

# SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT METRO RAIL PROJECT

SCRTD  
1988-  
.M56  
S82



## MONTHLY STATUS REPORT

NOVEMBER 1989

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**EXECUTIVE SUMMARY****DESIGN**

Final design of the three Stage II Contracts A136, Union Station Stage II, A147, Civic Center Station Stage II, A157, and 5th/Hill Station Stage II are substantially complete. Contracts A147 and A157 will be advertised concurrently with an option of combining the two contracts in a single award to one bidder. Prepared technical input to Addendum No. 3 for Contract A187 that has a planned bid opening on January 16, 1990. Completed drawings and specifications for Contracts A118, Yard Site Landscaping and A760, Signs and Graphics Responded to construction contract Request for Information change order actions and other field inquiries.

Systems Design procurement support requirements continue to be particularly high for Contract A640, Communications. Additional effort was applied to be responsive to contractor submittals and inquiries. Personnel from Contract A650, Passenger Vehicles, was utilized in support of Contract A640, Communications, but in December they will return to supporting the increasing backlog on Contract A650.

During the next 30 days, the following activities are planned:

- Send remaining Stage II drawings to the A640 contractor as updated information for the Communications design.
- Complete details of the Combined Bid Instructions and Form and submit for approval.
- Systems Design will submit the 85% (prefinal) review of Contract A680, Operational Graphics.
- Apply additional resources to reduce the backlog of submittals currently in the review cycle for Contract A650, Passenger Vehicles.
- Resolve Contract A760, Signs and Graphics, procurement concerns.

**PROCUREMENT/CONSTRUCTION**

As of November 24, 1989, 42 of 68 MOS-1 contracts were advertised. Contract A111, Santa Fe Yard Restoration, is no longer required and was deleted. Contract A750, Disposal of Hazardous Materials, has been divided among 5 different contractors into contracts A751-A755. Seven contracts are complete, and 33 contracts are under way. The 33 contracts currently under way are listed below:

- Contract A112, Main Shop Building
- Contract A130, Yard Leads and Transfer Zone
- Contract A135, Union Station, Stage I
- Contract A141, Line Section, Union Station to 5th/Hill Station, and Civic Center Station Stage I
- Contract A143, Water Treatment Plant Chemicals Procurement
- Contract A144, Water Treatment Plant Operations
- Contract A145, 5th/Hill Station, Stage I
- Contract A146, Line Section, 5th/Hill Station to the 7th/Flower Station
- Contract A165, 7th/Flower Station, Stage I
- Contract A167, 7th/Flower Station, Stage II
- Contract A171, Line Section, 7th/Flower Station to Wilshire/Alvarado Station
- Contract A175, Wilshire/Alvarado Station, Stage I
- Contract A610/A115, Trackwork Installation/Yard Storage Area
- Contract A612, Contact Rail Procurement

**EXECUTIVE SUMMARY**

- Contract A615, Protective Coverboard Procurement
- Contract A616, Direct Fixation Rail Fasteners Procurement
- Contract A620, Automatic Train Control
- Contract A630, Traction Power Equipment Procurement
- Contract A631, Traction Power Installation
- Contract A640, Communications
- Contract A650, Passenger Vehicles Procurement
- Contract A710, Escalators and Elevators Procurement and Installation
- Contract A732, Wheel Truing Machine Procurement
- Contract A740, Ventilation Equipment Procurement
- Contract A745, Air Handling Equipment Procurement
- Contract A751-A755, Disposal of Hazardous Materials
- Contract A795, Uninterruptible Power Supply Procurement - 50 KVA
- Contract H840, Fare Collection (by LACTC)
- Contract 4239, Metro Rail Telephone System

The only Master Agreement work in progress in November was work performed at the Contract A145 site. This included Los Angeles Department of Water and Power (LADWP) crews pulling cable from the vault to the newly installed equipment in the basement of the Equitable Building and the Los Angeles Department of Transportation's weekly site inspections and traffic control work.

Three Stage II contracts (station finish contracts) remain to be advertised for bid: Contract A136, Union Station, Stage II; Contract A147, Civic Center Station, Stage II; and Contract A157, 5th/Hill Station, Stage II. Contract A187, Wilshire/Alvarado Station, Stage II, has been advertised and bids are being prepared.

The following major elements of construction work have been completed:

- Contracts A130, A141, A146 and A171:
  - 115 linear feet (LF) of tunneling this period (21,226 LF to date out of a total of 25,975 LF).
- Contracts A112, A130, A135, A141, A145, A146, A165, A171, A175, and A610:
  - 14,381 cubic yards (CY) of concrete poured this period (186,403 CY to date out of a total of 410,968 CY).
  - 1,270 tons of steel placed this period (21,829 tons to date out of a total of 36,416 tons).

**SCHEDULE**

The Revenue Operations Date (ROD) remains September 1993. The critical path in this schedule is dependent upon trackwork access, whereby all tunnel and station contracts must complete their work in the trackbed area so that the trackwork contractor (Contract A610) can pour the top concrete level and lay the rail. The last contracts providing access to the A610 contractor are Contract A130, Yard Leads and Transfer Zone, and Contract A141, Line Section, Union Station to 5th/Hill Station, and Civic Center Station Stage I. A second key activity for the completion of the project is preparation of required rooms by the Stage II contractors for the installation of cables and equipment by Contract A620, Automatic Train Control, Contract A640, Communications, and

## EXECUTIVE SUMMARY

Contract A631, Traction Power Equipment Installation. The last station scheduled to provide access for the Systems contracts is also the Civic Center Station (Contract A141). Therefore, Contract A141 has the latest trackwork and Stage II room availability dates and is the critical facility contract. However, Contract A130 trackwork access is only a few weeks earlier than Contract A141, and delays to either contract could impact the schedule and the ROD.

During November, work continued on all tunnel, station Stage I, and major systems contracts. On November 16, 1989 the A141 contractor started excavation of the AR tunnel from Union Station to Civic Center Station, which is the last tunnel section on this contract. This tunnel excavation is forecast to be complete on March 1, 1990. Contract A141 remains 9 weeks behind schedule, and plans are being developed to expedite tunnel concrete placement to meet the required trackwork access dates. The A146 contractor should complete removal of the tunneling equipment by early December. Cross passage excavation is underway, and concrete work should begin on December 12. Installation of the A171 floating concrete slabs was completed on November 17, and invert repair work is now under way. Turning over the Contract A171 shaft to the A175 contractor is forecast for December 15, 1989, two weeks behind schedule.

The A130 contractor continued drilling horizontal grout holes in preparation for the start of tunneling under the 101 Freeway, planned for December 15, 1989. Tunnel grouting is falling behind schedule, but an adequate amount may be available to allow tunneling to begin on schedule. The mud mats in the traction power station are being poured in preparation for the first invert slab placement in early December. The contractor continues to share crews between the A130 and A135

contracts, jeopardizing the ability to maintain schedule. Slurry wall work on Contract A135 is continuing to fall behind schedule, delaying placement of the first invert slabs. Contract A135 is now 6 weeks behind schedule; however, the Contractor has prepared a detailed plan to recover the delay by March, 1990. Contract A145 concrete placement work is progressing, and all invert slabs were completed on November 16, 1989. Some productivity gains have been achieved, but it is too early to determine if this trend will continue. The A165 contractor met the full South Light Rail milestone on November 10, 1989 - four months after the contractually specified date. The November 3, 1989 North Light Rail milestone has been missed and is expected to be met on February 9, 1990. Mitigation actions similar to those on Contract A145 are being taken to bring this contract back on schedule, and productivity has improved considerably. Work in the Roosevelt Building continues but remains 6 months behind schedule. The A167 contractor continued utility installations and finish work in the Home Savings Building and electrical installations in the South Light Rail Station. South Light Rail plumbing work was completed on November 17, 1989. The A175 contractor continued wall and mezzanine slab concrete placement work in November. Work is still 4 1/2 months behind schedule due to slow work at the Contract A171/A175 interface. The A610 contractor is proceeding with underground electrical installation, rail welding, course ballast placement, and rail installation.

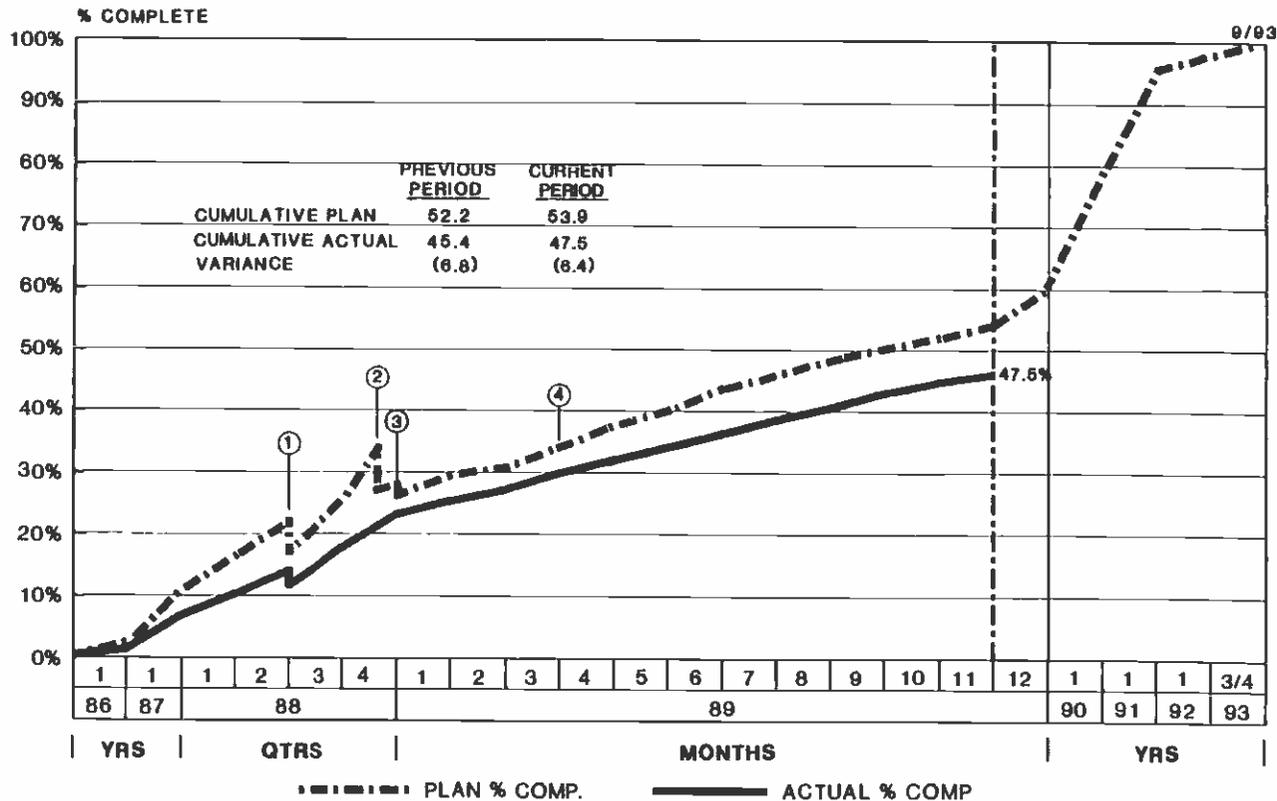
The major systems contracts are on schedule towards meeting their required delivery dates with the exception of Contract A710, Elevators and Escalators, for which modifications are being made to the current 7th/Flower Station delivery requirements.

EXECUTIVE SUMMARY

VALUE OF WORK-IN-PLACE

Total MOS-1 planned value of work-in-place through November was 53.9%. Actual value of work-in-place through November was 47.5%, producing a negative variance of 6.4%. The value of the work-in-place variance decreased 0.4% in November, due primarily to the revision to the Contract A175 schedule. Major contributors to the cumulative

work-in-place variance shortfall included Contract A145 (1.8%), which has experienced delays in excavation and concrete placement; Contract A165 (1.1%), which had previously fallen behind in concrete placement, but has improved its productivity considerably of late; and Contract A130 (1.2%), which has been experiencing excavation delays and has yet to fully recover from its slurry wall construction delays.



- 1 NOTE: DATA REVISED TO ELIMINATE NON-PHYSICAL WORK ITEMS.
- 2 NOTE: DATA REVISED TO INCORPORATE REVISED SCHEDULES FOR CONTRACT A112, A141 AND A145, AND APPROVED PART B SCHEDULE FOR CONTRACT A135.
- 3 NOTE: DATA REVISED TO INCLUDE REVISED SCHEDULES FOR CONTRACT A130, A135 AND A146.
- 4 NOTE: DATA REVISED TO REFLECT REVISED SCHEDULE (REV. 7) FOR ALL CONTRACTS NOT YET BID.

### EXECUTIVE SUMMARY

#### Facilities/Systems Contracts

contracts. Contracts with significant work-in-place variances are discussed following the table.

The Value of Work-In-Place table, which is based on payment for work completed, summarizes the progress performance for the facilities

	CONTRACT DESCRIPTION	PERIOD (\$000)						CUMULATIVE (\$000)					
		PLAN		ACTUAL		VARIANCE		PLAN		ACTUAL		VARIANCE	
		\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
A112	Main Shop Building	0	0.0	93	0.4	93	0.4	21,499	100.0	21,295	99.1	-204	-0.9
A130	Yard Leads & Tran. Zone	1,490	5.0	724	2.5	-766	-2.5	24,079	81.5	17,889	60.6	-6,190	-21.0
A135	Union Station - Stage I	4,538	9.0	2,383	4.8	-2,155	-4.2	34,984	69.7	31,313	62.4	-3,671	-7.3
A141	Tunnel U/S to 5/H Station & C/C Station Stage I	1,559	2.6	691	1.2	-868	-1.4	43,559	73.3	40,623	68.4	-2,936	-4.9
A145	5/H Station - Stage I	1,328	3.3	1,022	2.5	-306	-0.8	33,962	84.0	24,058	59.5	-9,904	-24.5
A146	Tunnel 5/H Station to 7/F Station	838	5.7	259	1.8	-579	-3.9	10,465	71.0	8,510	57.7	-1,955	-13.3
A165	7/F Station - Stage I	796	2.0	1,401	3.5	605	1.5	35,937	90.8	30,295	76.6	-5,642	-14.2
A167	7/F Station - Stage II	479	3.4	484	3.4	5	0.0	2,993	21.2	1,449	10.2	-1,544	-11.0
A171	Tunnel 7/F Station to W/A Station	0	0.0	119	0.6	119	0.6	18,453	100.0	18,054	97.8	-399	-2.2
A175	W/A Station - Stage I	751	3.6	284	1.4	-467	-2.2	14,662	70.6	14,195	68.4	-467	-2.2
A610/A115	Trwk. Instl./Yard Storage Area	671	4.1	446	2.8	-225	-1.3	12,104	74.8	10,590	65.4	-1,514	-9.4

**EXECUTIVE SUMMARY****Contract A130, Yard Leads and Transfer Zone**

The contractor continued drilling horizontal grout holes at the northwest end of the tunnel area, in preparation for tunneling operations which have been delayed and are now scheduled to begin in December, 1989. Progress shortfalls caused by delays in slurry wall construction for the excavation support system at the north end of the site have not yet been recovered. The contractor has completed excavation and tieback installations for the 3 Cell Box Structure, and is continuing excavation and placement of walers and struts for the 2 Cell Box Structure.

**Contract A135, Union Station, Stage I**

Final Phase II slurry wall panel placement work has resumed. Phase I slab-on-grade concrete placement was completed, and wall and column placement should begin in December. The contractor is also proceeding with excavation, tieback installation and the remaining slurry wall placement for Phases II and III. The contractor has prepared a detailed plan to recover the current delays by March, 1990.

**Contract A141, Line Section, Union Station to 5th/Hill Station and Civic Center Station, Stage I.**

Excavation of the AL tunnel from Union Station to Civic Center Station began on November 16, 1989. The cumulative delays of slow excavation and moving the tunneling machine have put the trackwork portion of the contract approximately 5 months behind schedule. A new schedule was recently submitted by the contractor, and was reviewed and rejected. A contractor plan to determine ways to mitigate at least a portion of these delays is currently under review. Current mitigation plans include working extra shifts, resequencing work activities, and using alternative methods of concrete placement.

**Contract A145, 5th/Hill Station, Stage I**

Cumulative progress is considerably behind schedule. Recent progress shortfalls are due to delays in station invert, lower wall and column

concrete placement which have postponed the start of mezzanine slab concrete placement. The cause of the cumulative delay to date also includes: inefficiencies in installation of the support system; inefficiencies in demolition, relocation and support of utilities under 4th, 5th, and Flower Streets; excavation and disposal of contaminated soils; inefficiencies in preparation and placement of invert concrete; and installation of temporary sewer line C. The contractor plans to work extra shifts and hire additional crews to mitigate the delays. The revised schedule, which was submitted in August, has been approved as noted, stipulating specific logic ties for Stage II and trackwork access. The contractor has prepared a plan to accelerate work and mitigate some of the current delays. The plan is currently under review.

**Contract A146, Line Section, 5th/Hill Station to 7th/Flower Station**

Cumulative progress is considerably behind the original contract schedule. The causes of the cumulative delays include: delinquent drawings submittals, earth compaction grouting specification dispute, tunneling machine modifications, and implementation of a chemical grouting procedure to stabilize the soil prior to tunneling. The contractor subsequently experienced problems in transferring the tunneling machine to the AR tunnel after completion of AL tunnel mining. Since resumption of tunneling, progress has been slowed due to equipment problems, ground runs and chemical grouting of the tunnel face. Tunneling was substantially completed on October 25, 1989. The contractor submitted a revised Part II schedule which revised the sequence of concrete placement work.

**Contract A165, 7th/Flower Station, Stage I**

Work remains behind schedule due to delays in concrete placement caused largely by contractor inefficiencies. The addition of a second shift and selected weekend overtime has accelerated the pace of work. The south end of the Light Rail portion of the 7th/Flower Station was released by the contractor in mid-November. The remainder of the Light Rail portion will be turned over in January, 1990. The contractor has adopted the RTD recommended schedule improvement plan and has begun to

**EXECUTIVE SUMMARY**

show some schedule recovery as a result. Contract A165 is not on the Metro Rail critical path, but is on the Light Rail critical path.

**Contract A167, 7th/Flower Station, Stage II**

Change order work in the Home Savings Building is near completion, with only electrical work outstanding. The schedule slip on this contract is a result of late submittal of shop drawings and late mobilization of subcontractors. A time extension for delays caused by the change order work in the Home Savings Building is currently under review. Delays have also been caused by late access to required areas due to delayed release of these areas by the A165 (Stage I) contractor.

**Contract A175, Wilshire/Alvarado Station, Stage I**

Early in this contract, there were significant delays in sewer line and tieback installation which were partially mitigated but can no longer be fully recovered. In addition, excavation support problems at the interface with Contract A171 have delayed work in the crossover area. The contractor was given a 123 day time extension on the Stage II access milestone for delays in the crossover area that were beyond the contractor's control. The contractor is expected to miss the Stage II contractor access milestone by 5 1/2 months. Additional contractor delay claims are currently under review. The A171 Contractor was to have

made the access shaft area available to the A175 contractor on August 11, 1989. As a result of this delay, the contractor was granted a 126 day time extension on both the trackwork access and contract completion milestone dates.

**Contract A610/A115, Trackwork Installation/Yard Storage Area**

Underground electrical installation, and rail installation work is in progress. Sub ballast, base ballast and final grading in the track area is complete. Final utilities installation and testing are in progress. Previous delays occurred in performing underground electrical and utility installations, specifically in the duct banks, sewer, storm drain, fire water line, and domestic water lines, due to differing site conditions and design clarifications. These utility work slippages caused delays to earth work, site paving, and the start of ballast placement in the yard storage area. The contractor mitigated part of the impact of these delays by revising logic and overlapping work activities.

**Procurement and Systems Contracts**

Currently there are no significant schedule delays to procurement and systems contracts.

**EXECUTIVE SUMMARY**

THROUGH NOVEMBER 1989, 79% OF ANTICIPATED METRO RAIL FUNDS WERE OBLIGATED, AND 58% WERE EXPENDED.

**PROJECT COST SUMMARY**

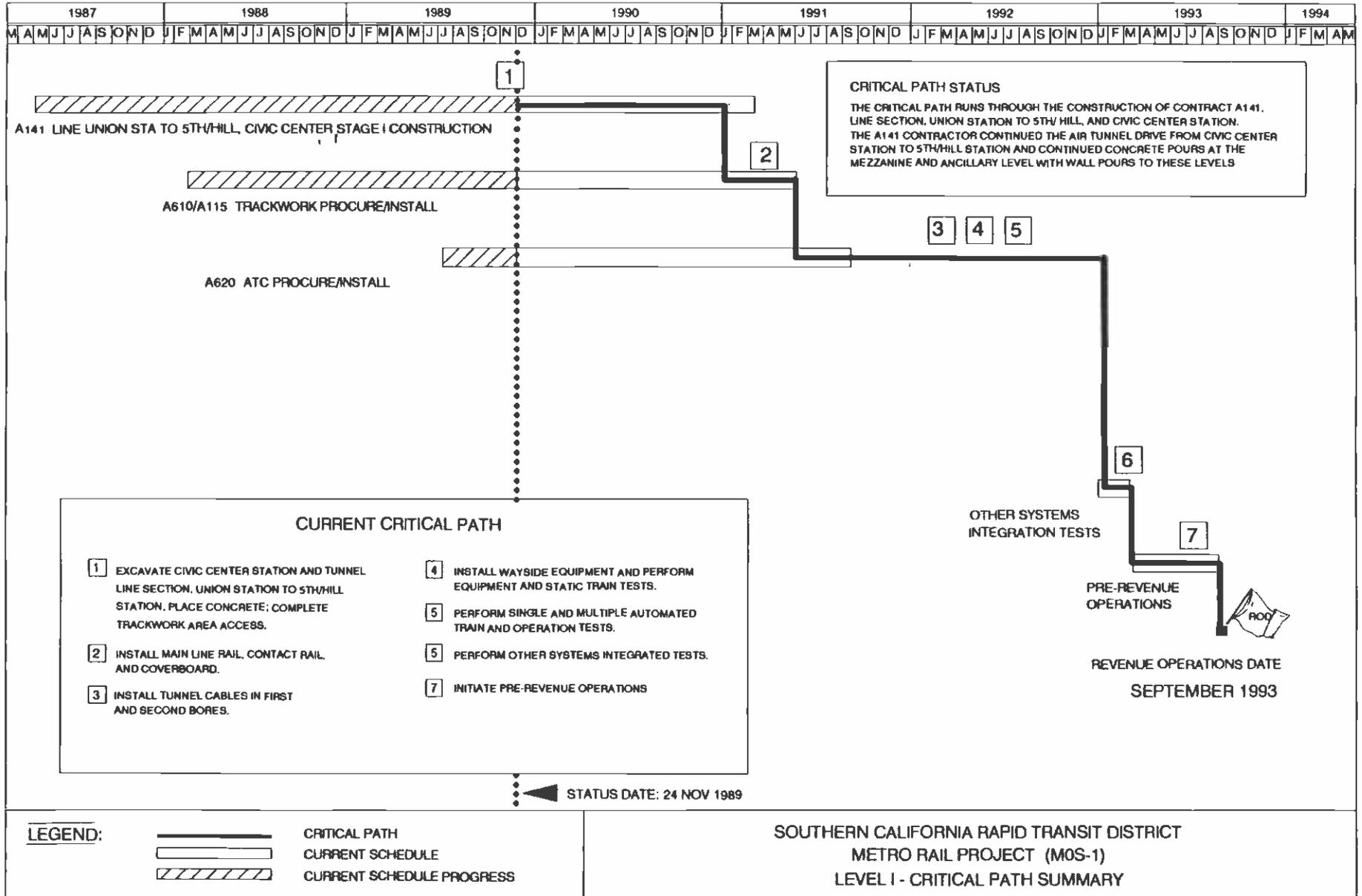
	ORIGINAL BASELINE FINANCIAL PLAN (\$000) (REV. 5)	CURRENT FORECAST FINANCIAL PLAN (\$000) (REV. 7B)	O B L I G A T E D ( \$ 0 0 0 )		E X P E N D E D ( \$ 0 0 0 )	
			THIS PERIOD	TO DATE	THIS PERIOD	TO DATE
CONSTRUCTION/PROCUREMENT COSTS	\$658,584	\$651,522	\$444	\$508,671	\$16,423	\$269,240
OTHER SUPPORTING COSTS	\$538,091	\$630,337	\$1,158	\$484,088	\$4,137	\$450,683
CONTINGENCY	\$53,225	\$72,041	\$0	\$0	\$0	\$0
<b>TOTAL PROJECT</b>	<b>\$1,249,900</b>	<b>\$1,353,900</b>	<b>\$1,602</b>	<b>\$992,759</b>	<b>\$20,560</b>	<b>\$719,923</b>

EXECUTIVE SUMMARY - STATUS OF MOS-1 FUNDS

SOURCE	TOTAL ANTICIPATED FUNDS	TOTAL FUNDS RECEIVED	OBLIGATIONS		EXPENDITURES		BILLED TO SOURCE	
			\$	%	\$	%	\$	%
UMTA-SECTION 3	\$605,300,000	\$605,299,997	\$488,197,400	81%	\$352,911,957	58%	\$343,687,636	57%
UMTA-SECTION 9	\$90,583,720	\$90,583,720	\$81,677,600	90%	\$64,016,063	71%	\$63,356,908	70%
STATE	\$213,076,630	\$214,015,500	\$162,444,595	76%	\$124,049,581	58%	\$156,876,078	74%
LACTC	\$176,639,650	\$175,700,780	\$153,973,664	87%	\$96,468,879	55%	\$93,492,511	53%
CITY OF L.A.	\$34,000,000	\$34,000,000	\$22,757,834	67%	\$16,992,396	50%	\$16,109,276	47%
BENEFIT ASSESS.	\$130,300,000	\$19,082,432	\$83,707,907	64%	\$65,484,766	50%	\$19,082,432	15%
TOTAL	\$1,249,900,000	\$1,138,682,429	\$992,759,000	79%	\$719,923,642	58%	\$692,604,841	55%



## SCHEDULES - CRITICAL PATH SUMMARY



## SCHEDULES - CONTRACT SCHEDULE STATUS

### CONTRACTS ADVERTISED

CONTRACT NUMBER	DESCRIPTION	ADVERTISE	BID OPENING		CONTRACT COMPLETE <sup>1</sup>	
		DATE	DATE	AWARD DATE	NTP DATE	DATE
A4239	TELEPHONE SYSTEM	25-Nov-85	21-Dec-86	11-Aug-88	16-Dec-88	30-Dec-93
A123	DEMOLITION WESTRANSCO BLDG	25-Aug-86	24-Sep-86	23-Oct-86	24-Nov-86	23-Feb-87
A149	5TH/HILL UTILITY & VAULT MOD	25-Aug-86	30-Sep-86	INCORPORATED INTO A145		
A172	DEMOLITION A1-208	08-Sep-86	12-Nov-86	11-Dec-86	12-Jan-87	04-Mar-87
A173	DEMOLITION A1-221,222,224,225	08-Sep-86	12-Nov-86	11-Dec-86	19-Jan-87	14-Apr-87
A121	MOW SHOP BUILDING	08-Sep-86	25-Nov-86	08-Jan-87	27-Feb-87	26-Jul-88
A171	LINE 7TH/FLOWER-WILSHIRE/ALVARADO	15-Sep-86	12-Dec-86	08-Jan-87	02-Feb-87	22-Jan-90
A161	7TH/FLOWER UTILITY REARRANGEMENT	29-Sep-86	26-Nov-86	17-Dec-86	19-Jan-87	16-Nov-87
A141	UNION STA-5TH/HILL; CMC CENTER STAGE I	29-Sep-86	14-Jan-87	26-Feb-87	16-Mar-87	01-Mar-91
A145	5TH/HILL STATION STAGE I	24-Nov-86	03-Feb-87	12-Mar-87	02-Apr-87	01-Feb-91
A146	LINE-5TH/HILL - 7TH/FLOWER	01-Dec-86	12-Feb-87	12-Mar-87	06-Apr-87	14-Sep-90
A134	DEMOLITION A1-032	12-Feb-87	02-Apr-87	23-Apr-87	13-May-87	29-May-87
A175	WILSHIRE/ALVARADO STAGE I	02-Mar-87	02-Jun-87	25-Jun-87	27-Jul-87	17-Aug-90
A650	PASSENGER VEHICLES	16-Mar-87	15-Jul-87	28-Apr-88	01-Jun-88	18-May-92
A640	COMMUNICATIONS	15-Apr-87	26-Aug-87	09-Jun-88	07-Jul-88	15-Jan-93
A616	DIRECT FIXATION RAIL FASTENERS	11-May-87	02-Jul-87	23-Jul-87	14-Oct-87	14-Sep-90
H840	FARE COLLECTION (LACTC)	12-Jun-87	31-Aug-87	13-Oct-88		
A112	MAIN SHOP BUILDING	18-May-87	11-Aug-87	10-Sep-87	28-Sep-87	14-Dec-89
A620	AUTOMATIC TRAIN CONTROL	01-Jul-87	23-Sep-87	12-Nov-87	01-Mar-88	15-Jan-93
A135	UNION STATION, STAGE I/CROSSOVER	10-Aug-87	27-Apr-88	26-May-88	11-Jul-88	28-Jun-91
A610/A115	TRACKWORK/YARD STORAGE AREA	13-Aug-87	26-Oct-87	19-Nov-87	04-Jan-88	12-Jul-91
A165	7TH/FLOWER STATION, STAGE I	*26-Oct-87	01-Dec-87	17-Dec-87	05-Jan-88	26-Dec-90
A745	AIR HANDLING EQUIPMENT	*02-Nov-87	12-Jan-88	28-Jan-88	16-Feb-88	30-Sep-91
A740	VENTILATION EQUIPMENT	*21-Dec-87	26-Jan-88	11-Feb-88	01-Mar-88	30-Sep-91
A612	CONTACT RAIL	21-Dec-87	10-Mar-88	14-Apr-88	01-Jun-88	23-Feb-90
A130	YARD LEADS AND TRANSFER ZONE	11-Jan-88	20-May-88	09-Jun-88	01-Jul-88	15-Feb-91
A143	CHEMICAL FOR WTF	29-Feb-88	28-Mar-88	14-Apr-88	23-May-88	01-Apr-91
A615	PROTECTIVE COVERBOARD	17-Mar-88	11-May-88	14-Jul-88	11-Aug-88	23-Feb-90
A144	OPERATIONS & MAINTENANCE OF WTF	04-Apr-88	02-May-88	23-Jun-88	05-Aug-88	29-Apr-91
A720	ELEVATORS	18-Apr-88	21-Jun-88	COMBINED WITH A710		
A795	UNINTERRUPTIBLE POWER SUPPLY	*09-May-88	07-Jun-88	14-Jul-88	25-Aug-88	24-Dec-90
A796	UNINTERRUPTIBLE POWER SUPPLY-100 KVA			10-Jan-89	10-Jan-89	10-Feb-89
A732	WHEEL TRUING MACHINE	01-Jun-88	13-Jul-88	28-Jul-88	17-Aug-88	01-May-91

\*Readvertised

<sup>1</sup> REFLECTS DATE IN CURRENT REV. 7B PROJECT SCHEDULE

**SCHEDULES - CONTRACT SCHEDULE STATUS**

**CONTRACTS ADVERTISED**

<b>CONTRACT NUMBER</b>	<b>DESCRIPTION</b>	<b>ADVERTISE DATE</b>	<b>BID OPENING DATE</b>	<b>AWARD DATE</b>	<b>NTP DATE</b>	<b>CONTRACT COMPLETE<sup>1</sup> DATE</b>
A710/A720	ESCALATORS AND ELEVATORS	*06-Jun-88	19-Aug-88	22-Sep-88	30-Sep-88	06-Nov-91
A630	TRACTION POWER EQUIPMENT	*18-Jul-88	1-Sep-88	22-Sep-88	10-Oct-88	20-Jul-90
A751	HAZARDOUS MATERIAL REMOVAL	02-Sep-88	10-Oct-88	12-Jan-89	14-Feb-89	9-Sep-91
A752	HAZARDOUS MATERIAL REMOVAL	02-Sep-88	10-Oct-88	12-Jan-89	14-Feb-89	9-Sep-91
A753	HAZARDOUS MATERIAL REMOVAL	02-Sep-88	10-Oct-88	12-Jan-89	14-Feb-89	9-Sep-91
A754	HAZARDOUS MATERIAL REMOVAL	02-Sep-88	10-Oct-88	12-Jan-89	14-Feb-89	9-Sep-91
A755	HAZARDOUS MATERIAL REMOVAL	02-Sep-88	10-Oct-88	12-Jan-89	14-Feb-89	9-Sep-91
A631	TRACTION POWER INSTALLATION	01-Dec-88	29-Mar-89	27-Apr-89	07-Jul-89	01-Jun-92
A167	7TH/FLOWER STATION STAGE II	02-Dec-88	08-Mar-89	23-Mar-89	17-Apr-89	03-Jul-91
A187	WILSHIRE/ALVARADO STAGE II	15-Aug-89	16-Jan-90	08-Mar-90	02-Apr-90	31-Dec-91

\*Readvertised

<sup>1</sup> REFLECTS DATE IN REV. 7B PROJECT SCHEDULE

## SCHEDULES - CONTRACT SCHEDULE STATUS

### CONTRACTS TO BE ADVERTISED

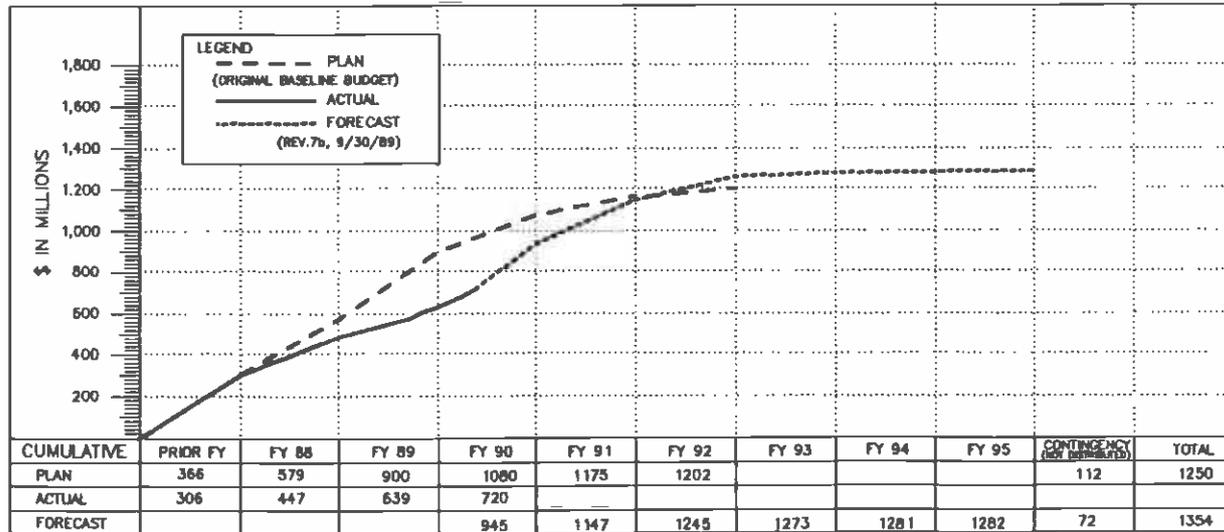
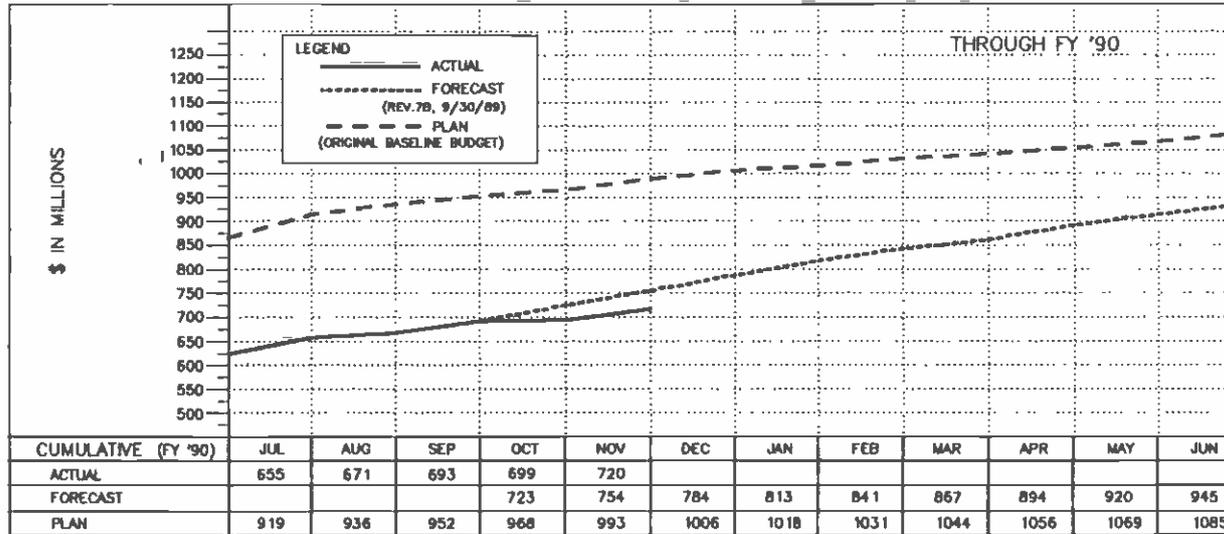
CONTRACT NUMBER	DESCRIPTION	ADVERTISE DATE	BID OPENING DATE	AWARD DATE	NTP	CONTRACT COMPLETE <sup>1</sup> DATE
A136	UNION STATION STAGE II	09-Jan-90	05-Mar-90	05-Apr-90	27-Apr-90	01-Apr-92
A680	OPERATIONAL GRAPHICS	15-Feb-90	17-Apr-90	08-Feb-90	26-Jun-90	02-Jul-92
A760	SIGNS AND GRAPHICS	04-Dec-89	05-Feb-90	15-Mar-90	02-Apr-90	02-Aug-91
A157	5TH/HILL STATION STAGE II	05-Jan-90	18-Apr-90	03-May-90	11-May-90	29-Apr-92
A117	YARD SITE LIGHTING	01-Dec-89	12-Feb-90	01-Mar-90	30-Mar-90	22-Mar-91
A655	TRANSPORTATION TEST CENTER	(SOLE SOURCE PROCURE)		30-Mar-90	30-Apr-90	05-Apr-91
A147	CMIC CENTER STATION STAGE II	05-Jan-90	18-Apr-90	03-May-90	11-May-90	29-Apr-92
A671	UNIMOG	28-Feb-90	23-Apr-90	17-May-90	29-Jun-90	01-Jul-91
A116	YARD SITE SECURITY FENCING	13-Apr-90	11-Jun-90	19-Jul-90	15-Aug-90	16-Apr-91
A118	YARD SITE LANDSCAPING	04-May-90	17-Jul-90	09-Aug-90	04-Sep-90	11-Jan-91
A780	FURNITURE	02-Jul-90	03-Sep-90	11-Oct-90	07-Nov-90	14-May-91
A730	SHOP EQUIPMENT-FIXED	01-Aug-90	17-Sep-90	08-Nov-90	03-Dec-90	03-May-91
A735	SHOP EQUIPMENT-FREE STANDING	01-Aug-90	17-Sep-90	08-Nov-90	03-Dec-90	03-May-91
A138	UNION STATION SITEWORK	06-Aug-90	10-Oct-90	08-Nov-90	14-Dec-90	19-Mar-92
A775	MOBILE EMERGENCY/MAINTENANCE EQUIP	31-Aug-90	06-Nov-90	13-Dec-90	02-Jan-91	01-Jul-91
A771	SEDANS, PICKUPS & VANS	01-Oct-90	16-Nov-90	13-Dec-90	07-Jan-91	05-Jul-91
A772	LIFT TRUCKS	01-Oct-90	16-Nov-90	13-Dec-90	07-Jan-91	05-Jul-91
A773	VACUUMS, HAND TRUCKS & MATL CART	01-Oct-90	16-Nov-90	13-Dec-90	07-Jan-91	05-Jul-91
A774	SCRUBBER & CLEANER CARTS	01-Oct-90	16-Nov-90	13-Dec-90	07-Jan-91	05-Jul-91
A785	FIRE SUPPRESSION	01-Oct-90	11-Dec-90	10-Jan-91	01-Feb-91	01-Jul-91
A790	FIRST STORES/CONSUMABLES	01-Oct-90	11-Dec-90	10-Jan-91	01-Feb-91	01-Jul-91
A124	STREET PAVEMENT	10-Oct-90	12-Dec-90	10-Jan-91	15-Feb-91	17-May-91
A675	CRANE FOR FLAT CAR	05-Nov-90	22-Jan-91	14-Feb-91	15-Mar-91	10-Mar-92
A672	FLAT CARS	N/A	N/A	N/A	05-Nov-90	06-Nov-92
A185	WILSHIRE/ALVARADO SITEWORK	02-Jan-91	06-Mar-91	11-Apr-91	01-May-91	31-Dec-91
A186	WILSHIRE/ALVARADO SITE LANDSCAPING	02-Jan-91	06-Mar-91	11-Apr-91	01-May-91	31-Dec-91
A139	UNION STATION LANDSCAPING	10-Apr-91	25-Jun-91	25-Jul-91	16-Aug-91	21-Oct-92

\* Readvertised

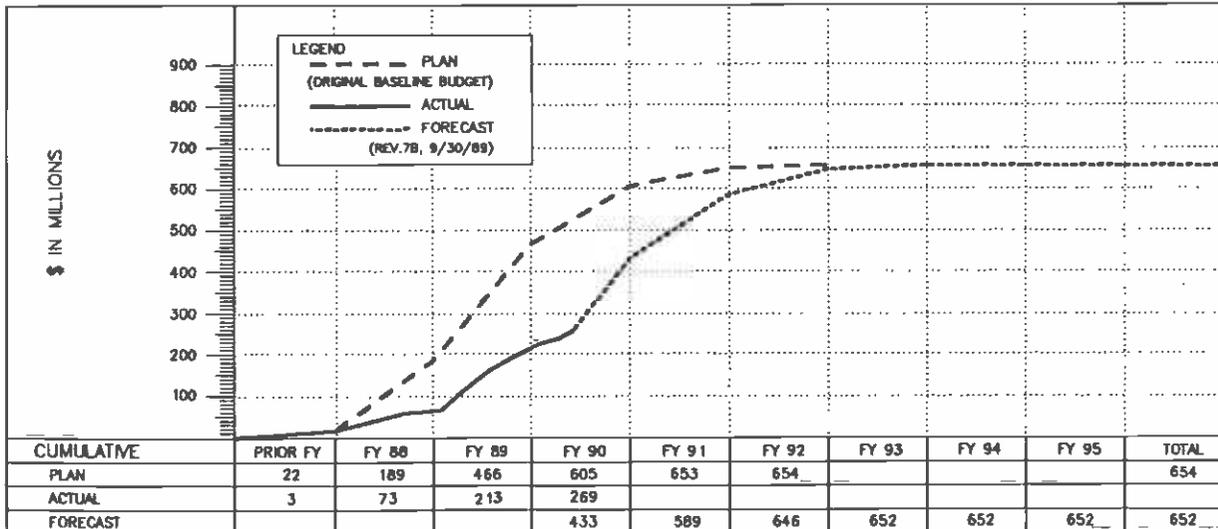
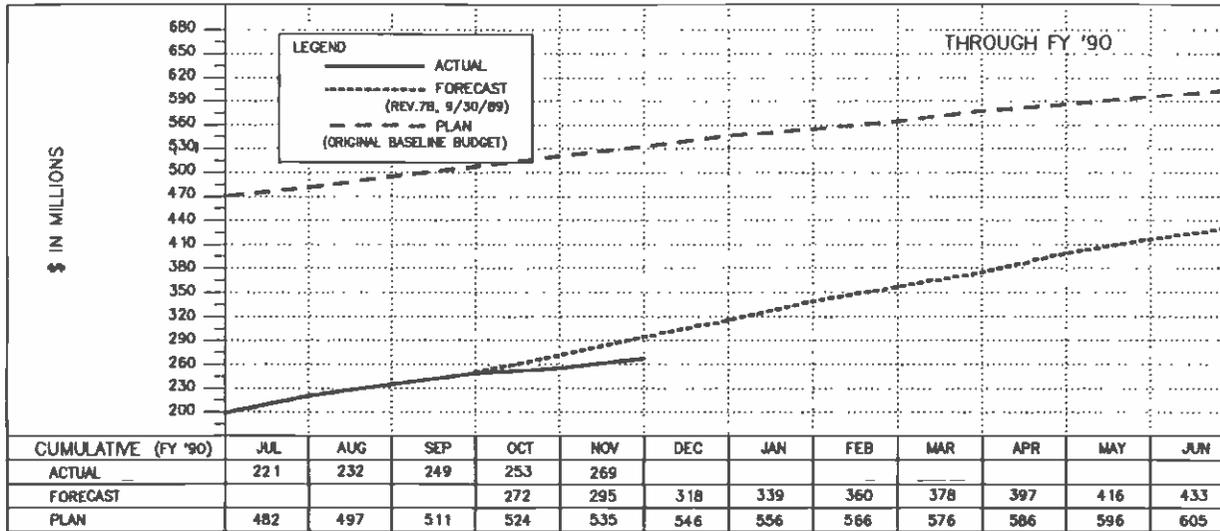
<sup>1</sup> REFLECTS DATE IN REV. 7B PROJECT SCHEDULE



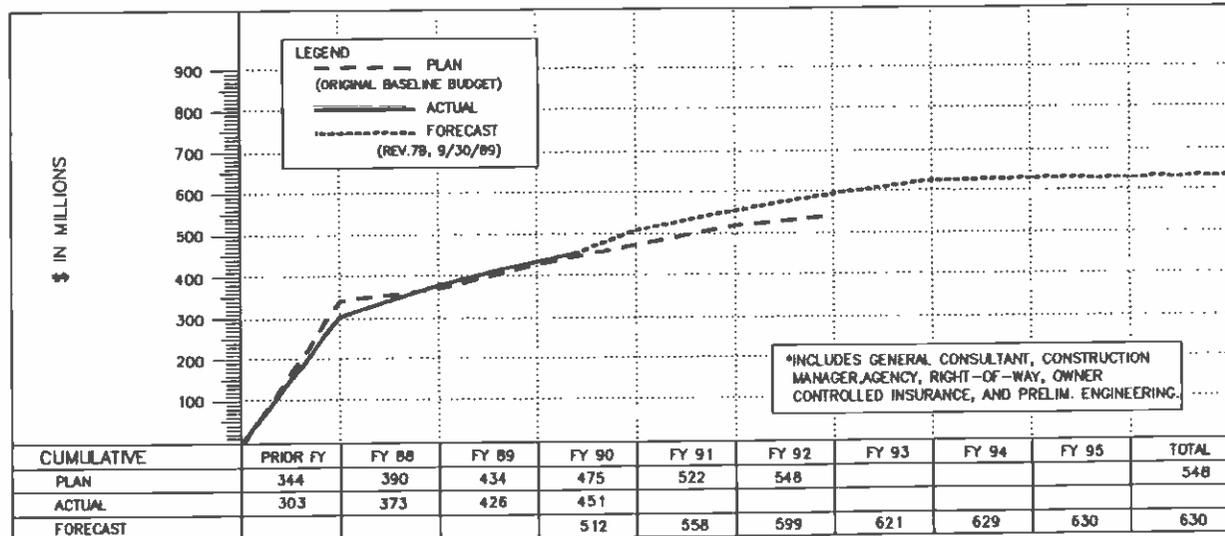
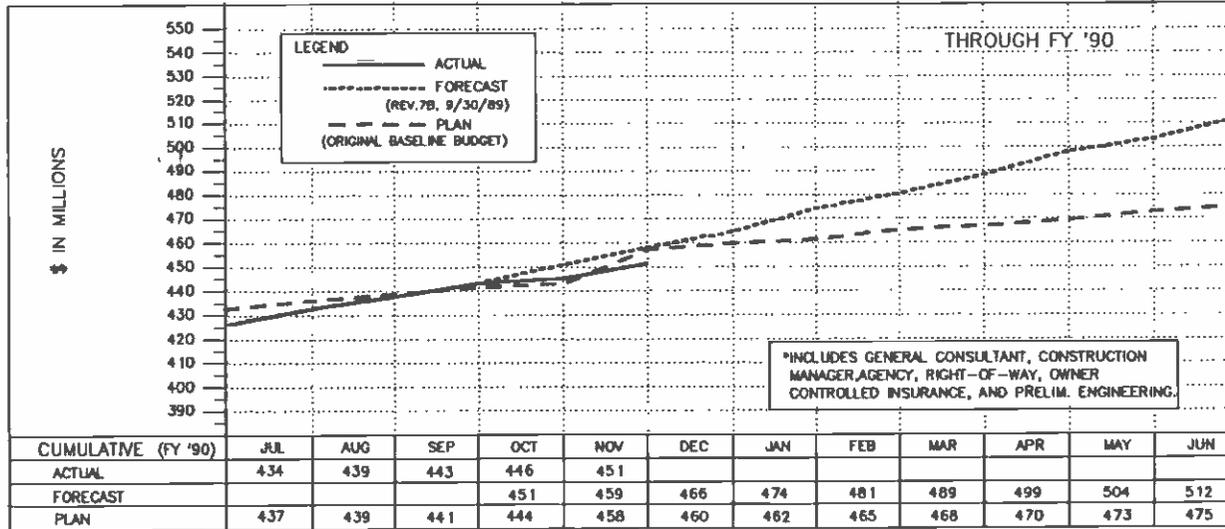
## COST - TOTAL PROJECT CASH FLOW



COST - CONSTRUCTION/PROCUREMENT CASH FLOW



COST - CONSTRUCTION SUPPORT COSTS CASH FLOW



# METRO RAIL PROJECT

# STATUS REPORT

# NOVEMBER 1989

## COST - CONSTRUCTION/PROCUREMENT CONTRACT COST SUMMARY

CONTRACT NO.	MACS CODE	AFE	DESCRIPTION	COLUMN A	COLUMN B	COLUMN C (COL A + B)	WORK ORDERS ISSUED	POTENTIAL CHANGES	COLUMN D	COLUMN E (COL D - C)	COLUMN F
				APPROVED PURCHASE ORDER VALUE	APPROVED PURCHASE ORDER REVISIONS	CURRENT PURCHASE ORDER VALUE			FORECAST	VARIANCE	EXPENDED
3138	13.75.95	11127	CITY OF LA - MRT	7,137	0	7,137	3,097	(553)	2,544	(4,593)	2,218
		20626	CITY OF LA - LRT	1114	0	1,114	829	(466)	363	(751)	142
3535	13.75.95	11128	COUNTY OF LA	274	0	274	189	62	251	(23)	27
3090	13.75.95	11128	CONSOLIDATED FIRE DIST	169	0	169	169	240	409	240	98
3301	13.75.95	11129	CALTRANS	260	0	260	0	260	260	0	43
3787	13.75.95	11124	CHEVRON	90	0	90	0	90	90	0	0
3237	13.75.95	11125	WESTERN UNION - MRT	80	0	80	37	43	80	0	0
		20624	WESTERN UNION - LRT	10	0	10	10	30	40	30	0
3520	13.75.95	11121	SO CA GAS - MRT	900	0	900	718	(141)	577	(323)	72
		20621	SO CA GAS - LRT	213	(107)	106	106	0	106	0	1
3371	13.75.95	11126	CABLE TV	100	0	100	95	5	100	0	33
3172	13.75.95	11120	PACIFIC BELL - MRT	2,000	0	2,000	1,984	(70)	1,914	(86)	1,006
		20620	PACIFIC BELL - LRT	80	0	80	80	70	150	70	3
3464	13.75.95	11122	DWP, WATER - MRT	1,600	800	2,400	2,295	203	2,498	98	1,139
		20622	DWP, WATER - LRT	300	354	654	655	0	655	1	300
3173	13.75.95	11123	DWP, POWER - MRT	2,250	0	2,250	1,524	486	2,010	(240)	744
		20623	DWP, POWER - LRT	264	(90)	174	175	0	175	1	9
SUB-TOTAL MASTER COOPERATIVE AGREEMENTS: - MRT				14,860	800	15,660	10,108	625	10,733	(4,927)	5,380
SUB-TOTAL MASTER COOPERATIVE AGREEMENTS: - LRT				1,981	157	2,138	1,855	(366)	1,489	(649)	455
TOTAL MASTER COOPERATIVE AGREEMENTS				16,841	957	17,798	11,963	259	12,222	(5,576)	5,835

# METRO RAIL PROJECT

# STATUS REPORT

# NOVEMBER 1989

## COST - CONSTRUCTION/PROCUREMENT CONTRACT COST SUMMARY

CONTRACT NO.	MACS CODE	AFE	DESCRIPTION	COLUMN A	COLUMN B	COLUMN C (COL A + B)	POTENTIAL CHANGES	CLAIMS	COLUMN D	COLUMN E (COL D - C)	COLUMN F
				AWARD VALUE	EXECUTED C.O. COST	CURRENT CONTRACT			REV. 7B FORECAST	VARIANCE	EXPENDED
-----											
AWARDED CONTRACTS:											
-----											
2963*	13.75.95	11131	SANTE FE RAILROAD	22	0	22	0	0	22	0	22
4239	13.62.08	11582	TELEPHONE EQUIPMENT	1,356	0	1,356	0	0	1,356	0	0
4878*	13.75.95	11131	SANTE FE RAILROAD	69	0	69	0	0	69	0	69
VARIOUS	13.33.02	15289	ART-IN-TRANSIT	653	0	653	295	0	948	295	106 SEE NOTE 1
A112	13.42.02	10720 (15620)	MAIN SHOP BUILDING	22,995	221	23,216	44	7,308	26,906	3,690	22,946
A121	13.42.02	10722	M.O.W. BUILDING	1,670	164	1,834	(7)	19	1,825	(9)	1,799
A123*	13.76.93	11220	DEMOLITION, WESTRANCO BLDG	249	0	249	0	0	249	0	249
A130	13.43.04	10826	YARD LEADS/TRANSFER ZONE	37,678	(2,489)	35,189	(166)	2,051	40,493	5,304	33,439
A134*	13.76.93	11222	DEMOLITION, A1-032	79	0	79	0	0	79	0	79
A135	13.33.02	10931	UNION STATION - STG I	46,678	7,392	54,070	3,083	750	58,040	3,970	33,439
A137	13.75.95	11130	SO. PAC. COMM. RELOCATION	13	0	13	0	0	13	0	0
A141	13.23.04	11330	UNION STA TO 5th/HILL TUN	22,331	6,737	29,068	2,735	2603	31,775	2,707	18,688
A141	13.33.02	11340	CIVIC CENTER STA-STG I	39,140	1,148	40,288	5,866	2079	44,316	4,028	30,143
SUBTOTAL A141				61,471	7,885	69,356	8,601	4,682	76,091	6,735	48,831
A143	13.23.04	11332	WATER TREATMENT CHEMICALS	1,021	0	1,021	0	0	2,900	1,879	428 SEE NOTE 2
A144	13.23.04	11331 11031	WATER TREATMENT PLANT OPS	1,193	277	1,470	7	0	5,176	7	1,477
A145	13.33.02	10950	5th/HILL STATION-STG I	38,443	4,811	43,254	(15)	5,532	48,436	5,182	24,465
	13.75.95	11150	UTILITY VAULTS	226	0	226	0	0	226	0	226
				38,669	4,811	43,480	(15)	5,532	48,662	5,182	24,691

# METRO RAIL PROJECT

# STATUS REPORT

NOVEMBER 1989

## COST - CONSTRUCTION/PROCUREMENT CONTRACT COST SUMMARY

CONTRACT NO.	MACS CODE	AFE	DESCRIPTION	COLUMN A	COLUMN B	COLUMN C (COL A + B)	POTENTIAL CHANGES	CLAIMS	COLUMN D	COLUMN E (COL D - C)	COLUMN F
				AWARD VALUE	EXECUTED C.O. COST	CURRENT CONTRACT			REV. 7B FORECAST	VARIANCE	EXPENDED
A146	13.23.04	11050 15350	5th/HILL TO 7th FLWR TUN	18,222	2,320	20,542	384	2831	21,377	835	14,030
A161*	13.75.95	11160 20998 20722 20710 (21121)	7th/FLWR UTIL RELOC - MRT 7th/FLWR UTIL RELOC - LRT WATER BETTERMENT GAS BETTERMENT	1,496 1,557 200 0	10 60 26 46	1,506 1,617 226 46	0 0 0 0	0 0 0 0	1,506 1,617 226 46	0 0 0 0	1,633 1,470 234 5
			SUBTOTAL A161	3,253	142	3,395	0	0	3,395	0	3,342
A165	13.33.02	10960 20715 20920	7TH/FLWR STA - STG I MRT TELEGRAPH BETTERMENT 7TH/FLWR STA - STG I LRT	22,940 150 19,658	413 0 285	23,353 150 19,943	235 0 44	1,937 0 3,286	24,797 150 22,111	1,444 0 2,168	16,816 0 14,147
			SUBTOTAL A165	42,748	698	43,446	279	5,223	47,058	3,612	30,963
A167	13.33.02	10961 20925	7th/FLWR STA - STG II MRT 7th/FLWR STA - STG II LRT	12,487 6,159	107 1	12,594 6,160	52 10	156 0	12,907 5,888	313 (272)	1,070 176
			SUBTOTAL A167	18,646	108	18,754	62	156	18,795 0	41 0	1,246
A171	13.23.04	11060	7th/FLWR TO WIL/ALV TUN	26,340	392	26,732	(48)	465	27,647	915	25,735
A172*	13.76.93	11270	DEMOLITION, A1-208	26	0	26	0	0	26	0	26
A173*	13.76.93	11271	DEMOLITION, A1-221-2, 224-5	67	0	67	0	0	67	0	67
A175	13.33.02	10970	WIL/ALV. STA STG I	23,377	360	23,737	111	3,885	25,641	1,904	15,700
A610/A115	13.23.04	11080	TRACK WORK/YARD STORAGE	21,433	984	22,417	1,355	3,848	29,648	7,231	13,655
A612	13.23.04	11081	CONTACT RAIL	2,053	0	2,053	0	0	2,053	0	812
A615	13.23.04	11082	CONTACT RAIL COVERBOARD	450	0	450	0	0	450	(0)	0
A616	13.23.04	11086 20930	RAIL FASTENERS - MRT RAIL FASTENERS - LRT	1,555 2,621	(30) 1,295	1,525 3,916	0 0	0 0	1,524 3,916	(1) 0	1,524 3,655
			SUBTOTAL A616	4,176	1,265	5,441	0	0	5,441	(1)	5,179

# METRO RAIL PROJECT

# STATUS REPORT

NOVEMBER 1989

## COST - CONSTRUCTION/PROCUREMENT CONTRACT COST SUMMARY

CONTRACT NO.	MACS CODE	AFE	DESCRIPTION	COLUMN A	COLUMN B	COLUMN C (COL A + B)	POTENTIAL CHANGES	CLAIMS	COLUMN D	COLUMN E (COL D - C)	COLUMN F
				AWARD VALUE	EXECUTED C.O. COST	CURRENT CONTRACT			REV. 78 FORECAST	VARIANCE	EXPENDED
A620	13.62.01	11580	AUTOMATIC TRAIN CONTROL	11,017	207	11,224	406	0	13,181	1,957	1502
A630	13.23.04	11083	TRACTION PWR EQUIP - MRT	5,683	0	5,683	0	0	5,462	(221)	0
		20935	TRACTION PWR EQUIP - LRT	164	0	164	0	0	385	221	0
			SUBTOTAL A630	5,847	0	5,847	0	0	5,847	0	0
A631	13.23.04	11084	TRACTION PWR INST - MRT	6,864	0	6,864	0	0	7,870	1,006	182
		20940	TRACTION PWR INST - LRT	157	0	157	0	0	178	21	0
			SUBTOTAL A630	7,021	0	7,021	0	0	8,048	1,027	182
A640	13.62.08	11581	COMMUNICATIONS - MRT	34,316	60	34,376	2,676	0	42,681	8,305	6,193
		20945	COMMUNICATIONS - LRT	1,351	39	1,390	28	0	1,576	186	178
			SUBTOTAL A640	35,667	99	35,766	2,704	0	44,257	8,491	6,371
A650	13.13.00	15482	PASSENGER VEHICLES	53,987	(700)	53,287	(563)	0	53,423	136	4,892
A710	13.33.02	10981	ELEVAT'S & ESCAL'S - MRT	11,371	64	11,435	0	0	11,520	85	830
		20950	ELEVAT'S & ESCAL'S - LRT	974	18	992	0	0	907	(85)	57
			SUBTOTAL A710	12,345	82	12,427	0	0	12,427	0	887
A732	13.42.06	11715	WHEEL TRUING MACHINE	693	(2)	691	0	0	692	1	130
A740	13.23.04	11085	VENTILATION EQUIP.-LRT	3,189	24	3,213	0	0	3,214	1	1,041
		20960	VENTILATION EQUIP.-LRT	866	8	874	0	0	873	(1)	320
			SUBTOTAL A740	4,055	32	4,087	0	0	4,087	0	1,361
A745	13.33.02	10983	TPSS/AIR HNDLG EQUIP.	1,359	10	1,369	0	0	1,367	(2)	1,137
A750	13.33.02	10910	HAZARDOUS MATERIAL REMOVAL	0	1,401	1,401	1,168	0	2,569	1,168	867
A785	13.33.02	10985	FIRE EQUIPMENT	50	0	50	0	0	55	5	55

COST - CONSTRUCTION/PROCUREMENT CONTRACT COST SUMMARY

CONTRACT NO.	MACS CODE	AFE	DESCRIPTION	COLUMN A	COLUMN B	COLUMN C (COL A + B)		POTENTIAL CHANGES	CLAIMS	COLUMN D	COLUMN E (COL D - C)	COLUMN F EXPENDED
				AWARD VALUE	EXECUTED C.O. COST	CURRENT CONTRACT	REV. 7B FORECAST			VARIANCE		
A795	13.33.02	10987	UPS 50 KVA - MRT	516	0	516	0	0	521	5	0	
		20965	UPS 50 KVA - LRT	57	0	57	0	0	52	(5)	0	
			SUBTOTAL A795	573	0	573	0	0	573	0	0	
A796	13.33.02	10988	UPS 100 KVA	75	0	75	0	0	75	0	73	
H840	13.31.06	15483	FARE COLLECTION EQUIP	1,608	0	1,608	0	0	1,626	18	0	
SUB-TOTAL	AWARDED CONTRACTS - MRT			474,989	23,881	498,870	17,618	33,464	549,952	51,082	275,545	
SUB-TOTAL	AWARDED CONTRACTS - BETTERMENTS			350	72	422	0	0	422	0	239	
SUB-TOTAL	AWARDED CONTRACTS - LRT			33,564	1,706	35,270	82	3,286	38,638	3,368	20,003	
TOTAL	AWARDED CONTRACTS			508,903	25,659	534,562	17,700	36,750	589,012	54,450	295,787	

NOTES: 1. TO DATE, \$653,000 IN CONTRACTS HAVE BEEN AWARDED. THE TOTAL BUDGET REMAINS \$948,000.

2. CONTRACT PARTIALLY AWARDED

3. CLOSE OUT AUDIT IN PROGRESS TO RECONCILE CONTRACT EXPENDITURES

\* COMPLETED CONTRACTS

COST - FINANCIAL STATEMENT

MACS CODE	AFE	DESCRIPTION	ORIGINAL	UMTA		FORECASTED		%	%	%	%
			BASELINE BUDGET (REV.5)	APPROVED BUDGET	BUDGET (REV.7B)	OBLIGATED TO DATE	EXPENDED TO DATE	OBLIGATED APPV'D BUD	EXPENDED APPV'D BUD	OBLIGATED FORC'T BUD	EXPENDED FORC'T BUD
----- TOTAL LOCAL ACTIVITIES -----											
13.71.02		PROF. SERVICES ENG. & DES.	15,892	27,867	36,149	28,152	24,083	101%	86%	78%	67%
13.42.11		SUPPORT VEHICLES	0	0	14	13	13	N/A	N/A	N/A	N/A
13.72.00		FORCE ACCOUNT	68,185	71,315	76,122	30,529	30,529	43%	43%	40%	40%
10.73.00		CONTINGENCIES	47,974	22,543	72,041	0	0	0%	0%	0%	0%
13.79.00		GEN. & ADMIN.	1,674	3,946	3,992	1,553	1,170	39%	30%	39%	29%
13.76.91		RIGHT OF WAY ACQUISITION	47,918	54,029	60,071	55,270	49,393	102%	91%	92%	82%
13.71.04		PROF. SERVICES CONST. MGMT.	75,367	81,544	85,840	59,088	46,535	72%	57%	69%	54%
13.71.05		OWNER CONTROLLED INSURANCE	0	0	0	0	0	0%	0%	0%	0%
13.24.92		RAILROAD RELOCATION	17,050	17,050	17,050	15,459	15,459	91%	91%	91%	91%
13.42.02		CONST. OF MAINT.& REP. FAC.	0	0	0	0	0	N/A	N/A	0%	0%
13.43.04		CONST. OF STORAGE YARD	0	0	0	0	0	0%	0%	0%	0%
13.75.95		UTILITY RELOCATIONS	0	0	0	0	0	0%	0%	0%	0%
13.33.02		CONST. OF STATIONS	1,123	948	948	653	106	N/A	N/A	N/A	N/A
13.23.04		SUBWAY TUNNEL CONSTRUCTION	0	0	0	0	812	N/A	N/A	N/A	N/A
13.42.06		SERVICE AND MAINT. EQUIP.	0	0	0	0	0	0%	0%	0%	0%
13.62.01		OTHER SUPPORTIVE SERVICES	0	43	43	43	43	100%	100%	100%	100%
13.62.08		COMMUNICATIONS EQUIPMENT	0	0	0	0	0	N/A	N/A	N/A	N/A
13.13.00		PASSENGER VEHICLES	51,595	54,616	54,062	53,287	4,892	98%	9%	99%	9%
13.32.06		FARE COLLECTION EQUIPMENT	8,749	1,626	1,626	1,608	0	99%	0%	99%	0%
		TOTAL	335,527	335,527	407,958	245,655	173,035	73%	52%	60%	42%

**DEFINITIONS**

Original Baseline Budget - The budgeted UMTA Project/Local Activities breakdown established in the Financial Plan prepared after signing of the Full Funding Contract (Rev. 5, dated 9/25/86).

Approved Budget - Projected breakdown of UMTA Project/Local Activities (Rev. 6A dated 3/31/88).

Forecasted Budget - Forecast of the UMTA Project/Local Activities breakdown based on the latest Financial Plan (Rev 7A dated 6/30/89).

All percentages pertain to the approved Budget.

COST - FINANCIAL STATEMENT

MACS CODE	AFE	DESCRIPTION	ORIGINAL	UMTA		FORECASTED		%		%	
			BASELINE BUDGET (REV.5)	APPROVED BUDGET	BUDGET (REV.7B)	OBLIGATED TO DATE	EXPENDED TO DATE	OBLIGATED APPV'D BUD	EXPENDED APPV'D BUD	OBLIGATED FORC'T BUD	EXPENDED FORC'T BUD
-----											
TOTAL UMTA PROJECT											
-----											
13.42.11		SUPPORT VEHICLES	100	90	90	90	90	100X	100X	100X	100X
13.42.20		SUPPORT EQUIPMENT	3,716	1,736	1,801	1,360	1,360	78X	78X	76X	76X
13.42.07		MIS EQUIPMENT	4,487	3,666	3,262	2,309	2,306	63X	63X	71X	71X
13.76.91		RIGHT OF WAY ACQUISITION	27,395	33,936	53,926	33,019	31,399	97X	93X	61X	58X
13.71.02		PROF. SERVICES ENG. & DES.	177,766	177,771	171,000	169,921	169,786	96X	96X	99X	99X
13.71.04		PROF. SERVICES CONST. MGMT.	10,947	10,526	10,802	10,802	10,802	103X	103X	100X	100X
13.71.05		OWNER CONTROLLED INSURANCE	54,521	53,071	62,339	37,890	30,781	71X	58X	61X	49X
13.72.00		FORCE ACCOUNT	28,431	28,433	30,081	27,984	27,984	98X	98X	93X	93X
13.79.00		OTHER SUPPORTING SERVICES	9,487	9,552	8,238	5,698	5,701	60X	60X	69X	69X
13.79.00		WATER REPLENISHMENT	0	300	100	0	0	0X	0X	0X	0X
13.79.00		GEN. AND ADMIN.	4,505	7,707	9,518	4,908	3,594	64X	47X	52X	38X
10.73.00		CONTINGENCIES	0	64,986	0	0	0	0X	0X	0X	0X
10.77.00		REVENUE FINANCING	0	0	0	0	(345)	N/A	N/A	N/A	N/A
13.76.93		DEMOLITION	803	421	420	420	420	100X	100X	100X	100X
13.33.02		CONSTRUCTION OF STATIONS	271,687	267,356	310,713	212,126	124,597	79X	47X	68X	40X
13.42.02		CONST. OF MAINT. & REP. FAC.	24,442	24,919	28,731	25,050	24,745	101X	99X	87X	86X
13.43.04		CONST. OF STOR. YD & LEADS	80,201	49,225	42,171	35,189	21,735	71X	44X	83X	52X
13.23.04		SUBWAY TUNNEL CONSTRUCTION	152,002	124,056	139,201	120,764	76,760	97X	62X	87X	55X
13.75.95		UTILITY RELOCATIONS	18,670	16,629	14,165	11,927	7,346	72X	44X	84X	52X
13.33.02		CONST. OF PARKING FACILITY	2,000	0	0	0	0	0X	0X	0X	0X
13.42.06		SERVICE AND MAINT. EQUIP.	1,848	2,692	2,167	691	130	26X	5X	32X	6X
13.62.01		AUTOMATIC TRAIN CONTROL	22,622	11,227	13,181	11,224	1,502	100X	13X	85X	11X
13.62.08		COMMUNICATIONS EQUIPMENT	18,743	26,075	44,037	35,732	6,195	137X	24X	81X	14X
		TOTAL	914,373	914,373	945,943	747,104	546,888	82X	60X	79X	58X

# METRO RAIL PROJECT

# STATUS REPORT

NOVEMBER 1989

## COST - FINANCIAL STATEMENT

MACS CODE	AFE	DESCRIPTION	ORIGINAL	UMTA	FORECASTED						
			BASELINE BUDGET (REV.5)	APPROVED BUDGET	BUDGET (REV.7B)	OBLIGATED TO DATE	EXPENDED TO DATE	% OBLIGATED APPV'D BUD	% EXPENDED APPV'D BUD	% OBLIGATED FORC'T BUD	% EXPENDED FORC'T BUD
			-----								
			TOTAL UNDERTAKING								
			-----								
13.42.11		SUPPORT VEHICLES	100	90	104	103	103	114%	114%	99%	99%
13.42.20		SUPPORT EQUIPMENT	3,716	1,736	1,801	1,360	1,360	78%	78%	76%	76%
13.42.07		MIS EQUIPMENT	4,487	3,666	3,262	2,309	2,306	63%	63%	71%	71%
13.76.91		RIGHT OF WAY ACQUISITION	75,313	87,965	113,997	88,289	80,792	100%	92%	77%	71%
13.71.02		PROF. SERVICES ENG. & DES.	193,658	205,638	207,149	198,073	193,869	96%	94%	96%	94%
13.71.04		PROF. SERVICES CONST. MGMT.	86,314	92,070	96,642	69,890	57,337	76%	62%	72%	59%
13.71.05		OWNER CONTROLLED INSURANCE	54,521	53,071	62,339	37,890	30,781	71%	58%	61%	49%
13.24.92		RAILROAD RELOCATION	17,050	17,050	17,050	15,459	15,459	91%	91%	91%	91%
13.72.00		FORCE ACCOUNT	96,616	99,748	106,203	58,513	58,513	59%	59%	55%	55%
13.79.00		OTHER SUPPORTING SERVICES	9,487	9,595	8,281	5,741	5,744	60%	60%	69%	69%
13.79.00		GEN. AND ADMIN.	6,179	11,653	13,510	6,461	4,764	55%	41%	48%	35%
10.73.00		CONTINGENCIES	47,974	87,528	72,041	0	0	0%	0%	0%	0%
10.77.00		REVENUE FINANCING	0	0	0	0	(345)	0%	0%	0%	0%
13.62.08		COMMUNICATION EQUIPMENT	18,743	26,075	44,037	35,732	6,195	137%	24%	81%	14%
13.79.00		WATER REPLENISHMENT	0	300	100	0	0	0%	0%	0%	0%
13.76.93		DEMOLITION	803	421	420	420	420	100%	100%	100%	100%
13.33.02		CONSTRUCTION OF STATIONS	272,810	268,304	311,661	212,779	124,703	79%	46%	68%	40%
13.42.02		CONST. OF MAINT. & REP. FAC.	24,442	24,919	28,731	25,050	24,745	101%	99%	87%	86%
13.43.04		CONST. OF STOR. YD & LEADS	80,201	49,225	42,171	35,189	21,735	71%	44%	83%	52%
13.23.04		SUBWAY TUNNEL CONSTRUCTION	152,002	124,056	139,201	120,764	77,572	97%	63%	87%	56%
13.75.95		UTILITY RELOCATIONS	18,670	16,629	14,165	11,927	7,346	72%	44%	84%	52%
13.42.06		SERVICE AND MAINT. EQUIP.	1,848	2,692	2,167	691	130	26%	5%	32%	6%
13.62.01		AUTOMATIC TRAIN CONTROL	22,622	11,227	13,181	11,224	1,502	100%	13%	85%	11%
13.13.00		PASSENGER VEHICLES	51,595	54,616	54,062	53,287	4,892	98%	9%	99%	9%
13.32.06		FARE COLLECTION EQUIPMENT	8,749	1,626	1,626	1,608	0	99%	0%	99%	0%
13.33.02		CONST. OF PARKING FACILITY	2,000	0	0	0	0	0%	0%	0%	0%
GRAND TOTAL			1,249,900	1,249,900	1,353,901	992,759	719,923	79%	58%	73%	53%

## COST - COST REDUCTION PROPOSALS

No cost reduction (value engineering) proposals were submitted to the Configuration Control Board in November.

- 1) A130-CO-011A: Revise water/cement ratio
- 2) A130-CO-029: Delete temporary decking

The following two change orders based on cost reduction proposals were executed for Contract A130, Yard Leads and Transfer Zone, during the November period:

The table below summarizes the status of cost reduction proposals as of November 24, 1989:

CONTRACT NO.	VE NO.	DESCRIPTION	CONTRACTOR	CCB		DATE OF ACTION	CHANGE NO.	RTD SHARE OF SAVING (\$)	STATUS DATE	STATUS	
				DATE SUBMITTED	CONTRACTOR PROPOSED SAVING (\$)						
A112		REVISE WATER/CEMENT RATIO	ILLINOIS WALSH				A112-CO-007	14,856	12-Jul-88	EXECUTED *	
A112	A112-VE-001	REBUILT WHEEL BORING MACHINE	ILLINOIS WALSH	08-Jan-88	119,400	REJECT	08-Feb-88				
A130	A130-VE-001	REVISE WATER/CEMENT RATIO	TUTOR-SALIBA/PERINI	26-Jul-88	52,334	REJECT	29-Aug-88	A130-CO-011A	82,834	30-Oct-89	EXECUTED *
A130	A130-VE-003	DELETE TEMPORARY DECKING	TUTOR-SALIBA/PERINI	05-Apr-89	129,377	APPROVE	08-May-89	A130-CO-029	128,712	24-Aug-89	EXECUTED
A130	A130-VE-002	COMPACTION GROUTING	TUTOR-SALIBA/PERINI	15-Nov-88	829,423	REJECT	27-Feb-89				
A135	A135-VE-002	TEMPORARY RAILROAD BRIDGE	TUTOR-SALIBA/PERINI	16-Dec-88	362,193	APPROVE	30-Jan-89	A135-CO-018	211,000	20-Apr-89	EXECUTED
A135	A135-VE-001	REVISE WATER/CEMENT RATIO	TUTOR-SALIBA/PERINI	26-Jul-88	91,632	REJECT	29-Aug-88	A135-CO-020	165,046	01-Jun-89	EXECUTED *
A135	A135-VE-003	DEL/SUB WORK ITEMS IN RR TRCKYRD	TUTOR-SALIBA/PERINI	31-Jul-89	257,813	APPROVE	15-Aug-89	A135-CR-056	128,906	21-Aug-89	IN NEGOTIATION
A141	A141-VE-001	REVISE WATER/CEMENT RATIO	TUTOR-SALIBA/GROVES	11-Jul-88	149,576	APPROVE	08-Aug-88	A141-CO-027	170,187	12-Dec-88	EXECUTED
A175	A175-VE-001	REVISE WATER/CEMENT RATIO	TUTOR SALIBA/PERINI	13-Jul-88	75,072	REJECT	29-Aug-88	A175-CO-020	156,317	20-Dec-88	EXECUTED *
A616	A616-VE-001	ANCHOR INSERTS-CHANGE OF MAT	LORD CORP	08-Feb-88	35,380	APPROVE	14-Mar-88	A616-CO-004	17,690	29-Mar-88	EXECUTED
TOTAL					2,102,200				1,075,548		

\* District receives entire savings of this change based on Contract Specification Articles 35C & 35J



**DESIGN - CONTRACT SUMMARY****FACILITIES DESIGN SUMMARY****A.FINAL DESIGN****Contract A118, YARD SITE LANDSCAPING**

- Completed drawings and specifications. Final review is in progress.

**Contract A136, UNION STATION, STAGE II**

- Coordinated art-in-transit at east and west entrances and incorporated into the drawings and specifications.
- Incorporated gas monitoring tubes in bid documents.

**Contract A147, CIVIC CENTER, STAGE II**

- Continued effort to clarify control samples, drawings modifications and terrazzo flooring specifications.
- Finalized site grading and entrance slopes at northeast and southwest entrances.
- Reviewed impacts of utility modifications in A141 on entrance design.

**Contract A157, 5TH/HILL STATION, STAGE II**

- Incorporated late Claims Avoidance Review comments from the Construction Manager.
- Completed details and specifications of stainless steel panels for art-in-transit requirements.
- Reviewed sidewalk cross-slopes to comply with City of Los Angeles requirements of two percent slope at entrances plazas.
- Included gas tube monitoring installation in bid documents.
- Continued to clarify control samples, drawing modifications and terrazzo flooring specifications.

**Contract A760, SIGNS AND GRAPHICS**

- Completed incorporation of all review comments in final documents. Quality assurance checking is in progress prior to final submittal.
- Reviewing all Stage I Contracts for provision of power to station entrance signs.

**B.DESIGN SERVICES DURING ADVERTISING AND CONSTRUCTION****Contract A112, MAIN SHOP BUILDING**

- Completed draft investigation report to resolve remedial work on the fireproofing.

**A115/A610/ YARD STORAGE AREA**

- Responded to a field inquiring regarding sub-ballast elevations.
- Completed a change request effort (A610-CR-082) to transfer trackwork currently included in A112 to A610.
- Preparing sketches illustrating how to embed in-pavement switches in the Yard area near MOW building.
- Provided data to change underground special trackwork from current ties to direct fixation rubber grout.

**Contract A130, REALIGNMENT OF YARD LEADS**

- Clarified embedded conduit locations at portal areas in response to a verbal field inquiry.

**Contract A135, UNION STATION, STAGE I**

- Reviewed framing requirements for architecture elements at the baggage handling facility.
- Preparing a change request to incorporate modifications to mechanical openings resulting from completion of Stage II design.

**DESIGN - CONTRACT SUMMARY****Contract A141, UNION STATION TO 5TH/HILL**

- Resolved irrigation system interface during construction of the Court of Flags with Los Angeles County. Suggested minor temporary modifications and restoration after construction.
- Completed A141-CR-122 for modified electrical incoming service ductbank and initiated A141-CR-139 for incorporation of pipe sleeves due to completion of Stage II work.
- Completed drawings changes for Change Request A141-CR-037 concerning modifications to the fire protection and storm drain systems at the Los Angeles County Court of Flags underground parking structure.

**Contract A145, 5TH/HILL STATION UTILITIES**

- Completed A145-CR-149 modifying the electrical incoming service ductbank.
- Responded to verbal field inquiries regarding drainage piping and knock-out panel locations.
- Reviewed fire hose cabinet piping details.
- Clarified location of communications conduits with raceway schedules.
- Revised the drawings for A145-CR-132 concerning elevator hoistway size changes to reflect changed field conditions.

**Contract A146, TUNNELS - 5TH/HILL STATION TO 7TH/FLOWER STATION**

- Reviewed contractor's proposal for modifying the AR alignment and AL profile to conform to as-built alignment surveys. Recommended concurrence with contractor's proposal.

**Contract A165, 7TH/FLOWER STATION**

- Resolved problems emanating from changed conditions of existing foundation at east entrance in Roosevelt Building.

**Contract A167, 7TH/FLOWER STATION, STAGE II**

- Initiated change request for revision of escalator handrail profile due to modification in A710.
- Clarified size of exposed conduits for communications systems.

**Contract A175, WILSHIRE/ALVARADO, STAGE I**

- Initiated Change Request A175-CR-083 for modification to plumbing, fire protection, and structural openings resulting from Stage II completion effort.
- Completed A175-CR-057 that modified the incoming electrical service ductbank.
- Changing drawings for Change Request A175-CR-075 concerning modified emergency exit No. 7 dimensions.
- Prepared written response to field inquiry A175-FI-083 clarifying the location of the slab floor drains below east shaft.

**Contract A187, WILSHIRE/ALVARADO, STAGE II**

- Issued Addendum No. 2 for revision of fire/smoke dampers.
- Completed design work for Addendum No. 3.

**A710/A720, ESCALATOR/ELEVATORS**

- Resolved changes at upper pit area of escalators to accommodate additional handrails to compensate for approved shorter balustrades.

**DESIGN - CONTRACT SUMMARY****SYSTEMS DESIGN SUMMARY****A.FINAL DESIGN****Contract A680, OPERATIONAL GRAPHICS**

- Incorporated prior review comments.
- Finalized formats for development of sign schedules (i.e., quantities, locations, legends, etc.).

**Contract A730, FIXED SHOP EQUIPMENT**

- No activity this month.

**Contract A735, FREE STANDING EQUIPMENT**

- No activity this month.

**Contract A775, MOBILE EMERGENCY AND MAINTENANCE EQUIPMENT**

- No activity this month.

**B.DESIGN SUPPORT PROCUREMENT SUPPORT****Automatic Train Control**

- Reviewed nineteen submittals summarized below, coordinated and transmitted responses:
  - 2 TC&C Room FDR Corrections
  - 11 Test Procedures
  - 2 Installation Drawings
  - 2 Test Reports
  - 1 ATC Vehicle FDR Corrections

- 1 Yard Cable Plan.
- Traction Power (Contracts A612, A615, A630, A631)
  - A612, Contact Rail Procurement
  - Reviewed and commented on the following:
    - Qualification/Production Test Report resubmittal for support insulators
    - Shop drawing and wear cycle qualification test report for expansion joint assembly.
  - A631, Traction Power Installation
  - Reviewed and commented on the following submittals:
    - Communications interface cabinets
    - Generator fuel storage tank
    - DC cable connectors to contact and running rails
    - 600 V, 2 KV and 35 KV cable
    - AC busway
    - Panelboards
    - DC load-break disconnect switches
    - Resubmittal for control power supply
    - Request for information on the substation wall thickness to be used in design of the DWP/SCRTD interface bushings.

**DESIGN - CONTRACT SUMMARY**

**A640 Communications**

- Completed review of Bechtel's Change Request No. CP-003 for Fire Alarm Zones.
- Responded to four field inquiries, six CDRLs, participated in the A640 Quarterly Progress Review, and participated in design review meetings with PDCD/MRTC/SCRTO.
- Continued to annotate drawings to add installation of gas monitoring tubing in stations to Stage II contracts.
- Continued to review gas monitoring routing and concern regarding bend radius of the tubing.

**Passenger Vehicle**

- Reviewed submittals concerning ATO, ATP coil mounting, August Monthly Report, bar chart, Breda integration for PDR, carbody FDR, carbody test notification, color strip, communication FDR, compression test, coupler FDR, coupling speed, critical/catastrophic item list, current vs. time, degraded performance, directed changes, drawing tree and list, final assembly site change, hazard analysis, Human Factors Report, manual and training, mock-up review, motor characteristics, operating speed vs. equipment availability, paint specifications, plping procedures, PSS-antenna mounting, PUC checklist, QA audit procedure, ripple and inrush currents, regenerative current and power vs. speed, response to CN-002A, response to CN-003, response to CO-005, run-time and energy, seats FDR, shipment of first carshell, side doors FDR, software QA plan (lighting and signs), speed and time vs. distance, stress analysis, system support plan, tamperproof fastener list, terminal blocks, test notification, test procedures trucks FDR, and unintentional movement protection.
- Drafted change requests covering ad/map frames, static and dynamic outline, and performance level control and reducer oil temperature rise.

- Worked on four "Notice of Action" items.

**Safety/Assurance**

- Reviewed and submitted comments on ten (10) major CDRL submittals for Contracts A612, A630, A640, and A650.
- Reviewed and provided comments on the following documents:
  - Change Request A175-CR-075
  - Two A640 RFIs on emergency ventilation operation procedures.
- Continued preparation of the following documents in support of the Safety Certification Program:
  - Assimilation of initial draft of Criteria Conformance Checklist for A136, A187, and A631
  - Audit activities/report development safety certification contract close-out.
- Completed resolution of comments received on the initial draft of the A631 Specification Conformance Checklist; distributed final approved document to project participants for use.

**Issues/Areas of Concern**

The following actions are needed:

- Awaiting District approval on amendments to extend services and adjust contract ceiling prices on Contracts 992 and 1011.
- Finalize planning or resolve funding for the following extra work items that have been authorized or are being considered:
  - Corrosion Control - As-Built Field Inspection
  - Art-in-Transit, Additional Design

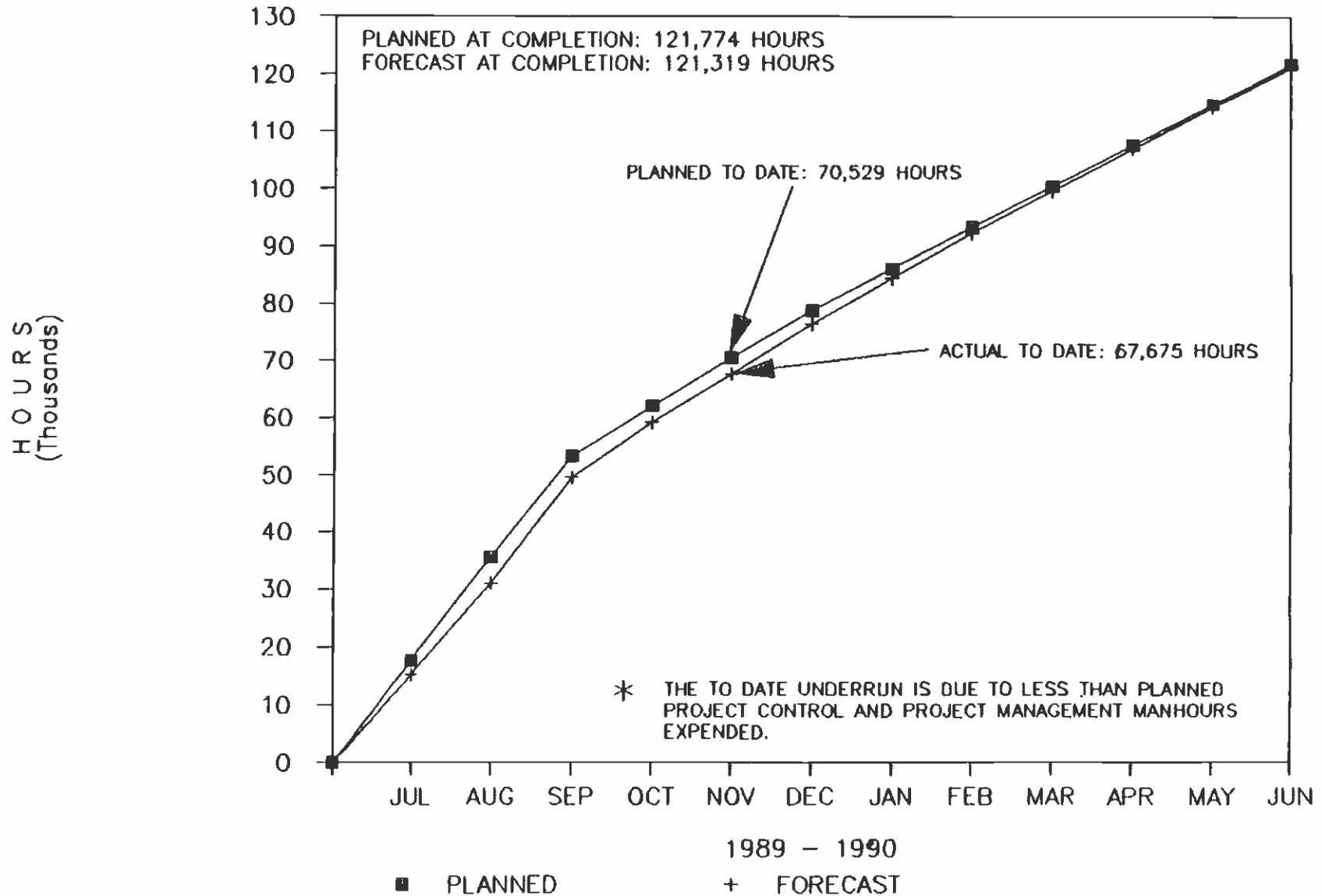
**DESIGN - CONTRACT SUMMARY**

- DPW Incoming Services, Additional Design
- A136, Additional Knockout Panel
- A136, Parking Lot Changes
- A136, Staging Changes and Utilities
- A147/A157, New Floor Tile Changes
- A147/A157, Extensive Mechanical and Electrical Changes
- A640, Additional Design Reviews
- ODCs, Additional Printing Costs, NOAs and A640.

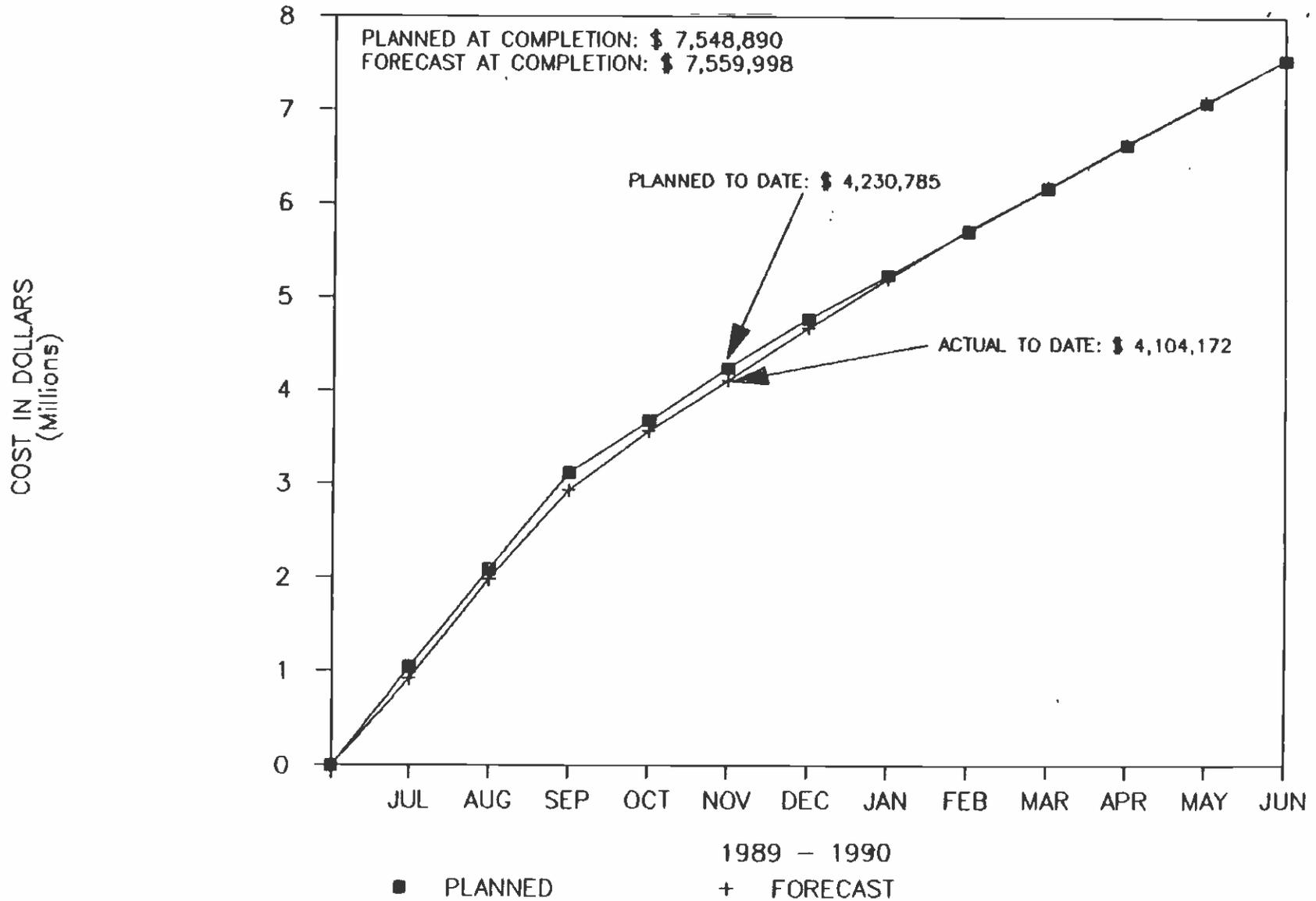
**30 Day Look-Ahead**

- Remaining Stage II drawings will be sent to the A640 Contractor as updated information for the Communications design.
- Details of the Combined Bid Instructions and Form will be completed and submitted to the District for approval.
- Systems Design will submit the 85% (prefinal) review of A680, Operational Graphics.
- Additional resources will be applied to reducing the backlog of A650 Passenger Vehicle submittals currently in the review cycle.
- Resolve A760 procurement concerns.

DESIGN - MRTC MOS-1 MANHOUR SUMMARY



DESIGN - MRTC MOS-1 COST SUMMARY





## REAL ESTATE - STATUS SUMMARY

CCU	NO. OF PARCELS	NUMBER CERT'D	BOARD APPROVED	APPR'SLS PENDING	JUST COMP APPROVED	OFFERS MADE	AGR'MNT SIGNED	CONDEMNATION	CLOSED/ROP	PARCELS AVAILABLE	PARCELS NOT AVAILABLE	RELOCATIONS COMPLETED	CONSTRUCTION NTP DATE	NOTES
A112	1	1	1	0	1	1	1	0	1	1	0	4	09/28/87	CLOSED
A130	16	16	16	0	16	16	12	4	16	16	0	3	07/01/88	CLOSED
A135	7	7	7	0	7	7	5	2	7	7	0	0	06/13/88	CLOSED
A141	18	18	18	0	18	18	18	0	18	18	0	0	03/16/87	CLOSED
A145	13	13	13	0	13	13	12	1	13	13	0	0	04/02/87	CLOSED
A146	11	11	11	0	11	11	4	7	11	11	0	0	04/06/87	CLOSED
A165	3	3	3	0	3	3	1	2	3	3	0	0	01/05/88	CLOSED
A171	14	14	14	0	14	14	13	1	14	14	0	5	02/02/87	CLOSED
A175	10	10	10	0	10	10	5	5	10	10	0	40	07/27/87	CLOSED
A610	1	1	1	0	1	1	1	0	1	1	0	0	01/04/88	CLOSED
<b>TOTAL</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>0</b>	<b>94</b>	<b>94</b>	<b>72</b>	<b>22</b>	<b>94</b>	<b>94</b>	<b>0</b>	<b>52</b>		

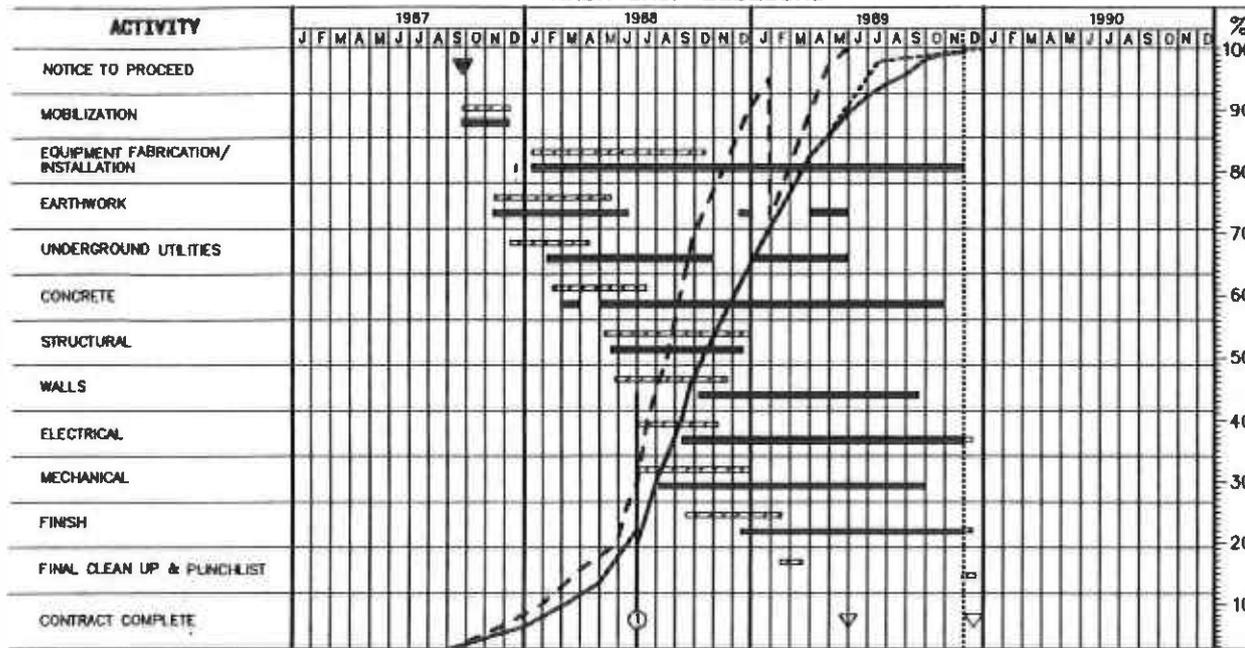
**NOTES:**

THE REAL ESTATE REQUIRED FOR MOS-1 CONSTRUCTION IS AVAILABLE EITHER UNDER OWNERSHIP BY THE DISTRICT OR UNDER A RIGHT-OF-ENTRY. CURRENTLY, THERE ARE 94 PARCELS AVAILABLE FOR CONSTRUCTION. NEGOTIATIONS ARE CONTINUING ON 4 PARCELS WHICH ARE AVAILABLE FOR CONSTRUCTION UNDER A RIGHT-OF-ENTRY AGREEMENT.



## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A112 MAIN SHOP BUILDING



LEGEND:   
 WORK ACTIVITY: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 VALUE OF WORK IN PLACE: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 MILESTONE: PLANNED (inverted triangle), ACTUAL (triangle), CURRENT FORECAST (triangle)

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
22,995	221	23,216	26,906	3,690	22,946

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
3	85	80	221

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.

A112 CONTRACTOR: Illinois-Walsh Construction Co., Inc.

**A. Work Accomplished This Period:**

**Completed:**

- exterior paving and traction power substation installation

**Continued:**

- electrical and plumbing work
- truck and car hoist, body supports, turntables and HVAC control devices installation
- finish and punch list work

**B. Work Planned Next Period:**

**Continue:**

- electrical, mechanical and concrete work
- installation and testing of hoist machine electrical work
- finish work and punch list reviews

**C. Issues/Proposed Resolutions:**

**Issue** - Part of the installed roofing does not meet fireproofing standards.

**Resolution** - The contractor has been advised of this fact and is taking corrective measures.

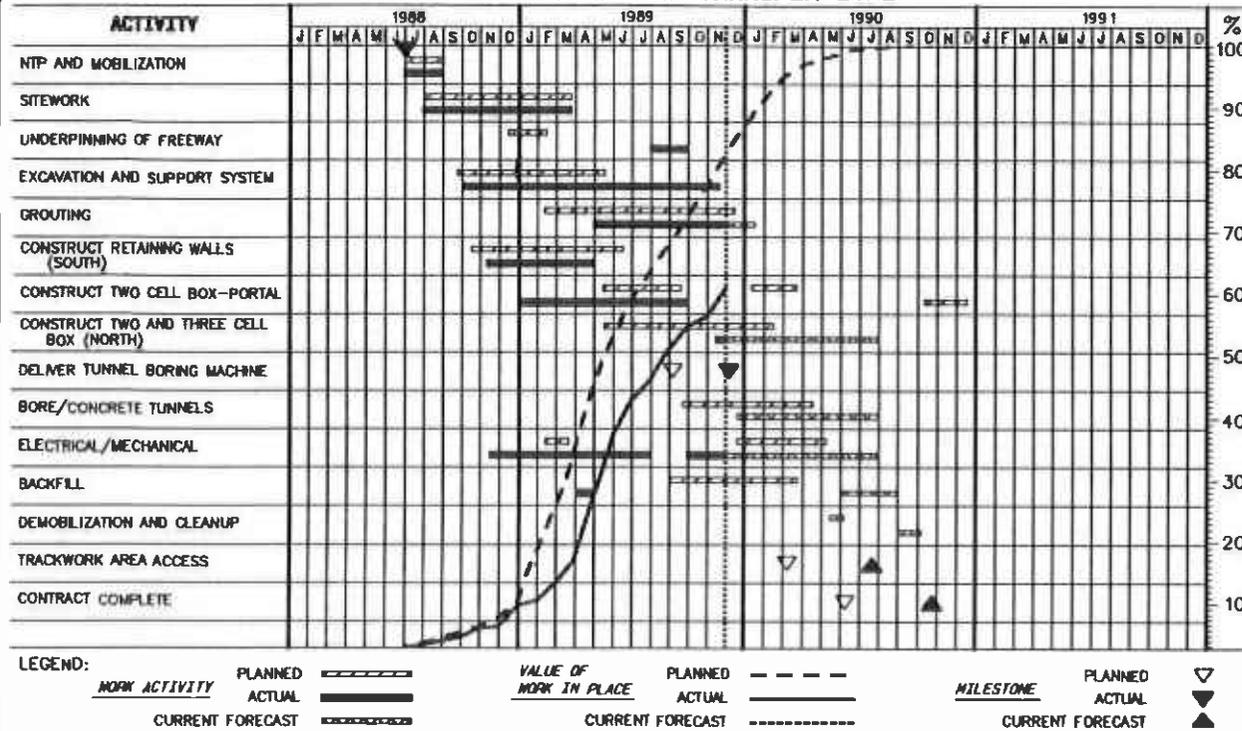
**D. Work-in-Place (percent):**

Period	Plan	Actual	Variance
Period	0.0	0.4	0.4
Cumulative	100.0	99.1	(0.9)

The variance is due to slow progress of finish work in the High Bay area and to previous delays in car hoist equipment pit construction, which affected the completion of earthwork, concrete slab on grade, and finish work in the High Bay area. The completion date for this contract was June 1, 1989. Note: The contract value was adjusted this period to reflect the incorporation of change orders.

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A130 YARD LEADS AND TRANSFER ZONE



A130 CONTRACTOR: Tutor-Saliba/Perini, J.V.

A. Work Accomplished This Period:

Completed:

- traction power substation excavation
- busway underpinning

Continued:

- north two cell box structure excavation and strut installation
- storm drain line installation
- grouting under Santa Ana Freeway

B. Work Planned Next Period:

Continue:

- grouting, excavation and utility work

Begin:

- tunnel excavation
- traction power substation concrete work

C. Issues/Proposed Resolutions:

None

D. Work-in-Place (percent):

	Plan	Actual	Variance
Period	5.0	2.5	(2.5)
Cumulative	81.5	60.6	(21.0)

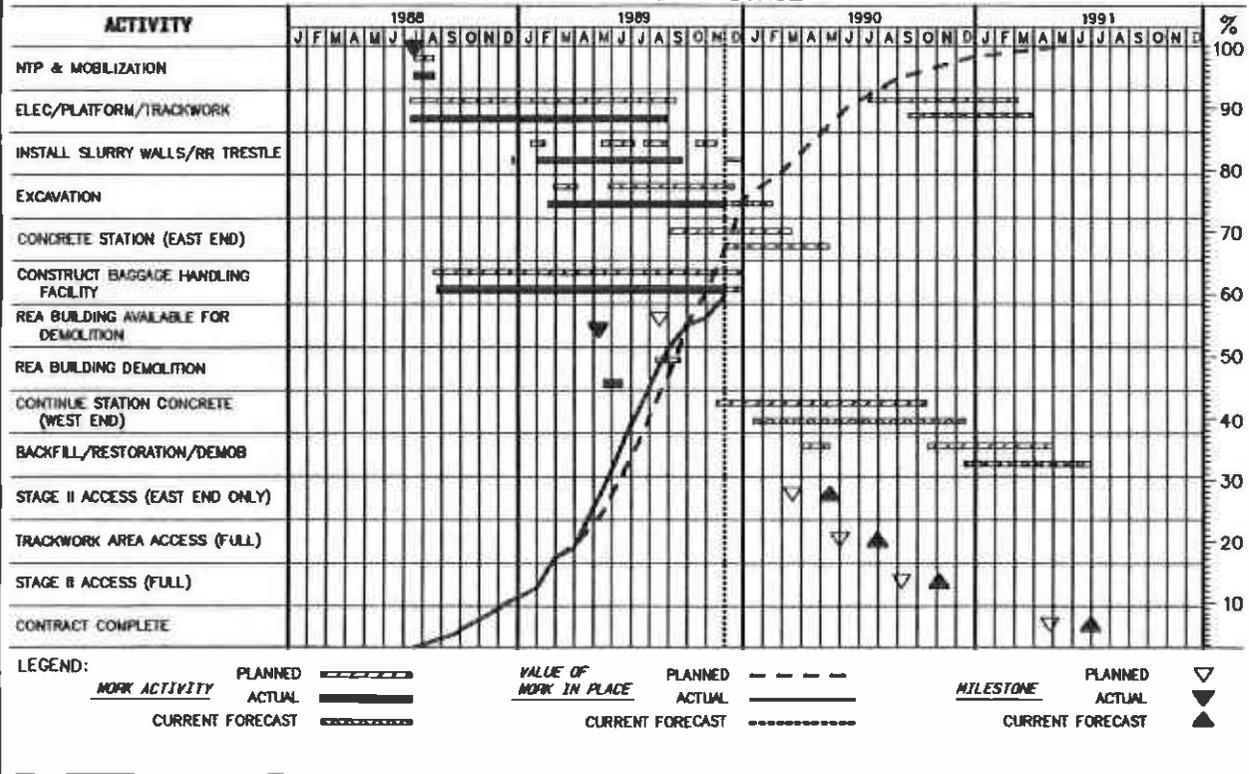
The start of tunnel mining has been delayed and is now scheduled to begin in December. The variance is also due to prior delays in completing the installation of the slurry wall at the north end. Delays in excavation of the 2 cell box structure had previously delayed the start of concreting. Note: The contract value was adjusted this period to reflect the incorporation of change orders.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
37,678	(2,489)	35,189	40,493	5,304	33,439

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
5	62	35	(2,489)

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A135 UNION STATION STAGE I



A135 CONTRACTOR: Tutor-Saliba/Perini, J. V.

**A. Work Accomplished This Period:**

**Completed:**

- 285 Tons steel (1,405 Tons to date)
- 4,782 CY concrete (21,125 CY to date)

**Continued:**

- station excavation
- elevator, drywall, wet standpipe, tieback, drain and electrical conduit installation
- paving and demolition work

**B. Work Planned Next Period:**

**Complete:**

- elevator no. 1, no. 2, and no. 3 installation in the Baggage Handling Facility

**Continue:**

- station excavation
- drywall, fire sprinkler and electrical installations in the Baggage Handling Facility
- invert and wall concrete placement

**C. Issues/Proposed Resolutions:**

None

**D. Work-in-Place (percent):**

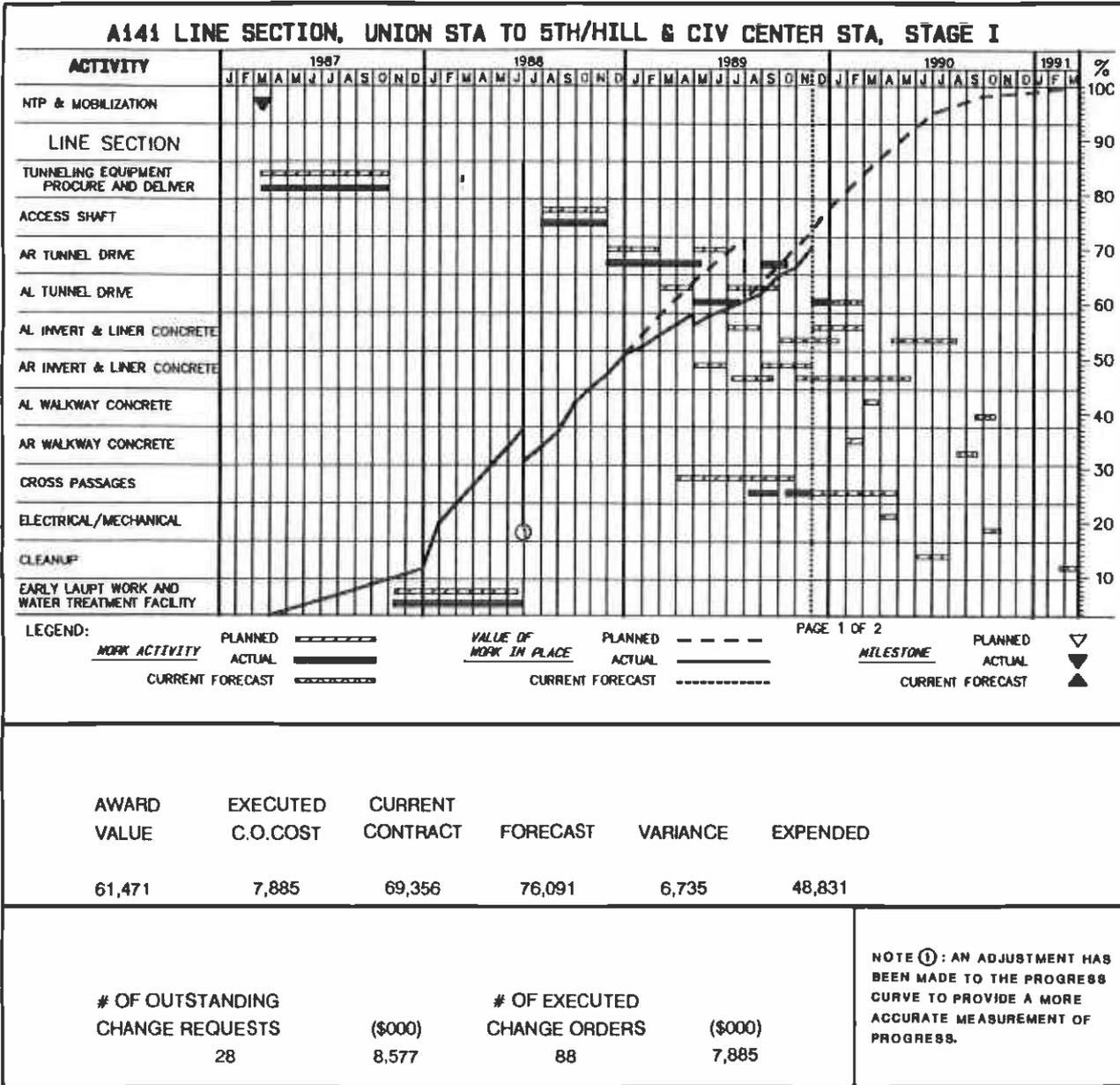
	Plan	Actual	Variance
Period	9.0	4.8	(4.2)
Cumulative	69.7	62.4	(7.3)

The variance is due to delayed resumption of slurry wall placement for Phase II work. The variance is also due to excavation delays which impacted the start of slab-on-grade and column concrete work. Note: The contract value was adjusted this period to reflect the incorporation of change orders.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
46,678	7,392	54,070	58,040	3,970	33,439

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
16	1,816	84	7,392

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY



**A141 CONTRACTOR:** Tutor-Saliba/S.J. Groves & Sons, J.V.

**A. Work Accomplished This Period:**  
**Completed:**

- 1,559 CY concrete (22,221 CY to date)
- 190 Tons steel (2,260 Tons to date)
- 106 LF tunnel (7,026 LF to date)

**Continued:**

- concrete and rebar placement; geotechnical instrumentation, high density polyethylene (HDPE) membrane and mechanical/electrical installations at Civic Center Station
- AL south tunnel re-mining
- cross-passage work

**Began:**

- AL tunnel mining from Union Station to Civic Center Station

**B. Work Planned Next Period:**  
**Continue:**

- electrical and mechanical conduits/ducts, and HDPE installation at Civic Center Station
- dewatering operations at Union Station
- concrete work
- cross-passage excavation

**Began:**

- tunnel invert concrete work

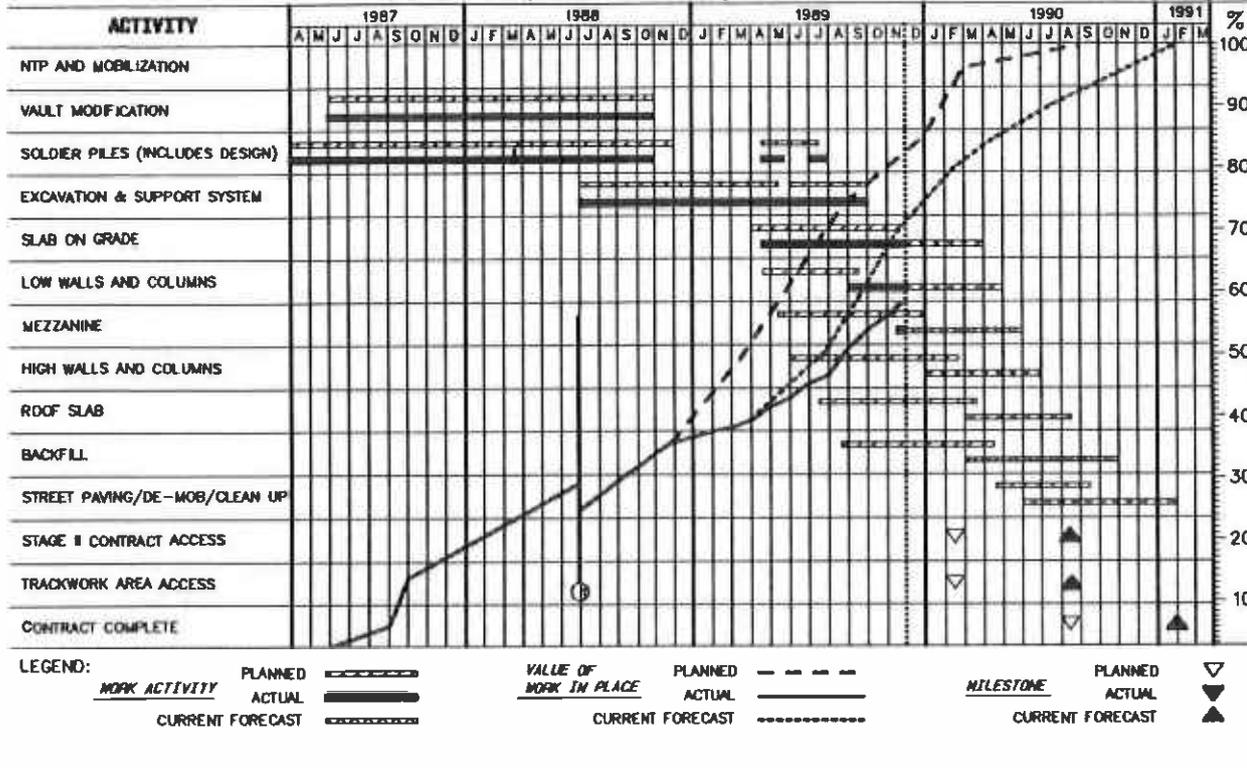
**C. Issues/Proposed Resolutions:**

None



CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

A145 5TH/HILL STATION, STAGE I



A145 CONTRACTOR: Guy F. Atkinson Construction Co.

A. Work Accomplished This Period:

Completed:

- 3,132 CY concrete (21,275 CY to date)
- 276 tons steel (4,048 tons to date)
- station invert concrete pours, HDPE installation and southeast entrance excavation

Continued:

- lagging, rebar, mud mat, electrical/plumbing embeds, waters/struts and station grounding system installation
- strut and water removal at level IV

B. Work Planned Next Period:

Continue:

- rebar installation
- excavation and concrete work

C. Issues/Proposed Resolutions:

None

D. Work-in-Place (percent):

	Plan	Actual	Variance
Period	3.3	2.5	(0.8)
Cumulative	84.0	59.5	(24.5)

The cumulative variance is due to the delayed completion of invert concrete placement and to the delayed start of mezzanine slab concrete placement. The variance is also due to inadequate work force and slow installation of the excavation support system, contaminated soil removal, stoppage of excavation at the northern end of the station because of the delay in installing temporary sewer line C, and inefficient concrete work. Note: The contract value was adjusted this period to reflect the incorporation of change orders.

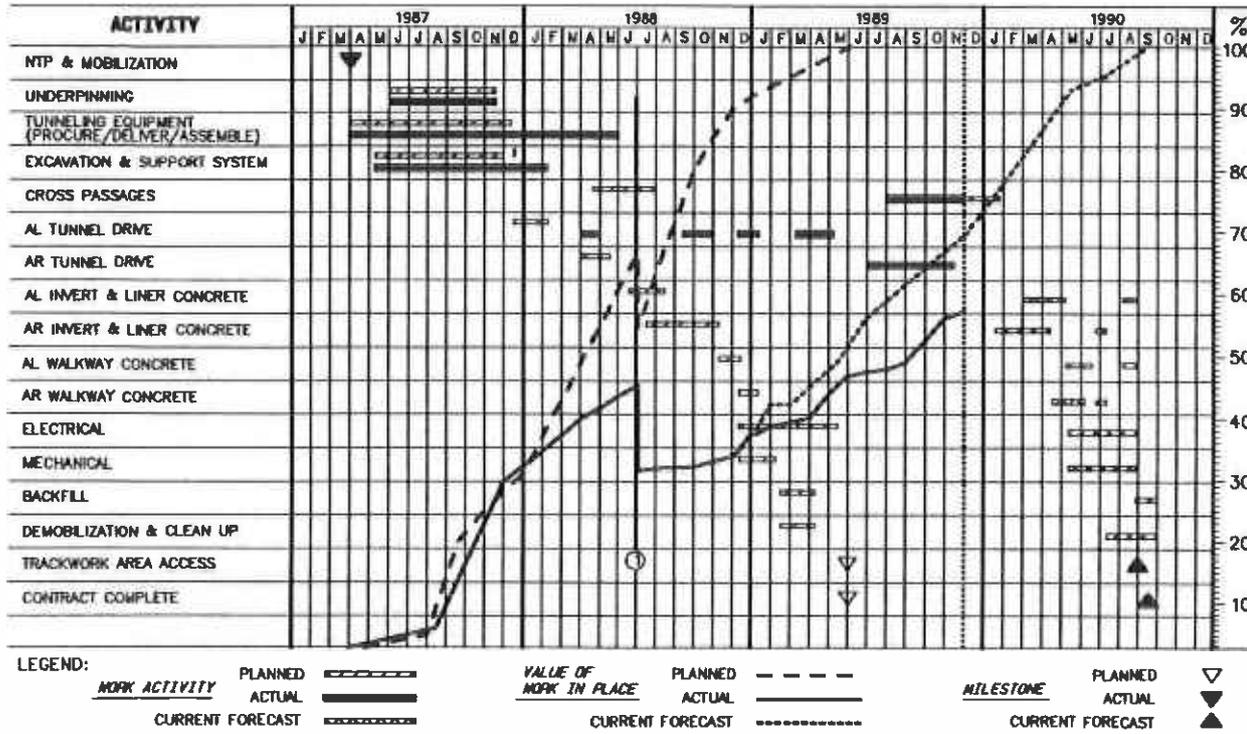
AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
38,669	4,811	43,480	48,662	5,182	24,691

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
18	471	126	4,811

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A146 LINE SECTION 5TH/HILL TO 7TH/FLOWER



A146 CONTRACTOR: Shank-Ohbayashi

A. Work Accomplished This Period:

Completed:

- 9 LF tunnel (4,300 LF to date)
- 2 tons steel (101 tons to date)
- tunnels, pump station, and cross-passages excavation

Began:

- high density polyethylene membrane (HDPE) and reinforcement installation in cross passages
- concrete batch plant construction

B. Work Planned Next Period:

Complete:

- concrete batch plant construction

Begin:

- cross-passage and pump station concreting

C. Issues/Proposed Resolutions:

None

D. Work-in-Place (percent):

	Plan	Actual	Variance
Period	5.7	1.8	(3.9)
Cumulative	71.0	57.7	(13.3)

The cumulative variance is due to delays resulting from resequencing of concrete placement activities. The variance is also due to discontinued operations during the compaction grouting specification dispute, equipment problems, modification of the tunneling machine shield to provide the capability to chemical grout ahead of the shield and compaction grout from within the shield.

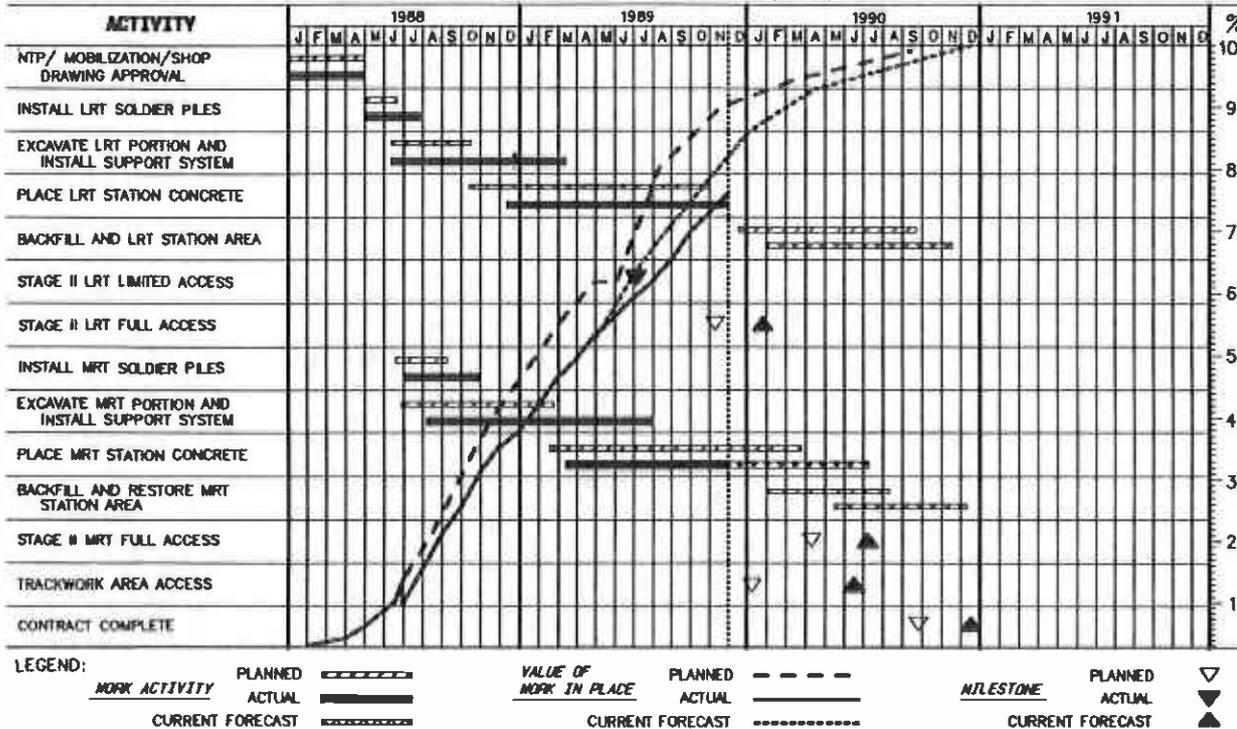
AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
18,222	2,320	20,542	21,377	835	14,030

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
7	54	52	2,320

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A165 7TH/FLOWER STATION STAGE I



A165 CONTRACTOR: Granite Construction Co.

A. Work Accomplished This Period:

Completed:

- 3,629 CY concrete (38,978 CY to date)
- 433 tons steel (7,503 tons to date)

Continued:

- pipe strut removal
- structural column placement
- roof, column, wall and base concrete slab placement

B. Work Planned Next Period:

Continue:

- base slab, roof and wall concrete placement

C. Issues/Proposed Resolutions:

None

D. Work-In-Place (percent):

	Plan	Actual	Variance
Period	2.0	3.5	1.5
Cumulative	90.8	76.6	(14.2)

The cumulative variance is due to slower than planned concrete placement, delays in the Roosevelt Building demolition, delays to the east and west bulkhead excavations, and interference from Pac Bell ducts on Flower St.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
42,748	698	43,446	47,058	3,612	30,963

# OF OUTSTANDING CHANGE REQUESTS	# OF EXECUTED CHANGE ORDERS
33	75

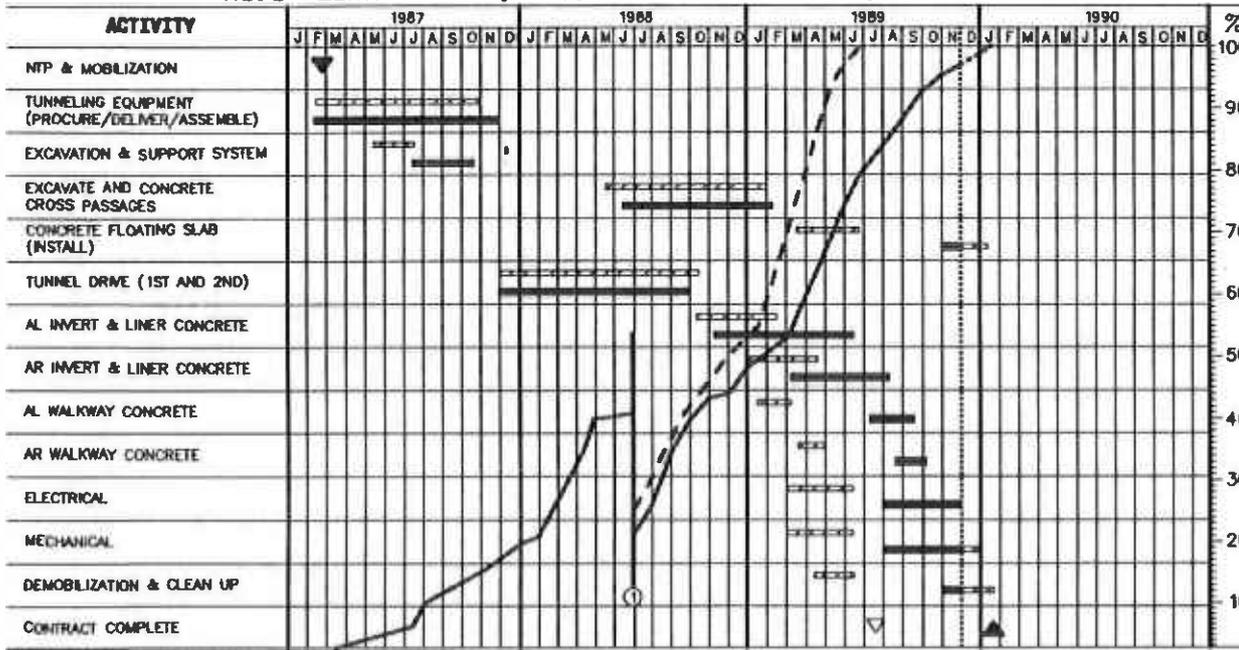
(\$000)	(\$000)
1,221	698

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.



CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

A171 LINE SECTION, 7TH/FLOWER TO WILSHIRE/ALVARADO



LEGEND:   
 WORK ACTIVITY: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 VALUE OF WORK IN PLACE: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 MILESTONE: PLANNED (inverted triangle), ACTUAL (triangle), CURRENT FORECAST (inverted triangle)

A171 CONTRACTOR: Shank-Ohbayashi

A. Work Accomplished This Period:

Completed:

- wet standpipe installation and testing
- conduit, tunnel lighting, cable, walkway covers, and AL floating slab installation

Began:

- AL and AR invert repairs
- contract close-out procedures

B. Work Planned Next Period:

Complete:

- invert repairs and AR floating slab installation

Continue:

- finish work

C. Issues/Proposed Resolutions

None

D. Work-in-Place (percent):

	Plan	Actual	Variance
Period	0.0	0.6	0.6
Cumulative	100.0	97.8	(2.2)

The cumulative variance is due to the late start of walkway concrete work and delays in AL and AR tunneling and cross passage work which has delayed the pouring of the invert concrete. The planned completion date for this contract was July 24, 1989.

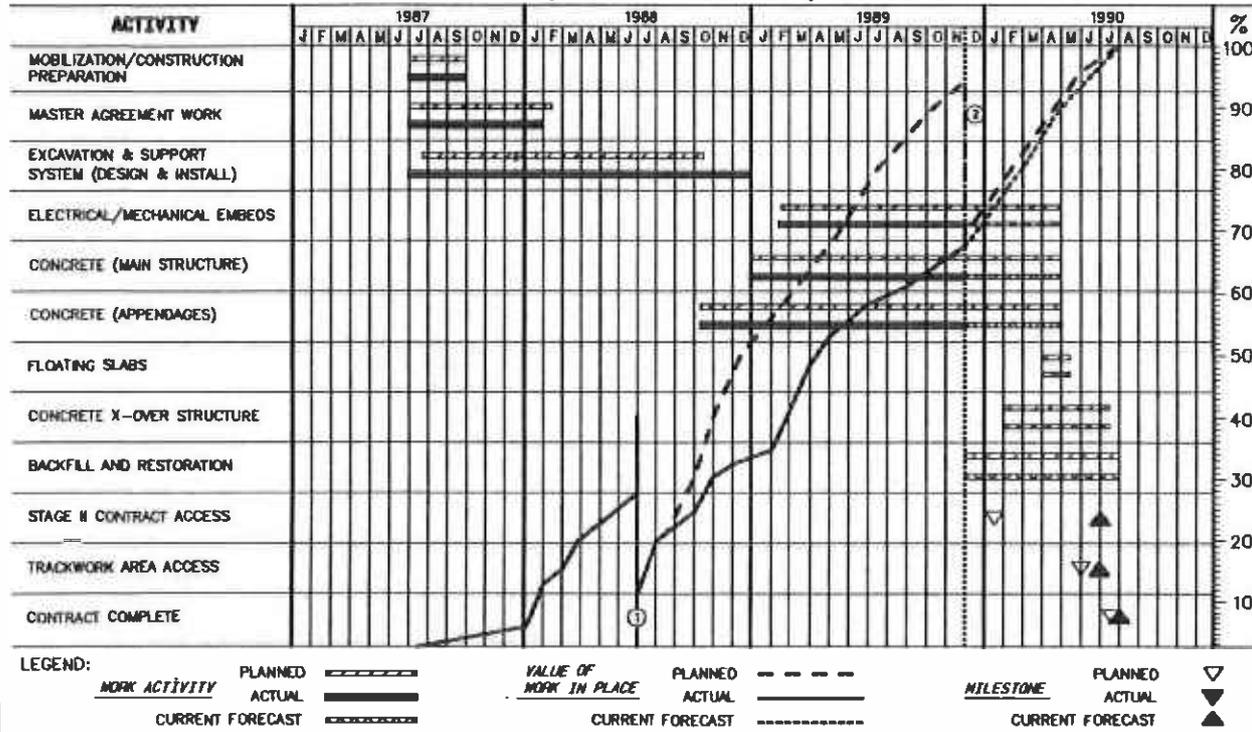
AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
26,340	392	26,732	27,647	915	25,735

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
3	(47)	13	392

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A175 WILSHIRE/ALVARADO STATION, STAGE I



A175 CONTRACTOR: Tutor-Saliba-Perini/JV

A. Work Accomplished This Period:

Completed:

- 1,145 CY concrete (27,295 CY to date)
- 84 tons steel (2,665 tons to date)

Continued:

- concrete work including mezzanine slab, level II walls, and roof slab placement
- high density polyethylene (HDPE) membrane, reinforcing steel, piping, and Contract A171/A175 interface support installation
- dewatering and site clean-up

B. Work Planned Next Period:

Continue:

- knee brace installation at Contract A171/A175 interface
- concrete work including mezzanine, wall and roof slab placement

C. Issues/Proposed Resolutions:

None

D. Work-in-Place (percent):

	Plan	Actual	Variance
Period	3.6	1.4	(2.2)
Cumulative	70.6	68.4	(2.2)

The cumulative variance is due to slow concrete placement and previous delays in excavation, out-of-sequence concrete work, lack of adequate resources, and delayed access to the Contract A171 shaft area.

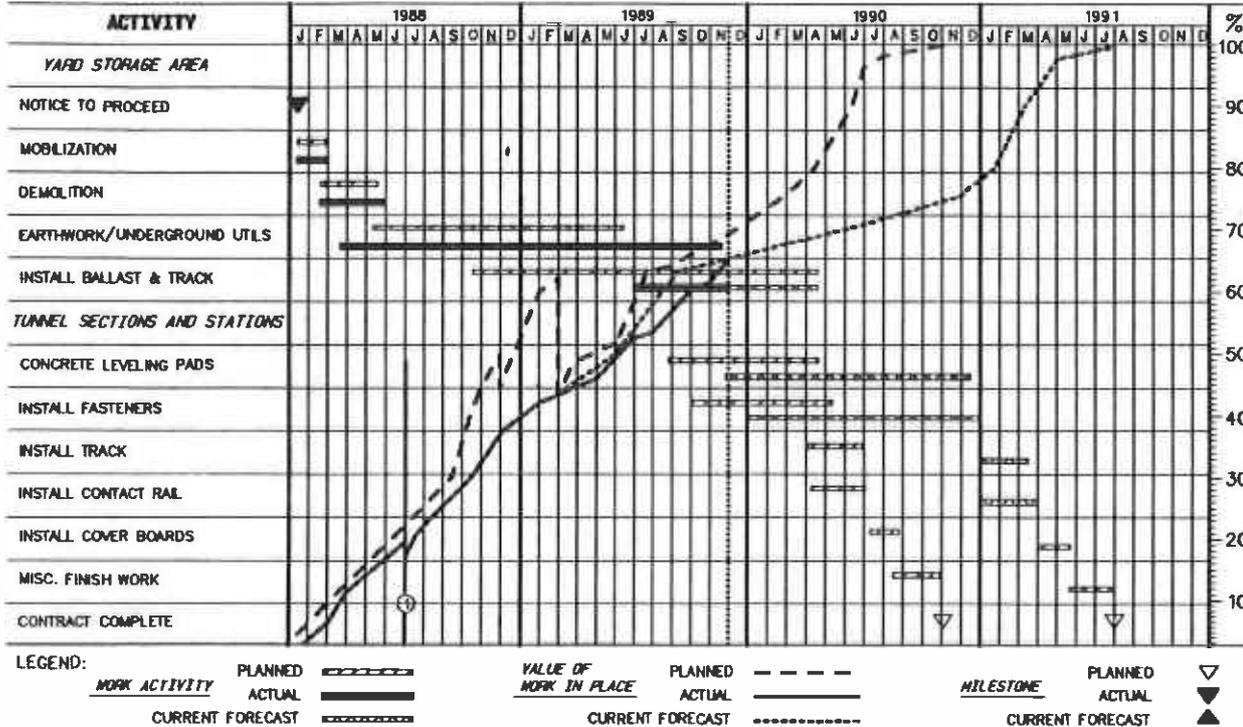
AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
23,377	360	23,737	25,641	1,904	15,700

# OF OUTSTANDING CHANGE REQUESTS	((\$000))	# OF EXECUTED CHANGE ORDERS	((\$000))
21	413	69	360

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.

## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A610/A115 TRACKWORK INSTALLATION/YARD AREA



**A610/A115 CONTRACTOR:** California Engineering Contractors, Inc.

**A. Work Accomplished This Period:**

**Completed:**

- 134 CY concrete (134 CY to date)
- fire protection water line pressure testing

**Continued:**

- yard track placement
- grading and ballast placement
- shop welding rail
- punch list work

**B. Work Planned Next Period:**

**Complete:**

- domestic and fire water line pressure testing

**Continue:**

- grading and ballast placement
- rail welding and placement

**C. Issues/Proposed Resolutions:**

None

**D. Work-in-Place (percent):**

	Plan	Actual	Variance
Period	4.1	2.8	(1.3)
Cumulative	74.8	65.4	(9.4)

The variance is due to delayed start of grading and ballast placement due to the late completion of underground electrical and utility installations.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
21,433	984	22,417	29,648	7,291	13,655

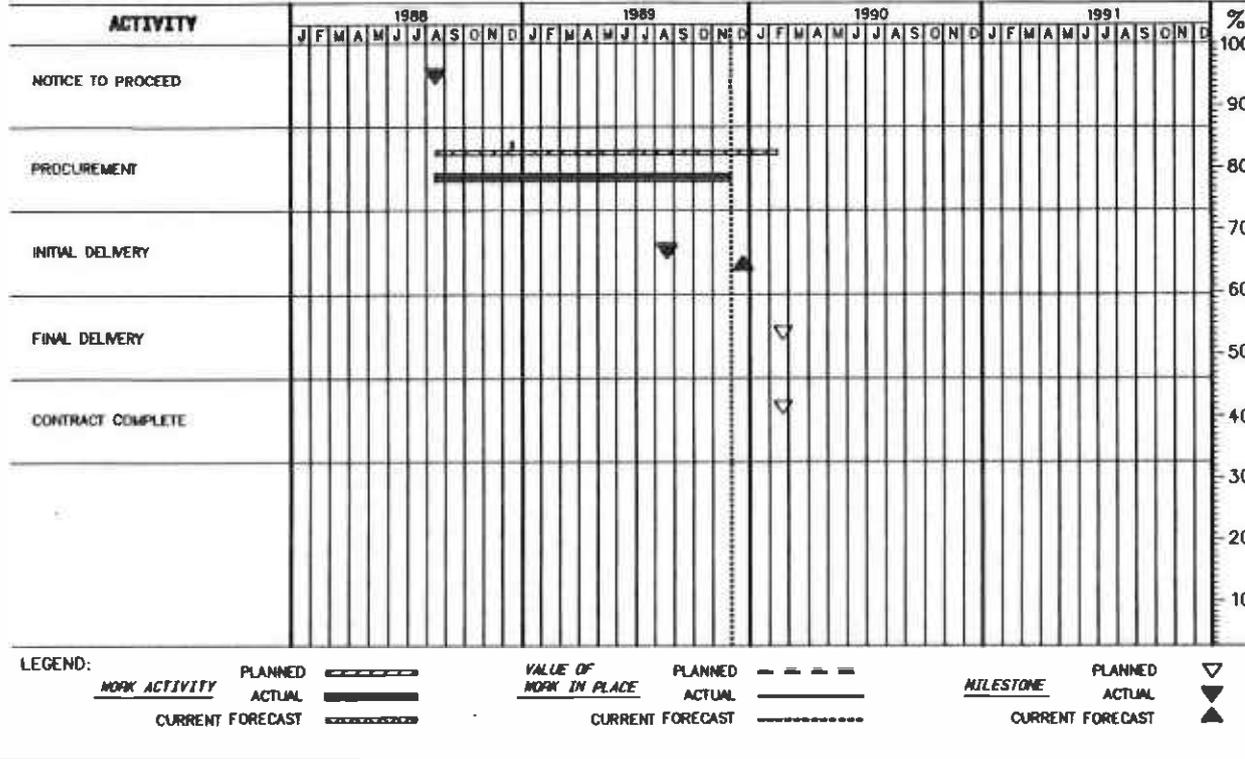
# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
13	1,286	87	984

NOTE ①: AN ADJUSTMENT HAS BEEN MADE TO THE PROGRESS CURVE TO PROVIDE A MORE ACCURATE MEASUREMENT OF PROGRESS.



CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

A615 PROTECTIVE COVER BOARD



A615 CONTRACTOR: The Budd Company

A. Work Accomplished This Period:  
Completed

- coverboard manufacturing

B. Work Planned Next Period:  
Continue:

- protective coverboard delivery

C. Issues/Proposed Resolutions  
None

D. Schedule Status:

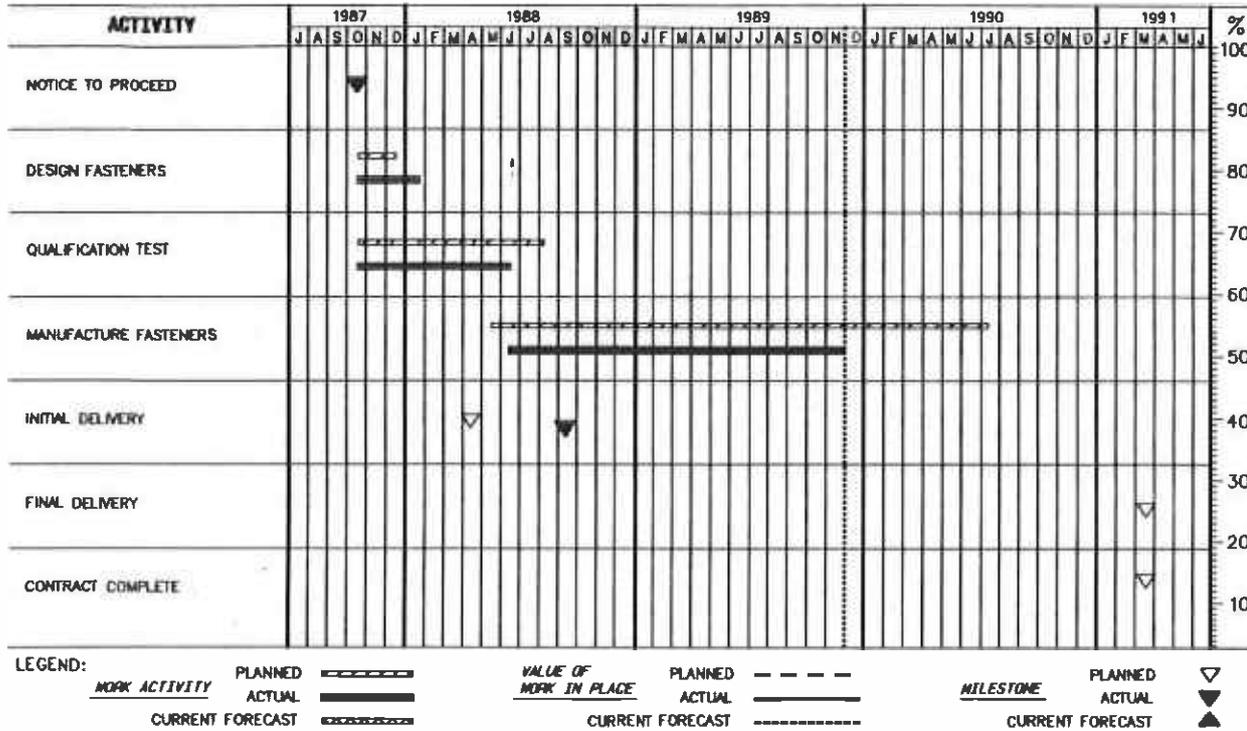
The contractor is forecast to complete initial delivery of items by the end of December 1989.

AWARD VALUE	EXECUTED .C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
450	0	450	450	0	0

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
0	0	3	0

CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

A616 DIRECT FIXATION RAIL FASTENERS



A616 CONTRACTOR: Lord Corporation

A. Work Accomplished This Period:

Continued:

- fastener production, testing, and delivery

B. Work Planned Next Period:

Continue:

- fastener production, testing, and delivery

C. Issues/Proposed Resolutions:

None

D. Schedule Status

Work is on schedule. A change order was issued exercising option 1B to provide an additional 46,000 fasteners. The contract final delivery date was extended to March 15, 1991.

LEGEND:

<u>WORK ACTIVITY</u>	PLANNED	-----	VALUE OF	PLANNED	-----	MILESTONE	PLANNED	▽
	ACTUAL	=====	WORK IN PLACE	ACTUAL	=====		ACTUAL	▼
	CURRENT FORECAST	-----		CURRENT FORECAST	-----		CURRENT FORECAST	▲

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
4,176	1,265	5,441	5,440	(1)	5,179

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
0	0	12	1,265

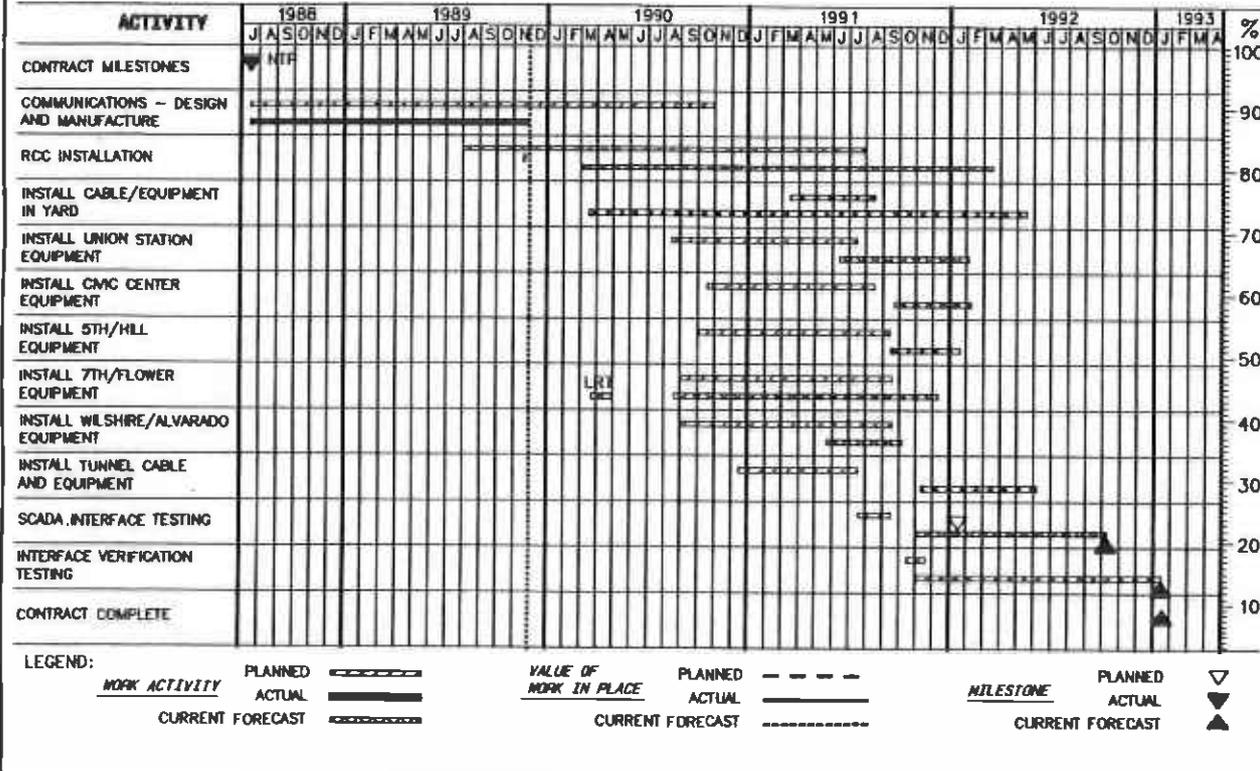






## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A640 COMMUNICATIONS



A640 CONTRACTOR: Bechtel Civil, Inc.

A. Work Accomplished This Period:

Continued:

- submittals preparation
- subcontractor interface meetings

B. Work Planned Next Period:

Continue:

- CDRL submittals
- preliminary and final design review meetings
- subcontractor interface meetings

C. Issues/Proposed Resolutions:

**Issue** - Lack of accurate and up-to-date drawings and documents of facilities and systems which impact communications equipment design and installation may require considerable re-engineering and functional modification of equipment at a later date.

**Resolution** - Meetings are being held to help alleviate the situation.

D. Schedule Status:

Work is on schedule. Submittals and reviews are taking place in accordance with the revised schedule for completion of the design phase in June 1990.

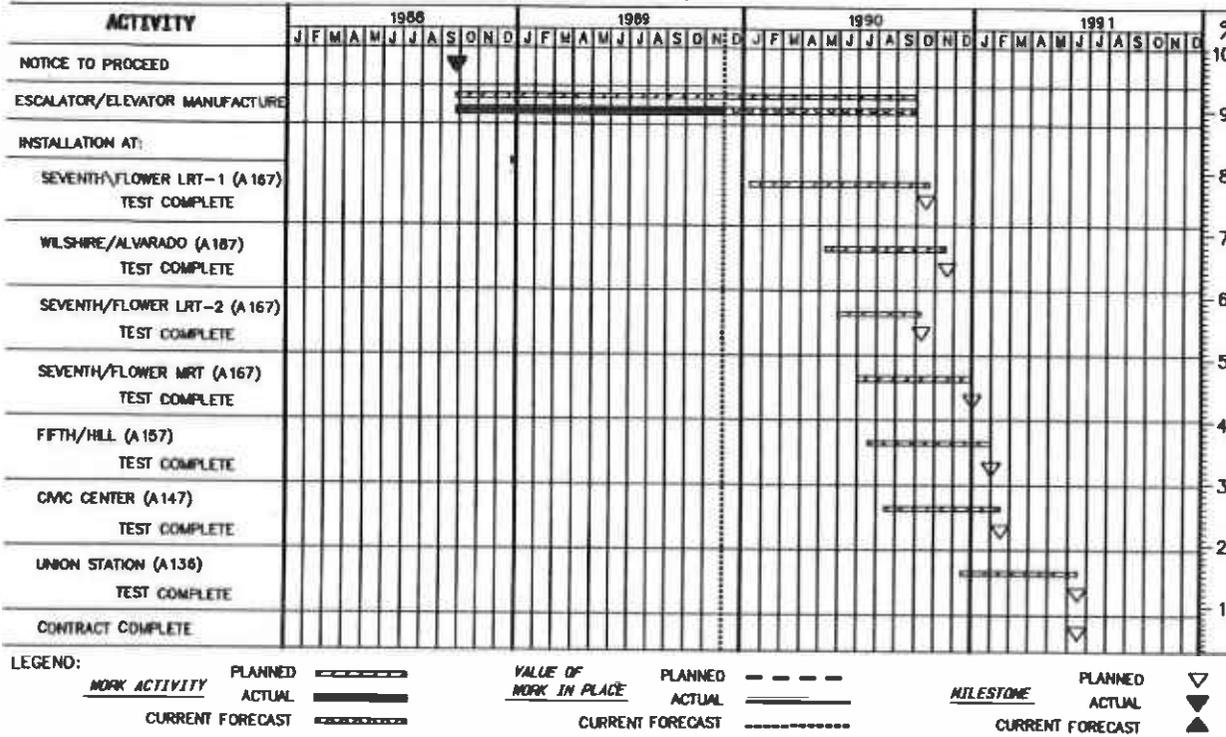
AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
35,667	99	35,766	44,257	8,491	6,371

OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
11	7,664	10	99



## CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

### A710 ESCALATOR/ELEVATOR



A710 CONTRACTOR: Montgomery Elevator Co.

A. Work Accomplished This Period:

Continued:

- escalator and elevator components manufacturing

B. Work Planned Next Period:

Continue:

- equipment manufacturing
- submittals processing

C. Issues/Proposed Resolutions:

None

D. Schedule Status:

Delays in facilities construction have caused the access dates to slip and the availability of permanent electrical power for final adjustment and testing to be delayed. A change order will be issued to reflect these delays.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
12,345	82	12,427	12,427	0	887

OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
0	0	6	82

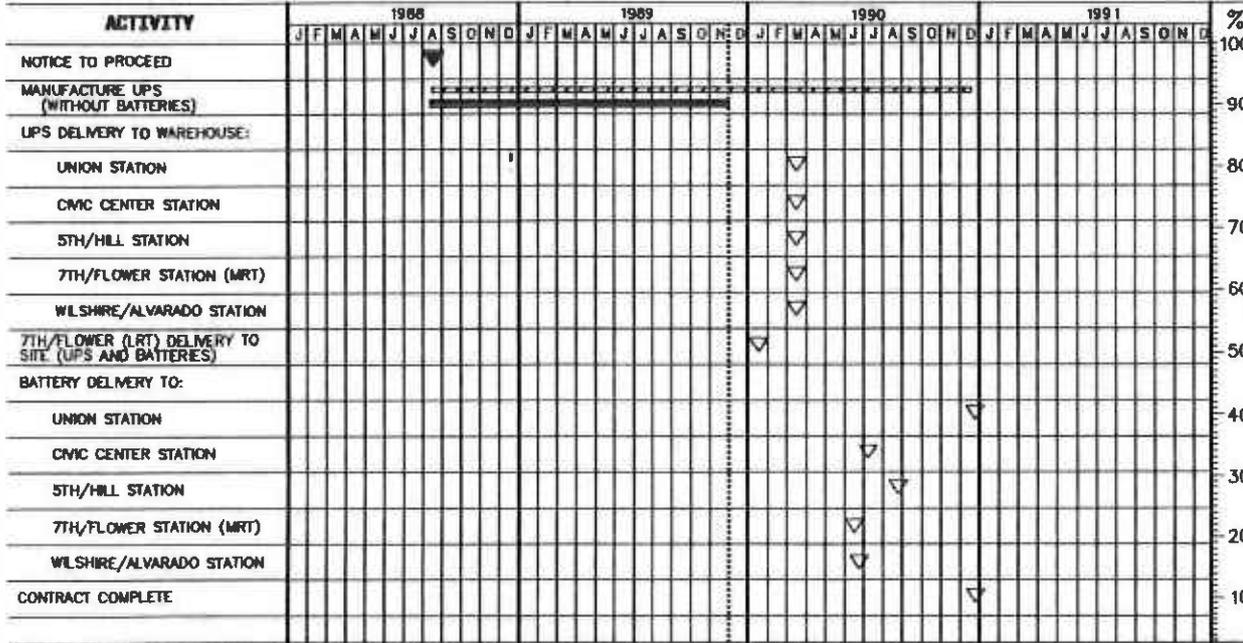






CONSTRUCTION/PROCUREMENT - CONTRACT SUMMARY

A795 UNINTERRUPTIBLE POWER SUPPLY



LEGEND:   
 WORK ACTIVITY: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 VALUE OF WORK IN PLACE: PLANNED (dashed line), ACTUAL (solid line), CURRENT FORECAST (dotted line)   
 MILESTONE: PLANNED (inverted triangle), ACTUAL (triangle), CURRENT FORECAST (triangle)

A795 CONTRACTOR: UP Systems, Inc.

A. Work Accomplished This Period:

Continued:

- uninterruptible Power Supply (UPS) shop drawings and power supply submittals

B. Work Planned Next Period:

Continued:

- battery procurement

Begin:

- 7th/Flower Substation UPS units manufacturing

C. Issues/Proposed Resolutions:

None

D. Schedule Status:

Work is on schedule.

AWARD VALUE	EXECUTED C.O.COST	CURRENT CONTRACT	FORECAST	VARIANCE	EXPENDED
573	0	573	573	0	0

# OF OUTSTANDING CHANGE REQUESTS	(\$000)	# OF EXECUTED CHANGE ORDERS	(\$000)
0	0	0	0

**CONSTRUCTION/PROCUREMENT - COMPLETED CONTRACTS**

CONTR. NO.	DESCRIPTION	C O S T			COMPLETION		ESTIMATED LOSS RESERVE		
		AWARD VALUE (\$)	C. O.'s NO.	VALUE (\$)	ADJUST. VALUE (\$)	CONTRACT	ACTUAL	WORK COMP CLAIMS (\$)	NON WORK COMP CLAIMS (\$)
A121	MAINT. OF WAY BUILDING	1,669,600	14	164,054	1,833,654	04/22/88	07/26/88	15,000	1,800
A123	DEMOLITION	248,675	0	0	248,675	02/23/87	02/23/87	0	0
A134	DEMOLITION	78,575	0	0	78,575	08/10/87	05/29/87	0	0
A161	7/F UTIL. RELOC.	3,252,500	11	141,574	3,394,074	10/31/87	11/15/87	24,580	108,611
A172	DEMOLITION	26,000	0	0	26,000	04/11/87	03/04/87	0	0
A173	DEMOLITION	66,700	0	0	66,700	04/18/87	04/14/87	0	0
A796	UNINT. PWR. SUPP. PROC. 100KVA	74,718	0	0	74,718	02/10/89	02/10/89	0	0
<b>TOTALS</b>		<b>5,416,768</b>	<b>25</b>	<b>305,628</b>	<b>5,722,396</b>			<b>39,580</b>	<b>110,411</b>

# METRO RAIL PROJECT

# STATUS REPORT

NOVEMBER 1989

## CONSTRUCTION/PROCUREMENT - SAFETY SUMMARY

CONT #	CURRENT MANHOURS	CUMULATIVE MANHOURS	<NUM CUR NO	W/CUM PTO	<CLAS> I.R. RATE	<NUM CUR NO	REC CUM PTD	<ACC> I.R. RATE	<NUM CUR NO	L.T. CUM PTO	<ACC> FREQ RATE	<NUM CUR NO	L.T. CUM PTO	<DAYS> SEV RATE	EST W/C RESERVE THRU 10-31-89	RPTD THRU COUNT	B/L 10-31-89 EST	CLAIMS RESERVE	
<b>FACILITY CONTRACT</b>																			
A112	9,017	353,067	3	101	57.2	0	34	19.3	0	16	9.1	0	178	100.8	264,832	4	8,000		
A121		27,453	0	2	14.6		1	7.3	0	1	7.3	0	4	29.1	1,955	2	1,344		
A123		5,064		0	0.0		0	0.0		0	0.0		0	0.0	0	0	0		
A130	10,318	107,461	4	22	40.9	1	9	16.8	1	4	7.4	7	14	26.1	26,596	8	9,100		
A134		962		0	0.0		0	0.0		0	0.0		0	0.0	0	0	0		
A135	7,861	137,775	1	10	14.5	0	4	5.8	0	2	2.9	0	28	40.6	94,393	5	1,300		
A141	32,335	523,876	12	164	62.6	7	65	24.8	4	36	13.7	17	302	115.3	496,661	42	306,287		
A145	31,146	538,424	9	115	42.7	2	34	12.6	0	6	2.2	0	146	54.2	834,404	109	895,420		
A146	13,212	189,079	10	85	89.9	5	38	40.2	2	27	29.6	14	1,000	1,057.8	487,569	31	42,694		
A161		32,172		7	43.5		2	12.4		1	6.2		4	24.9	98,755	39	164,146		
A165	36,134	492,502	7	123	49.9	2	43	17.5	0	14	5.7	0	193	78.4	340,766	95	353,746		
A171	15,662	408,791	7	165	80.7	2	93	45.5	2	62	30.3	101	1,673	818.5	687,528	10	146,650		
A172		1,621		0	0.0		0	0.0		0	0.0		0	0.0	0	0	0		
A173		3,072		0	0.0		0	0.0		0	0.0		0	0.0	0	0	0		
A175	13,077	222,152	8	73	65.7	5	26	23.4	1	13	11.7	2	191	172.0	169,011	18	24,766		
<b>FACILITY TOTAL</b>																			
	168,762	3,043,471	61	867	57.0	24	349	22.9	10	182	12.0	141	3,733	245.3	3,522,470	363	1,953,453		
<b>FINISH CONTRACTS</b>																			
A111	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A116	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A117	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A118	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A136	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A138	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A139	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A147	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A157	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A167	3,202	8,450	2	2	47.3	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0		
A186	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
A187	0	0	0	0	0.0	0	0	0.0	0	0	0	0	0	0.0	0	0	0		
<b>FINISH TOTAL</b>																			
	3,202	8,450	2	2	47.3	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0		

CONSTRUCTION/PROCUREMENT - SAFETY SUMMARY

SYSTEMWIDE CONTRACTS

RA610	5,560	164,442	0	22	26.8	0	8	9.7	0	1	1.2	0	14	17.0	101,383	5	12,400
RA610	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA615	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA616	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA620	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA630	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA631	649	649	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA640	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0

SYSTEMWIDE TOTAL	5,560	164,442	0	22	26.8	0	8	9.7	0	1	1.2	0	14	17.0	101,383	5	12,400
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MISC. CONTRACTS

POCD	30,200	872,453	1	28	6.4	1	8	1.8	1	3	0.7	3	9	2.1	12,854	2	30,000
A144	2,239	33,419	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA710	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA732	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA740/5	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA760	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
RA795	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0
OTHERS	0	0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	6	72,929

MISC. TOTALS	32,439	905,872	1	28	6.2	1	8	1.8	1	3	0.7	3	9	2.0	12,854	8	102,929
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PROJECT TOTALS	209,963	4,122,235	64	919	44.6	25	365	17.7	11	186	9.0	144	3,756	182.2	3,636,707	376	2,068,782
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PREVIOUS MONTH TOTALS	210,935	3,912,272	49	855	43.7	11	340	17.4	6	175	8.9	186	3,612	184.7	3,560,634	370	2,050,709
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NATIONAL AVERAGES																	
PROJECT VARIANCE:																	

LEGEND: W/C=WORKERS COMPENSATION; G/L=ALL LIABILITY CLAIMS; LT=LOST TIME; IR=INCIDENT RATE  
 REC=OSHA RECORDABLE; FREQ=FREQUENCY RATE; SEV=SEVERITY RATE.

CALCS: IR=(REC ACC X 200,000)/MANHOURS; FREQ=(LT ACC X 200,000)/MANHOURS; SEV=(LT DAYS X 200,000)/MANHOURS.

NOTE: FIELD REPORTED WORKERS COMPENSATION CLAIMS MAY VARY FROM THOSE ON FILE WITH THE INSURANCE CARRIER.

NOTE: SC-0<DOCTOR FIRST AID CASES> MAY BE CALCULATED BY SUBTRACTING RECOCLAIMS.  
 SC-9 WAS ELIMINATED AS THERE IS A STRONG LIKELIHOOD THAT THIS CLASSIFICATION WILL NOT BE USED.  
 FOR SIMPLICITY OF REPORTING, ALL G/L CLAIMS WERE COMBINED INTO ONE COLUMN.

NOTE: NOT CURRENTLY UNDER DCIP.

**CONSTRUCTION/PROCUREMENT - SAFETY NARRATIVE****General**

Toolbox safety meetings continued on a weekly basis and staff safety meetings on a monthly basis.

The Construction Safety Oversight Committee (CSOC) continued semi-monthly meetings.

Joint safety surveys with the District Insurance Administrator's Director of Safety continue.

Two projects had "wall-to-wall" CAL OSHA inspections during October, which resulted in no serious violations.

**Contract A112, Main Shop Building**

The safety representative continues to receive good cooperation from the employers and workers on site.

**Contract A130, Yard Leads and Transfer Zone**

The contractor continues to maintain a good overall safety program. Safety recommendations are being complied with in a timely manner. There were no losses during November.

**Contract A135, Union Station, Stage I**

The contractor continues to maintain a good overall safety program. There was one first aid case in November. The contractor remains cooperative with regard to safety recommendations.

**Contract A141, Line Section, Union Station to 5th/Hill Station & Civic Center Station, Stage**

There were one first aid case, two OSHA recordable cases, and one lost work day case in November. Discussions with the contractor and additional site visits should reduce losses in November.

**Contract A144, Water Treatment Plant Operations**

There were no losses during November.

**Contract A145, 5th/Hill Station, Stage I**

The contractor continues to maintain a positive safety attitude. There were six first aid cases in November.

**Contract A146, Line Section, 5th/Hill Station to 7th/Flower Station**

There were three first aid cases and two OSHA recordable cases in November.

**Contract A165, 7th/Flower Station, Stage I**

The contractor continues to demonstrate a positive attitude towards safety. There were two first aid cases in November.

**Contract A167, 7th/Flower Station, Stage I**

There were no losses during November.

**Contract A171, Line Section, 7th/Flower Station to Wilshire/Alvarado Station**

There were two first aid cases and one lost time case in November.

**Contract A175, Wilshire/Alvarado Station, Stage I**

The contractor continues to demonstrate a positive attitude towards safety and complies with safety recommendations. There were two first aid cases and one lost time case in November.

**CONSTRUCTION/PROCUREMENT - SAFETY NARRATIVE**

**Contract A610/A115, Trackwork Installation/Yard Storage Area**

The contractor continues to demonstrate a positive attitude towards safety. Site safety inspections noted excellent safety compliance. There were one first aid case and one OSHA recordable case in November.

**Contract A631, Traction Power Installation.**

There were no losses in November.

CONSTRUCTION/PROCUREMENT - EQUAL OPPORTUNITY SUMMARY

CONTRACT NO.	CONTRACT DESCRIPTION	ESTABLISHED GOALS (%)				COMMITMENT IN BID %		ACCOMPLISHMENTS TO DATE (%)				REMARKS
		DBE	WBE	AFFIRMATIVE ACTION		DBE	WBE	DBE	WBE	AFFIRMATIVE ACTION		
				MINORITY	WOMEN					MINORITY	WOMEN	
A112 <sup>1</sup>	Main Shop Building	20	3	28.3	6.9	20	1.5	14.85	-	29.61	1.88	Quarterly SSA&P Report submitted for P/E 6/30/89 Contractor did not submit SSA&P for for P/E 9/29/89. Contracto IWC has not submitted monthly employment utilization report for October 1989.
A121	MOW Building	18	4	28.3	6.9	26.6	5.3	24	-	45	1.4	Last Quarterly SSA&P Report submitted was for P/E 6/30/88. Contract is complete and is currently being closed out.
A123	Demolition of Westransco Bldg.	18	4	28.3	6.9	20	10	10.2	4.3	70	0	Final report. Contract completed.
A130 <sup>1</sup>	Yard Leads and Transfer Zone	18	0	28.3	6.9	19.4	0	7.36	-	59.92	2.05	Contract NTP date 7/1/88. Quarterly SSA&P Report submitted for P/E 9/29/89.
A134	Demolition of Building - 719 Vignes St.	18	4	28.3	6.9	20	10	9.8	3	64	15	Final report. Contract completed.
A135 <sup>1</sup>	Union Station, Stage I	22	0	28.3	6.9	24	0	10.99	-	56.15	1.42	Contract NTP date was 7/11/88. Quarterly SSA&P Report submitted for P/E 9/29/89
A141 <sup>1</sup>	Line Section, Union Station to 5th/Hill Station, Stage I	18	4	28.3	6.9	18.1	4	5.80	-	53.32	1.69	Quarterly SSA&P Report submitted for P/E 9/29/89. No WBE participati reported.
A145/ A145A <sup>1</sup>	5th/Hill Station, Stage I and 5th/Hill Utility Relocation and Vault Modifications	18	4	28.3	6.9	18	4	16.30	-	59.58	4.40	SSA&P Report submitted for P/E 9/29/89.
A146 <sup>1</sup>	Line Section, 5th/Hill Station to 7th/Flower Station	18	4	28.3	6.9	18.6	4.4	12.37	-	29.71	2.13	Quarterly SSA&P Report submitted for P/E 9/29/89.
A161 <sup>1</sup>	7th/Flower Utility Rearrangement	18	4	28.3	6.9	18	4	24.2	5.5	56	4	Final report. Contract completed. Commitment exceeded.

CONSTRUCTION/PROCUREMENT - EQUAL OPPORTUNITY SUMMARY

CONTRACT NO.	CONTRACT DESCRIPTION	ESTABLISHED GOALS (%)				COMMITMENT IN IN BID %		ACCOMPLISHMENTS TO DATE (%)				REMARKS
		DBE	WBE	AFFIRMATIVE ACTION		DBE	WBE	DBE	WBE	AFFIRMATIVE ACTION		
				MINORITY	WOMEN					MINORITY	WOMEN	
A165	7th/Flower Station, Stage I	22	-	28.3	6.9	15.2	-	13.60	-	44.84	2.24	Quarterly SSA&P Report submitted for P/E 9/29/89.
A167	7th/Flower Station, Stage II	25	-	28.3	6.9	9.69	-	-	-	35.08	5.26	Contract NTP date was 4/17/89. No quarterly SSA&P Report received to date.
A171	Line Section, 7th/Flower to Wilshire/Alvarado	18	4	28.3	6.9	20.3	4.1	15.36	-	36.76	2.10	Quarterly SSA&P Report submitted for P/E 9/29/89.
A172	Demolition of Bambi Market	18	4	28.3	6.9	19	9.5	12.7	8.5	75	0	Final report. Contract completed.
A173	Demolition - 7th/Alvarado	18	4	28.3	6.9	19	9.5	24.9	3.2	76	0	Final report. Contract completed.
A175	Wilshire/Alvarado Station, Stage I	18	4	28.3	6.9	19.7	2	12.13	-	49.44	1.31	Quarterly SSA&P Report submitted for P/E 9/29/89.
SYSTEMS CONTRACTS												
A610/115	Trackwork Installation	13	3	28.3	6.9	18.2	4.46	18.95	-	58.88	1.19	Quarterly SSA&P Report submitted for P/E 9/29/89. U.E.T. (8) D/WBE dual status counted as DBE.
A612	Contact Rail	10				10.32		3.21	-			Quarterly SSA&P report submitted for P/E 9/29/89. No MURs submitted to date.
A615	Protective Coverboard	3	0			5		0	-			No SSA&P report received for P/E 9/29/89. No DBE participation reported to date. No MURs submitted to date.
A616	Direct Fixation Rail Fasteners	10	-	-	-	24	-	11.72	-	0	0	Quarterly SSA&P Report submitted for P/E 8/31/89. No MURs submitted to date.

# METRO RAIL PROJECT

# STATUS REPORT

NOVEMBER 1989

## CONSTRUCTION/PROCUREMENT - EQUAL OPPORTUNITY SUMMARY

CONTRACT NO.	CONTRACT DESCRIPTION	ESTABLISHED GOALS (%)				COMMITMENT IN IN BID %		ACCOMPLISHMENTS TO DATE (%)				REMARKS
		DBE	WBE	AFFIRMATIVE ACTION		DBE	WBE	DBE	WBE	AFFIRMATIVE ACTION		
				MINORITY	WOMEN					MINORITY	WOMEN	
1 A620	Automatic Train Control	10	-	28.3	6.9	10	-	0.18	-	0	0	Quarterly SSA&P Report submitted for P/E 9/29/89.  Construction work began 10/10/89, no quarterly SSA&P report submitted to date. Martinez Electric (DBE 21% commitment) has requested termination of contract due to insolvency. Substitution has been requested with Universal Electric Supply(DBE); if approved total DBE participation will be 25.84%, 7.84% above goal.
1 A631	Traction Power Installation	18	-	28.3	6.9	32.54	-	-	-	100	0	
1 A640	Communications	12	-	-	-	12.07	-	0.50	-	-	-	Quarterly SSA&P Report submitted for P/E 9/29/89. No MURs submitted to date.
1 A710	Escalators and Elevators	4	-	-	-	4.28	-	0.17	-	-	-	Quarterly SSA&P Report submitted for P/E 9/29/89. No MURs submitted to date.
1 A740	Ventilation Equipment	9	-	-	-	9.3	-	2.80	-	-	-	Quarterly SSA&P Report submitted for P/E 9/29/89. No MURs submitted to date.
1 A745	Air Handling Equipment	12	-	-	-	12.9	-	10.98	-	-	-	Quarterly SSA&P Report submitted for P/E 9/29/89. No MURs submitted to date.
	* Date obtained from MUR/SSA&P Reports submitted by the Contractor.											
	1 New federal legislation combines WBE with DBE goals.											
	NOTE: DBE/WBE accomplishments based on original total project award amount.											

**COMMUNITY RELATIONS SUMMARY**

**A. SPECIAL ACTIVITIES THIS PERIOD:**

- Answered inquiries, coordinated community notification of street/alley closures, and alleviated concerns of tenants along Hill, 7th, and Flower Streets affected by Contracts A130, A141, A145, A146, and A165 regarding pedestrian/vehicular access, noise, rodent control and security.
- Coordinated four tours, site visits, media requests, and provided Metro Rail information packages to tenants along the MOS-1 alignment.
- Coordinated the December 14 Community Meeting
- Provide a coordination with the Traffic Control Office and tenants along Hill Street in preparation for the relocation of the Contract A141 tunnel mining machine.

- Continue expanded communication activities with tenants affected by Contracts A130, A135, A145, A146, A165, A175, and A631 regarding ongoing and pending construction activities.
- Continue to implement the Community Relations Work Plan, conduct community presentations, disseminate construction information, and respond to complaints and inquiries.
- Coordinate future community lunchtime briefings.

**B. PLANNED SPECIAL ACTIVITIES NEXT PERIOD:**

- Continue to alleviate the traffic/pedestrian access concerns of tenants affected by Contracts A141, A145, A146, A165, and A175.

**C. COMPLAINTS & RESOLUTIONS:**

During this period, 20 construction related inquiries/problems were received, and resolved. General inquiries/problems include media and tour requests. One inquiry, received from the Subway Terminal Building (Contract A145) regarding payment for security services during the water shut-down, remains open.

Complaints Received This Period	20
Resolved This Period	20
Received to Date	1283
Resolved to Date	1282
Open	1

**CONSTRUCTION/PROCUREMENT - ART IN TRANSIT SCHEDULE**

<b>STATION</b>	<b>ARTIST</b>	<b>NTP</b>	<b>PRELIMINARY DESIGN</b>	<b>FINAL DESIGN</b>	<b>REMARKS</b>
UNION	C. SPROAT	7-1-86	11-8-86 (A)	12-87 (A)	WORK COMPLETED.
	T. SCHOONHOVEN	3-12-86	6-4-86 (A)	TBD	FINAL DESIGN IS UNDERWAY.
	C. CARLSON	8-20-86	TBD		PRELIMINARY DESIGN WILL BE REVIEWED AT NEXT COMMITTEE MEETING
CIVIC CENTER	J. BOROFKY	1-18-88	5-13-88 (A)	8-19-88 (A)	WORK COMPLETED.
5TH/HILL	G. LEGRADY	10-1-86	11-6-87 (A)	8-19-88 (A)	WORK COMPLETED.
	S. ANTONAKOS	10-1-86	5-9-87 (A)	9-18-87 (A)	WORK COMPLETED.
7TH/FLOWER	J. KOZLOFF	5-20-86	11-7-87 (A)	TBD	FINAL DESIGN WILL BE COMPLETED JUST PRIOR TO FABRICATION.
	TBD				SELECTION OF ADDITIONAL ARTISTS WILL BE CONSIDERED BY THE COMMITTEE AT THEIR NEXT MEETING.
WILSHIRE/ ALVARADO	T. STATOM	5-16-87	11-8-86 (A)		STATUS OF ARTWORK WILL BE DISCUSSED AT NEXT MEETING.
	T. BERLANT	3-25-86	11-8-86 (A)	11-8-86 (A)	WORK COMPLETED.
	A. KASUBA	10-1-86	2-7-87 (A)	5-9-87 (A)	WORK COMPLETED.



**PHASE II EXECUTIVE SUMMARY****GENERAL ENGINEERING AND DESIGN**

- Design work continues on Contracts B201, B211, B221, and B231. Progress on the work for Contract B211 was basically limited to architectural structure sizing to finalize station structure features and limits.
- The Systems design effort has been concentrated on coordination of equipment interface requirements and Fire/Life Safety requirements with the Facilities design team.
- In order to remain within the financial budget, the hourly budgets for the Phase II tasks were reduced from the amounts negotiated. This was necessitated by the delay in starting the Phase II effort. In the interim between the original planned start of Phase II and October 1989, MRTC's engineering costing rates have increased approximately ten percent over the rates negotiated in Amendment 13. The hourly budgets were reduced accordingly. The effect of this reduction is under evaluation at this time.

**ADVANCE PLANNING**

The General Planning Consultant (GPC), Schimpeler-Corradino, completed compilation and documentation of materials on the Final Report for the Phase II Benefit Assessment Program. The GPC is now awaiting approval to develop the final report which will take one month to complete. Work began on the development of legal descriptions of the boundaries for each of the five Benefit Assessment Districts for the Phase II corridors.

During the next 30-day period, the "MOS-1 Validation Study - Lesson Learned", and the draft report documenting the results of the survey of real estate brokers, leasing agents, and developers will be submitted to the District for review. Work is expected to be completed on the development of legal descriptions for the boundaries of the five Benefit Assessment Districts.

## PHASE II - GENERAL ENGINEERING - PROGRESS BY TASK

**1.2.1 GENERAL ENGINEERING OF LINE TUNNEL SEGMENTS AND SIX STATIONS**

- Preparing response to LADOT request to modify alignment of Vermont/Beverly Station by 120'-15-' to obviate interferences with freeway ramps and sanitary sewer.

**1.2.2 B201, WILSHIRE/ALVARADO TO WILSHIRE/VERMONT LINE**

- Prepared grading plans for lake bottom and paving.
- Revising track level drainage design.
- Added HVAC provisions at modified location of train control and communications room.
- Finalized space requirements and location of electrical room to control booster fans.
- Completed alignment calculations, began preparation of profiles and plan drawings; began plotting profiles and coordinating locations of crosspassages.
- Preparing drawings addressing interface conditions between the west end of A175 and the east end of B201 pocket track structure.
- Studied location of tunnel shaft and its construction site options.

**1.2.3 B211, WILSHIRE/VERMONT STATION**

- Completed alignment studies.
- Studied entrance configurations in accordance with the final alignment.
- Studied exit requirements for incorporation into the modified concept and coordinated emergency exit locations with FLSC.
- Studied various platform widths and patronage implications. The 15'-3' platform width will be retained.

- Studied alternatives to shorten the cut and cover structure at each end of box structure by rearranging fire exits, UPE fan rooms and using vertical fans at emergency fan rooms.
- Studied equipment layouts in auxiliary power rooms.
- Studied structural implications by varying spacing of transverse struts with and without longitudinal beams for exterior walls at upper track level.
- Studied layout incorporating a 45' column grid and shortened box structure.

**1.2.4 B231, WILSHIRE/WESTERN STATION CROSSOVER AND TAILTRACK**

- Investigated alternatives for utility clearances above station and crossover. A reduction in the station slope from 0.5% to 0.3% is likely to alleviate the condition.
- Studied feasibility of relocating the equipment access hatch to the northerly sidewalk from Wilshire Boulevard.
- Started structural plan drawings for track and mezzanine level of the crossover structure.
- Completed alignment calculations.
- Conducting feasibility study to support existing DWP 34.5kv electrical system in place.
- Analyzing and designing transverse section for the crossover structure, east of the station.
- Continued reviewing finish materials for design intent, fabrication options, and current availability.
- Revising auxiliary power rooms and studying impacts on mechanical design.

**PHASE II - GENERAL ENGINEERING - PROGRESS BY TASK**

- Preparing typical installation, general routing, and tunnel interface details for electrical work.
- Revised drawings to reflect the addition of columns in the cross-over structure and traction power substation.
- Studied alternate crossover layouts to ascertain feasibility of maintaining existing manhole at Wilshire/Oxford Streets.

**1.2.5 B221, WILSHIRE/NORMANDIE STATION AND LINE**

- Updating drawings to conform with revised standards and criteria.
- Revised TPSS and DWP room sizes per modified requirements. Coordinated street hatch impacts with the City of Los Angeles.
- Studied elevator location in relation to Right-of-Way constraints at entrances.
- Updating HVAC calculations and coordinating revised auxiliary power room requirements.
- Resolved alignment at Wilshire/Vermont Station and developed an alignment to continue west towards Wilshire/Normandie station.
- Developing electrical standard installation and tunnel interface details.
- Commenced preparation of escalator cladding drawings and reviewing finish material availability.
- Began updating existing utilities plans.
- Coordinated redesign of station ancillary rooms, revising east fan room and providing for an electrical room.
- Reviewed existing entrance site conditions and prepared site design to conform with Right-of-Way constraints.

- Continued investigating availability of finish materials and preparing details.
- Preparing standardized elements connection and electrical block diagrams for major mechanical loads.

**1.2.6 RIGHT-OF-WAY CERTIFICATIONS**

- Submitted preliminary right-of-way certification for CCU B211 parcel B2-117.
- Issued work order for survey of the station area.
- Reviewed legal documents and clarifications for pedestrian circulation easements.

**1.2.7 SYSTEMS DESIGN**

- Reviewed proposed responses to comments received on the Preliminary Design Draft Report for Emergency Ventilation and submitted comments thereon.
- Provided support on the configuration and spacing of emergency exits to the surface and crosspassages in the B201 tunnel segment.
- Participated in two days of meetings on Phase II emergency ventilation system design and the Preliminary Design Draft Report on the same.
- Began new emergency existing analysis/calculations for revised Wilshire/Vermont Station/stair configuration.
- Reviewed the TC&C room sizes and requirements for B201, B220, and Wilshire/Western Stations.
- Participated in the Wilshire/Vermont curved-platform study.

**Issues/Areas of Concern**

- Resolve Phase II manpower budget reductions due to late NTP of Phase II, Part B tasks.

**PHASE II - GENERAL ENGINEERING - PROGRESS BY TASK**

**30 Day Look-Ahead**

- Inputs to and participation in the Value Engineering Study will assist the District to establish direction and actions to reduce the budget of Phase II design and construction.
- Work will continue on the final design of B201, B211, B221, and B231, the Wilshire Corridor Line and Stations.
- Responded to the District request of moving Vermont/Beverly Station southward to minimize the potential highway ramp traffic interference during construction.

## PHASE II - GENERAL ENGINEERING - COST SUMMARY

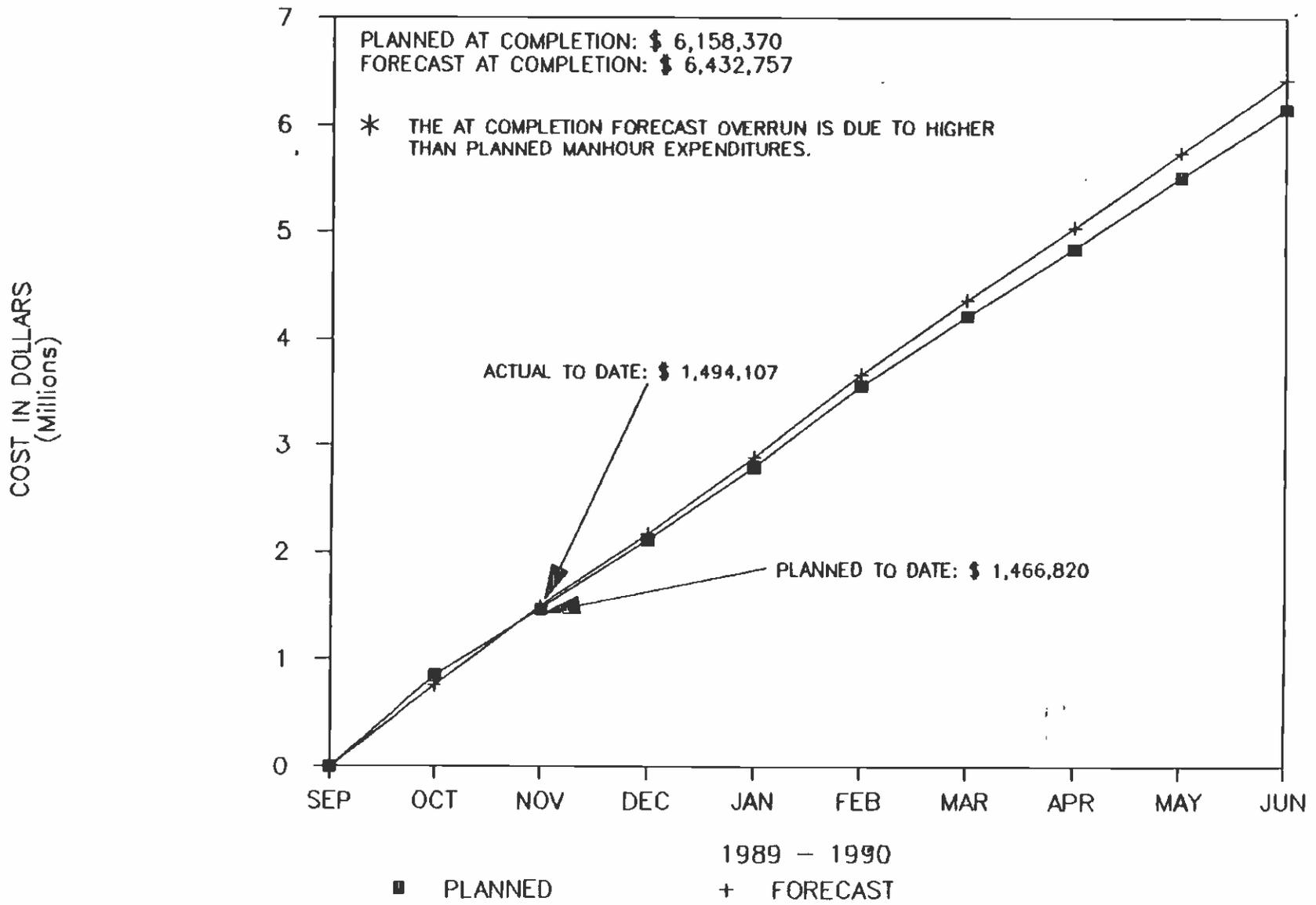
Metro Rail Phase II  
Work Program

General Engineering  
Part B - Through NOVEMBER 1989

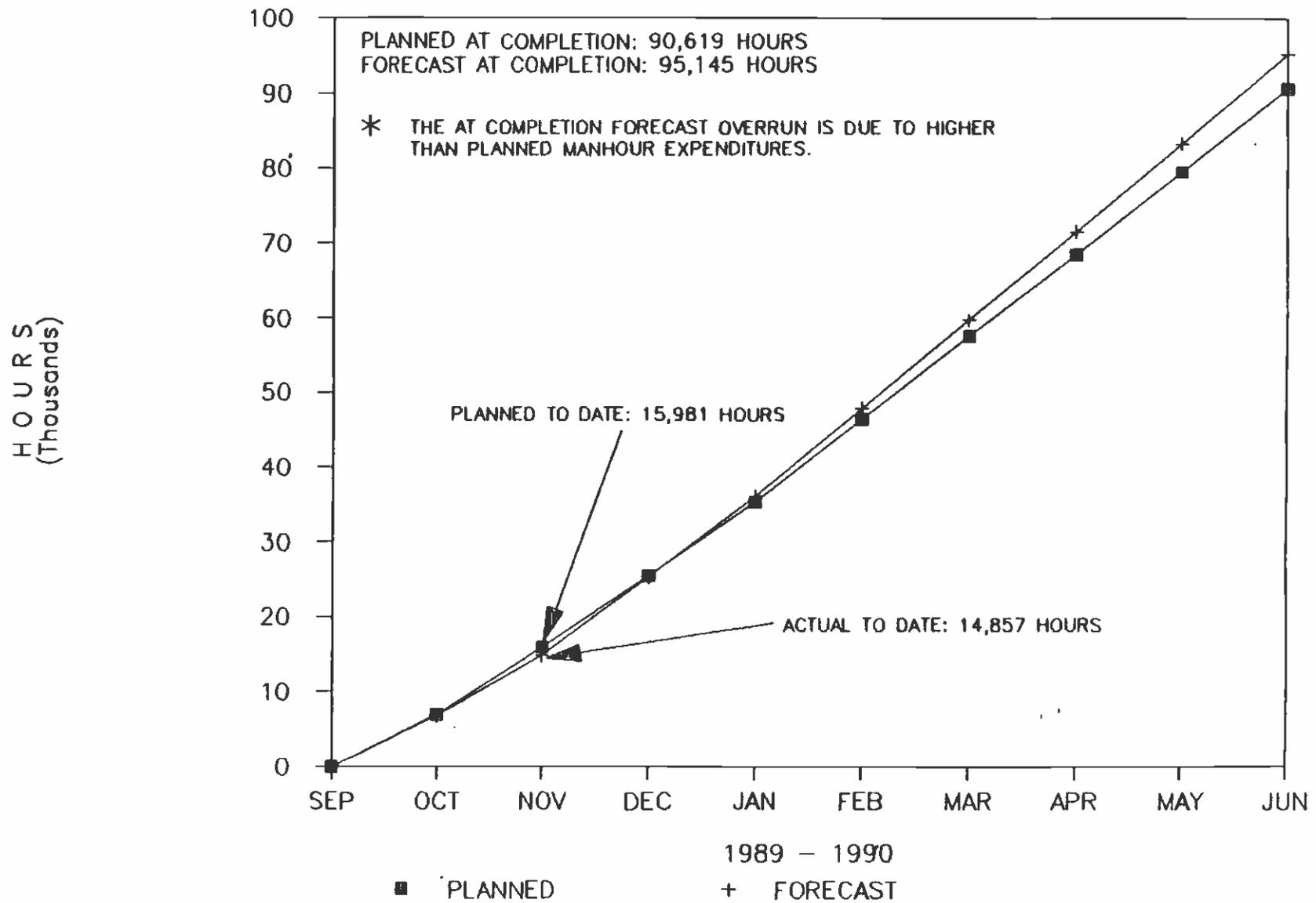
Task	Consultant(\$000)			District(\$000)			Total(\$000)		
	Plan	Actual	Forecast	Plan	Actual	Forecast	Plan	Actual	Forecast
1.0 DESIGN									
1.1 FACILITIES									
1.1.1 STATIONS (ITEMS 1.2.1 THRU 1.2.5)	\$1,473	\$211	\$1,449	\$459	\$20	\$394	\$1,932	\$231	\$1,843
1.1.2 TUNNELS (ITEMS 1.2.1 THRU 1.2.5)	\$1,473	\$211	\$1,447	\$456	\$20	\$390	\$1,929	\$231	\$1,837
1.2 SYSTEMS (ITEMS 1.2.7)	\$485	\$29	\$452	\$81	\$0	\$59	\$566	\$29	\$511
1.3 OTHER DESIGN SUPPORT (ITEM 1.2.8)	\$414	\$108	\$528	\$0	\$0	\$0	\$414	\$108	\$528
1.4 PUBLIC AGENCY COST	\$30	\$0	\$0	\$870	\$6	\$836	\$900	\$6	\$836
2.3 RIGHT - OF - WAY (ITEM 1.2.6)									
2.1 IDENTIFY REQUIREMENTS	\$3	\$18	\$19	\$90	\$30	\$100	\$93	\$48	\$119
2. APPRAISALS	\$0	\$0	\$0	\$495	\$40	\$425	\$495	\$40	\$425
3.0 PROJECT MGMT (ITEM 1.2.9)									
3.1 PROGRAM CONTROL	\$356	\$57	\$375	\$194	\$18	\$169	\$550	\$75	\$544
3.2 ADMINISTRATION	\$288	\$102	\$294	\$9	\$0	\$7	\$297	\$102	\$301
3.3 SAFETY	\$0	\$0	\$0	\$20	\$0	\$16	\$20	\$0	\$16
3.4 OTHER DEPARTMENTS		\$11	\$50	\$279	\$16	\$234	\$279	\$27	\$284
4.0 OTHER DIRECT COSTS	\$100	\$102	\$282	\$180	\$0	\$140	\$280	\$102	\$422
5.0 SUB - CONSULTANTS	\$130	\$645	\$1,124	\$940	\$0	\$742	\$1,070	\$645	\$1,866
TOTAL DIRECT COSTS	\$4,752	\$1,494	\$6,020	\$4,073	\$150	\$3,512	\$8,825	\$1,644	\$9,532
GENERAL & ADMINISTRATIVE CONTINGENCY	\$0	\$0	\$0	\$44	\$5	\$49	\$44	\$5	\$49
TOTAL PROGRAM COST	\$4,752	\$1,494	\$6,020	\$8,306	\$155	\$7,038	\$13,058	\$1,649	\$13,058

Note: Actuals costs include estimated expenditures and reconciliations.

PHASE II - MRTC COST SUMMARY



PHASE II - MRTC MANHOUR SUMMARY



**PHASE II - ADVANCE PLANNING - PROGRESS BY TASK****3A.9 - BENEFIT ASSESSMENT FINAL REPORT**

Work was completed on the compilation and documentation of materials to be included in the Final Report on the Phase II Benefit Assessment Program. Awaiting approval to develop the Final Report which will take about one month to complete.

**3B.1 - VALIDATION STUDY**

A Draft Report entitled "MOS-1 Validation Study - Lessons Learned" was revised for submission to the District in early December. This document was prepared in outline format for easier readability.

**3B.2 - STUDY DESIGN**

The draft report documenting the results of the survey of real estate brokers, leasing agents, and developers regarding their perception of the impact of Metro Rail development on land prices in the Phase II Corridor was edited and revised internally by Schimpeler-Corradino, the General Planning Consultant (GPC). This report will be submitted to the District in December and will become part of the documentation for the Study Design.

**3B.3 - DATA COLLECTION**

Work continued on the collection effort; however, the identification of data needs in the Study Design Phase will be required before this task can be fully implemented.

**3C - BENEFIT ASSESSMENT DISTRICT BOUNDARIES**

Work was initiated on the development of legal descriptions of the boundaries for each of the five Benefit Assessment Districts for the Phase II Corridor. These descriptions are to be included in the SCRTRD Board's Resolution to Proceed to Create Benefit Assessment District.

**30-DAY LOOK AHEAD****3B.1 - VALIDATION STUDY**

The Draft Report "MOS-1 Validation Study - Lessons Learned" will be submitted to the District for review.

**3B.2 - STUDY DESIGN**

The Draft Report documenting the results of the survey of real estate brokers, leasing agents, and developers will be submitted to the District for review.

**3C - BENEFIT ASSESSMENT DISTRICT BOUNDARIES**

Work is expected to be completed in December on the development of legal descriptions for the boundaries of the five Benefit Assessment Districts for the Phase II Corridor.

**ISSUES/CONCERNS**

Funding for the continuation of needed Tasks and Work Areas continues to be a major concern for the GPC.



**FUNDING SOURCES SCHEDULE**

(IN MILLIONS OF DOLLARS)

SOURCES	PRELIM. ENGR.	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89 & BEYOND	TOTAL	PROJECT SHARE %
SECTION 3	\$46.07	\$25.00	\$105.40	\$0.00	\$0.00	\$225.17	\$107.38	\$96.27	\$605.30	48.43%
STATE	8.32	0.00	67.80	0.00	0.00	110.60	11.64	15.66	214.02	17.12%
LACTC	1.37	5.65	0.00	21.34	9.00	16.90	27.35	94.10	175.70	14.06%
LOCAL/PRIVATE	0.00	0.00	0.00	0.00	0.00	13.40	5.68	111.22	130.30	10.42%
SECTION 9	0.00	0.00	0.00	25.48	0.00	49.50	15.60	0.00	90.58	7.25%
CITY OF L.A.	0.00	0.00	0.00	7.00	7.00	10.00	10.00	0.00	34.00	2.72%
<b>ANNUAL TOTALS</b>	<b>\$55.75</b>	<b>\$30.65</b>	<b>\$173.20</b>	<b>\$53.83</b>	<b>\$16.00</b>	<b>\$425.57</b>	<b>\$177.65</b>	<b>\$317.25</b>	<b>\$1,249.90</b>	<b>100.00%</b>
<b>CUMULATIVE TOTALS</b>	<b>\$55.75</b>	<b>\$86.40</b>	<b>\$259.60</b>	<b>\$313.43</b>	<b>\$329.42</b>	<b>\$755.00</b>	<b>\$932.65</b>	<b>\$1,249.90</b>		
<b>FUNDS REQUIRED- FORECAST COST GROWTH</b>								<b>\$103.10</b>		
<b>GRAND TOTAL</b>								<b>\$1,353.00</b>		

# SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

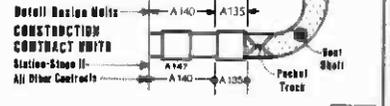


JULY 14, 1988  
as adopted by  
the SCRTD Board

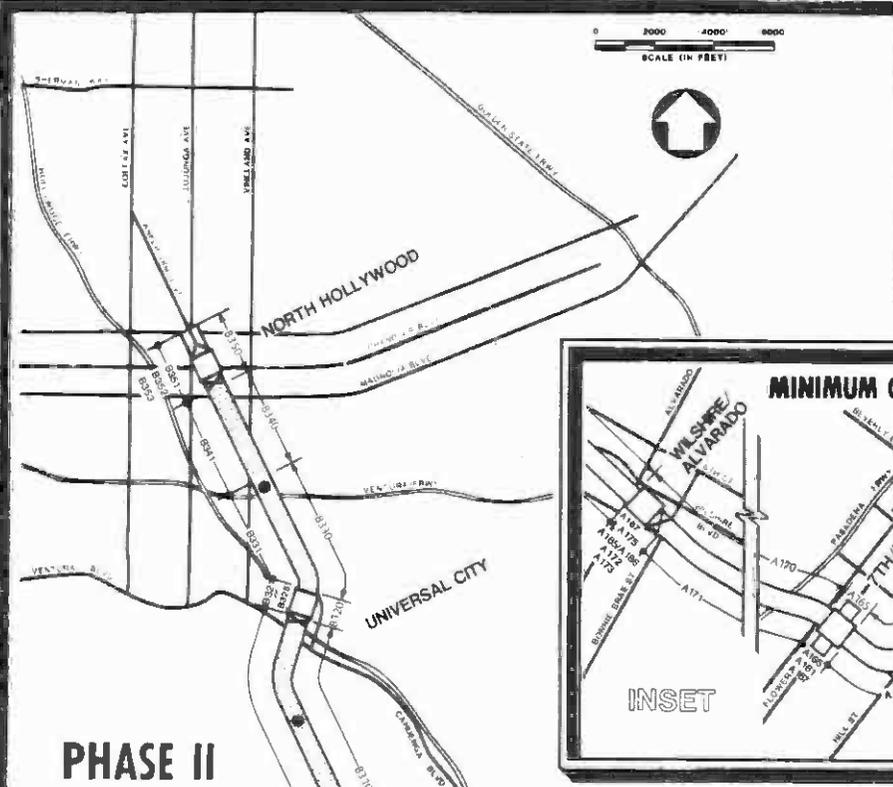
**RTD**

**METRO RAIL PROJECT**

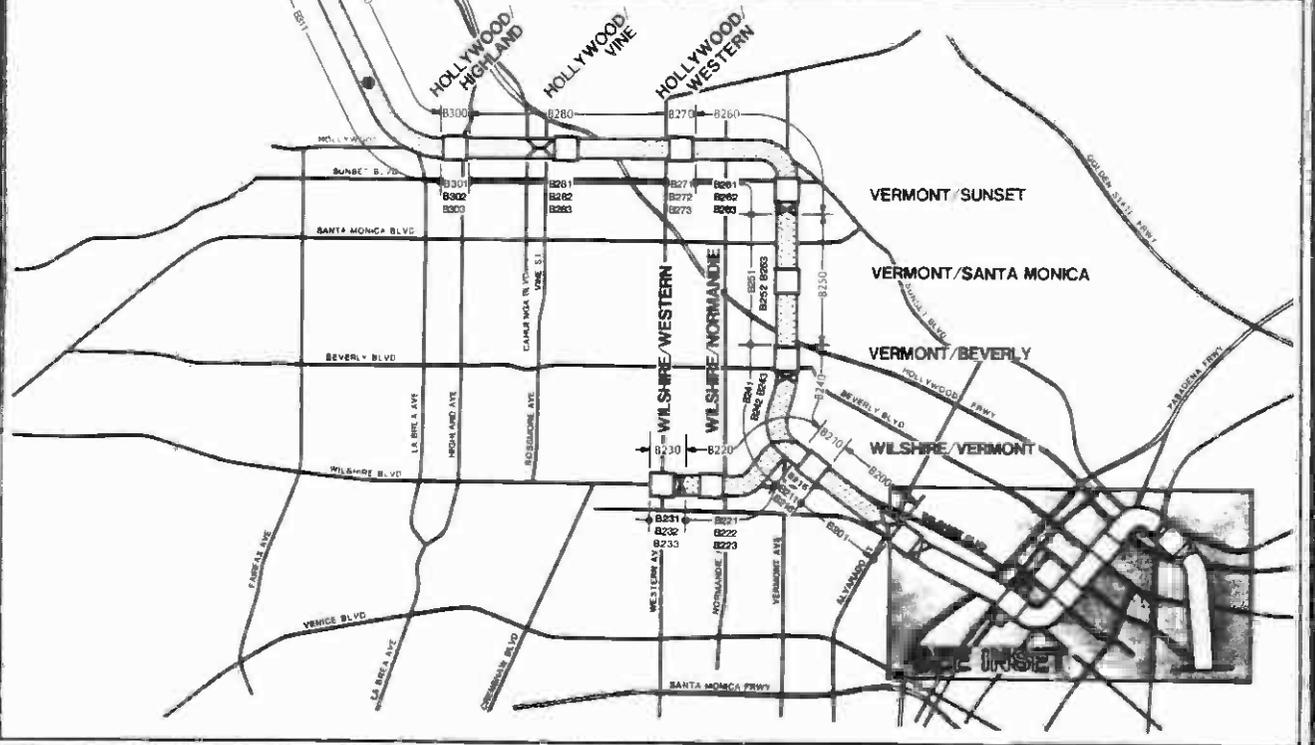
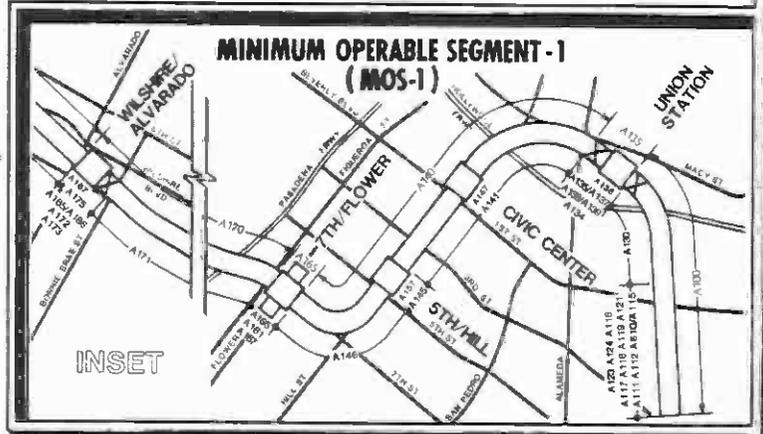
## PROJECT UNIT INDEX



Metro Rail Transit Consultants  
DMJM/PROGRESS/WA



**PHASE II**



**LOCALLY PREFERRED ALIGNMENT**