

COST AND SCHEDULE

STATUS REPORT

JANUARY 1985

MTA LIBRARY

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

NOVEMBER 1984



METRO RAIL PROJECT PROJECT UNIT INDEX

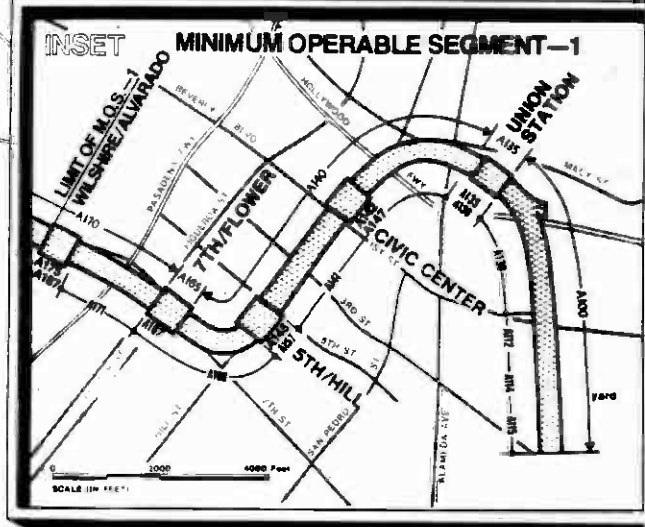
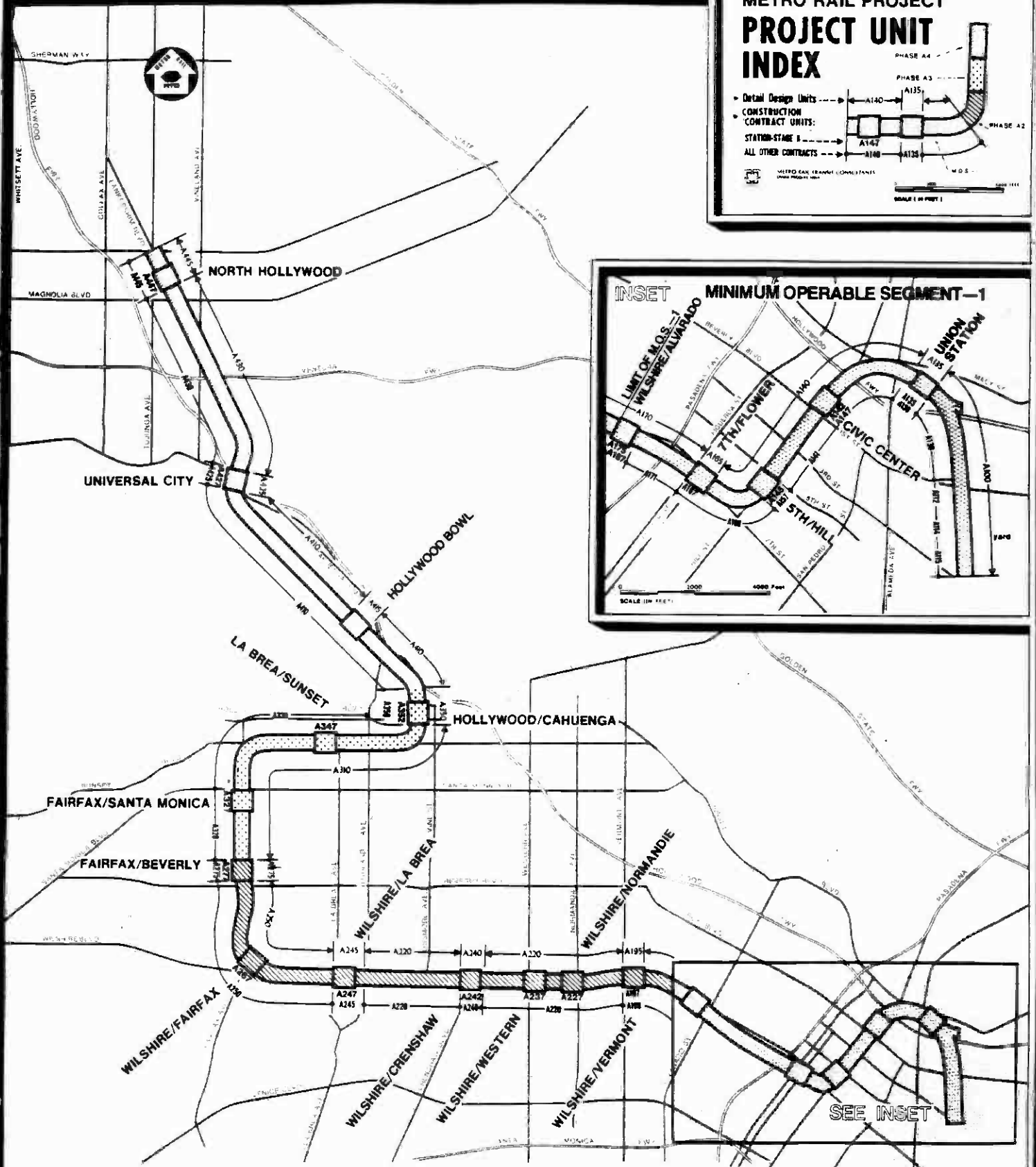
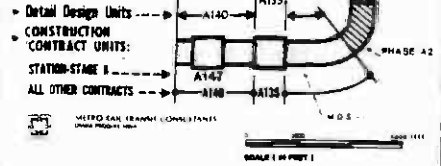


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SECTION I: BUDGET SUMMARY

RTD METRO RAIL PROJECT

STATUS NARRATIVE

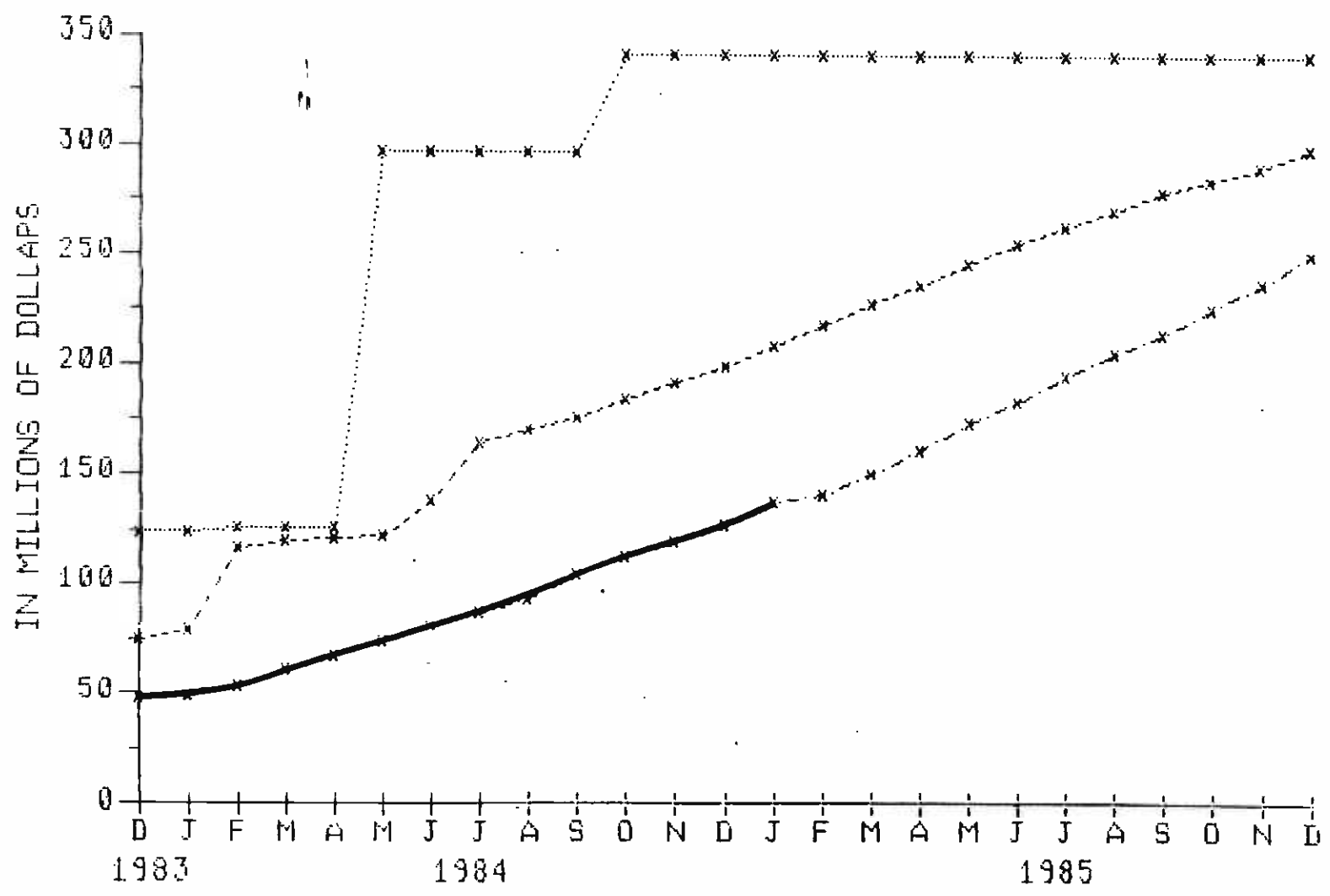
JANUARY 1985

The Total Project Approved Budget is now \$340.790 million; Expenditures to date total \$137.172 million.

The accompanying graph illustrates the planned expenditures of \$208 million against the actual expenditures. This variance of \$71 million is primarily due to the late issuance of contract NTP's and the late acquisition of R-O-W properties.

Presently, Preliminary Engineering is complete and Program Control is taking steps to close out Continued Preliminary Engineering.

RTD METRO RAIL PROJECT
 TOTAL PROJECT STATUS
 AS OF JANUARY 1985



--*-- FORECAST	— ACTUALS	--*-- PLANNED EXPENDITURES*..... CAPITAL GRANT FUNDS
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SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
METRO RAIL PROJECT NOS-1

OBLIGATIONS PLAN/FORECAST
(1st BTR. 1985 FUNDING)

REV. 0
FEB 14, 85

CONTRACT ID	DESCRIPTION	ESCALATED								
		NTP DATE	COSTS (1985)	OBLIG. TO DATE	FY'85	FY'86	FY'87	FY'88	FY'89	FY'90
A-111	CURBS/GUTTERS/SIDEWALK - SANTE FE AVENUE	11/17/87	183					183		
A-112	PAV SHOP BUILDING & YARD SERVICE AREA	8/7/85	24638		24638					
A-114	MAINTENANCE-OF-WAY SHOP BUILDING	8/7/85	4026		4026					
A-115	YARD STORAGE AREA	2/27/86	4364		4364					
A-116	YARD SITE SECURITY FENCING	4/5/89	234					234		
A-117	YARD SITE LIGHTING	4/5/89	293					293		
A-118	YARD SITE LANDSCAPING	3/28/88	83				83			
A-119	TRACK RELOCATION, 1st ST. & HOBART YARD	4/1/85	16500	16500						
A-130	YARD LEADS & TRANSFER ZONE	1/7/86	60502		60502					
NA-097	YARD/SHOPS - TELEPHONE RELOCATION	5/1/85	131	131						
NA-093	YARD/SHOPS - GAS RELOCATION	5/1/85	581	581						
NA-009	YARD/SHOPS - WATER RELOCATION	5/1/85	235	235						
NA-YYY	YARD/SHOPS - CHEVRON RELOCATION	1/7/86	303		303					
A-133	UNION STATION - BAGGAGE HANDLING	9/5/85	1605		1605					
A-135	UNION STATION - STAGE I	9/5/85	34193		34193					
A-136	UNION STATION - STAGE II	5/8/87	13846			13846				
A-138	UNION STATION - SITEWORK - CURBS/GUTTERS	10/3/89	1129						1129	
A-139	UNION STATION - SITE LANDSCAPING	10/3/89	207						207	
A-137	CENTRAL CONTROL FACILITY	8/4/86	2661			2661				
A-141	LINE-UNION TO 7th/FLOWER-CIVIC CTR STG I	12/16/85	56832		56832					
NA-009	SLB/HILL - POWER RELOCATION	4/1/85	1683	1683						
NA-007	SLB/HILL - TELEPHONE RELOCATION	4/1/85	579	579						
NA-093	SLB/HILL - GAS RELOCATION	4/1/85	316	316						
NA-009	SLB/HILL - WATER RELOCATION	4/1/85	579	579						
NA-446	SLB/HILL - CABLE TV RELOCATION	4/1/85	32	32						
NA-111	SLB/HILL - WESTERN UNION	4/1/85	16	16						
A-145	SLB/HILL STATION - STAGE I	12/16/85	48227		48227					
NA-009	CIVIC CENTER - POWER RELOCATION	4/1/85	57	57						
NA-007	CIVIC CENTER - TELEPHONE RELOCATION	4/1/85	226	226						
NA-009	CIVIC CENTER - WATER RELOCATION	4/1/85	195	195						
NA-111	CIVIC CENTER - WESTERN UNION	4/1/85	5	5						
A-142	CIVIC CENTER EXCAVATION & SUPPORT	8/7/85	12403		12403					
NA-093	EXCAV. SUPPORT - GAS RELOCATION	4/1/85	57	57						
A-147	CIVIC CENTER STATION - STAGE II	7/14/88	17729						17729	
A-157	SLB/HILL STATION - STAGE II	11/18/87	17496				17496			
A-148	SLB/HILL - VALTS RELOCATION	9/9/85	425		425					

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
METRO RAIL PROJECT NOS-1

REV. 0
FEB 14, 85

OBLIGATIONS PLAN/FORECAST
(1st STR. 1985 FUNDING)

CONTRACT #	DESCRIPTION	NTP DATE	ESCALATED COSTS (000)	OBLIG. TO DATE	FY							
					FY'85	FY'86	FY'87	FY'88	FY'89	FY'90	FY'91	
A-166	LINE-SUN/HILL-7th/FLOWER-7th/FLOWER STATION STG 1	12/16/85	70655		70655							
A-167	7th/FLOWER STATION - STAGE II	3/29/88	9490					9490				
NA-009	7th/FLOWER - POWER RELOCATION	4/1/85	341		341							
NA-007	7th/FLOWER - TELEPHONE RELOCATION	4/1/85	455		455							
NA-093	7th/FLOWER - GAS RELOCATION	4/1/85	57		57							
NA-A09	7th/FLOWER - WATER RELOCATION	4/1/85	455		455							
NA-444	7th/FLOWER - CABLE TV RELOCATION	4/1/85	26		26							
NA-111	7th/FLOWER - WESTERN UNION	4/1/85	114		114							
A-171	LINE - 7th/FLOWER TO WILSHIRE/VERMONT	9/19/85	38643		38643							
A-175	WILSHIRE/ALVARADO STATION - STAGE I	9/19/85	38617		38617							
A-187	WILSHIRE/ALVARADO STATION - STAGE II	7/14/88	9640						9640			
A-185	WILSHIRE/ALVARADO STATION - SITEWORK	5/11/89	823						823			
A-186	WILSHIRE/ALVARADO STATION - SITE LANDSCAPE	5/11/89	125						125			
NA-009	WILSHIRE/ALVARADO - POWER RELOCATION	4/16/85	58		58							
NA-007	WILSHIRE/ALVARADO - TELEPHONE RELOCATION	4/16/85	57		57							
NA-093	WILSHIRE/ALVARADO - GAS RELOCATION	4/16/85	104		104							
NA-A09	WILSHIRE/ALVARADO - WATER RELOCATION	4/16/85	73		73							
	ART-IN-TRANSIT	6/1/88	971						971			
A-610	TRACKWORK PROCUREMENT/INSTALLATION	11/19/85	18548		18548							
A-612	CONTACT RAIL PROCUREMENT	3/19/86	1829		1829							
A-615	PROTECTIVE COVERBOARD PROCUREMENT	3/19/86	1056		1056							
A-620	AUTOMATIC BRAIN CONTROL	7/9/86	23480				23480					
A-630	TRACTION POWER PROCUREMENT	9/15/86	6285				6285					
A-631	TRACTION POWER INSTALLATION	7/10/87	6110					6110				
A-640	COMMUNICATIONS PROCURE & INSTALL	8/7/86	18270				18270					
A-650	PASSENGER VEHICLES PROCUREMENT	6/4/86	53418		53418							
A-640	FARE COLLECTION PROCURE & INSTALL	5/7/87	10230				10230					
A-671	LOCOMOTIVE PROCUREMENT	2/17/88	769					769				
A-672	FLAT CARS PROCUREMENT	2/17/88	58					58				
A-675	CRANE PROCUREMENT (FOR FLAT CAR)	2/17/88	26					26				
A-680	OPERATIONAL GRAPHICS	11/30/88	133						133			
A-710	ESCALATORS PROCURE & INSTALL	7/25/86	12132				12132					
A-720	ELEVATORS PROCURE & INSTALL	7/25/86	1362				1362					
A-730	SHOP EQUIPMENT (FIXED) PROCURE & INSTALL	5/28/86	27					27				
A-735	SHOP EQUIPMENT (FREE STANDING/PORTABLE)	3/21/86	315				315					
A-740	FANS/BAMPERS PROCUREMENT	8/20/85	7640		7640							
A-745	AIR HANDLING EQUIPMENT (IPSS) PROCURE	8/5/86	228				228					
A-760	SIGNS & GRAPHICS PROCUREMENT	12/20/88	1762							1762		
A-770	SHOP EQUIPMENT - RUBBER Tired VEHICLES	11/17/87	394					394				
A-775	MOBILE EMERGENCY & MAINTENANCE EQUIPMENT	11/17/87	380					380				
A-780	FURNITURE PROCUREMENT	11/17/87	198					198				
A-790	FIRST STORES & CONSUMABLES PROCUREMENT	3/25/86	111				111					

MTA LIBRARY

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
 RETRO RAIL PROJECT NOS-1

OBLIGATIONS PLAN/FORECAST
 (1st QTR. 1985 FUNDING)

REV. 0
 FEB 14, 85

CONTRACT ID	ESCALATED		COSTS OBLIG. TO								
	DATE	(000)	DATE	FY'85	FY'86	FY'87	FY'88	FY'89	FY'90	FY'91	
GENERAL CONSULTANT		130860	35400	65700	24334	6226	6055	6221	4055	2070	
CONSTRUCTION MANAGER		71536		5510	10855	12464	14544	13151	11440	3541	
RIGHT OF WAY		87452	172	48527	38753						
AGENCY		102933	20412	15200	13011	13923	13634	11947	10655	4751	
OWNER CONTROLLED INSURANCE		51256		14540	19150	8410	6744	2404			
PRELIMINARY ENGINEERING		38843	38843								
Project Obligations (w/o contingencies)		1152956	94827	172415	576508	129527	76535	64469	28286	10389	

BASIS - ASSUMES REVENUE SERVICE DATE OF - MAY 1991
 ASSUMES FUNDING AVAILABILITY OF - 1st QUARTER 1985

METRO RAIL PROJECT
 AVAILABLE FUNDS CASHFLOW - MOS-1
 (\$000)

1 2 3 4
 (1 - 3)

5 6
 (4 - 5)

CASHFLOW

APE	DESCRIPTION	APPROVED BUDGET	ACTUAL OBLIG. THRU 1/85	ACTUAL EXPENDED THRU 1/85	REMAINING BUDGET THRU 1/85		FY 1985												FY 1986				TOTAL CASHFLOW FROM 1/85	BAL.
							CALENDAR 1985																	
							JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB				
02110	R.O.W (NOTE 1)	60863	987	987	59876	PLAN ACTUAL F'CAST	0	0	0	0	7130	9675	687	669	5272	5272	5272	5272	5272	5272	49793	10682		
02103	PROFESSIONAL SERVICES FOR ENG./DESIGN	139475	140565	106716	32759	PLAN ACTUAL F'CAST	5631	4831	5320	5074	4841	4619	4422	3971	3571	3216	2901	2621	1988	1670	54676	-17734		
02111	PROFESSIONAL SERVICES FOR CONSTR. MGMT	9000	6590	1909	7091	PLAN ACTUAL F'CAST	610	532	299	412	447	445	455	440	600	700	850	940	950	955	8625	-1355		
02117	RAILROAD RELOCATION	17000	12870	0	17000	PLAN ACTUAL F'CAST	0	0	0	0	0	0	0	0	230	1472	1680	1872	2000	1952	9206	7794		
02104	FORCE ACCOUNT	19416	13807	13807	3609	ACTUAL	436																	
02106	GEN. & ADM.	825	700	649	176	ACTUAL	96																	
02105	OTHER SUPPORT SERVICES	3350	3262	3262	88	ACTUAL	59																	
02101	SUPPORT AUTOS	70	70	22	48	ACTUAL	0																	
02102	SUPPORT EQUIPMENT	2290	1340	1176	1075	ACTUAL	-39																	
02108	MIS EQUIPMENT	1000	823	719	281	ACTUAL	719																	
02109	COMMUNICATION EQUIPMENT	100	0	0	100	ACTUAL	0																	
	TOTAL AGENCY	27051	20002	19635	5377	PLAN ACTUAL F'CAST	800	800	800	800	800	800	800	800	800	800	800	800	800	800	11200	-2513		

00

METRO RAIL PROJECT
AVAILABLE FUNDS CASHFLOW - MOS-1
(\$000)

1 2 3 4 5 6
(1 - 3) (4 - 5)

CASHFLOW

AFE	DESCRIPTION	APPROVED BUDGET	ACTUAL OBLIG. THRU 1/85	ACTUAL EXPENDED THRU 1/85	REMAINING BUDGET THRU 1/85	FY 1985												FY 1986		TOTAL CASHFLOW FROM 1/85 TO 2/86	BAL.		
						CALENDAR 1985												JAN	FEB				
						JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB				
04501	YARD/SHOPS ACQUISITION	31000	29000	169	30831	ACTUAL	0																
04502	YARD/SHOPS ACQUISITION	1630	1630	0	1630	ACTUAL	0																
	TOTAL YARD & SHOPS ACQUISITION	32630	30630	169	32461	PLAN ACTUAL F'CAST	0 0 0	15700	0	0	0	7268	736	1008	1018	0	0	0	0	0	25730	6900	
02112	OWNER-CONTROLLED INSURANCE	4000	894	100	3900	PLAN ACTUAL F'CAST	0 0 0	0	0	0	0	90	119	173	190	348	408	346	429	1082	3185	715	
	PROJECT SUBTOTAL (WITHOUT CONTINGENCIES)	290019	212538	129516	158464	PLAN ACTUAL F'CAST	7041 6401 0	21863	6419	6286	13218	22897	7209	7061	11681	11808	11911	11851	11439	11731	162415	4489	

NOTE: 1) YARD & SHOPS PARCELS ARE OBLIGATED AGAINST CTC/LACTC ADVANCED LAND ACQUISITION FOR YARD & SHOPS (\$ 32.6 MILLION - AFE 04501 & 04502)

BASIS:

- A) CASHFLOW REFLECTS THE DISTRICT'S ACTUAL PAYMENT HISTORY WHICH APPEARS TO BE APPROXIMATELY 2 MONTHS AFTER THE EXPENSE HAS ACCRUED.
- B) THIS CASHFLOW ASSUMES THAT THE GC & CM WILL CONTINUE WORKING AFTER THEIR CURRENT AWP'S HAVE EXPIRED. WE CANNOT OBLIGATE ANOTHER FULL YEAR AWP DUE TO FUNDING LIMITATIONS.
- C) OCIP IS CURRENTLY SHOWN AS A % OF THE PLANNED CONSTRUCTION CASHFLOW.

METRO RAIL PROJECT
 AVAILABLE FUNDS CASHFLOW - MOS-1
 (\$000)

1 2 3 4 5 6
 (1 - 3) (4 - 5)

AFE	DESCRIPTION	APPROVED BUDGET	ACTUAL OBLIG. THRU 1/85	ACTUAL EXPENDED THRU 1/85	REMAINING BUDGET THRU 1/85	CASH FLOW														TOTAL CASHFLOW FROM 1/85						
						FY 1985					CALENDAR 1985						FY 1986			JAN	FEB	TO 2/86	BAL.			
						JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC									
						PLAN	ACTUAL	F*CAST	PLAN	ACTUAL	F*CAST	PLAN	ACTUAL	F*CAST	PLAN	ACTUAL	F*CAST									
02107	CONTINGENCIES	3537	0	0	3537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3537	0	
02116	REVENUE FINANCING	2089	0	0	2089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2089	0
PROJECT TOTAL INCLUDING CONTINGENCIES		295645	212538	129516	164090	7041	6401	21863	6419	6286	13218	22897	7209	7061	11681	11808	11911	11851	11439	11731	162415	10115				

SCRIPD METRO RAIL PROJECT

DETAILED FUNDING BREAKDOWN

Funding Increment	FUNDING SOURCE					TOTAL
	UMDA Section 3	UMDA Section 9	State	LACTC	District (TDA)	
Preliminary Engineering Phase I (6/80) CA-03-0130	\$ 12,000,000	\$ -0-	\$ 2,816,250	\$ 750,000	\$ -0-	\$ 15,566,250
Preliminary Engineering Phase II (5/82) CA-03-0130-01	\$ 9,800,000	\$ -0-	\$ 1,683,250	\$ 612,500	\$ -0-	\$ 12,095,750
Preliminary Engineering Phase III (7/82) CA-03-0130-02	\$ 9,274,400	\$ -0-	\$ 1,326,950	\$ 579,650	\$ -0-	\$ 11,181,000
SUB-TOTAL Preliminary Engineering	\$ 31,074,400	\$ -0-	\$ 5,826,450	\$ 1,942,150	\$ -0-	\$ 38,843,000
Continued Preliminary Engineering, Phase I (9/82) CA-03-0130-03	\$ 15,000,000	\$ -0-	\$ 2,812,500	\$ 937,500	\$ -0-	\$ 18,750,000
Continued Preliminary Engineering, Phase II (4/83) CA-03-0130-04	\$ 25,000,000	\$ -0-	\$ 5,503,000	\$ 2,830,000	\$ -0-	\$ 33,333,000 (1)
SUB-TOTAL Continued Preliminary Engineering	\$ 40,000,000	\$ -0-	\$ 8,315,500	\$ 3,767,500	\$ -0-	\$ 52,083,000
Acquisition of Santa Fe Rail Yard (9/83) X-7619	\$ -0-	\$ -0-	\$ 31,000,000	\$ 1,630,000	\$ -0-	\$ 32,630,000
Advanced Land Acquisition (9/83) CA-90-0022	\$ -0-	\$ 14,760,000	\$ -0-	\$ -0-	\$ 3,690,000	\$ 18,450,000
Pre-Construction (5/84) CA-03-0130-05,06	\$ 105,400,000	\$ -0-	\$ 27,100,000	\$ 37,500,000	\$ -0-	\$ 170,000,000
Busway Modification (7/84)	\$ -0-	\$ -0-	\$ -0-	\$ 2,500,000	\$ -0-	\$ 2,500,000
Funds Available For Future Use/Match	\$ -0-	\$ 25,483,720	\$ 300,000	\$ 500,000	\$ -0-	\$ 26,283,720
TOTAL, ALL GRANT ALLOCATIONS	\$ 176,474,400	\$ 40,243,720	\$72,541,950	\$ 47,839,650	\$ 3,690,000	\$ 340,789,720

(1) Share ratio changes from 80% Federal/20% State and Local to 75% Federal/25% State And Local.

PC-(DUMP) .18
1/22/85

RTD METRO RAIL PROJECT
OPEN PROFESSIONAL SERVICES CONTRACTS

1/31/85

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>\$</u> <u>BUDGET</u>
I. Transit Facilities		
3509	Westec	15,000
2284-5	Lindvall Richter (Geotech. II)	480,900
3138	City of Los Angeles (Master Agreement)	693,000
3172	Pacific Bell	156,000
3301	CALTRANS	2,553,000
3237	Western Union Telegraph	60,000
3351	John Gordon	20,000
3320	Julia Brown	20,000
3323	Alan Sieorty	20,000
3464-A	Dept. of Water & Power - Water Section	90,000
3173-A	Dept. of Water & Power - Power Section	360,000
2160-6	Barton Aschman	161,700
2611-3	County of Los Angeles (Staff Asst.)	229,300
2274	Carl Englund	14,153
3212	W.H. Patterson	7,000
3520	Southern California Gas Co.	45,000
3480	O'Brien & Kreitzberg	24,900
3535	Flood Control District	53,000
	Sub-Total	\$ 5,002,953
II. System Design & Analysis		
3394	MIDCOM	10,000
3282	SRI International	19,985
3090-1	Cons. Fire Prot. District	103,286
3136-1	Booz-Allen & Hamilton	1,499,031
3170-1	Mellon Institute	24,900
3371	COMMUNICOM	7,500
2218	Commission de Transport	5,000
2218	Walter Woods	1,020
	Sub-Total	\$ 1,670,722

RTD METRO RAIL PROJECT
OPEN PROFESSIONAL SERVICES CONTRACTS
(CONT.)

1/31/85

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>\$</u> <u>BUDGET</u>
III. Planning		
3010-1	Community Redevelopment Agency	542,000
3137	City of Los Angeles (Station Dev.)	573,000
3254-2	Schimpeler - Corradino	927,213
2900-2	Schimpeler - Corradino	151,000
3328	CMB Communications	<u>2,500</u>
	Sub-Total	\$ 2,195,713
IV. Real Estate		
A. Yard & Shops Acquisition		
3032	Flavell & Assoc.	50,000
3033	Lea Associates	50,000
3102-1	Robert Swanson	22,500
3484	Robert Swanson	<u>2,750</u>
	Sub-Total	\$ 125,250
B. Other Real Estate		
3116	Chicago Title Insurance	50,000
3175	TICOR Title Insurance	75,000
3462	James Himes	8,750
3209	Arthur Anderson	1,550
3463	R.P. Laurain	9,900
3189-2	Joseph Gary	10,026
3523	Thomas Scalora	6,000
3550	William Helpes	12,500
3547	Universal Appraisal	16,000
3241	Crockett	5,900
3242	Industrial Appraisal	7,925
3461	Leon Beliausk	7,950
3485	Woeber	4,050
3495	Jack Jue	3,000
3522	Carl Lau	1,000
3483	Norman Eichel	<u>13,250</u>
	Sub-Total	\$ 232,801

PC-MO.STAT.#2
6-A.2
2/27/85

RTD METRO RAIL PROJECT
 OPEN PROFESSIONAL SERVICES CONTRACTS
 (CONT.)

1/31/85

<u>AUDIT #</u>	<u>CONTRACT</u>	<u>BUDGET</u>
V. Legal		
2910-4	NBMBW & M	115,000
2943	O'Melveny & Myers	<u>100,000</u>
	Sub-Total	\$ 215,000
VI. Misc. Contracts		
3065	David Ashley	7,000
3030	Dillon Read & Co.	24,900
3054	Haverson International	24,900
2499	Barton-Aschman	4,121
2430	Bureau de Transit Metro	2,187
2940	Steve Mertz (U.S.C.)	5,000
2276	U.S.C.	4,320
3506	California Newspaper Service Bureau	<u>105,000</u>
	Sub-Total	\$ 177,428
VII. Owner Controlled Insurance		
3504	James/Kadowski/Ortiz/Rideau	894,154
VIII. General Consultant		
2967	MRTC	102,388,000
	Sub-Total	\$ 102,388,000
VIII. Construction Management		
3369	PDCD	<u>6,589,849</u>
	Sub-Total	\$ 6,589,849
TOTAL OPEN PROFESSIONAL SERVICES CONTRACTS		\$ 119,491,870

PC-MO.STAT.#2
 6-A.2
 2/27/85

SECTION II: CONTRACT EVALUATIONS

MTA LIBRARY



A. COST

EXPLANATION OF TERMS

Cost Performance Index (C.P.I.)	- Used to indicate the actual cost of each planned dollar of work accomplished. = $\frac{\text{Earned Costs}}{\text{Expenditures}}$
Cost Variance (C.V.)	- The difference between the actual dollars spent and the actual dollars earned. = Actual \$ Spent - Earned \$
Current Contract Cost	- The dollar value on which contractual agreement has been reached.
Expended	- The entry into official RTD accounting ledgers of the use of resources.
Forecast at Completion	- An estimate and prediction of the total cost of the contract.
Independent Estimate at Completion (I.E.A.C.)	- A calculated EAC based on the current rate of cost performance. = $\frac{\text{Forecast at Completion}}{\text{C.P.I.}}$
Negotiated Contract Changes	- The cumulative cost applicable to definitized contract changes which have occurred since the beginning of the contract.
Original Contract Cost	- The dollar value negotiated in the original contract.
Pending Changes	- The estimated cost for contract changes that have yet to be negotiated or approved.
Percent Complete	- A comparison of the completion status to the current projection of total work.
Productivity	- A relative measure of labor efficiency compared to an established base. = $\frac{\% \text{ complete} \times \text{Total MH forecast}}{\text{MH's spent}}$

To Complete Performance Index

(T.C.P.I.) - Basically a comparison of the work remaining to the amount of money remaining. The results of this formula indicate the cost efficiency the contractor must perform to meet the Forecast at Completion.

$$= \frac{\text{Forecast at Completion} - \text{Earned Costs}}{\text{Forecast at Completion} - \text{Actual \$ Spent}}$$

Variance

- Any actual or potential deviation from a budget or plan.

OVERALL COST ASSESSMENT

This month's Cost/Schedule Status Report analyzes and compares reported actuals against the MRTC's latest forecasts. In general, actual progress is running behind forecasted progress on MOS-1 contracts. For details concerning individual contracts, refer to the Section Designer Evaluation Summary in this report.

Some concerns with this month's report are as follows:

- o Forecasted percent complete figures are not reported this month on contract A170 and all Increment I contracts.
- o To accurately analyze Increment I contracts, the Increment I data has been converted to show progress as a percentage of only the Increment I base - not as a percentage of the total contract as depicted in the MRTC Progress Report.
- o The To Complete Performance Index (T.C.P.I.) on contracts A165, A170, A195, A275 and A350 reflect unrealistically high performance indices.

METRO RAIL PROJECT
SECTION DESIGN EVALUATION SUMMARY
JANUARY 1985

UNIT NO.	DESCRIPTION	TOTAL % COMPLETE		CURRENT INCRE- MENTAL PROGRESS	PRODUCTIVITY BASED ON		ORIGINAL/INC. I NEGOTIATED CONTRACT AMOUNT	FORECAST AT COMPLETION		TO COMPLETE AVERAGE EFFICIENCY **
		F'CAST	ACTUAL		MHRS	\$\$		MRTC	TSD PROJECTED	
MOS-1 CONTRACTS:										
A100	YARD AND SHOPS	98%	96%	5%	98%	101%	\$ 4,080,878	\$ 6,449,000	\$ 6,535,000	73%
A135	UNION STATION	95%	95%	3%	101%	103%	2,897,000	4,200,000	4,168,000	72%
A140	CIVIC CENTER/5TH & HILL/LINE	76%	66%	5%	106%	114%	6,203,707	6,987,000	5,965,000	82%
A165	7TH & FLOWER	98%	95%	6%	99%	98%	2,129,587	3,841,000	3,739,000	183%
A170	WILSHIRE/ALVARADO + LINE	N/A	94%	3%	99%	99%	3,119,430	4,410,000	4,457,000	118%
SUBTOTAL MOS-1 CONTRACTS:							\$ 18,430,602	\$ 25,887,000	\$ 24,864,000	
INCREMENT I CONTRACTS:										
A195	WILSHIRE/VERMONT	95%	95%	3%	99%	97%	\$ 2,203,000	\$ 2,203,000	\$ 2,271,000	200%
A220	WILSHIRE/NORMANDIE & WILSHIRE/WESTERN + LINE	71%	71%	8%	96%	97%	3,878,000	3,878,000	3,998,000	108%
A240	WILSHIRE/CRENSHAW	91%	91%	3%	91%	106%	2,109,000	2,109,000	1,990,000	66%
A245	WILSHIRE/LA BREA	N/A	N/A	N/A	N/A	N/A	1,719,000	1,719,000	N/A	N/A
A250	WILSHIRE/FAIRFAX + LINE	79%	79%	1%	103%	101%	2,901,000	2,901,000	2,872,000	95%
A275	FAIRFAX/BEVERLY	95%	95%	5%	99%	98%	2,212,000	2,212,000	2,257,000	176%
A310	FAIRFAX/SANTA MONICA & LA BREA/SUNSET + LINE	67%	67%	4%	97%	98%	2,678,000	2,678,000	2,926,000	105%
A350	HOLLYWOOD/CAHUENGA	75%	75%	3%	84%	85%	1,525,000	1,525,000	1,794,000	220%
A410	LINE FROM HOLLYWOOD/CAHUENGA TO UNIVERSAL CITY	N/A	N/A	N/A	N/A	N/A	2,313,000	2,313,000	N/A	N/A
A415	HOLLYWOOD BOWL	40%	40%	0	N/A	N/A	810,000	810,000	N/A	N/A
A425	UNIVERSAL CITY	98%	98%	1%	104%	105%	1,689,000	1,689,000	1,609,000	30%
A430	LINE FROM UNIVERSAL CITY TO NORTH HOLLYWOOD	94%	94%	4%	107%	107%	1,553,000	1,553,000	1,451,000	48%
A445	NORTH HOLLYWOOD	81%	81%	2%	115%	109%	1,485,000	1,485,000	1,362,000	73%
SUBTOTAL INCREMENT I CONTRACTS:							\$ 27,075,000	\$ 27,075,000	\$ 22,530,000*	
SUBTOTAL MOS-1 CONTRACTS:							\$ 18,430,602	\$ 25,887,000	\$ 24,864,000	
GRAND TOTAL:							\$ 45,505,602	\$ 52,962,000	\$ 47,394,000*	

* EXCLUDES TSD PROJECTIONS FOR CONTRACTS A245, A410, & A415

** FOR CONTRACTS TO BE COMPLETED AT MRTC'S FORECAST

NOTE: INCREMENT I DATA HAS BEEN CONVERTED TO SHOW PROGRESS AS A PERCENTAGE OF ONLY THE INCREMENT I BASE - NOT AS A PERCENTAGE OF THE TOTAL CONTRACT AS DEPICTED IN THE MRTC PROGRESS REPORT.

METRO RAIL PROJECT
SYSTEMS/FACILITIES DESIGN EVALUATION SUMMARY
JANUARY 1985

UNIT NO.	DESCRIPTION	TOTAL % COMPLETE		CURRENT INCRE- MENTAL PROGRESS	PRODUCTIVITY BASED ON		MRTC PLAN	FORECAST AT COMPLETION		TO COMPLETE AVERAGE EFFICIENCY *
		F'CAST	ACTUAL		MHRS	\$\$		MRTC	TSD PROJECTED	
SYSTEMS CONTRACTS:										
A612										
A615										
A630	TRACTION POWER PROCUREMENT	N/A	93%	8%	102%	102%	\$ 919,000	\$ 942,000	\$ 924,000	83%
A620	AUTOMATIC TRAIN CONTROL	65%	64%	4%	100%	100%	849,000	888,000	888,000	100%
A631	TRACTION POWER INSTALLATION	30%	30%	5%	109%	109%	262,000	526,000	483,000	97%
A640	COMMUNICATIONS	56%	56%	4%	92%	94%	1,045,000	1,362,000	1,449,000	109%
A650	PASSENGER VEHICLES	76%	77%	1%	99%	102%	764,000	898,000	880,000	95%
A660	FARE COLLECTION	57%	54%	4%	100%	101%	360,000	507,000	502,000	99%
A671										
-679	AUXILIARY VEHICLES	N/A	N/A	N/A	N/A	N/A	213,900	213,900	N/A	N/A
SUBTOTAL SYSTEMS CONTRACTS:							\$ 4,412,900	\$ 5,336,900	\$ 5,126,000	
FACILITIES CONTRACTS:										
A610	INSTALL MAIN LINE TRACKWORK	N/A	55%	2%	93%	92%	\$ 1,175,000	\$ 826,000	\$ 897,000	112%
A710	ESCALATORS	N/A	100%	0%	103%	111%	95,000	95,000	N/A	N/A
A720	ELEVATORS	N/A	100%	0%	99%	107%	64,000	84,500	N/A	N/A
A740	FANS, DAMPERS, AND CONTROLS	N/A	90%	(-5)%	47%	51%	51,000	58,500	100,000	N/A
A745	STATION AIR-HANDLING UNITS	N/A	50%	0%	N/A	N/A	TBD	19,600	N/A	N/A
A750	TUNNEL LINERS	N/A	80%	(-17)%	31%	33%	167,200	373,000	506,700	N/A
A760	GRAPHICS AND SIGNAGE	N/A	52%	2%	26%	32%	72,500	111,100	226,600	N/A
A795	UNINTERRUPTIBLE POWER SYSTEM	N/A	5%	N/A	N/A	N/A	TBD	TBD	N/A	N/A
SUBTOTAL FACILITIES CONTRACTS:							\$ 1,624,700	\$ 1,567,700	\$ 1,730,300	
SUBTOTAL SYSTEMS CONTRACTS:							\$ 4,412,900	\$ 5,336,900	\$ 5,126,000	
GRAND TOTAL:							\$ 6,037,600	\$ 6,904,600	\$ 6,856,300	

* FOR CONTRACTS TO BE COMPLETED AT MRTC'S FORECAST

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MTA LIBRARY

**COST PERFORMANCE REPORT
SECTION DESIGNER**

CONTRACT NO. : A100, Yard & Shops
 CONTRACTOR : DMJM/PBQD
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 4,080,878	\$ 479,020	\$ 4,559,898	\$ 1,889,494	\$ 6,449,392	\$ 6,420,000	\$ 29,392

CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

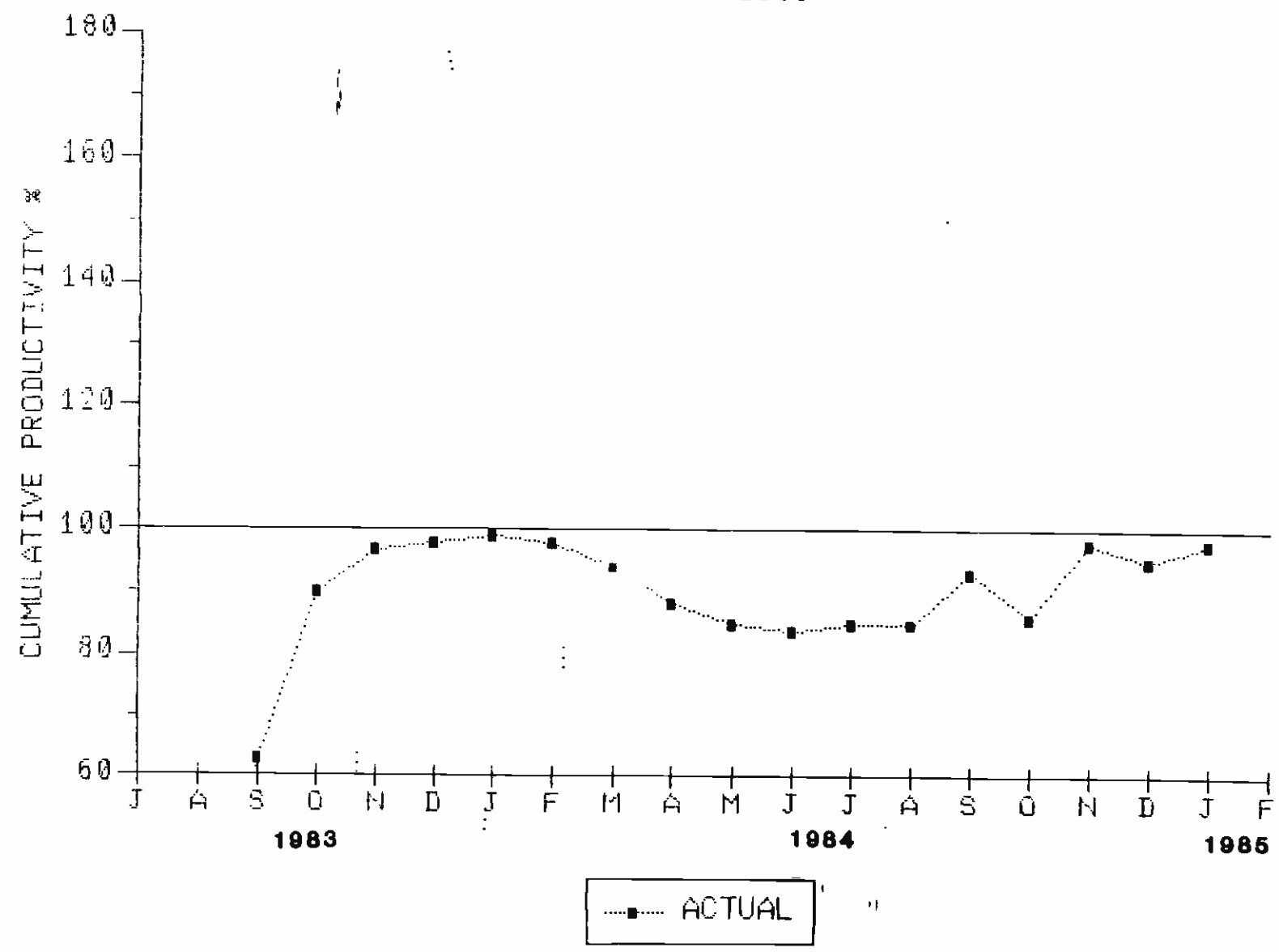
PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	98%	96%	98%	\$ 1.01	\$ (48,000)	73%	\$ 6,534,653

CONCLUSIONS AND OBSERVATIONS:

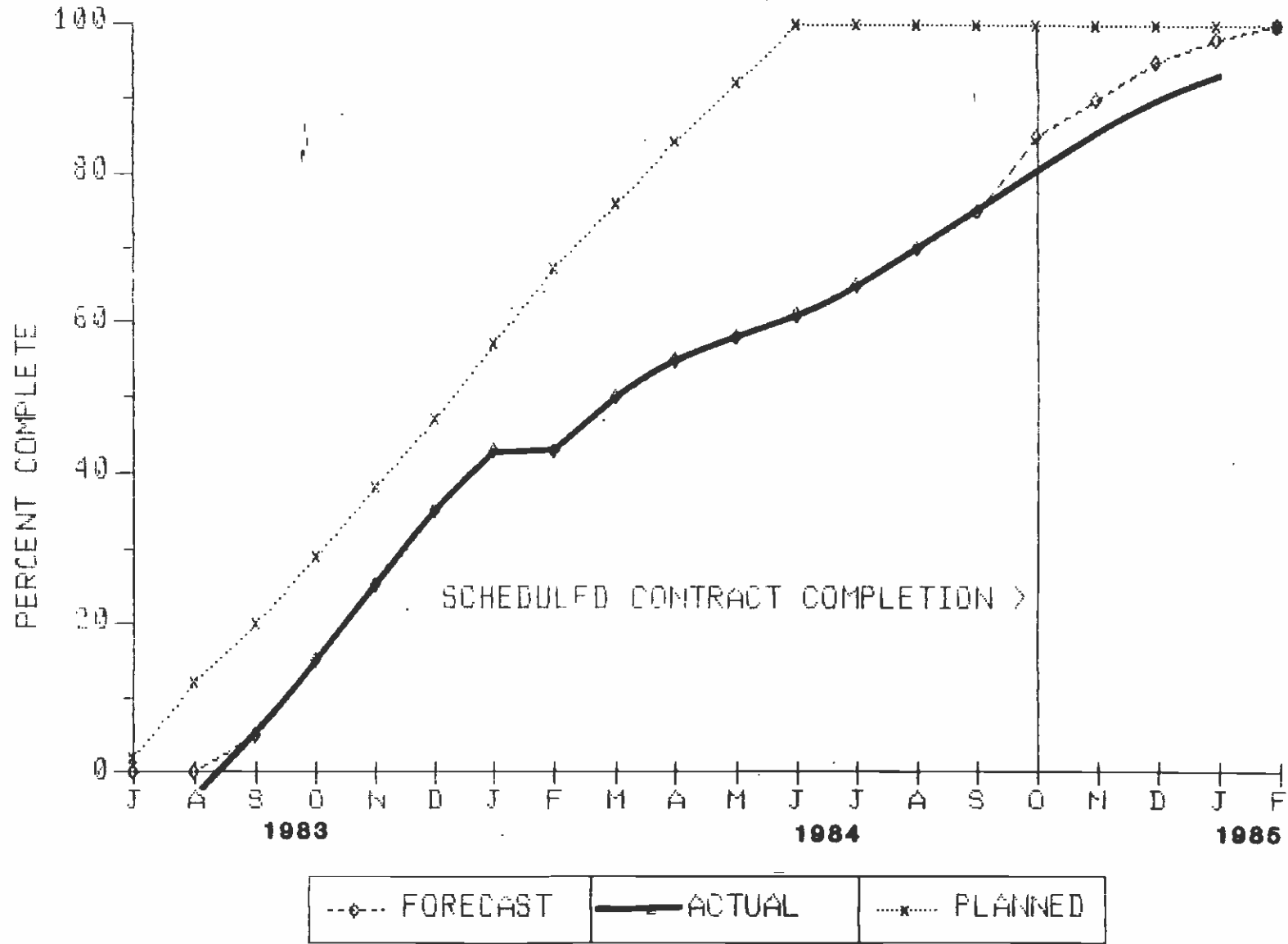
The MRTC estimate at completion has been reduced by \$100,608 this month. This is due to the adjustment of some pending changes. Productivity and the C.P.I. have both increased this month, indicating that the contractor's performance will help attain the projected completion date of February 1985.

RTD METRO RAIL PROJECT
 CONTRACT A100 - MAIN YARD AND SHOPS
 SECTION DESIGNER: DMJM/PBQD
 JANUARY 1985

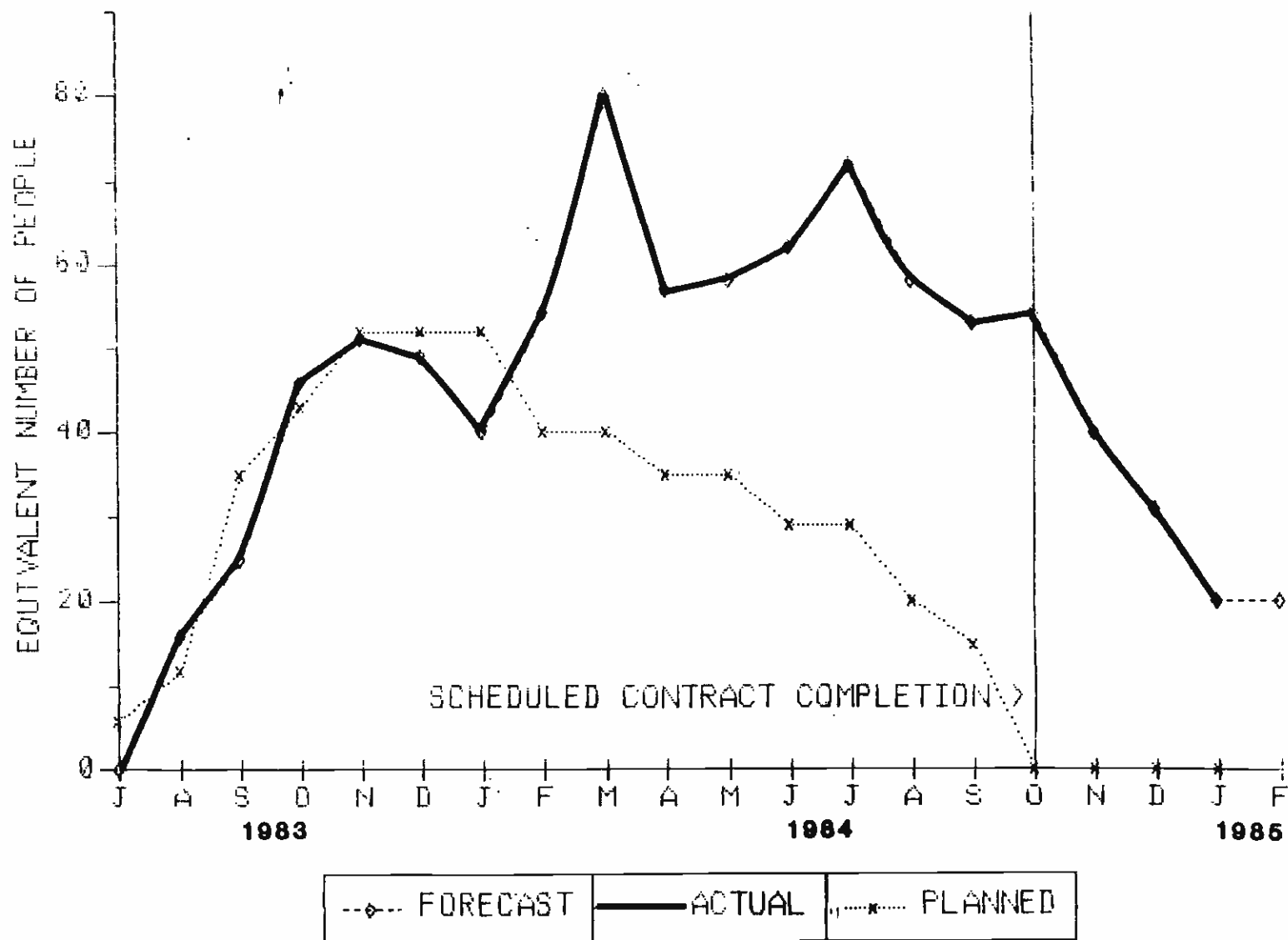
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RTD METRO RAIL PROJECT
 CONTRACT A100 - MAIN YARD AND SHOPS
 SECTION DESIGNER: DMJM/PBQD
 JANUARY 1985



RTD METRO RAIL PROJECT
 CONTRACT #100 - MAIN YARD AND SHOPS
 SECTION DESIGNER: DMJM/PB00
 JANUARY 1985



COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A135, Union Station
 CONTRACTOR : Harry Weese & Associates
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 2,897,000	\$ 457,997	\$ 3,354,997	\$ 845,003	\$ 4,200,000	\$ 3,993,000	\$ 207,000

CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

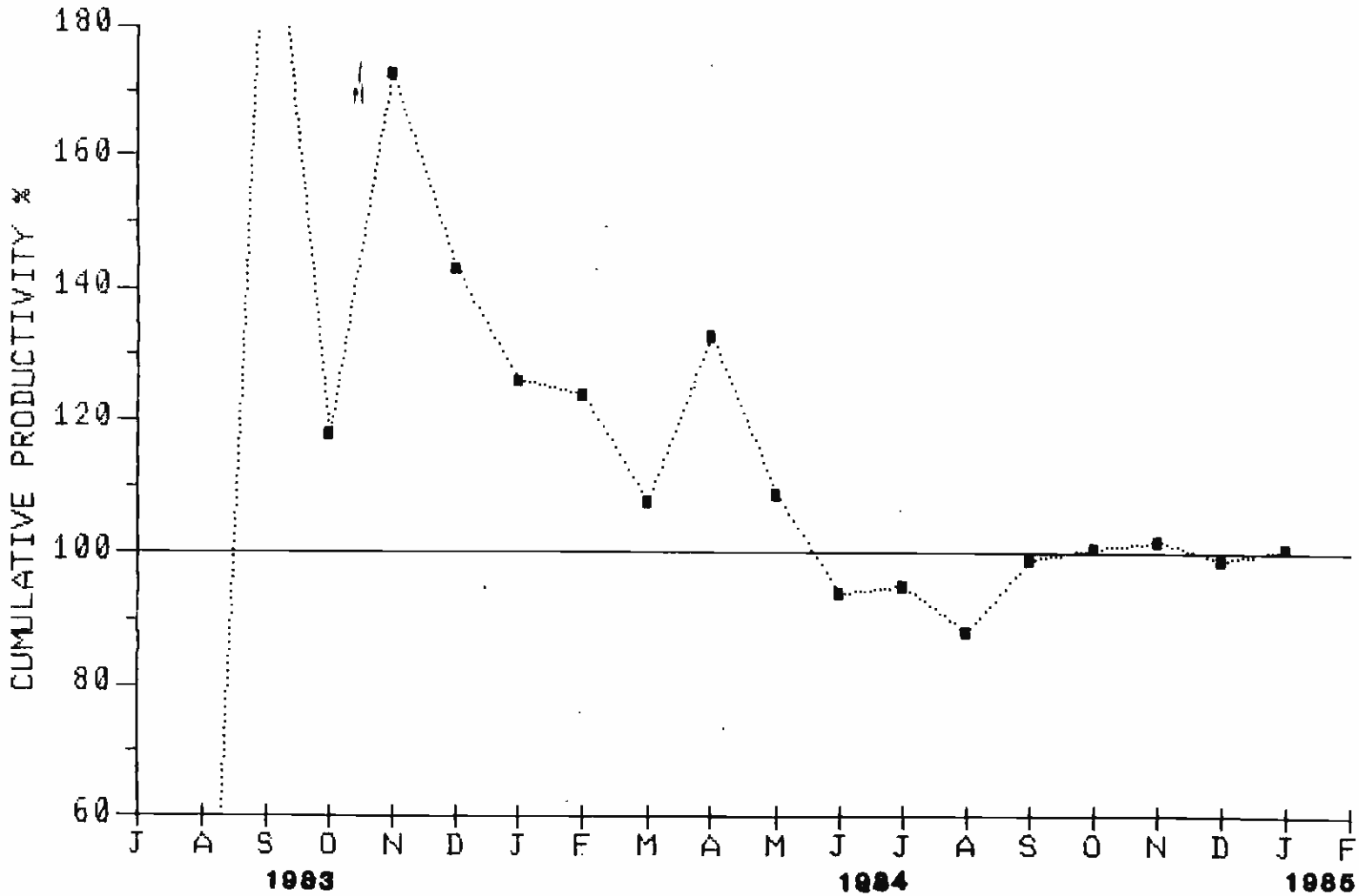
PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	95%	95%	101%	\$ 1.03	\$ (85,350)	72%	\$ 4,167,961

CONCLUSIONS AND OBSERVATIONS:

(Note: The monthly cost and labor forecasts for March should read 120 and 23, respectively; for April, 60 and 11, respectively. These figures were inadvertently omitted from the January MRTC Progress Report.)

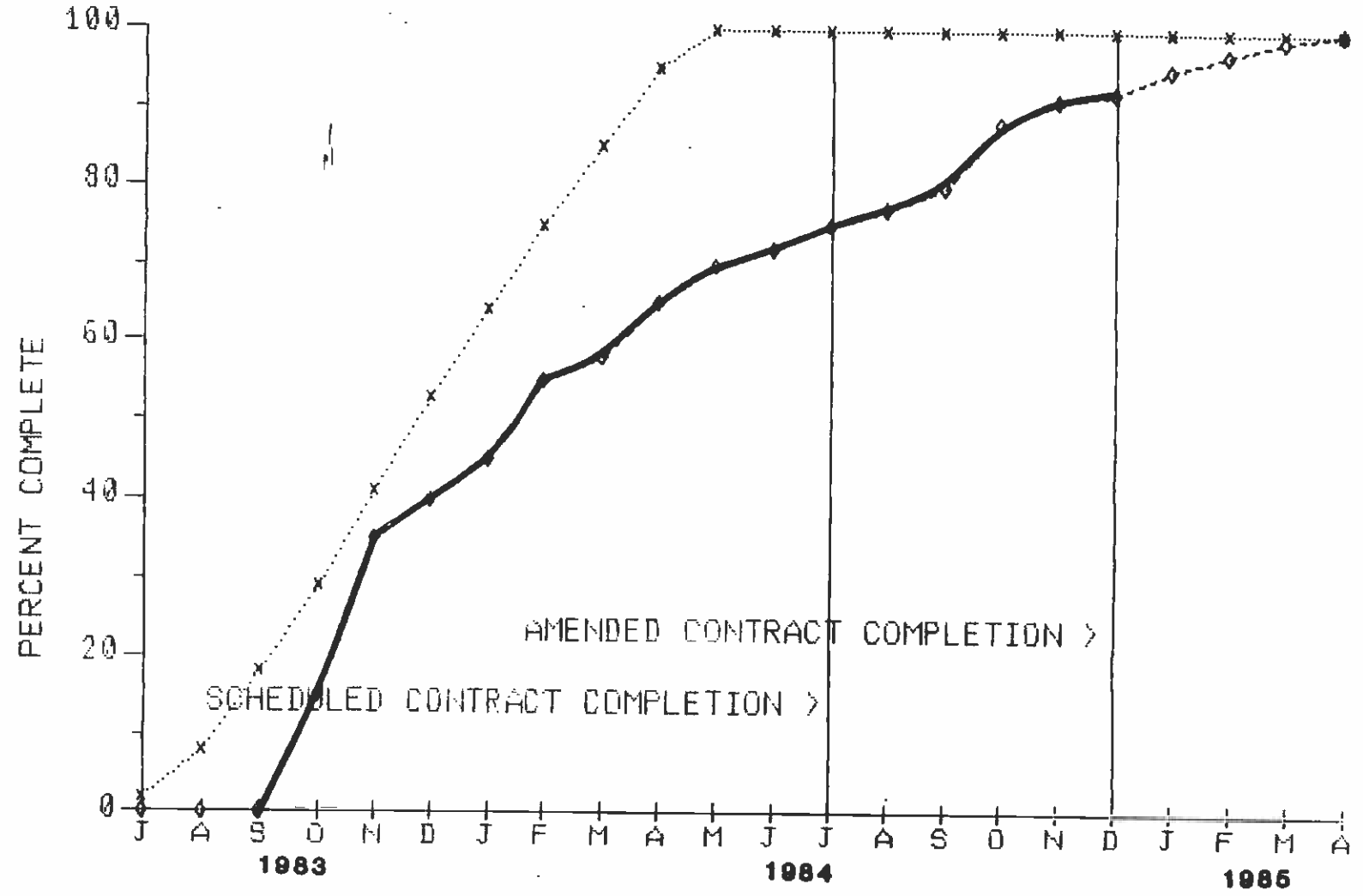
Despite a 2-month schedule slip, the cost picture for this station has improved. Although the Progress Report this month forecasts a \$93,000 increase in cost at completion, productivity, C.P.I., and the cost variance have all increased since December and the District's estimate at completion has decreased. With the schedule slippage, the section designer must achieve 5% progress in three months - a much more reasonable goal than the previous month's 8% progress in two months.

RTD METRO RAIL PROJECT
 CONTRACT A135 - UNION STATION
 SECTION DESIGNER: HARRY WEESE AND ASSOC.
 JANUARY 1985



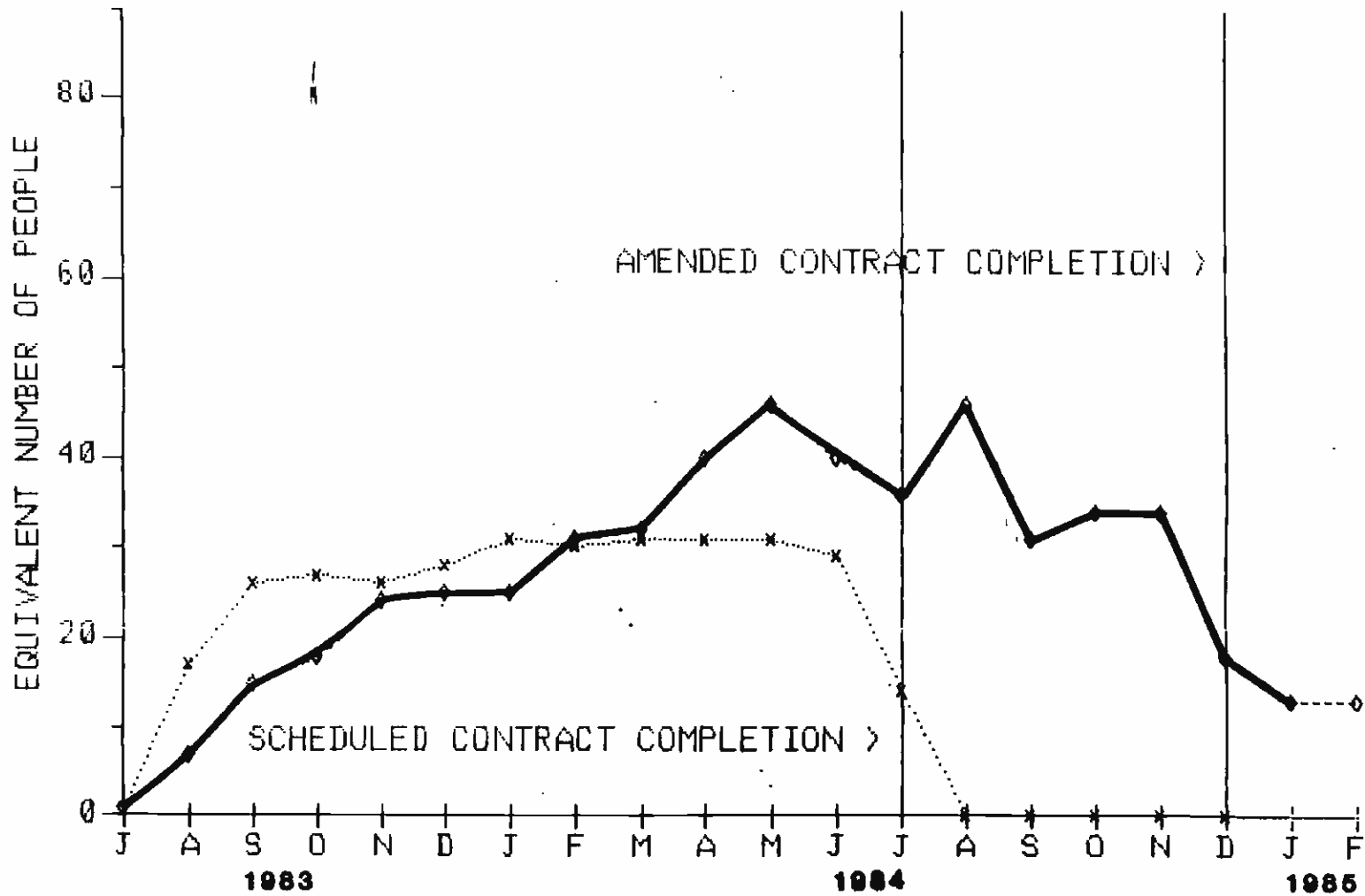
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RTD METRO RAIL PROJECT
 CONTRACT A135 - UNION STATION
 SECTION DESIGNER: HARRY WEESE & ASSOC.
 JANUARY 1985



---◇--- FORECAST ——— ACTUALS X PLANNED

RTD METRO RAIL PROJECT
 CONTRACT A135 - UNION STATION
 SECTION DESIGNER: HARRY WEESE & ASSOC.
 JANUARY 1985



--◇-- FORECAST ——— ACTUAL ····x··· PLANNED

COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A140, Civic Center/5th & Hill Stations + Line
 CONTRACTOR : Delon Hampton & Associates
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 6,203,707	\$ 6,732	\$ 6,210,439	\$ 777,000	\$ 6,987,439	\$ 3,962,000	\$3,025,439

CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

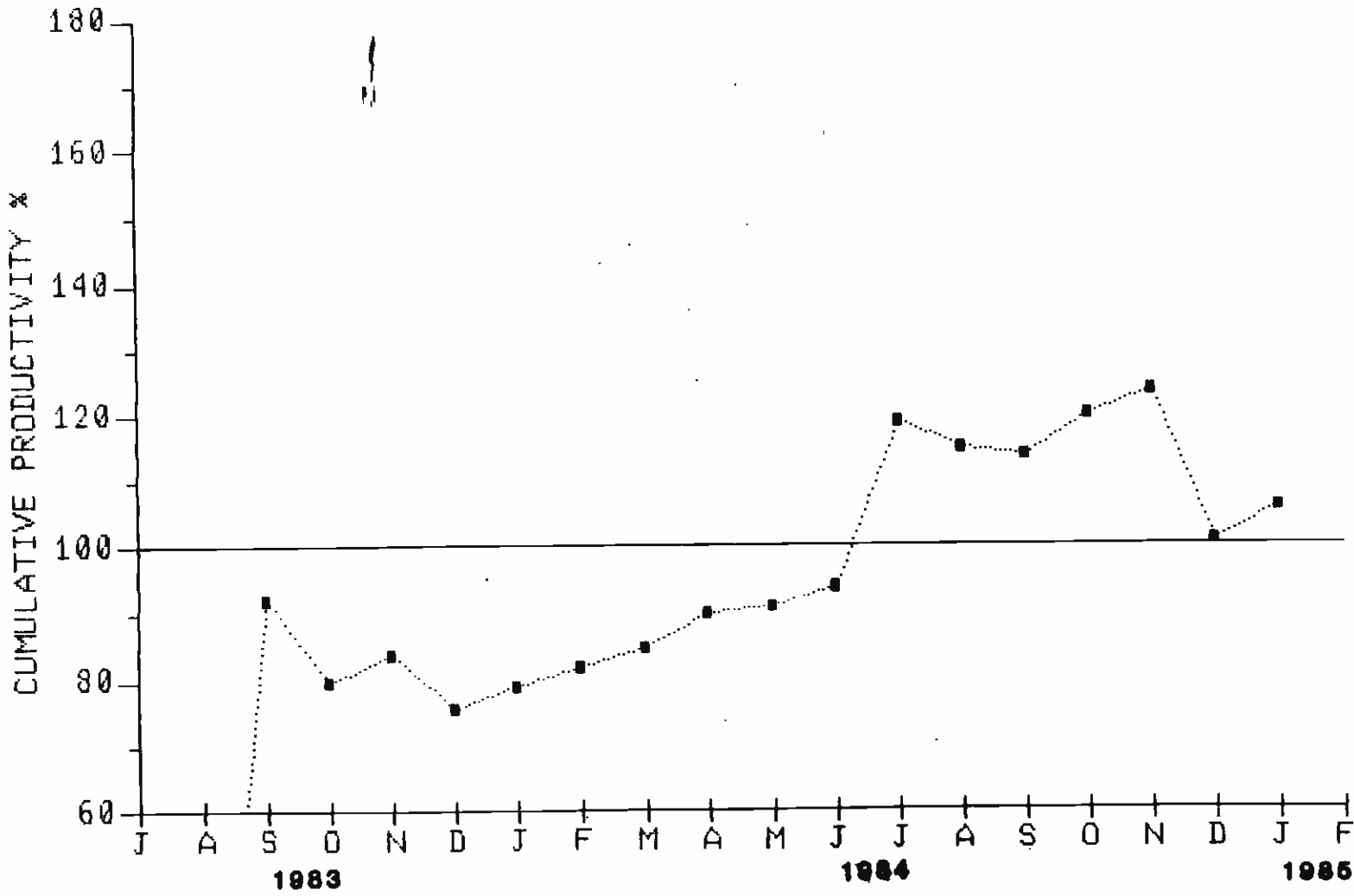
PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
82%	76%	66%	106%	\$ 1.14	\$ (526,000)	82%	\$ 5,964,912

CONCLUSIONS AND OBSERVATIONS:

Actual percent complete continues to fall 10 points behind the forecast. However, productivity, C.P.I., and the cost variance remain high and the District's estimate at completion decreased in January. With eight months remaining until forecasted contract completion, the above calculations indicate that A140 will complete at a cost below the original contract amount.

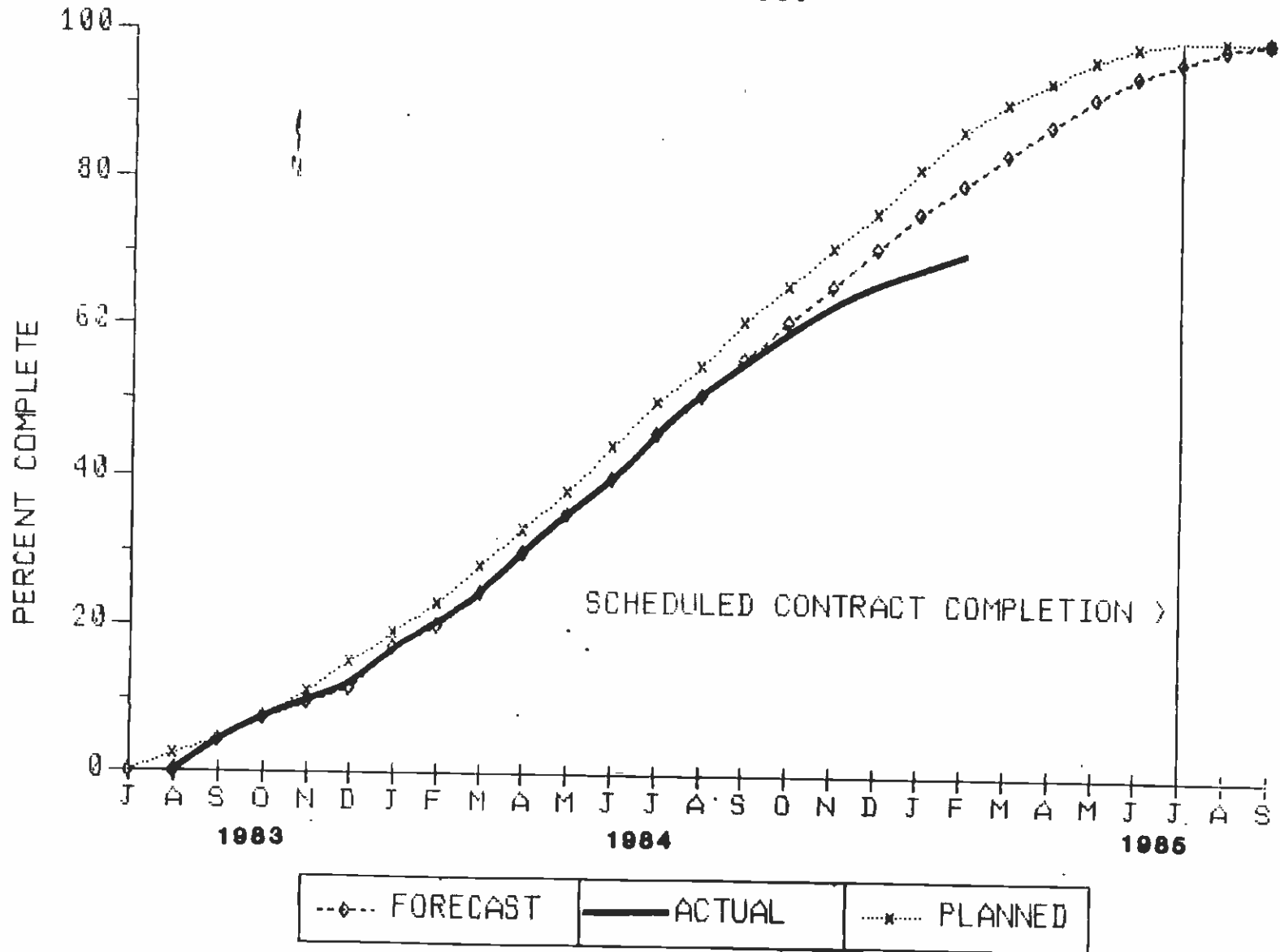
RTD METRO RAIL PROJECT
 CONTRACT A140 - CIVIC CENTER/FIFTH & HILL
 SECTION DESIGNER: DELON HAMPTON & ASSOC.
 JANUARY 1985

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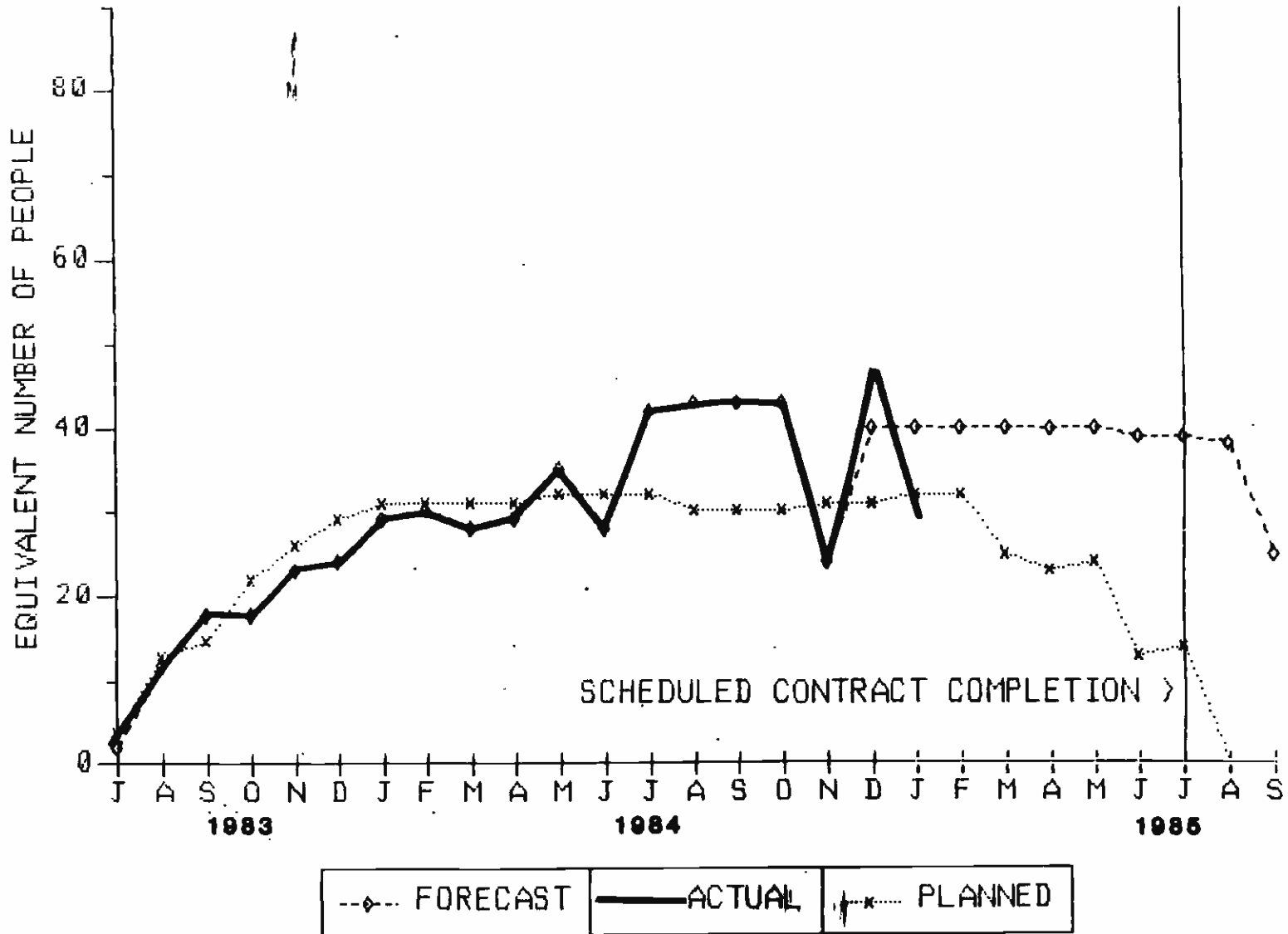


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RTD METRO RAIL PROJECT
 CONTRACT A140 - CIVIC CENTER/FIFTH & HILL
 DESIGNER: DELON HAMPTON & ASSOC.
 JANUARY 1985



RTD METRO RAIL PROJECT
 CONTRACT A140 - CIVIC CENTER/FIFTH & HILL
 SECTION DESIGNER: DELON HAMPTON & ASSOC.
 JANUARY 1985



**COST PERFORMANCE REPORT
SECTION DESIGNER**

CONTRACT NO. : A165, 7th/Flower Station
 CONTRACTOR : Gannett Fleming/Dworsky
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 2,129,587	\$ 824,675	\$ 2,954,262	\$ 886,553	\$ 3,840,815	\$ 3,564,000	\$ 276,815

CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	98%	95%	99%	\$.98	\$ 83,200	183%	\$3,738,776

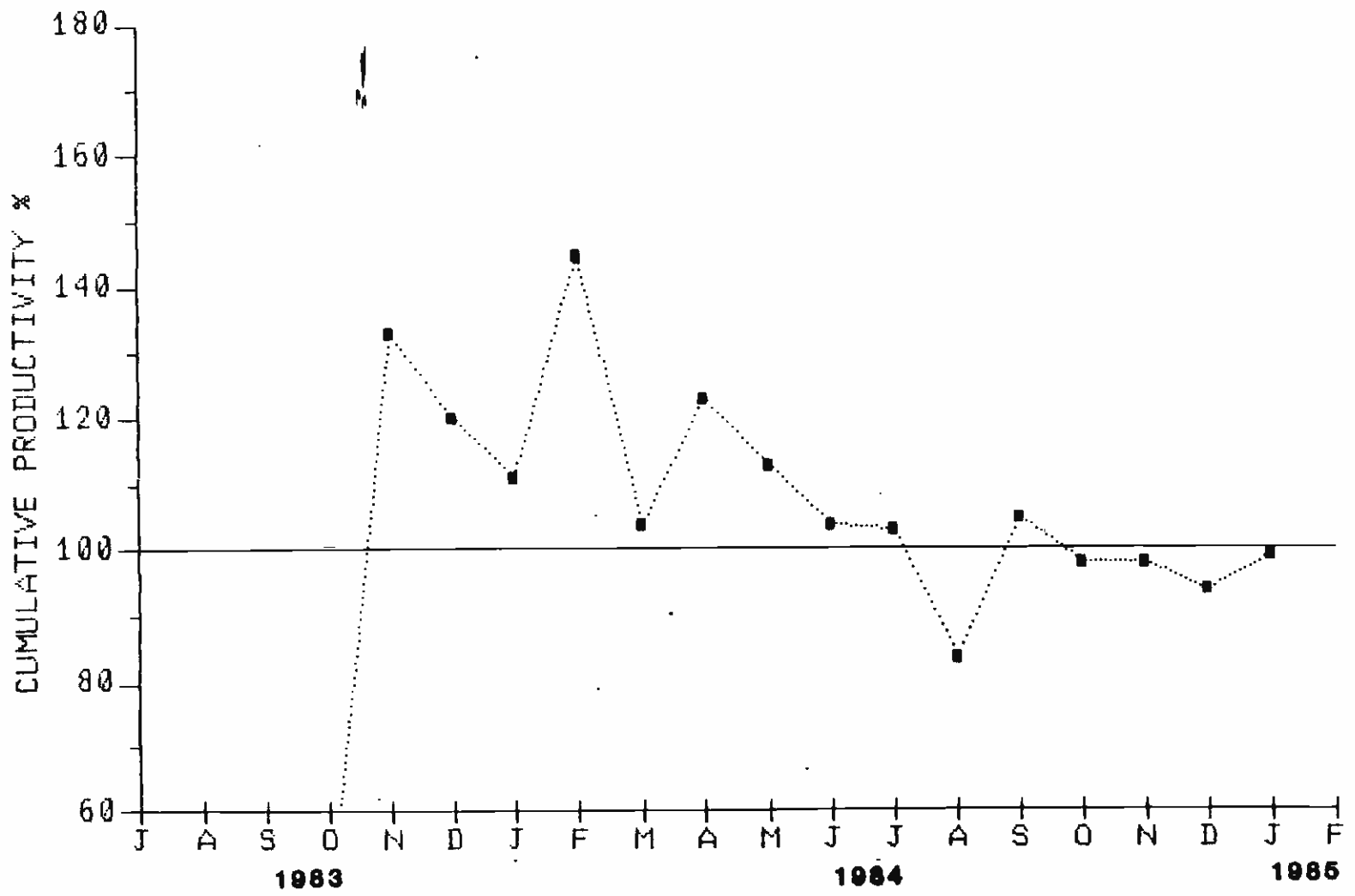
CONCLUSIONS AND OBSERVATIONS:

The expenditures on this contract continue to exceed the approved contract amount. The latest amendment (No. 13) brings the total contract amount to only \$3,363,473, \$200,527 short of the current expenditures. Discussions are underway to reactivate Amendment No. 10 which would bring the contract total to \$3,591,578.

The To Complete Performance Index (TCPI) is high this month because only \$100,000 remains to complete this contract at the MRTC estimated amount of \$3,664,000 (as shown in the January Progress Report).

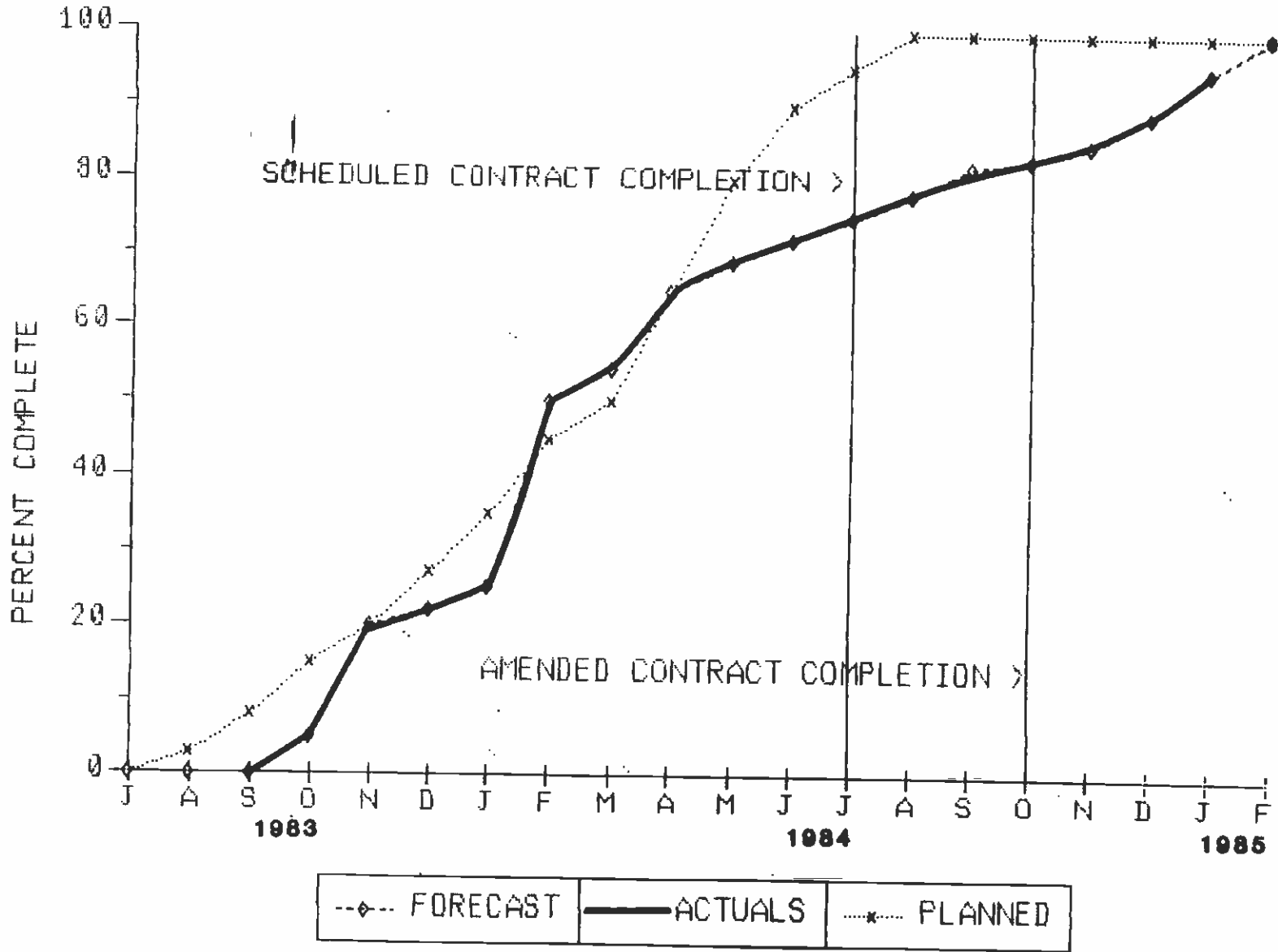
RTD METRO RAIL PROJECT
 CONTRACT A165 - SEVENTH & FLOWER
 SECTION DESIGNER: GANNETT FLEMING/DWORSKY
 JANUARY 1985

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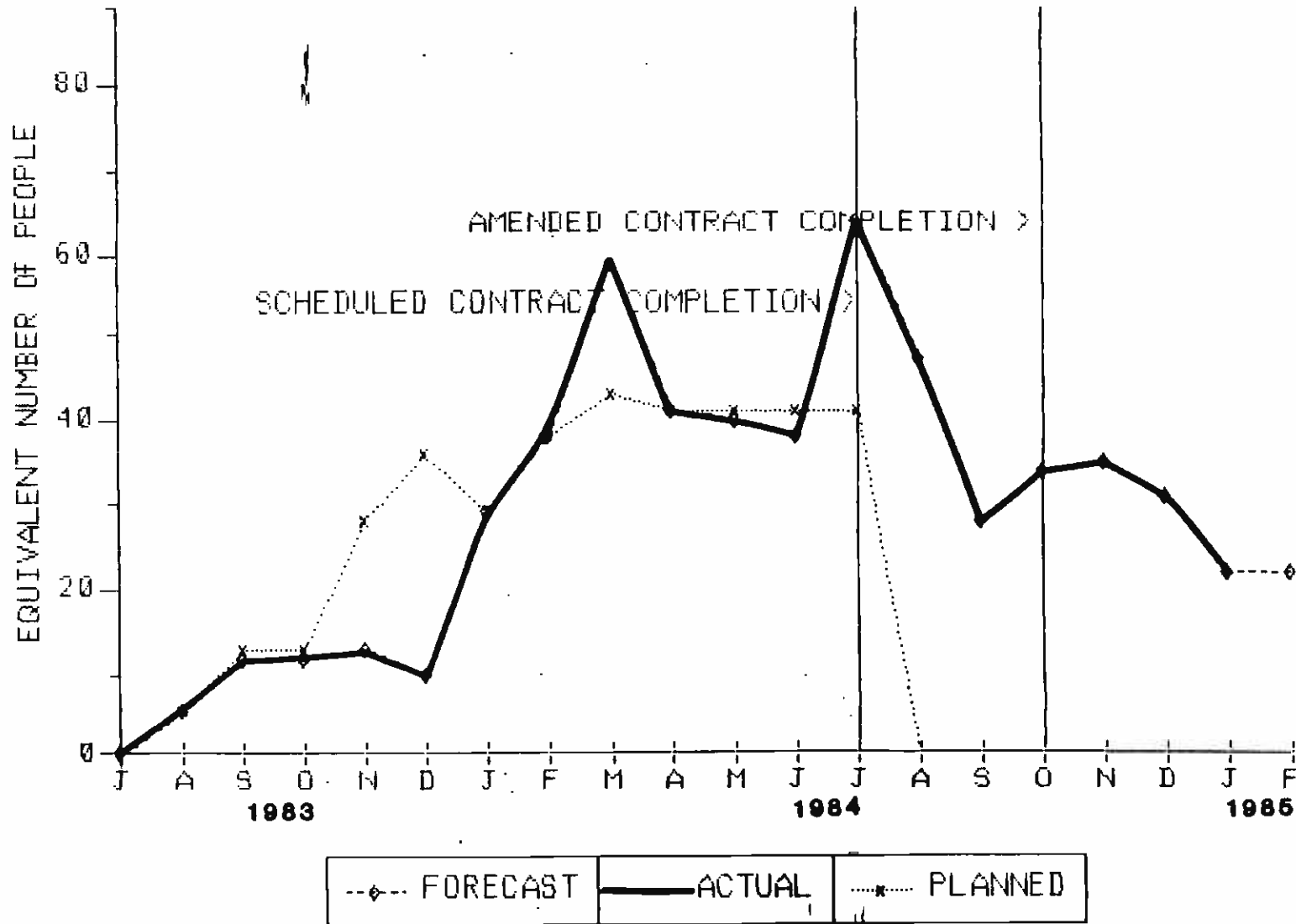
---■--- ACTUAL

RTD METRO RAIL PROJECT
 CONTRACT A165 - SEVENTH & FLOWER
 SECTION DESIGNER: GANNETT FLEMING/DWORSKY
 JANUARY 1985



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RTD METRO RAIL PROJECT
 CONTRACT A165 - SEVENTH & FLOWER
 SECTION DESIGNER: GANNETT FLEMING/DWORSKY
 JANUARY 1985



COST PERFORMANCE REPORT
SECTION DESIGNER

CONTRACT NO. : A170, Wilshire/Alvarado Station + Line
 CONTRACTOR : Sverdrup Corporation
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 3,119,430	\$ 233,496	\$ 3,352,926	\$ 1,056,758	\$ 4,409,684	\$ 4,188,000	\$ 221,684

CUMULATIVE TO DATE
(BASED ON MRTC MONTHLY PROGRESS REPORT DATA)

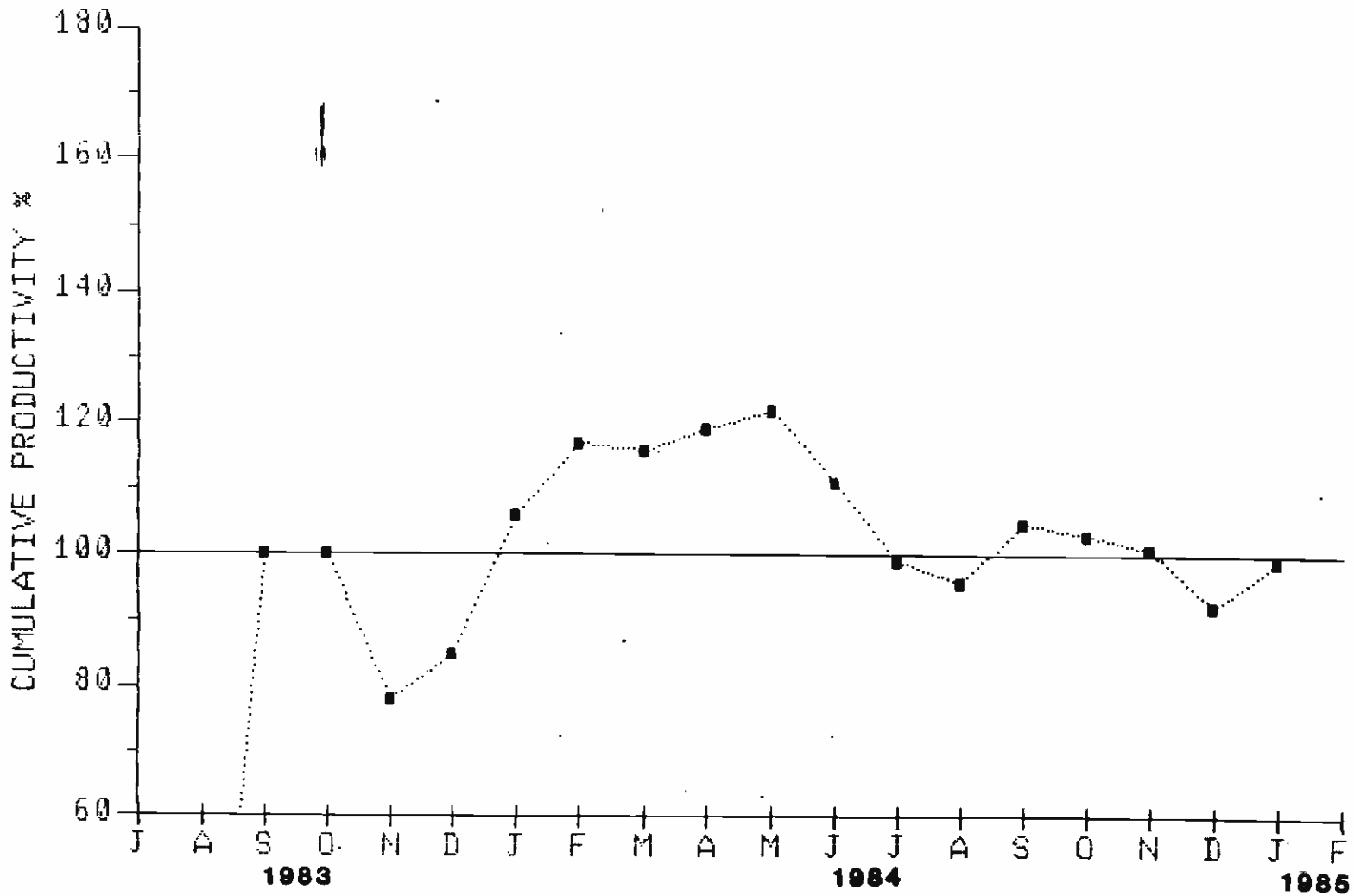
PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	N/A	94%	99%	\$.99	\$ 40,720	118%	\$ 4,456,565

CONCLUSIONS AND OBSERVATIONS:

The negotiated cost to complete for this contract is still not finalized; meanwhile expenditures continue to exceed the approved contract amount.

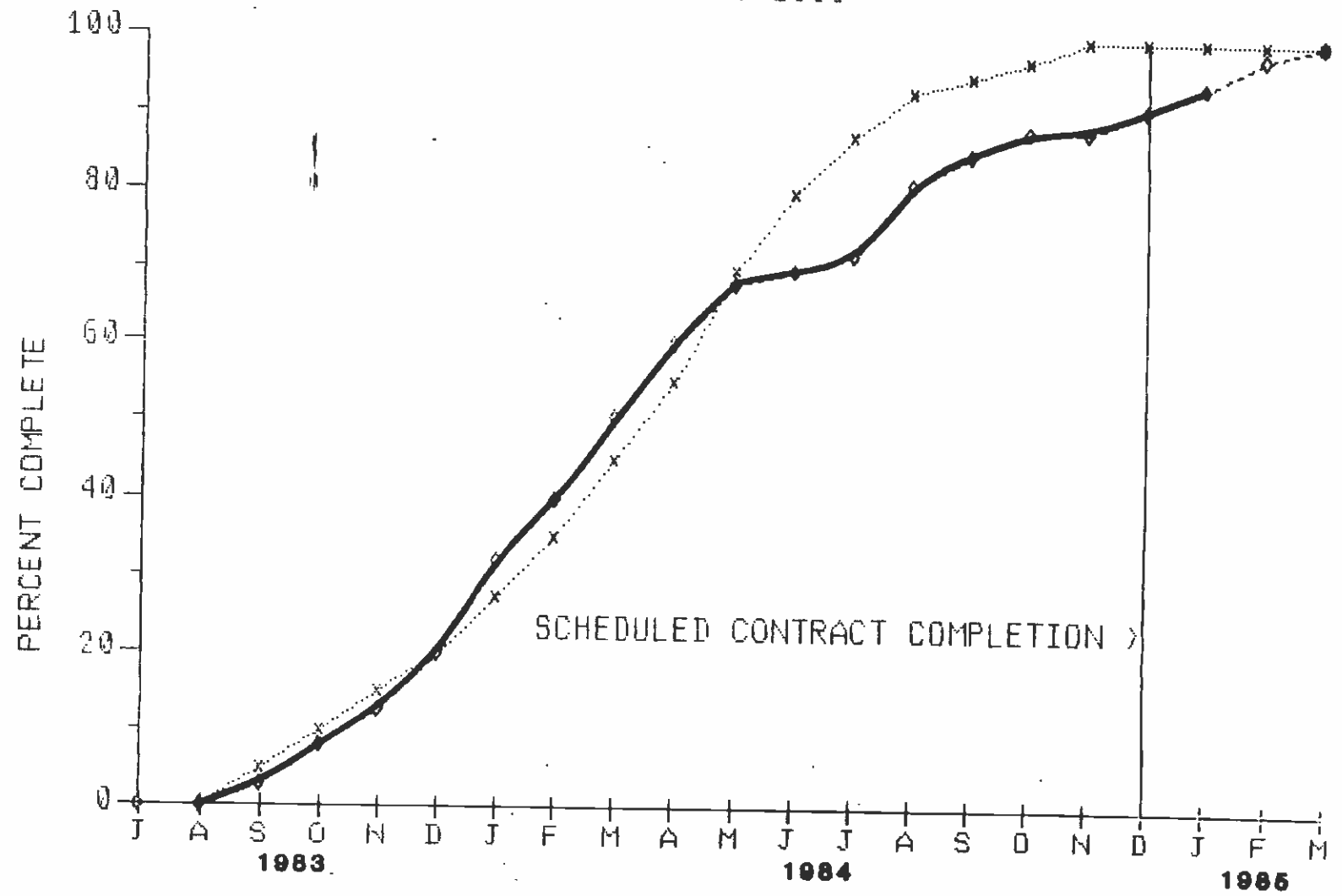
The To Complete Performance Index (T.C.P.I.) is high this month because only \$224,000 remains to complete this contract at the MRTC estimated amount of \$4,300,000 (as shown in the January Progress Report).

RTD METRØ RAIL PROJECT
 CONTRACT A170 - WILSHIRE/ALVARADO
 SECTION DESIGNER: SVERDRUP CORP.
 JANUARY 1985



---●--- ACTUAL

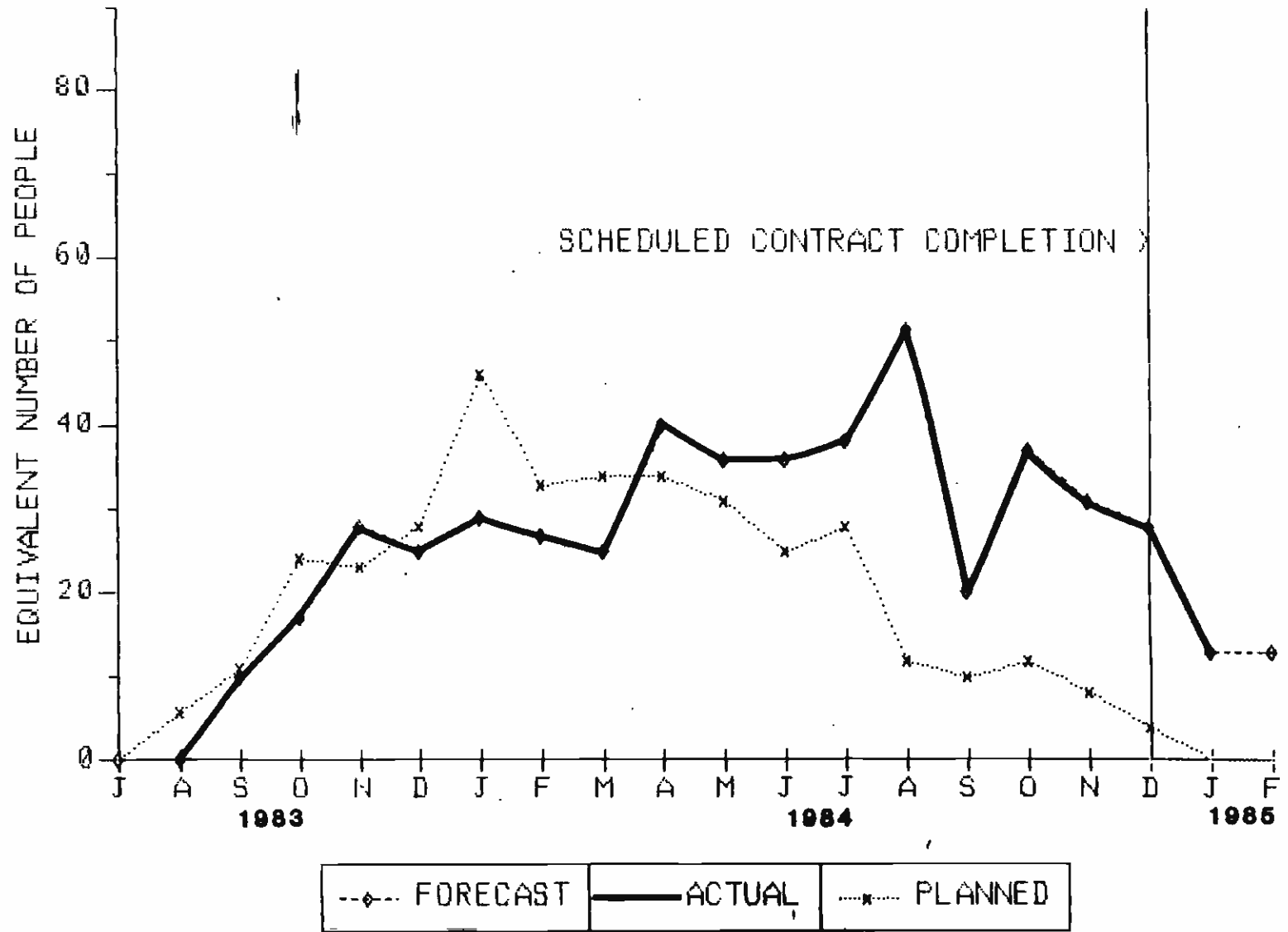
RTD METRO RAIL PROJECT
 CONTRACT A170 - WILSHIRE/ALVARADO
 SECTION DESIGNER: SVERDRUP CORP.
 JANUARY 1985



--◇-- FORECAST
— ACTUALS
-x- PLANNED

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RTD METRO RAIL PROJECT
 CONTRACT A170 - WILSHIRE/ALVARADO
 SECTION DESIGNER: SVERDRUP CORP.
 JANUARY 1985



COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A610, Main Line Trackwork Installation*
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
\$ 1,175,000	N/A	\$ 826,000	N/A	\$826,000	\$495,000	\$331,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
66%	N/A	55%	93 %	\$.92	\$ 40,700	112%	\$897,800

CONCLUSIONS AND OBSERVATIONS:

* This contract now includes A611, A613, A616, and A617. At this time, the approved contract changes are not detailed in the MRTC report. The difference between the original contract cost and current contract cost may be a reflection of the reduction in scope for MOS-1.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A612, A615, A630 - Traction Power Procurement
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$942,000	\$862,000	\$80,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
95%	N/A	93%	102%	\$1.02	\$(14,000)	83%	\$923,529

CONCLUSIONS AND OBSERVATIONS:

For the first time in three months, the analysis for the traction power procurement contracts does not project an overrun. This upturn is due to new cost and manhour forecasts in January.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A620, Automatic Train Control
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$888,000	\$569,000	\$319,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURL PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
91%	65%	64%	100%	\$1.00	\$680	100%	\$888,000

CONCLUSIONS AND OBSERVATIONS:

The consultant's cost and labor performance continues at a satisfactory level.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A631, Traction Power Installation
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$526,000	\$145,000	\$381,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
30%	30%	30%	109%	\$1.09	\$(12,800)	97%	\$482,569

CONCLUSIONS AND OBSERVATIONS:

With revised cost and manhour forecasts this month, this contract unit continues to proceed satisfactorily.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A640, Communications
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$1,362,000	\$813,000	\$549,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
85%	56%	56%	92%	\$.94	\$50,280	109%	\$1,448,936

CONCLUSIONS AND OBSERVATIONS:

No comment.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A650, Passenger Vehicles
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$898,000	\$681,000	\$217,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
85%	76%	77%	99%	\$1.02	\$(10,460)	95%	\$880,392

CONCLUSIONS AND OBSERVATIONS:

The progress rate reported by MRTC has declined from previous months, however, the cost performance figures are still well within a satisfactory range.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A660, Fare Collection
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$507,000	\$271,000	\$236,000

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
60%	57%	54%	100%	\$1.01	\$(2,780)	99%	\$501,980

CONCLUSIONS AND OBSERVATIONS:

The consultant is progressing satisfactorily with no major problems reported.

COST PERFORMANCE REPORT
SYSTEMS DESIGNER

CONTRACT NO. : A671-679, Auxiliary Vehicles
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
*	*	*	*	\$213,900	\$170,699	\$43,201

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
*	*	*	* §	*	*	*	*

CONCLUSIONS AND OBSERVATIONS:

* Insufficient information.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A710, Escalators
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$ 84,500	\$ 85,976	\$ (1,476)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.J	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	N/A	100%	103 %	\$1.11	\$ (9,024)	N/A %	N/A

CONCLUSIONS AND OBSERVATIONS:

Final submittal was made in January; however, no increase in expenditures occurred - the District Project Manager is looking into this matter.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A720, Elevators
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$58,500	\$ 59,780	\$(1,280)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	N/A	100%	99 %	\$1.07	\$(4,220)	N/A %	N/A

CONCLUSIONS AND OBSERVATIONS:

Final submittal was made in January, however, no increase in expenditures occurred. The District Project Manager is looking into the matter.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A740-Fans, Dampers, and Controls
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) + (6)
N/A	N/A	N/A	N/A	\$ 67,423	\$ 90,290	\$ (22,867)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURL PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	N/A	90%	47%	\$ 0.51	\$ 44,390	N/A %	\$ 100,000

CONCLUSIONS AND OBSERVATIONS:

The projected cost overrun of this contract continues to increase. At the current rate of performance, this contract will overrun by 49% at contract completion. The MRTC Progress Report narrative states that no work was accomplished this month; in fact, the percent complete decreased 5 percentage points. However, the Progress Report states that 198 manhours and \$10,830 were expended in January! The District Project Manager is aware of these problems and is researching the matter.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A750, Design Tunnel Liners
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) + (6)
N/A	N/A	N/A	N/A	\$372,990	\$ 7,905	\$ 365,085

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P. I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
100%	N/A	80%	31%	\$ 0.33	\$ 282,644	N/A %	\$ 506,667

CONCLUSIONS AND OBSERVATIONS:

This contract's performance is unsatisfactory; both productivity and C.P.I. are at unacceptable levels, and the above calculations project a cost overrun at completion of 36%. Progress decreased 17 points in January with no explanaton of this decline in the Progress Report narrative.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A760, Graphics and Signage
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
N/A	N/A	N/A	N/A	\$111,112	\$ 117,465	\$ (6,353)

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	52%	26 %	\$.32	\$79,765	N/A %	\$226,563

CONCLUSIONS AND OBSERVATIONS:

This contract is presently overrunning by 62%, up 34 points from last month's report. At contract completion a 104% cost overrun is projected. New cost and manhour forecasts are needed.

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A745, Station Air-Handling Units
 CONTRACTOR : MRTC
 REPORT PERIOD : January 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
*	*	*	*	\$ 19,600	\$ 10,623	\$ 8,977

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOUR PRODUCTIVITY	\$ C. P. I.	\$ COST VARIANCE	T. C. P. I	\$ RTD I. E. A. C.
PLANNED	FORECAST	ACTUAL					
53%	*	50%	* %	*	*	*%	*

CONCLUSIONS AND OBSERVATIONS:

No progress was accomplished in January due to a recommendation to eliminate systemwide procurement of station air-handling units. The recommendation was rejected; work will resume 2/4/85.

* Insufficient information

COST PERFORMANCE REPORT
FACILITIES DESIGNER

CONTRACT NO. : A795, Uninterruptible Power System
 CONTRACTOR : MRTC
 REPORT PERIOD : January, 1985

(1) ORIGINAL CONTRACT COST	(2) APPROVED CONTRACT CHANGES	(3) CURRENT CONTRACT COST (1) + (2)	(4) PENDING CHANGES	(5) MRTC ESTIMATE AT COMPLETION (3) + (4)	(6) EXPENDED	(7) ESTIMATE TO COMPLETE (5) - (6)
*	*	*	*	*	\$ 10	*

CUMULATIVE TO DATE

PERCENT COMPLETE			MANHOURLY PRODUCTIVITY	\$ C.P.I.	\$ COST VARIANCE	T.C.P.I.	\$ RTD I.E.A.C.
PLANNED	FORECAST	ACTUAL					
N/A	N/A	5%	* %	*	*	*	*

CONCLUSIONS AND OBSERVATIONS:

* Insufficient information. Work on this contract began 1/21/85.

B. SCHEDULE

MOS-1 Critical Path

The Critical Path (MOS-1) defined in the Level III Project Schedule originates at Design Contract A135 (Union Station, Stage I) and continues to Engineering Review and Bid Documents of Contract A133 (Union Station Baggage Handling Facilities). This path follows A135 construction - from West end installation of soldier piles, to the East end form and pour roof slab. The path then shifts to Architectural Work, the auxiliary Power in Contract A136 (Union Station, Stage II) and continues through connecting/testing of Traction Power, Automatic Train Control, and Communications Equipment & Cabling. The path proceeds through Passenger Vehicles Tests, Automatic Train Control Dynamic Tests, and finally to Pre-Revenue Operations Testing.

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: JANUARY 31, 1985

DESIGN CONTRACTS & CONSTRUCTION PACKAGES	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL		PRE-FINAL SUBMITTAL		FINAL SUBMITTAL		BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
				F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)	SCHEDULE	F'CAST(F) ACTUAL(A)			
MOS-1:													
YARD & SHOPS	07/13/83	01/31/85											
A112			02/01/84	06/14/84A	03/28/84	10/11/84A	05/23/84	12/10/84A	-	01/07/85A	-	-	
A114			-	01/27/84A	04/25/84	05/30/84A	06/13/84	08/27/84A	-	09/10/84A	-	-	
A115			09/10/84	09/24/84A	10/08/84	11/01/84A	12/10/84	12/28/84A	-	01/07/85A	-	-	
A130			03/07/84	09/10/84A	05/02/84	12/24/84A	06/27/84	01/29/85F	-	02/28/85F	30	4	
UNION STATION	07/13/83	12/31/84											
A133 BAGGAGE HANDLING			-	11/08/84A	-	-	-	12/14/84A	-	02/01/85F	-	-	
A135 STAGE I			02/01/84	03/09/84A	04/01/84	11/30/84A	06/01/84	03/01/85F	07/18/84	05/01/85F	6	17	
A136 STAGE II			02/01/84	03/09/84A	04/01/84	11/30/84A	06/01/84	03/01/85F	07/18/84	05/01/85F	6	17	
LINE, CIVIC CENTER/ 5TH & HILL, LINE	07/27/83	07/27/85											
A141&A145 STAGE I			08/01/84	08/01/84A	03/01/85	03/01/85F	06/10/85	06/10/85F	07/15/85	07/15/85F	-	-	
A142 ENC./SUP.			08/01/84	07/16/84A	09/07/84	09/28/84A	10/15/84	12/12/84F	-	-	-	-	
A147 STAGE II			08/01/84	08/01/84A	03/01/85	03/01/85F	06/10/85	06/10/85F	07/15/85	07/15/85F	-	-	
A157 STAGE II			08/01/84	08/01/84A	03/01/85	03/01/85F	06/10/85	06/10/85F	07/15/85	07/15/85F	-	-	
7TH & FLOWER	08/09/83	01/31/85											
A166 STAGE I			02/07/84	03/12/84A	05/22/84	11/26/84A	08/07/84	01/14/85F	10/14/84	03/05/85F	-	5	
A167 STAGE II			02/07/84	03/12/84A	05/22/84	11/26/84A	08/07/84	01/14/85F	10/14/84	03/01/85F	-	4	
WILSH./ALVARADO	08/09/83	12/07/84											
A171&A175 STAGE I			02/14/84	02/16/84A	05/30/84	11/26/84A	08/14/84	02/28/85F	09/26/84	03/28/85F	-	16	
A187 STAGE II			04/02/84	05/07/84A	07/25/84	11/26/84A	11/05/84	02/28/85F	12/28/84	03/28/85F	-	16	

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: JANUARY 31, 1985

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DESIGN CONTRACTS & CONSTRUCTION PACKAGES	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL F'CAST (F) ACTUAL (A)	PRE-FINAL SUBMITTAL SCHEDULE	F'CAST (F) ACTUAL (A)	FINAL SUBMITTAL (85%) SCHEDULE	F'CAST (F) ACTUAL (A)	CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
BEYOND MOS-1										
WILSH./VERMONT A196 STAGE I A197 STAGE II	08/12/83	08/11/84	02/07/84 02/07/84	02/10/84A 02/10/84A	05/22/84	12/14/84A	08/07/84	02/25/85F -	9 -	28** -
WILSH./WESTERN A220 STAGE I A237 STAGE II	10/10/83	10/07/85	08/06/84 08/06/84	08/23/84A 08/23/84A	11/05/84	01/09/85F -	02/04/85 -	03/15/85F -	- -	- -
WILSH./NORMANDIE A220 STAGE I A227 STAGE II A222 LINE			12/03/84 12/03/84 10/08/84	02/20/85F 02/20/85F 06/26/84A	03/04/85 -	05/01/85F -	06/03/85 -	06/26/85F -	- - -	- - -
WILSH./CRENSHAW A240 STAGE I A242 STAGE II	01/27/84	01/26/85	07/26/84 07/26/84	09/13/84A 09/13/85A	11/01/84	03/14/85F -	01/15/85 -	04/15/85F -	- -	11 -
WILSH./LA BREA A245 STAGE I A247 STAGE II	10/10/83	10/15/84	04/16/84 04/16/84	05/07/84A 05/07/84A	07/07/84	02/22/85F -	10/16/84 -	03/30/85F -	- -	42 -
WILSH./FAIRFAX & LINE A250 STAGE I A267 STAGE II	03/02/84	06/17/85	11/12/84 11/12/84	11/15/84A 11/15/84A	03/04/85	03/04/85F -	05/06/85 -	05/06/85F -	- -	- -

*DESIGN CONTRACTS BEYOND MOS-1 WILL TERMINATE AT THE 85% DESIGN LEVEL.

**AMENDMENT #5 (INCREMENT 1) TO BE EXPEDITED; WILL INCREASE CONTRACT TIME OF PERFORMANCE.

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: JANUARY 31, 1985

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DESIGN CONTRACTS & CONSTRUCTION PACKAGES	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL P*CAST (F) ACTUAL (A)	PRE-FINAL SUBMITTAL		FINAL SUBMITTAL (85%) *		BID DOCUMENTS	
					SCHEDULE	F*CAST (F) ACTUAL (A)	SCHEDULE	F*CAST (F) ACTUAL (A)	SLIPPAGE (C.D.)	DELAY (WEEKS)
FAIRFAX/BEVERLY A275 STAGE I A277 STAGE II	12/30/83	12/27/84	06/28/84 06/28/84	06/28/84A 06/28/84A	09/27/84	01/16/85F	12/27/84	03/01/85F	- -	9 -
FAIRFAX/SANTA MONICA & TUNNEL A320 STAGE I A327 STAGE II	12/05/83	12/05/85	11/10/84 11/10/84	11/12/84A 11/12/84A	05/29/85	05/29/85F	06/31/85	06/31/85F	- -	- -
LA BREA/SUNSET A330 STAGE I A347 STAGE II			02/06/85	02/06/85F	05/29/85	05/29/85F	06/31/85	06/31/85F	- -	- -
HOLLYWOOD/ CAHUENGA A350 STAGE I A352 STAGE II	12/29/83	05/02/85	08/27/84 08/27/84	09/10/84A 09/10/84A	12/20/84	03/04/85F	05/02/85	04/15/85F	- -	- -
LINE BETWEEN HOLLYWOOD/ CAHUENGA AND UNIVERSAL CITY A410	12/29/83	12/29/84	06/28/84	07/31/84A	09/28/84	11/26/84A	12/28/84	01/18/85A	-	-
HOLLYWOOD BOWL A415	02/13/84	02/11/85	08/13/84	11/16/84A	DESIGN TERMINATED AT 50% DESIGN LEVEL			-	-	
UNIVERSAL CITY A425 STAGE I A427 STAGE II	02/13/84	02/11/85	08/13/84 08/13/84	08/15/84A 08/15/84A	11/19/84	02/04/85F	02/11/85	03/18/85F	- -	5 -

*DESIGN CONTRACTS BEYOND MOB-1 WILL TERMINATE AT THE 85% DESIGN LEVEL.

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: JANUARY 31, 1985

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DESIGN CONTRACTS & CONSTRUCTION PACKAGES	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL P'CAST (F) ACTUAL (A)	PRE-FINAL SCHEDULE	SUBMITTAL P'CAST (F) ACTUAL (A)	FINAL SUBMITTAL (85%) SCHEDULE	P'CAST (F) ACTUAL (A)	CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)
LINE BETWEEN UNIVERSAL CITY & NO. HOLLYWOOD A430	12/29/83	03/20/85	07/06/84	08/06/84A	02/06/85	02/06/85F	03/20/85	03/20/85F	-	-
NORTH HOLLYWOOD A445 STAGE I	12/29/83	05/03/85	09/20/84	10/01/84A	01/31/85	03/01/85F	05/27/85	05/03/85F	-	-
A447 STAGE II			09/20/84	10/01/84A	-	-	-	-	-	-

*DESIGN CONTRACTS BEYOND MOS-1 WILL TERMINATE AT THE 85% DESIGN LEVEL.

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METRO RAIL PROJECT
DESIGN SCHEDULE STATUS

STATUS AS OF: JANUARY 31, 1985

DESIGN CONTRACTS & CONSTRUCTION PACKAGES	NOTICE TO PROCEED	CONTRACT TIME OF PERFORM.	IN PROGRESS SCHEDULE	SUBMITTAL	PRE FINAL SUBMITTAL	FINAL SUBMITTAL	BID DOCUMENTS		CURR MONTH SLIPPAGE (C.D.)	TOTAL DELAY (WEEKS)		
				F'CAST (F) ACTUAL (A)	SCHEDULE	F'CAST (F) ACTUAL (A)	SCHEDULE	F'CAST (F) ACTUAL (A)			SCHEDULE	F'CAST (F) ACTUAL (A)
SYSTEMWIDE												
A610 MOS-1 TRACKWORK	03/01/84	-	01/15/85	01/15/85A	03/15/85	03/15/85F	05/15/85	05/15/85F	07/15/85	07/15/85F	-	-
A620 ATC	05/02/83	-	09/28/84	02/14/85F	12/09/84	07/09/85F	04/19/85	09/26/85F	-	-	-	23
A630 TRACTION POWER EQUIP. INCL A612 & A615	02/01/84	-	04/30/84	05/29/84A	11/30/84	01/10/85A	02/25/85	04/30/85F	-	-	-	9
A631 TRACTION POWER INSTAL.	02/01/84	-	07/01/85	07/01/85F	01/31/86	01/31/86F	04/30/86	04/30/86F	-	-	-	-
A640 COMM.	05/02/83	-	03/30/85	02/15/85F	05/30/85	08/19/85F	07/30/85	12/02/85F	-	-	-	-
A650 PASS. VEHICLES	05/02/83	-	07/23/84	07/23/84A	11/01/84	03/01/85F	02/15/85	07/01/85F	-	-	-	19.5
A660 FARE COLLECTION	05/02/83	-	11/01/84	03/29/85F	06/01/85	07/31/85F	01/02/86	02/01/86F	-	-	-	-
A671 AUX. VEHIC. LOCOMOTIVE	05/02/83	-	05/01/84	05/11/84A	10/01/84	11/07/84A	02/15/85	02/15/85F	-	-	-	-
A710 ESCALATORS	05/02/83	-	01/30/84	02/08/84A	05/02/84	06/21/84A	07/02/84	01/14/85A	-	-	-	-
A720 ELEVATORS	05/02/83	-	05/01/84	07/02/84A	N/A	N/A	08/01/84	01/14/85A	-	-	-	-
A740 FANS	01/15/84	-	04/02/84	04/16/84A	N/A	N/A	09/01/84	03/15/85	-	-	58	9
A745 TPSS AIR HANDLING EQUIP.	05/15/84	-	11/15/84	03/01/85F	N/A	N/A	03/15/85	04/30/85F	-	-	-	-
A750 TUNNEL	10/01/83	-	05/16/84	05/16/84A	08/15/84	08/23/84A	11/16/84	03/01/85F	N/A	N/A	-	15
A760 SIGNING	02/22/84	-	06/30/84	02/15/85F	08/01/84	03/22/85F	10/01/84	04/19/85F	-	-	-	28.5

N/A = Not Applicable

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**METRO RAIL PROJECT
SCHEDULE EXCEPTION REPORT**

Minimum Operable Segment-1 Design Contracts

CONTRACT: A130 Yard Leads and Transfer Zone

AREA OF CONCERN: The Final Design Submittal (Bid Documents) has slipped 4 weeks during this reporting period. Slippage is due to lack of progress in receiving and incorporating review comments.

RECOMMENDATION: MRTC to expedite the Section Designer's completion of Design Contract A100.

CONTRACT: A135 Union Station

AREA OF CONCERN: Contract completion is forecast 17 weeks beyond the Contract Time of Performance (12/31/84). Current slippage of 6 weeks is due to numerous design review comments requiring revised criteria input.

RECOMMENDATION: Expedite correction of these deficiencies.

CONTRACT: A165 7th/Flower Station

AREA OF CONCERN: Contract completion is forecast 5 weeks beyond the Contract Time of Performance (01/31/85). Delay is due to the following:

- o lack of design criteria,
- o continuous design changes,
- o late receipt of seismic design criteria.

RECOMMENDATION: It is again recommended the schedule be revised to reflect remaining work items and strictly monitored to avoid further delays.

2/28/85

CONTRACT: A170 Wilshire/Alvarado Station & Line

- AREA OF CONCERN:
- 1) Contract Completion is forecast 16 weeks beyond the Contract Time of Performance (12/7/84).
 - 2) Disposition of relocation of existing Fire Station is required.

- RECOMMENDATION:
- 1) A Contract Amendment to extend the Time of Performance should be expedited. The schedule should be revised accordingly.
 - 2) Replacement site for the Fire Station should be determined and UMTA approval secured in order to meet the forecast construction NTP.
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BEYOND MINIMUM OPERABLE SEGMENT-1 DESIGN CONSULTANTS

CONTRACT: A196/A197 Wilshire/Vermont Station & Line

AREA OF CONCERN: Contract completion is forecast 28 weeks beyond the Contract Time of Performance (08/11/84). Delay is due to the following:

- o numerous changes in the standard and directive drawings,
- o breaking out A195 contract into A196 Stage I and A197 Stage II contracts,
- o delayed submittal of seismic design criteria to Section Designer.

RECOMMENDATION: Contract Amendment #5 (which includes extension to the Time of Performance) should be expedited.

CONTRACT: A240 Wilshire/Crenshaw Station

AREA OF CONCERN: Contract completion is forecast 11 weeks beyond the contract Time of Performance (1/26/85). Delay is due to the following:

- o late receipt of seismic design criteria,
- o numerous ECRs that require changes in the design,
- o late direction of street lighting design.

RECOMMENDATION: The Contract Amendment for Increment I (which extends the Time of Performance to 4/15/85) should be expedited.

CONTRACT: A245 Wilshire/La Brea Station

AREA OF CONCERN: Contract completion is forecast 42 weeks beyond the contract Time of Performance (10/15/84). Delay is due to the following:

- o late direction on street lighting design,
- o late receipt of seismic design criteria,
- o numerous ECRs that require changes in the design,
- o section designer is short of personnel.

RECOMMENDATION: Contract Amendment for Increment I should be expedited.

CONTRACT: A275 Fairfax/Beverly Station

AREA OF CONCERN: Contract completion is forecast 9 weeks beyond the Contract Time of Performance (12/27/84). Delay is due to the following:

- o late receipt of seismic design criteria,
- o numerous ECRs that require changes in the design,
- o late direction on street lighting design.

RECOMMENDATION: Pending agreement during negotiation the Final Submittal for Increment I will be rescheduled and a Contract Amendment should be expedited to extend the Time of Performance.

CONTRACT: A425 Universal City Station

AREA OF CONCERN: Contract Completion is forecast 5 weeks beyond the Contract Time of Performance (2/11/85). Delay is due to the late receipt of seismic design criteria.

RECOMMENDATION: Contract Amendment #4 Proposal (which incorporates Increment I negotiated changes and time extension to 3/31/85) should be expedited.

SYSTEMWIDE IN-HOUSE DESIGN

CONTRACT: A610 MOS-1 Trackwork

AREA OF CONCERN: The main line trackwork installation, yard trackwork, running rail, timber tie, direct fixation rail fastener, and rail welding contracts have been combined into one "furnish and install" contract. Design completion is critical to the project construction schedule (MOS-1 LEVEL II). Timely issuance of Notice to Proceed is necessary to allow adequate procurement time for long lead items.

RECOMMENDATION: It is again recommended that revised base-line schedule should be established and strictly monitored to avoid any slippages.

CONTRACT: A612 Contact Rail Procurement
 A615 Coverboard Procurement
 A630 Traction Power Substation
 Equipment Procurement

AREA OF CONCERN: Project completion is forecast 9 weeks beyond the original scheduled date (2/25/85). Slippage is due to the design directive to incorporate options in procurement for phases II, III and IV.

RECOMMENDATION: MRTC should transmit the design schedule to TSD Program Control. Slippages should be monitored to avoid further delay.

CONTRACT: A620 Automatic Train Control

AREA OF CONCERN: Project completion is forecast 23 weeks beyond the original scheduled date (4/19/85). Delay is due to incorporation of numerous industry review comments.

RECOMMENDATION: MRTC should transmit the CPM design schedule to TSD. It is noted that ATC Dynamic Test is on the critical path to Revenue Operations.

CONTRACT A650 Passenger Vehicles

AREA OF CONCERN: Project completion is forecast 19 weeks beyond the original scheduled date (2/15/85). Delay is due to incorporation of numerous review comments to the General Conditions, Special Conditions, and Technical Provisions.

RECOMMENDATION: A design schedule should be transmitted to TSD and strictly monitored to avoid further delays. It is noted that Testing Passenger Vehicles is currently on the Critical Path to Revenue Operations.

CONTRACT: A740 Fans

AREA OF CONCERN: Contract completion is forecast for 3/15/85, which is 9 weeks beyond scheduled date. Delay is due to enlarging the fan size for A187 (Wilshire/Alvarado Station).

RECOMMENDATION: Efforts should be increased to avoid further delay to final design completion.

CONTRACT: A750 Tunnel Liners

AREA OF CONCERN: The final completion date is forecast for 3/01/85, 15 weeks beyond the scheduled completion date (11/16/84). Delay is due to continuing search for a suitable membrane that will eliminate gas penetration.

RECOMMENDATION: In order to meet the forecast date of 3/01/85, it is recommended that efforts be increased in locating a material that is impervious to methane gas and will withstand heavy construction operations.

CONTRACT: A760 Graphics & Signage

AREAS OF CONCERN: Contract completion is forecast 28.5 weeks beyond the original scheduled date of 10/01/84. Delay is due to several scope changes in the contract.

RECOMMENDATION: Schedule should be revised and strictly monitored to avoid further delay.