park-and-Ride 2
Park-and-Ride 2	42	30	71%	Nov 2008	Verification of items continuing
Park-and-Ride RB	43	13	30%	Dec 2008	Verification of items will begin after Park-and-Ride 2
Wheel Truing Machine	Specs.	Specs	100%	Oct 2008	CLOSED. Certificate of Compliance was approved at the October 2008 SSCRC Meeting.
Art Contracts	Art contracts will be certified on a case by case basis as each piece is installed.				



Construction Accident Data

METRO Construction Incident Rate	July 2008	Previous 12 Month Average
	0	2.05
OSHA National Construction Incident Rate = 5.30		

METRO Construction Lost Time Rate	July 2008	Previous 12 Month Average
	0	0.13
OSHA National Construction Lost time Rate = 2.20		

Total Hours Worked, July 2008 – 88,881
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Issues and Solutions

- None.



8. Environmental Management

During design and construction, the Environmental Manager is responsible for overseeing the compliance with federal and State environmental laws/regulations, the Project's environmental/historic preservation obligations, implementing the requirements of the Final Environmental Impact Statement (FEIS), Record of Decision (ROD), and Section 106 Memorandum of Agreement.

The Environmental Manager is also responsible for review of all proposed Project changes to determine if the proposed change is consistent with the Project Definition as stated in the FEIS and to determine if the change presents any environmental impact not addressed in the FEIS/ROD. If a proposed change results in potential new impacts, the Manager shall document those impacts and secure FTA concurrence with the change, definition of impacts and proposed mitigation.

Progress

Archaeology Monitoring

- Monitoring and data recovery is complete and closed.

Archaeology Testing and Analyses

- Pueblo Grande/La Plaza
 - Non-mortuary feature descriptions for Pueblo Grande and La Plaza are complete in draft form. Final descriptions and discussions will be completed once the technical data from artifact analyses are available; this is scheduled for early December 2008.
- Lithics Analysis (Chipped stone, ground and pecked stone, miscellaneous stone objects)
 - The total lithics analyzed to date, including critical and non-critical, is 17,202. This is approximately 96.9 percent of the Pueblo Grande collection and 92.4 percent of La Plaza.
- Ceramics Analysis
 - The total ceramics analyzed to date is 2,626. This includes 160 from Pueblo Grande and 2,466 from La Plaza. The pottery sherds remaining to be analyzed includes: 4,756 from Pueblo Grande, 20,817 from La Plaza, 5 from Las Acequias, and 2 from Dutch Canal Ruin.
- Faunal and Shell Analysis
 - Faunal remains and shell artifact remains are in progress. A total of 8,335 faunal specimens and 1,550 shell specimens have been analyzed. Remaining specimens to be analyzed include 2,754 faunal and 1,654 shell.
- Archaeobotanical Analysis
 - Processing: 34 pollen samples were sent to Texas A&M Palynology Lab for analyses, bringing the total to 343 samples. Sixty macrobotanical samples were floated by the lab staff bringing the total to 295.



- Analysis: 14 pollen samples were counted, 19 pollen samples were scanned, and 40 flotation samples were analyzed.
- Remaining: 138 pollen samples and 212 flotation samples remain to be analyzed. Two hundred and fifty-two flotation samples and 159 pollen samples remain to be analyzed.
- Fifty-seven percent of the pollen analysis and 39 percent of the flotation analysis are complete. Forty-nine percent of the paleoethnobotanical analysis is completed.
- Water Control (canals, reservoirs, etc.)
 - The water control analysis and chapter is in progress.
- Bioarchaeology (Human Remains)
 - The entire population of 146 burials has been analyzed. Isolated human bone fragments discovered during data recovery without a burial context are being inventoried.
- Contaminated and Hazardous Materials
 - No activity.
- Regulatory Compliance
 - No activity.



Cost and Schedule – Variance Analysis

Archaeology Monitoring FY'08

Task Order 2 – Cost +Fee construction monitoring FY'08	\$227, 906
Billed as of April 30, 2008	(\$228,772)
Balance available	(\$0)
Disallowed fee	\$1,866
Agency reserve for data recovery through end of construction	\$0

Archaeology Testing and Analyses

Contract Value	\$2,697,095
Invoiced Through October 31, 2008	(\$1,298,815)

Hazardous Materials Assessment (CAC)

Original Contract Value	\$499,488
Contract Value to date	\$499,488
Invoiced through February 29, 2008	(\$486,967)
Task orders open	(\$0)
Expended and Committed	\$486,967
Estimated cost to complete	\$487,000

Remediation and Treatment Fund (METRO)

Budget	\$1,004,000
Expended	(\$96,811)
ERI invoiced to date	(\$96,811)
Open Task orders	(\$0)
Transferred to Archaeology Monitoring-Data Recovery	(\$650,000)
Funds Available	\$257,189
Estimated cost to complete	\$98,811

Issues and Solutions

- None.



9. Real Estate

Description

The LRT Project travels down main business arterials in the cities of Phoenix, Tempe and Mesa and approximately 769 parcels of property are affected. The number of right-of-way certifications required within this 20-mile corridor is in excess of 2,500. This number includes all easements required by the project, such as utility, irrigation, sidewalk, traffic, slope, landscape and temporary construction, as well as all of the normal fee acquisitions. Real Estate staffs from the project cities are responsible for obtaining all of the necessary property rights required to construct and operate the LRT system. Oversight and coordination of the cities' activities is provided by the METRO Real Estate Manager.

Progress

- Presently, all of the required properties are under City control and are available for construction. Extensive coordination between METRO and City staff has enabled the project to obtain these properties in a manner sufficient to support construction.
- In Line Section 1, all 183 relocations have been completed. All 149 parcels are under City control and are available for construction.
- In Line Section 2, all 29 relocations have been completed. All 92 parcels are under City control and are available for construction.
- In Line Section 3, all 36 relocations have been completed. All 254 parcels are under City control and are available for construction.
- In Line Section 4, all 28 relocations have been completed. All 108 parcels are under City control and are available for construction.
- In Line Section 5, 40 of the 41 relocations have been completed, leaving one relocation in progress. All 162 parcels are under City control and are available for construction.
- Project-wide, twenty building cut and re-faces were identified; all twenty building cut and re-faces have been completed. These building modifications required structural engineering analysis, architectural and utility modifications, procurement of relevant contractors, and extensive permitting processes.
- The FTA Real Estate Program Compliance Review cited nine areas of noncompliance. Presently, all citations have been adequately addressed and the FTA has rendered a final decision as of November 8, 2007. All issues have been resolved and all FTA decisions have been accepted by the Project. The FTA reserves the right to review legal settlements at a future date.
- An updated Real Estate Acquisition Summary table is included at the end of this section.



Cost and Schedule – Variance Analysis

- A focused real estate effort was initiated to accelerate the acquisition process and thus eliminate a negative impact to the project schedule. The Cities worked diligently with METRO to improve and streamline processes wherever possible.
- The overall real estate forecast is still within the budget and actual costs are within the budget plus contingency for the real estate contract unit.

Issues and Solutions

- Efforts continue to be focused on completing cost-to-cure work. No parcels are impeding construction work.

**CENTRAL PHOENIX / EAST VALLEY
LIGHT RAIL TRANSIT PROJECT
REAL ESTATE ACQUISITION SUMMARY**

October 31, 2008

ACTIVITY								
	1 PHX	2 PHX	3 PHX	4 PHX	4 TEMPE	5 TEMPE	5 MESA	Totals
Full Takes	40	0	11	2	0	16	0	69
Partial Takes	109	92	243	105	1	102	44	696
Total Affected Parcels	149	92	254	107	1	118	44	765
Offers Accepted	135	86	251	103	1	117	43	736
Escrow Closed Acquisition Complete	135	86	251	103	1	117	43	736
In Condemnation	10	6	3	3	0	1	1	24
In Negotiations	4	0	0	1	0	0	0	5



10. Utilities

Description

The METRO Utility Manager is responsible for managing and overseeing the relocation of all privately owned utilities (irrigation, natural gas, nitrogen lines, fiber optics, power, private force mains, private communication lines, private irrigation lines, cable television, and telecommunications) necessary to allow LRT construction, including those with and without prior rights. Utilities with prior rights include SRP Power, SRP Irrigation, Qwest (local and long distance), Southwest Gas, WilTel, MCI and APS. Relocation of privately owned utilities is performed by private utility companies and their contractors, preferably prior to beginning LRT construction. Relocation of publicly-owned utilities is accomplished within the civil construction contracts by METRO contractors.

Progress

- Line Sections 1, 2, 3, 4 and 5 - no major utility conflicts or coordination issues.
- Park-and-Ride - no major utility conflicts or coordination issues.
- Transit Centers - no major utility conflicts or coordination issues.
- Traction Power Substations and Stations Platform: All TPSS Sites energized.
- Station Finishes (Platform) All Stations energized.
- SRP 230 kV over Town Lake Bridge.
- Induced Voltage.
 - SRP is schedule to rotate the phases on their 230 kV power line that crosses over the LRT tracks at Tempe Town Lake week of November 17, 2008. This will help mitigate the problem until a more permanent solution is developed.
 - There have been numerous trips on the LRV auxiliary power supply due to overvoltage condition caused by induced voltage from other overhead power lines. Mitigation measures for induced voltage are in development.
 - A meeting was held with METRO, LTK, SRP, APS, Qwest and SW Gas to discuss the induced voltage issue. APS has requested some additional information about the LRV auxiliary power supply, voltage sensing, and protection circuits. APS requested that METRO measure the voltage and waveform on the overhead without DC power. LTK brought up that capacitors can be installed on the OCS to discharge the AC voltage to ground via the pole ground. However to determine the necessary size of the capacitors measurements would need to be taken along the guide way to determine the magnitude of the voltage induction.
 - APS and SRP Electrical engineers are willing to provide assistance to help METRO; however, the source of the problem first needs to be identified (is it electromagnetic or electrostatic issues causing the induced voltage).

- The GEC is evaluating, gathering data, and will perform a site survey and take measurements for electrical and magnetic fields and provide a recommendation for remediation measures.

Cost and Schedule – Variance Analysis

- Costs incurred to-date for prior rights utilities are within the Utility Budget.

Issues and Solutions

- Induced voltage – pending measures to identify the source of the problem.

Construction Photographs



SRP onsite preparing
Sycamore and Main Street for energizing

11. Architecture

Public Art



Description

Public art projects will be a part of all Station Finishes listed in Section 4.1.3 with the exception of the platform at 19th Avenue and Camelback. Additional artworks will be placed at the 19th Avenue and Camelback Park-and-Ride and at the Tempe Town Lake Bridge. Artworks will include stand alone sculptures, integrated architectural finishes, entryway canopies, lighting, paving and landscaping elements. Artists will install their work in conjunction with the Station Finishes, Park-and-Ride, and Town Lake Bridge construction schedule.

Progress

- Line Section 1
 - Montebello: Installed.
 - 19th Avenue/Camelback: Columnar support was installed on Tuesday, November 4, 2008. The artwork sleeve will be installed Monday, November 10, 2008.
 - Camelback/7th Avenue: Installed.
- Line Section 2
 - Camelback: Installed.
 - Campbell: Artwork is installed. Need to confirm correct lighting placement by Archer Western Contractors.



- Osborn: Installed.
- Indian School: Terrazzo carpets have been installed. Arrows in pavements have been installed. Glass panels in the entryway should be installed in November.
- Thomas: Granite turning stones have been installed in the entryway. Granite benches which flank the trees on the station will be installed November 8, 2008.
- Encanto: Installed.
- Line Section 3
 - McDowell: Working with the original fabricator to fabricate completed designs by Station Artist Michael Maglich.
 - Roosevelt: Installed.
 - Van Buren: Installed.
 - Central/Washington – 1st Avenue/Jefferson: Tiles and panels have been installed at Central/Washington. At 1st Avenue/Jefferson, the terrazzo medallions have been installed and we are working out signage issues prior to the installation of panels.
 - Third Street: the artist installed the main body of the artwork and is now coordinating the installation of the electrical lighting component. This will be installed by Archer Western.
 - Twelfth Street: Artist painted tiles, commercial tiles and artist pavers have all been installed. Artist designed steel panels will be installed the first week in December.
 - Twenty-Fourth Street: installed.
- Line Section 4
 - 38th Street: artwork installed. Bronze pavers insert locations being marked in every month for partial install in November 2008 and completion (last five) in February 2009. Waiting for Archer Western Contractors to install the lighting and ground the artwork.
 - Forty-Fourth Street: Artwork is installed, working through grounding issues for art columns.
 - Priest/Washington: artwork is installed, waiting for Archer Western Contractors to install the lighting.
- Tempe Town Lake
 - Artwork has been completed except for the final programming of the bridge lighting.
- Line Section 5
 - Mill/3rd Avenue: Artwork is installed, waiting for Archer Western Contractors to install the lighting component.
 - College/5th Avenue: installed

- Apache Boulevard Stations
 - Sculpture: Hands sculpture to be installed November 15, 2008.
 - Paving: Paving has been installed.
 - Trellis boxes: installed at all of the Apache stations and is complete except for the Price/Apache station where Archer Western Contractors needs to install the trellis panel to anchor the artwork.
 - Lighting: Neon Cactus has been installed at Dorsey, Text Lights have been installed at Smith Martin. Water Bottles have been installed with the neon lights but need to work with Archer Western regarding conduit that was not installed. Neon Louvers are scheduled to be installed in November.
- Sycamore/Main: installed
- General Progress
 - Working with Archer Western Contractors (AWC) to resolve the foundation installation and scheduling issues.
 - Working with artists and GEC to resolve the outstanding request for information issues.

Cost and Schedule – Variance Analysis

- Working with AWC to install artwork at the Dorsey/Apache station, this is out of sequence with their construction schedule due to art fabrication delays. Public Art activities remain within budget.

Issues and Solutions

- Continuing to monitor contract schedule issues. Except for the stations noted above, artwork installation is on schedule within the latest AWC construction schedule.

Construction Photographs



Central/Roosevelt Station Shade Canopy
by Peter Richards



Tile Artwork at 12th St./Washington Station by
Victor Mario Zaballa

Station Finishes



Description

The METRO Station Finishes (SF) Contract includes twenty-eight stations, four transit centers and installation of art pieces by twenty-seven artists. Amenities within the fully accessible stations include shading trellises with overhead canopies, irrigated trees and landscape, patron seating and leaning rails, drinking fountains, map cases, directional signage and trash receptacles. Types of art pieces include stand-alone sculptures, paving treatments, lighting treatments and integrated art within the station structures.

The Station Finishes architects prepared the construction drawings in five separate packages that correspond to each civil line section. These documents along with an art reference volume have been combined together and are currently under construction by Archer Western Contractors, the METRO Station Finishes Contractor.

System elements that are located in the station areas include surveillance cameras (CCTV), a public address system (PA), emergency call boxes (ECB), variable message boards (VMB) automated ticket vending machines (TVM) and Stand-alone Validators (SAV).

Progress

- None.
- Montebello and 19th Avenue Transit Center: Work is ongoing but intermittent. The contractor is finalizing completed utility work and other site improvements, and has completed structural steel and canopy installation.



- Work on underground utilities is completed and structural steel installation is completed at the Central Avenue and Camelback Transit Center. Construction of site screen walls is completed. Canopy installation is completed. Artwork installation is completed. The brick paver sidewalk is completed. The contractor completed the Mariposa Cul De Sac and associated driveways and the main driveway entrance paving.
- Washington and 44th Street Transit Center: Installation of Interior wall assemblies and miscellaneous finishes continue intermittently at Operator Facility Building (OPF3).
- Sycamore and Main Street Transit Center: Landscaping work is completed. Installation of Interior finishes continues intermittently at Operator Facility Building (OPF4).
- Contractor completed constructing the foundation, and the masonry for Operator Facility Building north of the Montebello/19th Avenue Station (OPF1) roofing installation is complete. Work continues intermittently on miscellaneous finishes.
- Stations:
 - Canopy Installation has been completed for 33 Stations. This completes canopy installation for all of the stations.
 - Louver Installation is completed for 33 stations. This completes canopy installation for all the stations.
 - Electrical/Communications Cabinet Installations have been completed for 33 Stations. This completes electrical / communications cabinet installation for all of the stations.
 - Paver installation has been completed for 33 Stations.
 - The contractor is completing handrail installation, painting and sealing, and miscellaneous contract and change order work at all of the stations.
 - Punchlists have been developed for 31 stations. Additional requests for substantial completion have been submitted for two stations and one transit center. Punchlists are being developed for these.
 - Work is ongoing at 33 Stations.
- The Signals and Communications contractor has access to 33 station platforms.

Cost and Schedule – Variance Analysis

- Substantial completion has been granted for twelve stations. Punchlist work for all of the stations.
- Contractor has submitted a Request for Equitable Adjustment in the amount of \$4,800,000. The REA is currently under review.

Issues and Solutions

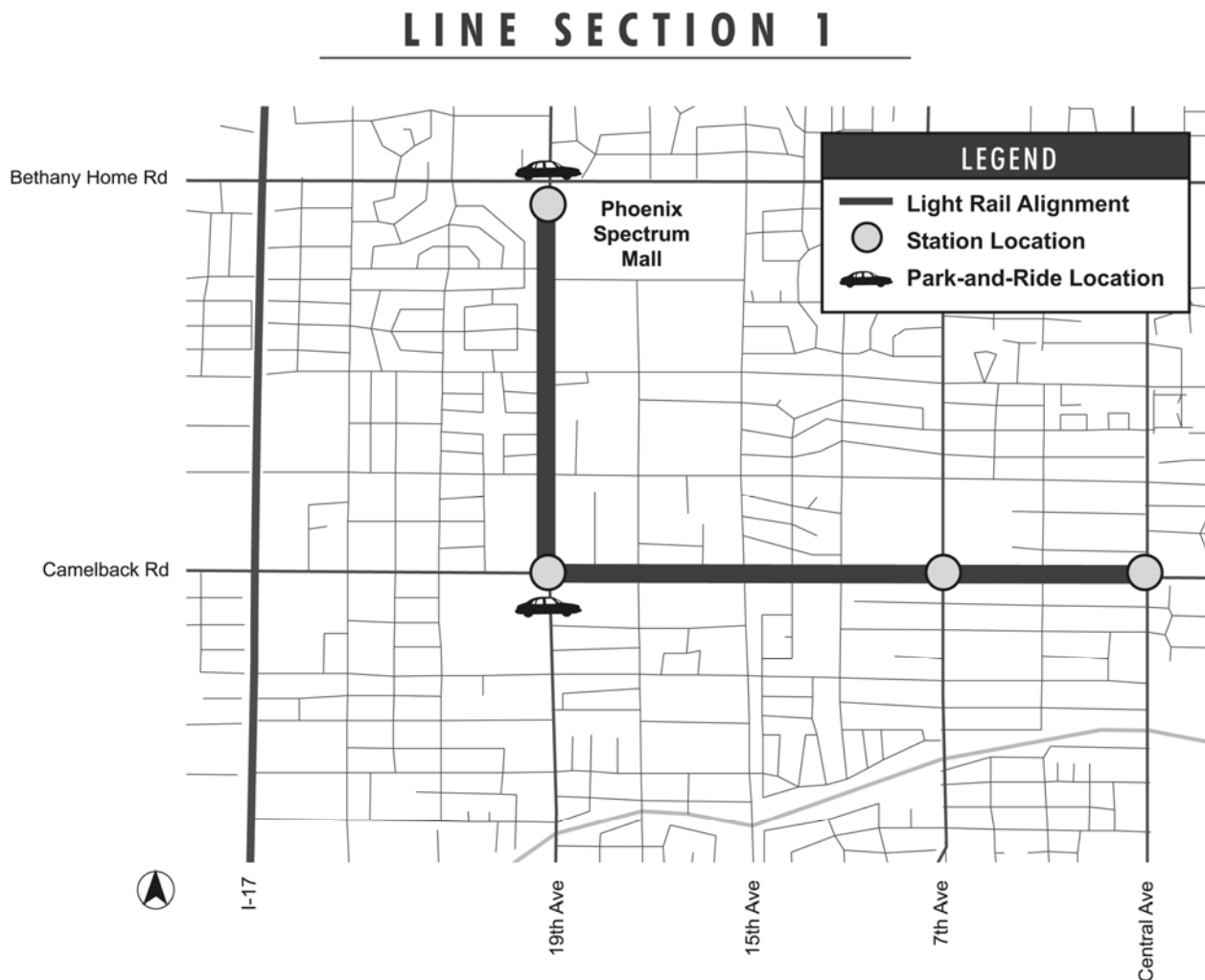
- Replacement seating to replace defective seating will not be delivered in time for opening. Contractor will install repaired seating in the interim.



- Some electrical issues are necessary to be resolved prior to DSD granting Certificates of Occupancy. Those issues include UL listings for Emergency Call Boxes, and Ticket Vending Machines, as well as sign off by a registered electrical engineer on all the changes at the stations in Phoenix. Follow-up with contractors and other appropriate personnel to resolve these issues is ongoing.

12. Facilities

Line Section 1



Description

Line Section 1 is 2.27 miles in length, and begins on 19th Avenue south of Bethany Home Road to a point west of the Central Avenue and Camelback Road Station. The construction work in this contract includes demolition, relocation of public utilities, roadway and drainage modifications, systems ductbank installation to the substation site interface, station foundations, signing and marking, irrigation, landscaping, et cetera.

There are three stations in Line Section 1. They are at 19th Avenue and Montebello, 19th Avenue and Camelback Road, and 7th Avenue and Camelback Road.

Progress

- The Contractor was granted Substantial Completion on Milestone E (Final Completion) on July 18, 2008.



- The Contractor has completed all items shown on the Substantial Completion punchlist. However, several new issues, arising since the punchlist was published, have necessitated continued construction activity by the Contractor.
- All track milestones are substantially complete. However, issues noted during post-construction rail resistance testing have necessitated demolition and reconstruction of rail in several locations. Work to resolve these issues still continues.
- All Contract utility work is substantially complete. However, conformance issues on two sanitary sewer laterals on 19th Avenue will require redesign and rework, to be addressed as warranty issues.
- Final rubber asphalt placement and striping has been completed. However, quality issues subsequently noted in the 19th Avenue and Camelback Road intersection will require repaving or surface rework.
- All new traffic signal systems in the Line Section 1 alignment have been accepted by the City of Phoenix.
- The Contractor continues to coordinate with follow on contractors working within the guideway.

Cost and Schedule – Variance Analysis

- A revised schedule has been developed to reflect re-sequencing the work to support overall Program Milestones. Milestone D was completed April 22nd, and Milestone E (final project milestone) was substantially complete July 18, 2008. Final acceptance is pending completion of all punchlist items, resolution of three quality issues, resolution of payroll issues, and final settlement on bid item quantities and changes.

Issues and Solutions

- The RE is attempting to avoid any new changes at this point in the contract. However, Contractor is still being directed to address recently noted cost-to-cure issues, resulting in additional change work.
- Three quality issues remain, which currently are being tracked by nonconformance reports. The Contractor has requested to track these issues as warranty items to facilitate closing the contract. The Agency has approved this action for the sanitary sewer laterals on 19th Avenue, and for a small area of track at 7th Avenue that is out of specification for track gauge. However, the Agency is requiring the repair of nonconforming asphalt at the 19th Avenue and Camelback Road intersection prior to closing out the Contract.
- Project Specifications require a one-year landscaping maintenance period, beginning at final acceptance. However, there is no funding for this maintenance in the Contract bid items, as in other line section contracts. Rather than extend the Contractor's maintenance coverage at the same monthly rate as for the three-month plant establishment/maintenance period, the Agency has determined to delete it from the Line Section 1 contract.

- Change Order 90 revised the Contractual Milestone Dates (see chart below). One more Change Order will need to be issued in order to bring the final completion dates in line.

Milestone Number	Description	Original Contract Milestone Dates	CO No. 26 Revised MS Dates	CO No. 90 Revised MS Dates
A1	7th Avenue Station	27-Nov-06	26-Jan-07	2-Apr-07
A2	Camelback Station	27-Nov-06	9-Feb-07	22-Jun-07
A3	Montebello Station	5-Jul-07	31-May-07	27-Aug-07
B	Rail Access Camelback	3-May-07	22-Aug-07	22-Aug-07
D	Rail Access 19th Avenue	5-Jul-07	10-Jan-08	10-Jan-08
E	Final Completion	1-Nov-07	26-Mar-08	25-Jul-08

Construction Photographs



First Test Train Entering Line Section 1 Near Central Avenue and Camelback Road



Test train on Camelback Avenue



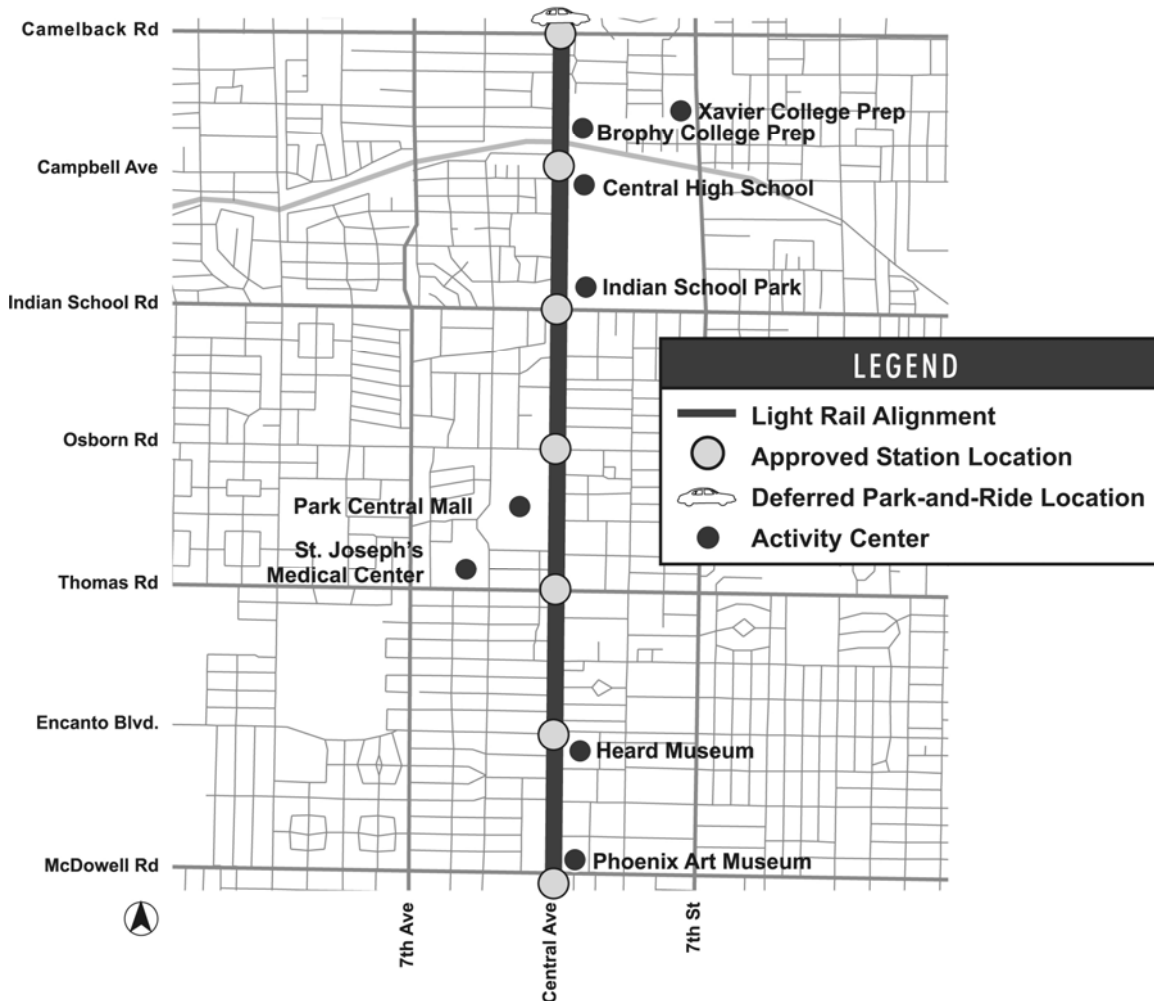
Test Train Going Through Switches on 19th Avenue



Test Train at North End of Line

Line Section 2

LINE SECTION 2



Description

Line Section 2 begins at a point on Camelback Road just west of the Central Avenue/Camelback Road Station, and continues south on Central Avenue to a point approximately 200 feet north of the Central Avenue/McDowell Road intersection. The construction work in this contract includes demolition, relocation of public utilities, roadway improvements, drainage modifications, systems ductbank installations, station foundations, installation of systems ductbank and conduits, streetlights, traffic signals, OCS pole foundations, preparation of trackbed, and installation of embedded track. It also includes replacement of the Grand Canal Bridge on Central Avenue.

This Line Section will have six stations at the following locations: Central/Camelback, Central/Campbell, Central/Indian School, Central/Osborn, Central/Thomas and Central/Encanto.



Progress

- Herzog has completed all contract and Change Order work related to infrastructure on the project and continues to work on punch out issues.
- Herzog has completed installation of the guideway and turn over to follow-on contractors.
- Herzog has completed all the Station foundations and turned over to follow-on Contractors.
- Herzog has completed 98 percent of punch list activities.
- Herzog has completed final AC Rubber Paving, and thermo plastic traffic striping. Pavement marking installation continues.
- Herzog's sub contractor punching Traffic Signals with COP/GEC and completed installation of Traffic Controller in the Cabinets.

Cost and Schedule – Variance Analysis

- The contractor has developed a new schedule to reflect re-sequencing the work to support overall Program Milestones. There are no impacts to follow-on contractors, TES installed final poles and began overhead cantenary wire installation in mid-June.

Issues and Solutions

- None.

Construction Photographs



Installing Traffic signal



Replacing Traffic signal loop



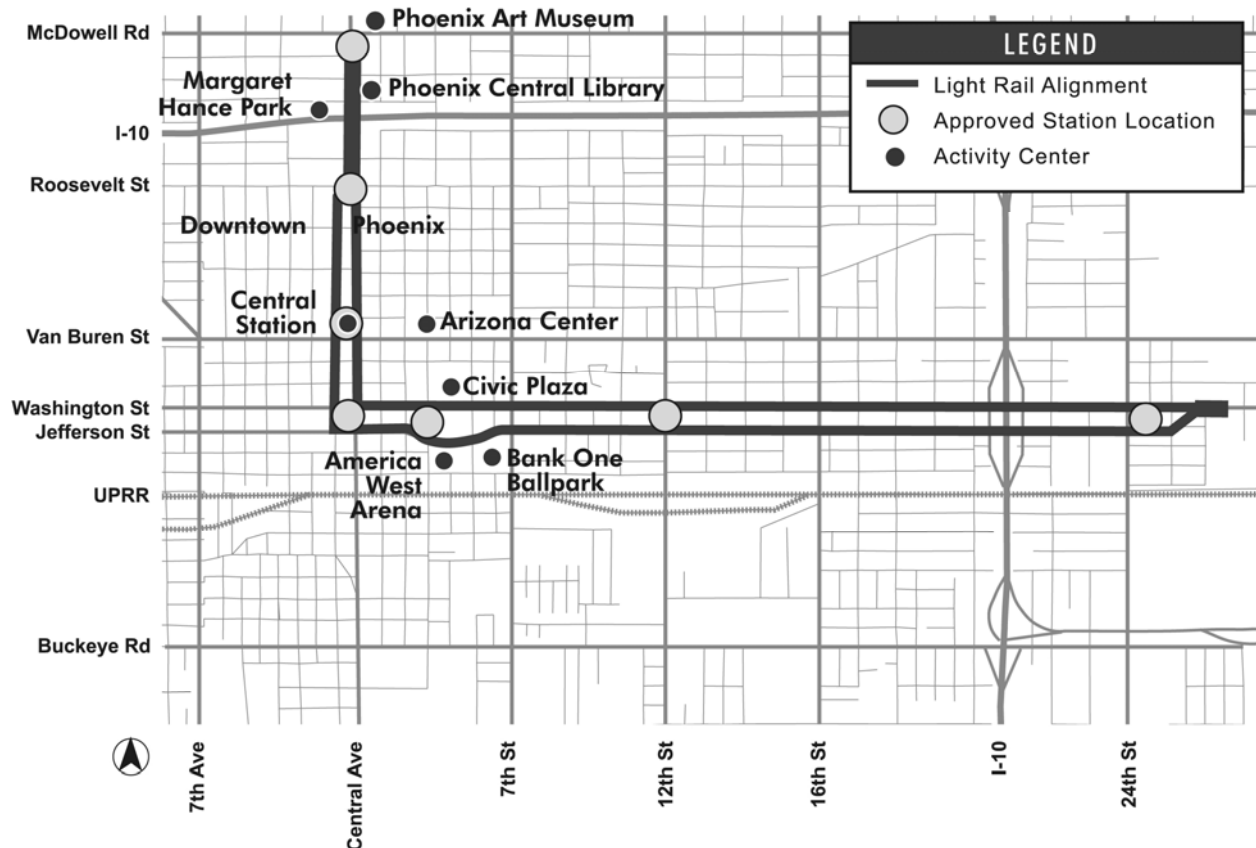
Replacing Mast arm



Replacing vault lid, Punch List item

Line Section 3

LINE SECTION 3



Description

Line Section 3 is 4.29 miles in length with approximately eight miles of in-street track. It begins at Central Avenue and McDowell Road and extends south on Central Avenue to Portland Avenue where the line splits into single-track alignment on the one-way streets of Central Avenue and 1st Avenue. It continues south on one-way 1st Avenue to Jefferson Street and then east on one-way Jefferson Street to its end at 26th Street. It continues on one-way Central Avenue to Washington Street and then east on one-way Washington Street to 26th Street. The eastbound leg is on 1st Avenue and Jefferson Street and the westbound leg is on Washington Street and Central Avenue. The Section traverses downtown Phoenix crossing the Deck Park Bridge and passes near America West Arena, Bank One Ballpark, the Symphony Hall, Civic Plaza and Arizona Science Center.

The work anticipated in this construction contract includes demolition, relocation of public utilities, corrosion control facilities, roadway and drainage modifications, station platform foundations, installation of systems duct bank and conduits, streetlights, traffic signals, OCS pole foundations, irrigation, landscaping, traffic signing, pavement marking, preparation of track bed and installation of embedded track. It also includes modifications of existing structures at



the Deck Park Bridge, Renaissance II Garage, Arizona Science Center/CPEG Pedestrian Bridge and ADOT I-10 Washington-Jefferson Interchange.

The seven stations with 13 platforms located within Line Section 3 are McDowell Road/Central Avenue, Roosevelt Street/Central Avenue, Roosevelt Street/1st Avenue, Van Buren Street/Central Avenue, Van Buren Street/1st Avenue, Washington Street/Central Avenue, Jefferson Street/1st Avenue, 3rd Street/Washington Street, 3rd Street/Jefferson Street, 12th Street/Washington Street, 12th Street/Jefferson Street, 24th Street/Washington Street and 24th Street/Jefferson Street.

For Right-of-Way availability and order of construction or sequencing, Line Section 3 has been divided into 15 segments. The segments are paired on the one-way street couplets with Segments 1 and 2 extending from Polk to Washington on Central and 1st Avenue, 3 and 4 from 1st Avenue to 3rd Street on Washington and Jefferson, 5 and 6 from 3rd Street to 9th Street on Washington and Jefferson, 7 and 8 from Portland to Polk on Central and 1st Avenue, 9 and 10 from 9th Street to 14th Street on Washington and Jefferson, 11 and 12 from 14th to 20th Street on Washington and Jefferson, 13 and 14 from 20th to 26th Street on Washington and Jefferson, and Segment 15 on Central Avenue from McDowell to Portland.

Progress

- City of Phoenix has accepted all 67 intersections traffic signals to include controller change out to the more advanced ASC3 equipment and with only a few minor punch-list items remaining.
- AWC is aggressively constructing the 11th Street Loop to meet necessary Change Order Milestones and meet the December 15, 2008 completion date. This is still on schedule.
- Substantial Completion was granted for all original LS3 contract work September 26, 2008. The raising of manholes and valves to include striping, signage and placing of symbols is now complete. AWC is actively pursuing the completion of all punch-list items.
- **Cost and Schedule – Variance Analysis**
 - AWC has completed approximately 99 percent of their project.

Issues and Solutions

- AWC has turned over all of LS3 to follow-on contractors to complete any necessary work as needed to stay on schedule.

Construction Photographs



Punch-List Items Being Corrected



OCS Foundation Preparation for the 11th Street Loop



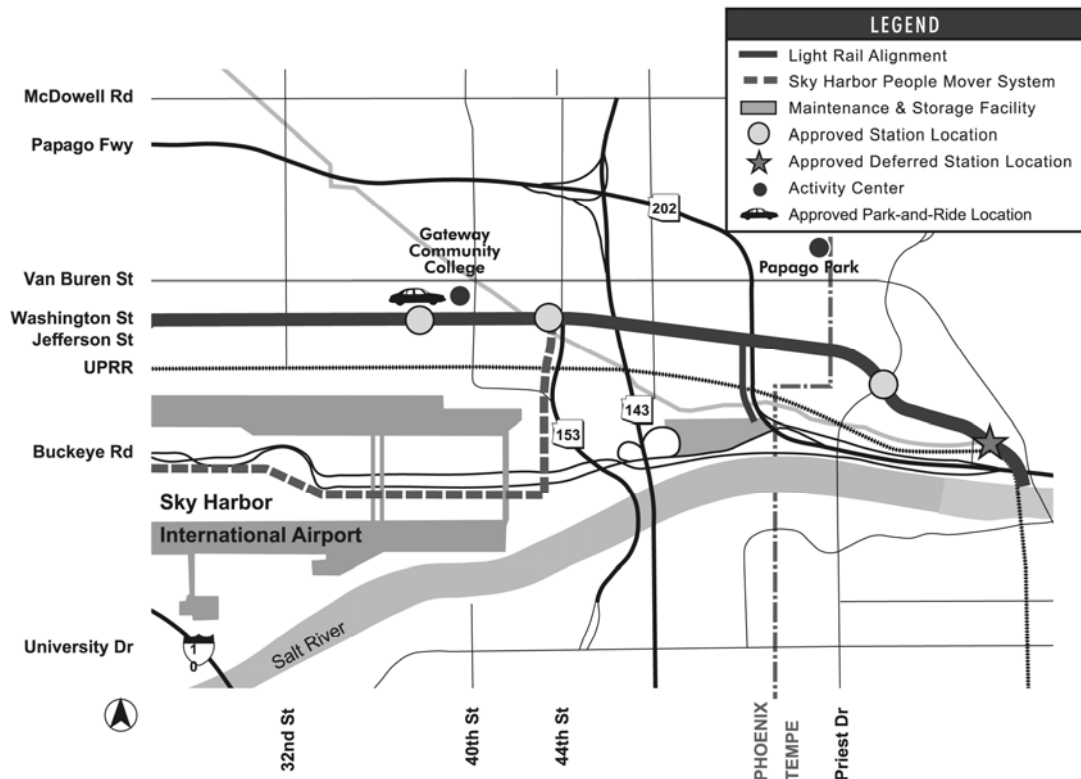
24" Box Trees Ready to be Planted on Washington



Curb and Gutter Placement for the 11th Street Loop

Line Section 4

LINE SECTION 4



Description

Line Section 4 guideway is approximately 5.4 miles from 26th and Washington Street to the northern limit of Tempe Town Lake. The work includes demolition, relocation of water and sewer lines, roadway improvements, drainage modifications, sidewalk and landscaping, streetlights, installation of traffic control signals, LRT station platform foundations, systems duct bank and conduits, OCS pole foundations, preparation of the tracked and sub drains, installations of track and special trackwork including the portion of the LRT Tempe Town Lake Bridge, and replacement of the Washington Street Bridge over the Grand Canal. There are three light rail stations located on Washington Street at 38th Street, 44th Street and Priest Drive.

Progress

- The work is complete.

Cost and Schedule – Variance Analysis

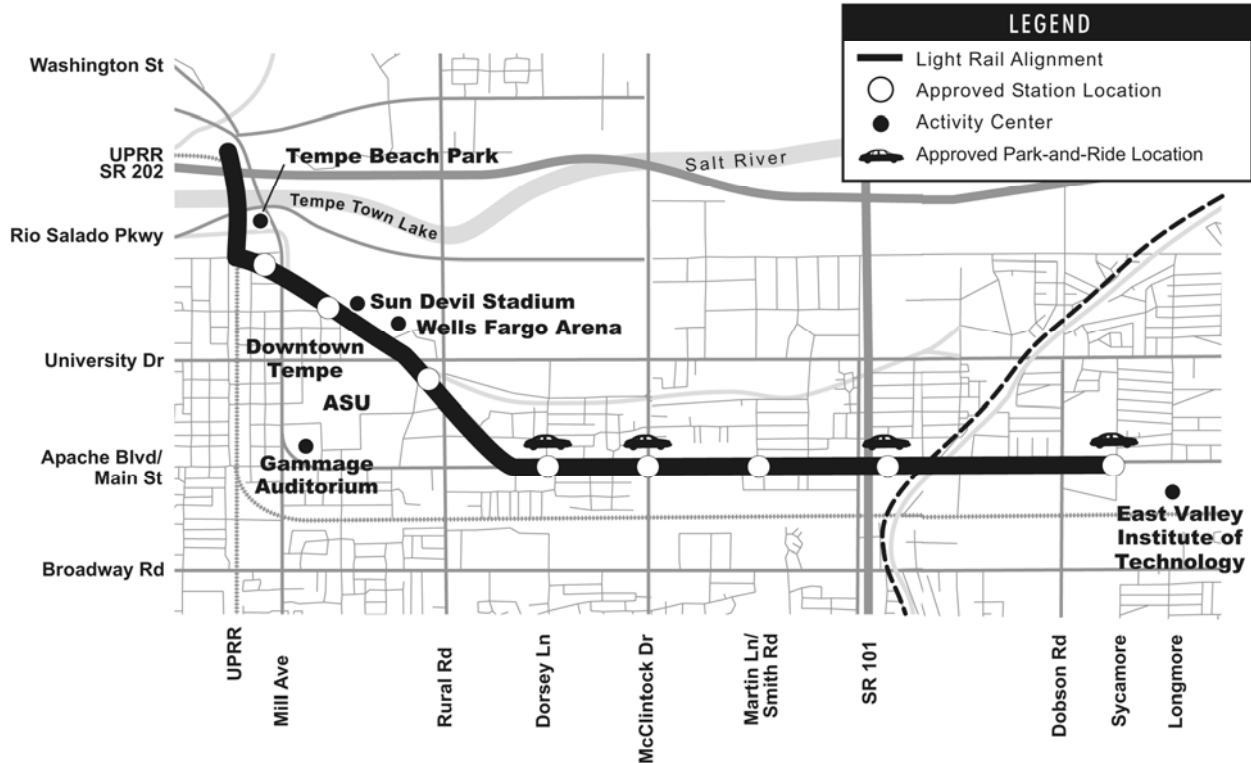
- The contract is in the progress of being closed.

Issues and Solutions

- None.

Line Section 5

LINE SECTION 5



Description

Line Section 5 is 4.7 miles in length, beginning at the 1st Street grade crossing in Tempe and progressing down the former Creamery Branch of the UPRR in Tempe, across Mill Avenue, and behind the Mission Palms resort. From there, it runs along Stadium Drive across Rural Road down Terrace Road to Apache Boulevard. It then proceeds east on Apache Boulevard and enters the City of Mesa, where it terminates in the vicinity of Main Street and Sycamore near the Tri-city Mall property.

The construction work in this contract includes demolition, relocation of public utilities, roadway and drainage modifications, station platform foundations, installation of systems duct bank and conduits, street lights, traffic signals, OCS pole foundations, preparation of track bed, and installation of embedded track. Stations are located in Tempe at 3rd and Mill, 5th and College, University and Rural, Apache and Dorsey, Apache and McClintock, Apache and Smith-Martin, Apache and Price Freeway; and in Mesa at Main and Sycamore.

Progress

- The Contractor has substantially completed all track milestones, station platforms, street widening and roadway paving, sidewalks, curbs and gutters, landscaping, and the ASU Promenade. Substantial completion has been granted for Milestone H. ASU has given its final acceptance for the Promenade, and acceptance for all civil work has verbally been given by Cities of Tempe and Mesa.



- The Contractor has continued coordinating with follow-on contractors in various locations in Milestones A through F since Line Section 5 substantial completion.
- All traffic signals have been activated and accepted throughout Tempe and Mesa.
- The Contractor completed all change work throughout Tempe and Mesa, and has finished punch list work. The Contractor responded to several warranty issue calls during this month.
- Testing of the light rail vehicle continues all the way to the end of the guideway east of Sycamore, without any noted rail issues.
- Contract closeout administration continues. Approval of a final contract price by the Board of Directors made funding available for payment of changes previously initiated, but not executed. The RE is currently processing these changes as agreed to in the final settlement. The Contractor is currently finalizing as-built drawings and final submittals required by the Contract. The RE will process these as they are received. The Safety Security Checklist for Line Section 5 has been submitted and approved.

Cost and Schedule – Variance Analysis

- Milestones A2 through F2 are substantially complete, as are all eight station platforms. Though Milestones C2 through F2 were challenged by utility relocation delays, the Contractor has met these milestones as set in Change Order 83 for acceleration. Additional contract changes after substantial completion extended the contract work. A settlement for final project cost has been negotiated, and approved by the Board.

Issues and Solutions

- Contract closeout was hampered by insufficient contingency to execute numerous changes during construction, leaving a number of these to be processed at the end of the project. Staff reductions by both the Contractor and the Line Section Field Staff has somewhat slowed the process. Both the Contractor and the Construction Administration Consultant have placed temporary staff to aid in this process.

48th Street Bridge Replacement



Description

The 48th Street Bridge Replacement Contract consists of the replacement of one concrete vehicular and one utility bridge over the SRP Grand Canal, construction of underground utilities including water mains and APS ductbanks, jack and bored utility pipe casings under UPRR railroad track, curb and gutter, sidewalk and driveways, grading and fencing of the METRO rail material storage yard, and removal and replacement of asphalt concrete pavement.

Progress

- The remaining work was completed and accepted by METRO and the City of Phoenix in May 2007.

Cost and Schedule – Variance Analysis

- This contract was closed out after final completion, final acceptance and final payment.

Issues and Solutions

- None.

Town Lake Bridge



Description

The Town Lake Bridge consists of an 11-span structure with concrete deck and steel deck truss superstructure on concrete piers. The structure has an overall length of 1,546 feet. The North and South approaches to the bridge are of retained earth fill and are approximately 1,654 feet in total length. The construction work includes cast-in-place drilled shaft pier foundations to bedrock, cast-in-place concrete pier caps, concrete abutments, concrete retaining walls, a steel truss superstructure, cast-in-place concrete deck, specialty lighting, demolition, relocation of public utilities, roadway and drainage modifications, systems duct bank conduits, streetlights, OCS pole foundations, preparation of track embankment and installation of concrete track slab. Installation of direct fixation rail for both the approaches and the bridge is included in Line Section 4 contract.

Progress

- The Project is complete and the Contract has been closed as of March 2007.

Cost and Schedule – Variance Analysis

- This Contract has been closed.

Issues and Solutions

- None.

Operations and Maintenance Center



Description

The Operations and Maintenance Center (OMC) contract includes construction of Maintenance of Equipment (MOE) building, Maintenance of Way (MOW) building, Car Wash facility, Service and Cleaning facility, maintenance equipment and tools, entry station, track installation in the yard and shop areas, construction of yard lead track from the LRT mainline in Washington Street to the OMC site including a bridge over the UPRR railroad track and SRP Grand Canal, retaining walls and embankment, fill materials for site preparation, grading and drainage, drain channel and swales, culverts and underground drainage pipes, roadways, parking lots, landscaping, fencing, water mains for fire protection and domestic services, utility services, electrical ductbanks, OCS pole foundations, and systems ductbanks.

Progress

- The contract is complete.

Cost and Schedule – Variance Analysis

- This Contract has been closed.

Issues and Solutions

- None.

Park-and-Ride



Description

Surface Park-and-Rides (PNR) are proposed at eight sites along the alignment, 3,513 spaces are currently provided. Sites are located at 19th Avenue and Montebello, 19th Avenue and Camelback Road, Central Avenue and Camelback Road, 38th Street and Washington Street, Dorsey Lane and Apache Boulevard, McClintock Road and Apache Boulevard, Price Freeway and Apache Boulevard, and Sycamore Drive and Main Street. The lots are adjacent to Transit Centers at 19th Street and Montebello, Central and Camelback and Sycamore and Main Street. On site security buildings are provided at 19th Avenue and Montebello, 19th Avenue and Camelback Road, McClintock Road and Apache Boulevard, Price Freeway and Apache Boulevard, and Sycamore Drive and Main Street.

The PNR construction package includes work for demolition, grading, drainage, concrete curbs, concrete sidewalks, asphalt concrete pavement, lighting, irrigation, landscaping, a security building, signing and pavement marking. CCTV security cameras and emergency telephones will be installed under the Signals and Communication construction package.

Progress

- Kiewit completed the paving and landscape installation for the Montebello/19th Avenue project site this month. A “pre-final inspection” was performed and a punchlist was generated.
- During the month of October, Kiewit performed the striping for 19th Avenue/Camelback Avenue Park and Ride Site. A “pre-final inspection” was performed and a punchlist was generated.



- MRM Construction is working on punch list items for the 38th Street/Washington site.
- At the Central and Camelback A “pre-final inspection” was performed and a punchlist was generated. MRM Construction is working on punch list items.
- During the month of October, Sundt, Stacy & Witbeck performed the striping for Price Freeway/Apache Boulevard Park and Ride Site. A “pre-final inspection” was performed and a punchlist was generated.
- At the Sycamore and Main Park and Ride site, Sundt, Stacy & Witbeck have been working on the installation of curb ramps, brick pavers, the irrigation system and planting trees and shrubs. All paving has been completed on this site.
- The Developer for the McClintock/Apache site is in the process of constructing the garage. Signals and Communications continue to work with the contractor to finalize rough-in requirements for the safety and security systems to be installed by S&C.
- The City of Tempe completed construction for an additional 100 spaces at Dorsey/Apache. METRO Signals and Communications is providing the necessary interface for the facility security system.

Cost and Schedule – Variance Analysis

- Total award amount for the six sites to be constructed by METRO is \$22,295,267.

Issues and Solutions

- Installation of the security building fire alarm reporting system at each of the four sites with buildings. This is necessary to obtain a Certificate of Occupancy for the buildings.
- Monitoring of the private Developer’s progress for the McClintock/Apache site to assure that there are no less than 300 parking spaces available in December 2008.

Park and Ride Construction Data

No.	Park and Ride Site	Number of Spaces	Scheduled Substantial Completion	Contractor
1	Montebello/19 th Avenue	794	November 1, 2008	Kiewit
2	19 th Avenue/Camelback	408	November 1, 2008	Kiewit
3	Central/Camelback	135	September 28, 2008	MRM Construction
4	38 th Street/Washington	189	September 28, 2008	MRM Construction
5	Dorsey/Apache (2-Sites)	207	November 1, 2008	City of Tempe
6	McClintock/Apache--Garage	310	November 1, 2008	Developer, Gray
7	Price Freeway/Apache	678	November 22, 2008	Sundt, Stacy & Witbeck
8	Sycamore/Main	802	November 22, 2008	Sundt, Stacy & Witbeck
Opening Day Total		3,523		

Construction Photographs



Overview of Project
19th Avenue/Montebello PNR Facility



Final Cleanup
Central/Camelback PNR Facility



Landscaping Installation
Sycamore / Main PNR Facility



Placing Finishing Touches on Landscaping
Price / Apache PNR Facility

Track Material Procurement



Description

The track materials are broken down into five separate procurements as follows:

- Ballasted Special Trackwork – includes ballasted turnouts and concrete switch ties for the MSF and direct fixation fasteners for the MSF, Town Lake Bridge (TLB) and Deck Park Bridge.
- Girder Rail – rail needed for the embedded trackwork.
- Girder Rail Special Trackwork – turnouts needed for the embedded trackwork.
- Concrete Crossties – concrete crossties needed for the OMC.
- T Rail – rail for the MSF, TLB including approaches and Deck Park Bridge.

Progress

- Girder Rail
- Embedded Special Trackwork: The Contractor continues to produce special trackwork castings and other miscellaneous materials for this contract.

Cost and Schedule – Variance Analysis

- Track material procurement activities remain on schedule and within budget at this time.

Issues and Solutions

- None.

Traffic Signal Procurement



Description

These Purchase Orders include the system-wide procurement of traffic signal poles, controllers, controller cabinets, and traffic central system upgrades for the City of Phoenix and Tempe.

Progress

- All of traffic signal equipment for the five Line Section contracts initially ordered under these Purchase Orders has been delivered to METRO or directly to the Line Section contractors' storage yards.

Cost and Schedule – Variance Analysis

- No Change for this month, traffic signal procurement activities has been completed; however, the Central System Upgrades for phoenix and Tempe is an ongoing activity, and will continue throughout the duration of the project.

Issues and Solutions

- None.

Underfloor Wheel Profiling Machine



Description

Design, fabricate, furnish an Underfloor Wheel Profiling Machine, Mechanical Chip Collection/Removal Conveying System, and all necessary accessories, items of equipment, and mechanical, electrical, controls and structural items to re-profile wheels on Light Rail Vehicles. Deliver the machine to the OMC and install the machine within the concrete foundation constructed by the Agency in the Maintenance of Equipment building. Inspect, test, start-up the machine to ensure it is operating properly and safely and provide training to Agency staff.

Progress

- The work is complete.

Cost and Schedule – Variance Analysis

- The contract is closed out.

Issues and Solutions

- None.

13. Systems

Automated Fare Collection System



Description

Design, manufacture, furnish, assemble, test, inspect and install the LRT Automated Fare Collection System (AFCS) for use by METRO. The AFCS consists of Ticket Vending Machines (TVMs), Ticket Validators (Validators) integrated within the TVMs, a Data Collection/Information System (DC/IS), station LANs, Hand Held Verifiers (HHVs), Revenue Collection Equipment, related data communication networks to allow the TVMs to communicate with a central fare collection computer, spare parts, tools, test equipment, documentation, software listings, training, technical assistance and warranty.

Progress

- Milestone 1 Progress: Approved Management Plan and Master Schedule – Complete.
- Milestone 2 Progress: Approved Conceptual Design Review – Complete.
- Milestone 3 Progress: Approved Preliminary Design Review – Formal closeout of Preliminary Design Review (PDR) submittals outstanding.
- Milestone 4 Progress: Approved Final Design Review – Formal closeout of Final Design Review (FDR) submittals outstanding.



- Milestone 5 Progress: First Article Configuration Inspection Approved – Complete.
- Milestone 6 Progress: Qualification Testing – Complete.
- Milestone 7 Progress: Factory Integration Testing – Combined with Milestone 8, Pilot Station Testing.
- Milestone 8 Progress: Combined FIT/Pilot Station Testing - Complete. Punchlist items being addressed.
- Milestone 9: Delivery of Ticket Vending Machines – Complete.
- Milestone 10 Progress: Completion of Training – Training rescheduled for November/December to avoid other training conflicts. Approval of training material submittals outstanding.
- Milestone 11 Progress: Field Installation Testing – 76 TVMs Installed, 73 tested.

Cost and Schedule – Variance Analysis

- There has been no current/regular issue of the project schedule for TVM installation and testing. The contractor is working closely with the Station Finishes contractors to work at platforms that have completed punch list items to allow proper installation. Forecasting the installation timing for upcoming stations is difficult but necessary for successful completion of machine installation.

Issues and Solutions

- Standalone Ticket Validator - A Change Order, which was processed as a Directive Change (Force Account) to maintain progress while the contractor's proposal was being evaluated, has been forwarded to the contractor. After further evaluation and discussion with the Agency, a revised Change Order was processed and forwarded to the contractor. Contractor is expediting production.
- Handheld Verifier - A Change Notice was forwarded to the contractor to perform design modifications to the verifiers; however, completion of design and fabrication in time for revenue service was in question. The Agency has therefore requested that the contractor provide verifiers that can be completed in time for revenue service, with additional verifiers with the revised design following in February 2009.
- Power Availability - Power availability at the 19th Avenue and Montebello Station (and Transit Center) is not anticipated until the week of November 3, 2008. Installation is being rescheduled to accommodate the delay.
- City of Phoenix Electrical Inspection Issues – Inspections by City of Phoenix have identified issues that require modifications to power and grounding provisions. The Agency is working with the contractor and city staff to satisfy requirements, however, as a result, completion of Milestone 11 by November 10, 2008 (contractual date) cannot be accomplished.

Construction Photographs



Safety Certification Inspection at Smith-Martin and Apache Boulevard Station



Testing In-Progress at McClintock and Apache Boulevard Station



Testing In-Progress at Smith-Martin and Apache Boulevard Station

Light Rail Vehicle



Description

METRO has a Contract with KINKISHARYO International, L.L.C. (KI) for two prototype and forty eight production light rail vehicles (LRVs) for a total of fifty (50) LRVs. The contract includes prototype engineering, special tools and test equipment, training, spare parts and publications. The cars are 70 percent low-floor, double-articulated LRVs with two main “A” and “B” passenger sections and a mid “C” section, joined to form one single operating unit. There are four passenger doors on each side and an operators cab at each end. The LRVs are designed to be “street friendly” with energy absorbing bumpers and crashworthy cab ends.

Progress

- METRO is continuing review of submittals for Contract Data Requirement List items (CDRLs) the bulk of which are test procedures and reports. METRO and KI are engaged in daily and weekly meetings. Main topics for presentation by KI and discussion are going to be: special tools, spare parts, operator training course, application, closing open items, vehicle delivery schedule, GE and GEO Focus Interface, and conditional acceptance testing.
- Changes for an Overhead Catenary System (OCS) Surveillance Camera Installation on two cars and an Automatic Passenger Counting System (APC) for the fleet have been processed. Testing of the APC is on going and software is being installed.



- All 50 cars have been delivered from Osaka. No further inspections are ongoing in Osaka Japan.
 - KI is installing equipment and static testing. Cars 146 through 147 have been inspected for delivery. Punch lists are done and waiting for title transfer.
 - A total of 45 LRVs are accepted as delivered. The last five vehicles are in final assembly and test. Twenty vehicles have start there warranty clock as of October 22nd.
 - Cars 149 and 150 are in the shop for final assemble and are on schedule for delivery the end of Nov.08
 - Inspections of the interior, exterior, roof equipment, and trucks are being performed and ongoing. Some side window glass has been found to be cracked. Those pieces have been changed out. KI has started the vehicle maintenance training. The second set of classes will be starting in September. This will be ongoing through November 2008.
 - Geo Focus equipment is being installed and testing is ongoing. DVR mod's are done and tested. Latest software is being installed on the fleet. KI is studying software changes to correct our slip and slide issues on the main line.
 - Conditional acceptance testing is ongoing. Up to 40 mph in the yard. 41 vehicles are now through this process and will continue through Nov. 08. Burn in with multi cars is in progress.
 - Main line vehicle testing has started and will be ongoing into December 2008.
 - Wheel to rail testing is ongoing and will be in test over the next couple of weeks.
 - Very good results have been recorded on wheel to rail interface.
 - All truck frames and components were shipped from Osaka to Phoenix for final assembly. Telephone, email and drawing exchange continue between KS-J and KI on vehicle issues, testing procedures and schedules, subsystem interfaces and equipment mounting, interior design and equipment installation, systems application issues, material shipments, production schedule and CDRL's items.
 - Qualification testing is ongoing in the yard and main line for high speed. Car 101 is qualified to 40 mph.
 - Conditional acceptance testing procedures are set up and started February 4, 2008.

Cost and Schedule – Variance Analysis

- Car delivery remains on schedule, sufficient to meet the needs of the overall program. Contract remains within budget.

Issues and Solutions

- KI has experienced parts shortages METRO representatives held a series of meetings with both suppliers to evaluate the impacts to the schedule as well as to determine

contingency production plans. To date, those plans are in action and the suppliers are maintaining on schedule. KI as a contingency plan to over come this temporary shortage. Brake pressure switches have been burning out. KI and Knorr know the problem and are working to install the fix mid November.

- While some part shortages have impacted the delivery of LRVs in the short term, both METRO and KI remain confident that the final LRV (150) will be delivered and accepted by November 2008.

Assembly Photographs



Car shells coming in for final assembly



Car under floor work



Car C section being prepped for final assembly



Car articulated and prepping for static testing

Signals and Communications



Description

The LRT Signal and Communications (SC) Contract provides for the final design, manufacturing, installation, and testing of the integrated signal and communication system.

Major work elements include train signal equipment and communication hardware and software for controlling train movements through crossovers and interlocking, fiber-optic backbone communication transmission system (CTS), closed-circuit TV (CCTV), public address system (PA), variable message boards (VMB), Train Control System, Vehicle Management (VMS), Radio System, PABX and Telephone System including emergency telephones at Park-and-Rides and Transit Centers, Supervisory Control and Data Acquisition System (SCADA), installation of workstations and equipment in the Operations Control Center (OCC) and at the Maintenance and Storage Facility (MSF), six site-built signal buildings and three signal buildings combined with traction power substations. The work scope also includes installation of fiber-optic cables for street traffic control systems for the Cities of Phoenix, Tempe and Mesa, and installation of fiber-optic cables for ASU.

Progress

- Signal Buildings and Signal Cases
 - Continuing Operational Acceptance Testing activities at Montebello Interlocking.
 - Completed Operational Acceptance Testing activities at Pierson Interlocking



- Completed Dynamic Testing Activities all locations in Areas 1 and 2, except for the Yard Entrance Interlocking.
- Completed civil rework at the Yard Entrance Interlocking to mitigate traction power imbalance issues. Installation and testing anticipated to be completed by November 5, 2008.
- Communications System
 - Completed handover of Street Traffic System fiber backbone to the City of Phoenix in Area 2 for traffic control testing, with the exception of one location. Began testing redundancy circuits.
 - Completed fiber installation of Fiber Optic Systems (City Fiber) in all cities.
 - Continuing network testing and device end to end testing in all Rings.
 - Continuing Communications equipment installation at all Park and Ride Lots.
 - Completed station fittings replacement and rewiring at all nine City of Phoenix platforms.
 - Completed civil, electrical and fiber rework at Street Traffic Mid-level Switch No. 4 at Sycamore and Main. Awaiting utility power to complete street traffic fiber handover.
 - Completed Communications System training (with exception of refresher training).
- Coordinating with other Contracts
 - Station Finishes Communication Cabinets – Continuing to coordinate power-on activities of main circuit breakers (one station and three transit centers outstanding).
 - Station Finishes Ambient Noise Sensor Relocation – Began relocation of sensors.

Cost and Schedule – Variance Analysis

- The final completion target Milestone of October 3, 2008 was not met but revenue service operations in December 2008 will not be significantly impacted. Mitigation planning continuing to lessen the impact of construction delays.
- Mitigation efforts include:
 - Ring testing is being done in series.
 - Contractor led integrated testing will take place in parallel with Agency led integrated testing.
 - Manpower levels for installation and testing are being monitored closely.

Issues and Solutions

- Embedded Switch Correspondence Problems – Internal limits switches are being replaced with manual switches. Replacements anticipated to be completed by November 7, 2008.

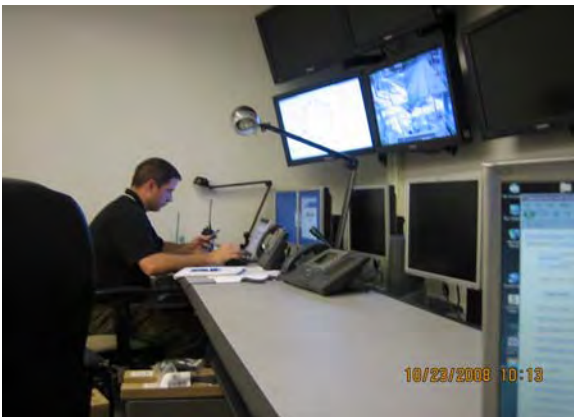
Construction Photographs



Demolition Work at Yard Entrance Interlocking



Concrete Testing at Yard Entrance Interlocking



CCTV Testing from OCC



Battery Discharge Test at Dobson Interlocking



Street Traffic Fiber Testing between McDowell and Montebello



OCC Training for Maintenance Personnel

Traction Electrification System



Description

The Traction Electrification System (TES) provides the electric power required to operate the Light Rail Vehicles (LRV). There are two main components to the TES, these are: Traction Power Substations (TPSS) that convert incoming utility power to DC power, which is used by the LRV and the Overhead Contact System (OCS), which distributes the DC power to the trackway. There are 15 Site Built 2,000 kW substations. Twelve of the substations are 22-feet by 44-feet and three are 22-feet by 57-feet. The substation buildings will be constructed of integrally colored concrete block on landscaped sites. The OCS is comprised of 20-route miles of double-track low-profile overhead catenary. The OCS will be installed on over 1,300 round painted poles. The nominal system voltage is 750 VDC. The nominal height of the OCS above the roadway is 18-feet, 6-inches.

The TES Contract provides final design of the TPSS and OCS, manufacturing, fabrication, installation, site work and testing.

Progress

- Traction Power Substation No. 1
 - HVAC System testing progressed.
 - Removal of non-compliant crushed stone commenced.
 - Received temporary power from SRP. Siemens onsite commissioning substation.
 - Building and Sitework Construction – 95 percent complete.



- Traction Power Substation Equipment Installation and Testing – 80 percent complete.
- Traction Power Substation No. 2
 - Removal of non-compliant crushed stone commenced.
 - City clearance for temporary power received.
 - Completing installation of TPSS equipment.
 - Correcting utility conduit routing.
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 80 percent complete.
- Traction Power Substation No. 3
 - Received temporary power from APS. Siemens onsite commissioning substation.
 - HVAC System testing progressed.
 - Recoating floor with dielectric floor topcoat.
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 80 percent complete.
- Traction Power Substation No. 4
 - Removal of non-compliant crushed stone commenced.
 - City clearance for temporary power received.
 - HVAC System testing progressed.
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 80 percent complete.
- Traction Power Substation No. 5
 - Installation of metal louver fence progressed.
 - Building and Sitework Construction – 90 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 6
 - Racking and tagging cables.



- Building and Sitework Construction – 95 percent complete.
- Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 7
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 8
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 9
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 10
 - Watertight seals have been placed for negative conduits.
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 11
 - Racking and tagging cables.
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 12
 - Racking and tagging cables.
 - Building and Sitework Construction – 90 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.



- Traction Power Substation No. 13
 - Building and Sitework Construction – 95 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 14
 - Building and Sitework Construction – 90 percent complete.
 - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 15
 - Punchlist items remain outstanding.
- MOE Shop and Traction Power Substation No. 16
 - Punchlist items remain outstanding.
- Traction Power Substation Performance Tests
 - Siemens has performed the substation performance tests. Reviews of the test reports indicate that the substations are not meeting specification requirements. Ongoing meetings are being held with the substation supplier.
- Overhead Contact System
 - OMC Yard and MOE Shop
 - Punchlist items remain outstanding.
 - Line Section 1
 - Outstanding items identified during aerial inspections are being addressed by the Contractor.
 - OCS pole touch-up painting has commenced.
 - Installation of OCS poles is 100 percent complete.
 - Installation of cantilever support arms is 100 percent complete.
 - Line Section 2
 - Outstanding items identified during aerial inspections are being addressed by the Contractor.
 - OCS pole touch-up painting has commenced.
 - Installation of OCS poles is 100 percent complete.
 - Installation of cantilever support arms is 100 percent complete.



- Line Section 3
 - Live Wire testing for Wire Runs 17 thru 28 has been performed for all speeds except for the maximum speed limit. This will be performed during the same time as the live wire tests in Line Section 1 and 2.
 - 11th Street Loop and punchlist items remain outstanding.
- Line Section 4
 - Punchlist items remain outstanding.
- Line Section 5
 - Punchlist items remain outstanding.
 - Installation of OCS pole baseplate covers has started.
- Coordination with other Contracts/Entities
 - Ongoing coordination meetings are being held with the Facility Contractors on a regular basis. Closely coordinating with the Line Section 1, Line Section 2, Line Section 3, and the Station Finishes Contractor.
- Milestones
 - Milestone 10B is still outstanding pending the resolution of the noncompliant TPSS field performance tests and the resolution of the noncompliant crushed rock.
 - Milestone 10C is still outstanding pending the completion of the noncompliant TPSS field performance tests and the resolution of the noncompliant crushed rock.

Cost and Schedule – Variance Analysis

- The contractor has completed most of the material delivery and TPSS civil construction and is primarily performing OCS construction, field testing and commissioning. Construction progress to date has included the civil and architectural parts of all sixteen traction power substations, TPSS electrical equipment installation in all sixteen of the traction power substations, OCS components installation in the OMC yard, OMC shop and parts of all Line Sections. Start up testing and commissioning has been done at the OMC, LS4 Test Track areas, and the extended 6 mile burn-in track area and is in progress for the balance of LS5. Milestone 10A for Test Area A was completed on schedule. Milestone 10B for Test Area B is nearing completion.

Issues and Solutions

- TPSS/LRV Compatibility Issue. TPSS field performance tests were executed which resulted in noncompliant results. Meetings are being held on a regular basis with the substation supplier to discuss anomalies.
- Induced Voltage. SRP is schedule to rotate the phases on their 230 kV power line that crosses over the LRT tracks at Tempe Town Lake. This will help mitigate the problem until a more permanent solution is developed. There have been numerous trips on the

LRV auxiliary power supply due to overvoltage condition caused by induced voltage from other overhead power lines. Mitigation measures for these issues are in development.

- Underwriters Laboratories (UL) Certification. The auxiliary transformer is not UL certified which will affect retaining final a Final Certificate of Occupancy (C of O). The City of Phoenix has issued a temporary C of O so that utility power could be hooked up at TPSS #1 thru #4. UL is scheduled to perform a final inspection of the transformer in the first week of November which will clear this issue and lead to Final C of O.

Construction Photographs



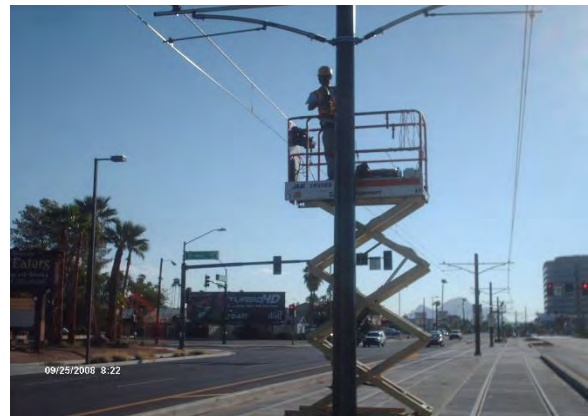
TPSS No. 2 – Removal of Non-compliant Rock



TPSS No. 4 – Testing of HVAC System



Line Section 2 – Balance Weight Adjustments



Line Section 1 – OCS Pole Touch-Up Painting



Rail Activation/System Integration

Description

The Rail Activation Plan was developed in June, 2006 to outline the process and organizational approach that METRO will employ to oversee the testing and start-up of the 20 mile light rail CP/EV system. The Rail Activation process is used to transition the Light Rail Project from the construction phase, through testing, pre-revenue operations, and finally into revenue service. The Rail Activation Team is a diverse group of Transit professionals which consists of METRO staff from Operations, Maintenance, System Engineering, Safety/Security, and Media relations, along with CAC, PMC, GEC and City staff.

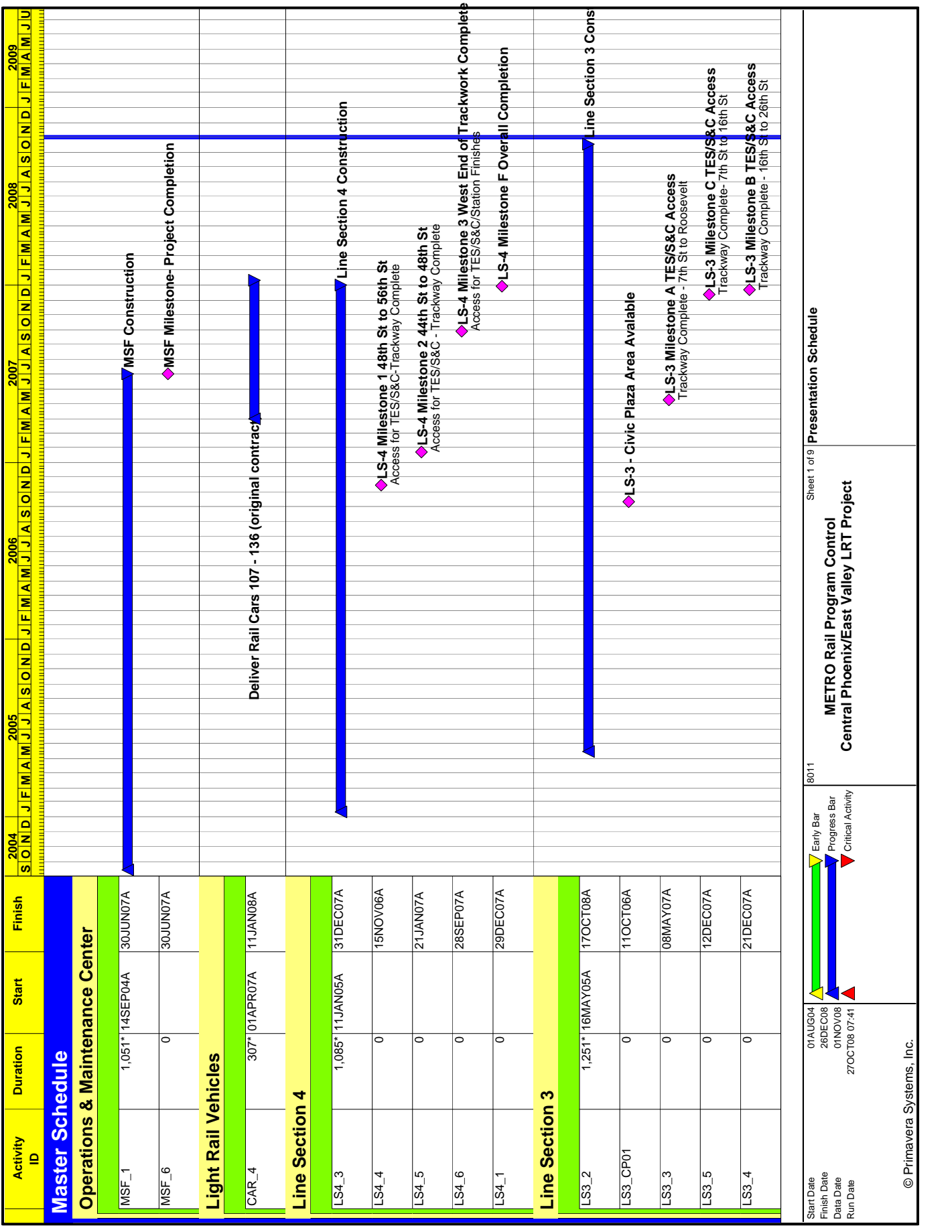
This same group will participate in and oversee the System Integration process, which is the final testing process before sections of the alignment can be activated for use. The System Integrated tests are designed to prove that the various systems within the alignment work well together and meet design criteria. The primary goal of the Rail Activation Team is to ensure the project achieves revenue operations in a timely and safe manner.

Progress

- METRO and the consulting staff are developing test plans and procedures related to track allocation, rail/wheel interface, clearance, and LRV dynamic testing.
- METRO, CAC and Seimens are continuing work on modifications to the substations, but this work has no impact on LRV testing.
- An investigative report was received from a CAC substation expert for review by Rail Activation Team.
- Seimens has implemented a new software revision to the substations and will begin testing mid November.
- LRV testing was performed on the main line, with the original wheel profile, and the rail activation team is waiting for the results.
- The Rail Activation Team is observing and monitoring the progress of TES and Signal testing to determine when the expanded test track and future milestones will be achieved.
- The extended test zone (Montebello to Sycamore) has been activated and is available for METRO's use.
- Trains are running from Montebello to Main and Sycamore regularly for LRV burn-in and Transportation Supervisors training.
- Transportation supervisors and operators are now working two shifts for training and LRV burn-in.
- The Transportation group has assumed "track allocation" responsibilities on September 29, 2008.
- The Rail Activation Team and the CAC are continually modifying the integrated test schedule to reflect changes in turnover dates.



- Rail Activation and the CAC are developing the integrated test procedures.
- Fifty percent of the integrated test procedures are under Metro review.
- Integrated testing will begin the week of November 10, 2008
- The integrated test team is working with MEC to participate in some of the contractor lead integrated tests.
- Track Allocation meetings are being held every Wednesday at the OMC conference room.
- Track Access Training is ongoing every Monday at the OMC.



Start Date: 01AUG04
 Finish Date: 26DEC08
 Data Date: 01NOV08
 Run Date: 27OCT08 07:41

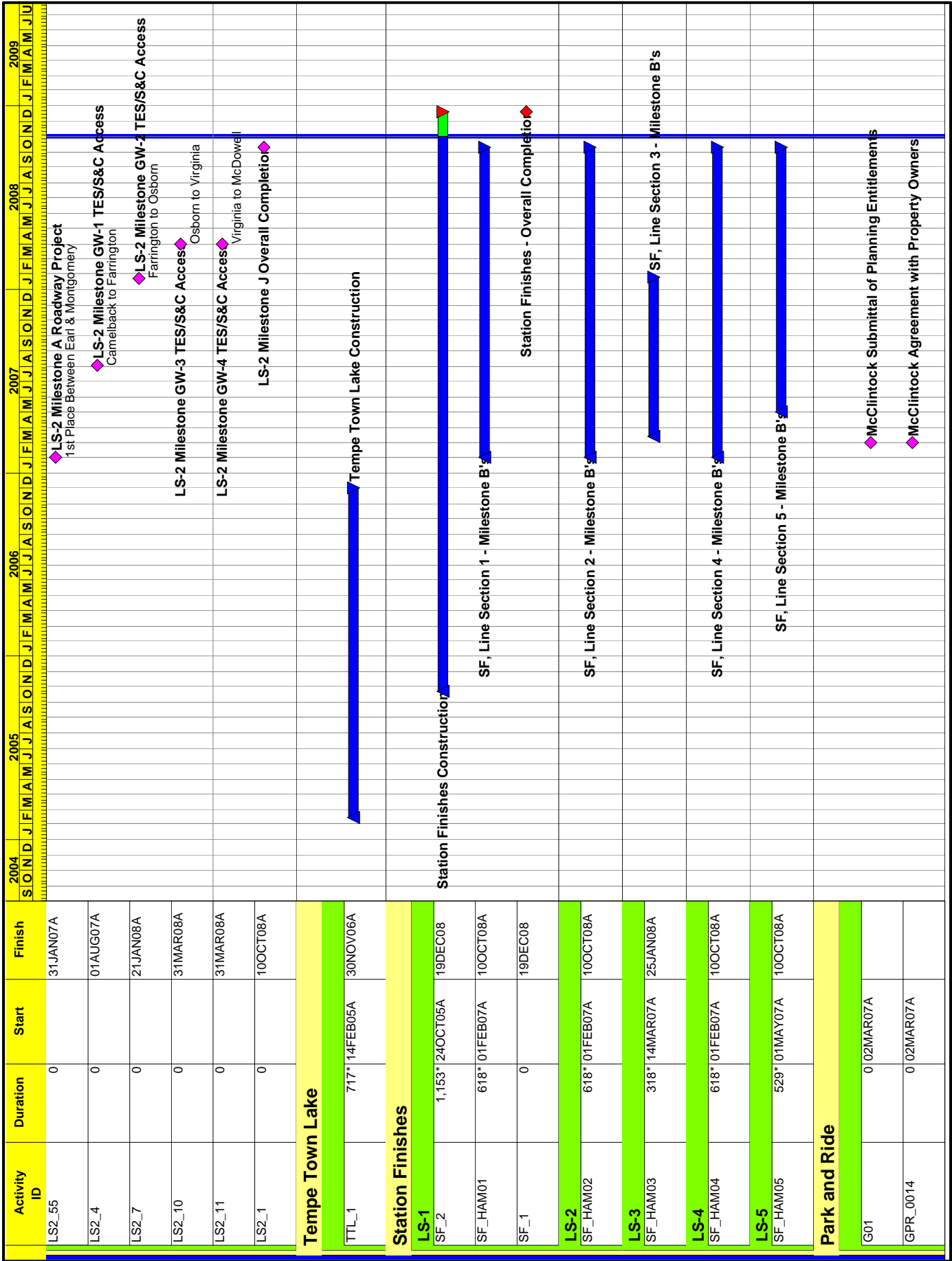
8011

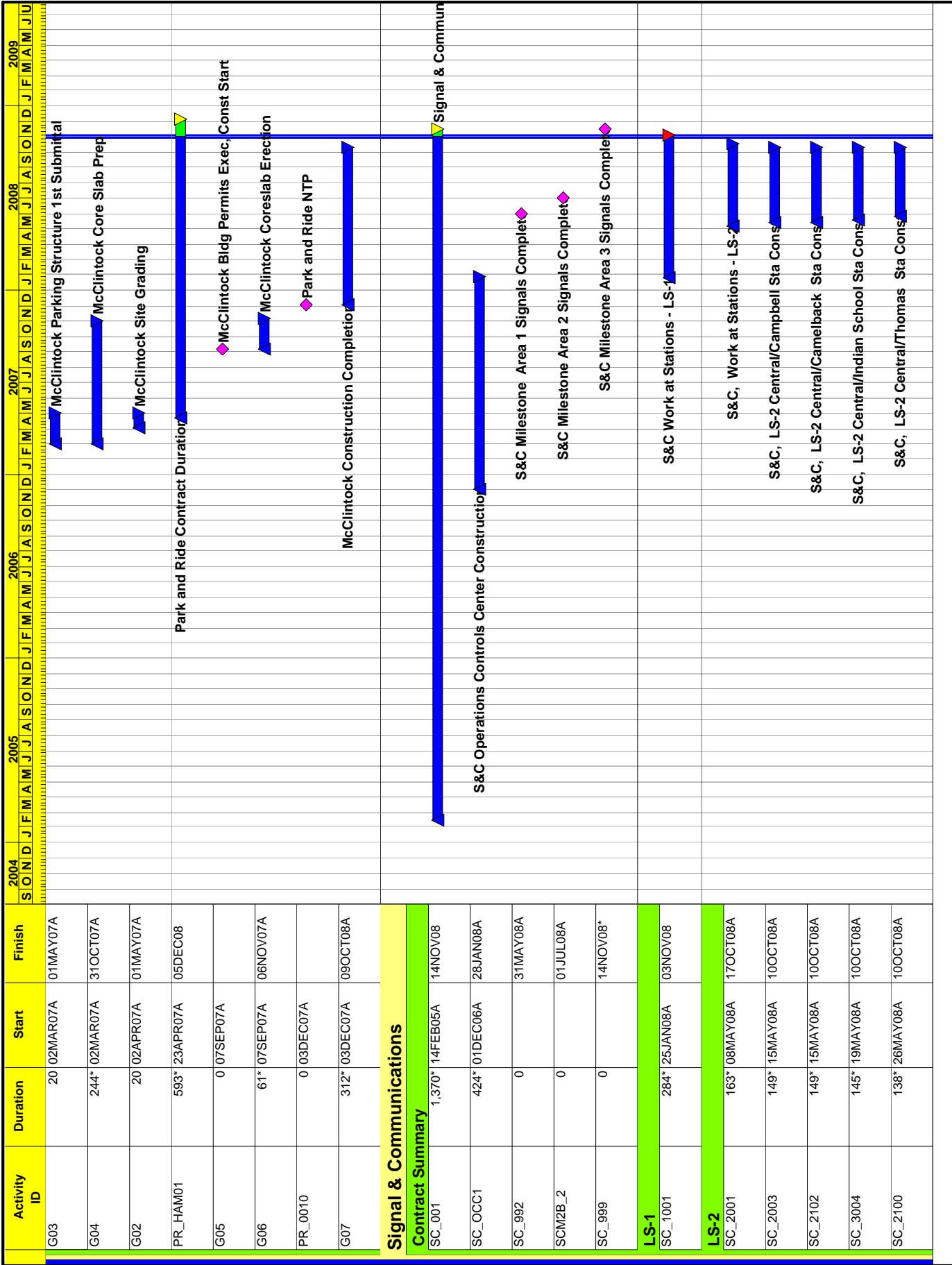
Legend:
 Early Bar (Yellow triangle)
 Progress Bar (Blue bar)
 Critical Activity (Red triangle)

Sheet 1 of 9

Presentation Schedule

METRO Rail Program Control
Central Phoenix/East Valley LRT Project





Activity ID	Duration	Start	Finish
G03	20	02MAR07A	01MAY07A
G04	244*	02MAR07A	31OCT07A
G02	20	02APR07A	01MAY07A
PR_HAM01	593*	23APR07A	05DEC08
G05	0	07SEP07A	
G06	61*	07SEP07A	06NOV07A
PR_0010	0	03DEC07A	
G07	312*	03DEC07A	09OCT08A

Signal & Communications

Contract Summary	Duration	Start	Finish
SC_001	1,370*	14FEB05A	14NOV08
SC_OCC1	424*	01DEC06A	28JAN08A
SC_992	0		31MAY08A
SCM2B_2	0		01JUL08A
SC_999	0		14NOV08*
LS-1			
SC_1001	284*	25JAN08A	03NOV08
LS-2			
SC_2001	163*	08MAY08A	17OCT08A
SC_2003	149*	15MAY08A	10OCT08A
SC_2102	149*	15MAY08A	10OCT08A
SC_3004	145*	19MAY08A	10OCT08A
SC_2100	138*	26MAY08A	10OCT08A



Acronyms

AASHTO	American Association of State Highway and Transportation Officials
AC	Alternating Current
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
APM	Automatic People Mover
APPROX	Approximately
APS	Arizona Public Service
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASTM	American Society for Testing and Materials
ASU	Arizona State University
ATS	Automatic Train Stop
AT&T	American Telephone and Telegraph Company
AWG	American Wire Gauge
AWS	American Welding Society
BTU	British Thermal Unit
CAC	Construction Administration Consultant
CALCS	Calculations
CCTV	Closed Circuit Television
CFM	Cubic Feet Per Minute
CFS	Cubic Feet Per Second
CMU	Concrete Masonry Unit
CNPA	Concurrent Non-Project Activity
COE	US Corp of Engineers
COM	City of Mesa
COMM	Communications
COP	City of Phoenix
COT	City of Tempe
CPU	Central Processing Unit
CRSI	Concrete Reinforcing Steel Institute
CRT	Cathode Ray Tube
CTS	Carrier Transmission System
CWR	Continuous Welded Rail
CY	Cubic Yard
DBE	Disadvantaged Business Enterprise



DC	Direct Current
DSD	Development Services Department
DWG	Drawing(s)
EPA	Environmental Protection Agency
EST	Estimate, Estimated
FAA	Federal Aviation Administration
FAI	First Article Inspection
FHWA	Federal Highway Administration
FPS	Feet Per Second
FTA	Federal Transit Administration
GEC	General Engineering Consultant
HVAC	Heating, Ventilating, Air Conditioning
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronic Engineers
IFB	Invitation For Bid
IPI	In Process Inspection
LAN	Local Area Network
LF	Linear Feet
LRT	Light Rail Transit
LRV	Light Rail Vehicle
LS	Line Section
MAG	Maricopa Association of Governments
MEC	Mass Electric Company
MISC	Miscellaneous
MOE	Maintenance of Equipment
MOW	Maintenance of Way
MPH	Miles Per Hour
OMC	Maintenance and Storage Facility
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NRHP	National Register of Historic Places
OCC	Operations Control Center
OCS	Overhead Contact System
O&M	Operations And Maintenance
OMC	Operations and Maintenance Center



OPS	Operations
PA	Public Address
PAN	Pantograph
PBAX	Telephone Private Exchange And Controls
PCI	Prestressed Concrete Institute
PSI	Pre Shipment Inspection
PED	Pedestrian
PMC	Program Management Consultant
PNR	Park-and-Ride
PSF	Pounds Per Square Foot
PSI	Pounds Per Square Inch
PTZ	Pan Tilt Zoom
QA	Quality Assurance
QC	Quality Control
RE	Resident Engineer
RFI	Request For Information
RI	Receiving Inspection
RPM	Revolutions Per Minute
ROW	Right-of-Way
RTU	Remote Terminal Unit
S&C	Signals and Communications
SCADA	Supervisory Control and Data Acquisition
SDI	Steel Deck Institute
SJI	Steel Joist Institute
SONET	Synchronous Optical Network
SPEC	Specification
SRP	Salt River Project
SSPC	Structural Steel Painting Council
SSW	Sundt/Stacy and Witbeck
SSWJV	Sundt/Stacy and Witbeck Joint Venture
SWG	Southwest Gas Corporation
TBD	To Be Determined
TCE	Temporary Construction Easement
TES	Traction Electrification System
TTLB	Tempe Town Lake Bridge
TPSS	Traction Power Substation
TTY	Text Teletype ADA Device
TVM	Ticket Vending Machine



TWC	Train to Wayside Communications
UBC	Uniform Building Code
UL	Underwriters Laboratories Incorporated
UPRR	Union Pacific Railroad
UPS	Uninterruptible Power System
VCR	Video Cassette Recorder
VETAG	Vehicle Tagging System
VMB	Variable Message Board
VMR	Valley Metro Rail
VMS	Vehicle Management System
WAN	Wide Area Network