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no. 56

RTD

LOS ANGELES **METRO RAIL** PROJECT
MONTHLY CONTRACT PERFORMANCE REPORT



REPORT NUMBER 56
FEBRUARY 1989

PDCD

A Joint Venture of The Ralph M. Parsons Co., Dillingham Construction N. A. Inc., and De Leuw, Cather & Co.,

MONTHLY CONTRACT PERFORMANCE REPORT

for the

LOS ANGELES METRO RAIL PROJECT

FEBRUARY 1989

presented to

Southern California Rapid Transit District

CONTRACT NO. 3369

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Month FEBRUARY Year 1989

A Joint Venture of The Ralph M. Parsons Co., Dillingham Construction N. A. Inc., and De Leuw, Cather & Co.,
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LOS ANGELES **METRO RAIL**

CONTRACT PERFORMANCE REPORT

PDCD

PERIOD FEBRUARY 1989

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Parsons-Dillingham-De Leuw, Cather

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SECTION I

CONSTRUCTION MANAGER'S SUMMARY STATEMENT

I. CONSTRUCTION MANAGER'S SUMMARY STATEMENT

MAJOR CM ACTIVITIES

This Contract Performance Report (CPR) for the month of February 1989 is the eighth CPR in the Fifth Annual Work Plan (5th AWP) and covers the period January 28 through February 24, 1989. The following is a summary, by functional organization, of major CM activities during this period:

CONSTRUCTION OPERATIONS: Continued construction management (CM) services for 12 Facility Contracts and 12 Systems Contracts, monitoring of utilities relocations, and submittal reviews. Continued conducting QC inspections of work for compliance to plans and specifications. Monitored contractor progress to approved project schedules. Assisted contractors in coordination with local public agencies in areas of community impact, permits and traffic access. Continued to conduct safety inspections of all contractor activities. Responded to contractor document clarification requests as appropriate.

Environmental Activities: Continued monitoring for water and wastewater quality at A171 and A175, Ballona Creek, A141, A144, A145, A146 and the Los Angeles River. Completed compilation of December and January Los Angeles River monitoring records for District and LA County Replenishment District. Monitored geotechnical borings for soil and water contamination and reviewed dewatering submittals for A130 and A135. Prepared and submitted closure reports for underground tank sites at A112, A145, A165 and A175. Prepared and submitted January Discharge Monitoring Reports (DMR) to SCRTD for the California Regional Water Quality Board (CRWQCB). Continued monitoring removal and disposal of contaminated soil at A130 and A145. Reviewed first A750 proposals for asbestos abatement at A135 and claims for A135 Boiler Room Abatement. Provided technical support for successful variance to remove, haul and store oily soil at the A144 site and for the site development plan associated with the oily soil storage area.

Utilities and Traffic Activities: Continued coordination of traffic control plans and street closures with city agencies for A141, A145, A146 and A165. Continued coordination of MOS-1 Traffic Control Plans, inspections with LADOT and processing of Master Agreement Work Invoices. Coordinated Caltrans' encroachment permit extension for crossing under Hollywood Freeway at Hill St. overcrossing (A141). Continued coordination of necessary requirements to obtain permanent occupancy permit for Amtrak machine shop (A141). Processed a total of 26 Traffic and Utilities related submittals.

Surveying Activities: Continued checking contractor's control points and layout. Began performing as-built cross sections of AL Tunnel invert pour (A171). Continued monitoring instrumentation, building and ground settlement points on A141, A145, A146, A165, A171 and A175. Continued as-built survey of AR Tunnel (A141). Continued location survey at shop and yards contracts. Checked slabs poured at A141 and A175 excavations. Checked alignment of excavation at A165. Checked location of elevator shafts A141, A165 and A175.

PROJECT CONTROLS: Processed 32 Change Requests as follows: 7 for A112; 1 for A130; 1 for A135; 3 for A141; 1 for A144; 3 for A145; 1 for A146; 8 for A165; 1 for A175 and 6 for A610/A115. Processed 20 Change Notices as follows: 1 for A130; 3 for A135; 2 for A141; 2 for A145; 2 for A165; 4 for A175; 2 for A610/A115; 2 for A620; 1 for A640 and 1 for A745. Processed 33 Change Orders as follows: 1 for A112; 2 for A130; 2 for A135; 8 for A141; 6 for A145; 1 for A146; 1 for A165; 3 for A175; 6 for A610/A115; 1 for A616; 1 for A620 and 1 for A732. Processed 17 executed Change Orders through TRACS as follows: 1 for A112; 6 for A135; 4 for A141; 1 for A144; 3 for A145 and 2 for A610/A115. Processed 6 Potential Claims as follows: 3 for A112; 1 for A141; 1 for A165 and 1 for A175. Processed 7 Change - Technical Evaluations as follows: 1 for A112; 3 for A141; 1 for A145; 1 for A610/A115 and 1 for A616. Processed 17 Force Accounts as follows: 3 for A141; 1 for A145; 2 for A146; 1 for A165 and 10 for A610/A115. Processed 18 Monthly Payment Estimates. Completed close-out audits on 3 Force Account Change Orders. Continued testing PC TRACS for potential use on the project. Began preliminary data preparation for PDCD services for 6th AWP. Finalized procedures associated with Force Account work and Force Account close-out audit. Rejected Part I Schedule for A630. Approved-as-noted Part I Schedule for A732 and Part II for A112 and A145. Continued review and analysis of revisions to A141 Part II Schedule. Prepared contractor progress inputs to RTD Monthly Status Report. Prepared an evaluation of the first version of the proposed Document Control system for PC's. Prepared/submitted semi-monthly 250 page Claims Log. Reviewed/marked-up weekly Change Action Status calendar. Reviewed/marked-up weekly Notice of Action report. Prepared/submitted semi-monthly Force Account Change Order Close Out Status report.

Cost Estimates for Changes and Proposals: A130-VE-002: Prepared estimate for Cost Reduction Incentive Proposal - Compaction grouting in lieu of chemical grouting. A130: Reviewed estimate and proposal from contractor for proposed credit to substitute PVC in lieu of GRS materials for duct bank. A130-CR-021: Reviewed contractors proposal for concrete water cement ratio change. A135-CR-004: Continued material take-off and estimates on changes and review of subcontractor quotes, submittals etc., LAUPT Baggage Handling Facilities. A141: Prepared tunnel equipment rates of Stand-By rates for access delay. Evaluated contractor proposal. A141-CR-064: Prepared estimate and reviewed contractors proposal for replacing 36" air duct. A141-CR-079, A145-CR-100, A165-CR-027 and A175-CR-029: Prepared estimate and evaluated changes for Trainway clearance. A145-CR-116: Evaluated scope of work, prepared estimate for temporary and permanent telephone manhole No. 793. A145-CR-113: Evaluated realignment of Sewer in 5th Street and associated cost estimate. A145 and A130: Evaluated Contractor's proposed Equipment Rates for Force Account Work. A146: Prepared equipment ownership and operating rates for tunnel equipment for Force Account. A146-CR-028A: Prepared estimates for Grout Plant and Grouting Operations. A165-CR-015: Prepared estimate for street light revisions. A165-CR-033: Prepared estimate for opening east Mezzanine Boiler room. A165-CR-041: Began review of pavement reconstruction at 7th/Figueroa intersection. A620-CR-001: Prepared estimate for revision to project schedule. A745-CR-006: Prepared

alternate estimates for equipment handling due to revised delivery schedule. General - Prepared miscellaneous ROM estimates, reviewed Resident Engineer estimates, and reviewed proposed wage rates for Force Account work.

CONTRACTS/PROCUREMENT: Submitted proposed Subcontract Amendment and request for District approval to increase Fifth Annual Work Plan funding for Field and Laboratory Testing services. Submitted proposed Amendment and request for District approval to increase Fifth Annual Work Plan funding for Subcontract with Engineering-Science, Inc., an Associate Subcontractor. Submitted annual agreement(s) recommendation for procurement of office products to District.

ENGINEERING SERVICES: Performed intensive field and office studies of the Civic Center Station overloaded struts, including surveys of damages, collection/review/dissemination of data, coordination of efforts to arrive at solutions, and inspection of additional instrumentation and strut jacking operations. Transmitted to RTD and MRTC a preliminary plan for a multiphase study to determine reason for Civic Center Station strut overloads. Completed technical review of second iteration of A130 CRIP to substitute compaction grouting for chemical grouting. Coordinated quick responses to check reports (ultimately proved baseless) that Italian Hall was settling near the A141 tunnel heading and that several inches of lateral movement had taken place in the soils around Civic Center Station. Coordinated effort with MRTC to complete review of first A130 tunneling machine submittal. Completed tabulating geology and predicted ground loads for 11 non-Metro excavations in downtown L.A. by assembling data already in PDCD and Dames & Moore files. Made intensive efforts to clear CalTrans permits in order to get geotechnical instrumentation installed prior to arrival of A141 tunneling machine at the Hollywood Freeway. Responded to 98 requests for information or documentation clarification from various Contractors. Processed 57 field inquiries with MRTC to obtain clarification of design requirements.

During this period 292 Contractor submittals were processed as follows:

For Contract A112	- Approved -	8;	Approved-as-Noted -	6;	Rejected -	4.					
For Contract A130	- Approved -	18;	Approved-as-Noted -	12;	Rejected -	8.					
For Contract A135	- Approved -	13;	Approved-as-Noted -	5;	Rejected -	6;	For Record Only -	2.			
For Contract A135BH	- Approved -	13;	Approved-as-Noted -	6;	Rejected -	2.					
For Contract A141	- Approved -	36;	Approved-as-Noted -	7;	Rejected -	5;	For Record Only -	1.			
For Contract A145	- Approved -	2;	Approved-as-Noted -	6;	Rejected -	2.					
For Contract A146	- Approved -	2;			Rejected -	1.					
For Contract A165	- Approved -	26;	Approved-as-Noted -	14;	Rejected -	4.					
For Contract A171	- Approved -	2;	Approved-as-Noted -	3;	Rejected -	3;	For Record Only -	1.			
For Contract A175	- Approved -	4;	Approved-as-Noted -	9;	Rejected -	7;	For Record Only -	2.			

For Contract A610/A115	- Approved -	22;	Approved-as-Noted -	2;	Rejected -	1.			
For Contract A612	- Approved -	1;			Rejected -	1.			
For Contract A615	- Approved -	3;			Rejected -	2.			
For Contract A616	- Approved -	2.							
For Contract A620	- Approved -	2;	Approved-as-Noted -	2;	Rejected -	1.			
For Contract A630	- Approved -	1;	Approved-as-Noted -	6;	Rejected -	1.			
For Contract A640	-		Approved-as-Noted -	1.					
For Contract A710	-						For Record Only -	1.	
For Contract A740	- Approved -	2;	Approved-as-Noted -	1.					
TOTAL		157		80		48		7	= 292

SAFETY/SECURITY: Performed daily site safety, health and security surveillances on a two shift basis and prepared written reports for the 11 construction projects. Coordinated activities of the Systemwide Security Guard Service and the Systemwide Clean-up Service Subcontractor. Completed revisions to the Construction Safety and Security Manual in conjunction with SCRTD & DIA.

COMMUNITY RELATIONS - Coordinated community notifications and traffic control assistance for A141, A145, A146, A165 and A175. Coordinated traffic mitigation concerns for tenants along Hill St. affected by A145 and A146 traffic access plans, for tenants in the 7th and Flower area affected by A165 and for tenants of Westlake St. affected by A175. Provided assistance to A141, A145, A146, A165 and A175 for problems caused by street closures and lane restrictions, blocked access and emergency closure of Hill St. between Temple and First Streets. Assisted RTD/LGCA in merchant advertising campaign for the 7th/Flower and 5th/Hill areas. Provided assistance to RTD in coordinating site visits and responding to media requests. Processed 33 inquiries/complaints.

QUALITY ASSURANCE/QUALITY CONTROL - Welding inspection activities included a continuation of reviewing welding submittals for A130, A135, A141 and A165; performed direct inspection of welding on A141 and continued to review welding being performed at Eckman, Paramount Steel and BARTEC. Conducted training session for A141 inspectors on taking of concrete slump tests. Prepared draft of safety certification file content for Facility Contract A112. Continued to monitor laboratory testing services subcontractor's technical performance and implemented cost control system that provides more timely information. Provided input to Contract General Conditions review. Conducted audit of one of the A640 subcontractors (Axal Corp.) relative to their work on the "SCADA" communications subsystem. Continued participation in Safety Certification activities including monthly Safety Certification Team meeting. Conducted review of HDPE testing and documentation for A141, A165, A171 and A175.

EQUAL OPPORTUNITY - Monitored Equal Opportunity reporting requirements for 20 Contracts. Conducted project site visits/employee interviews at 9 construction sites. Processed penalty assessments for late submittal of the Monthly Employment Utilization Reports for 7 contracts. Prepared Chronology of Correspondence pertaining to Carpenter Wage Rate issue. Sent directive for all affected Contracts requesting restitution for carpenters, as applicable. Prepared Summary of Contracts Awarded to P.I.E. Construction Company for RTD/EO.

MANPOWER PERFORMANCE

The manpower performance for February is measured against the approved planned staffing for the 5th AWP. During February, the actual staff level was 200 vs. the planned staff level of 183. Therefore, the actual staff count for February was 17 over the planned staffing level. The staff breakdown by company was 128 for the Joint Venture firms and 72 for the Associate Subcontractors. The increased staff continues to be required for the accelerated shop drawing review for the A135 contract and for multishift inspection of construction work at various jobsites.

The February period had 160 available workhours/person. The plan provided for expenditure of 29,120 hours, including "as-required" manhours which would have generated a projected equivalent head count of 182.0 personnel at 160 hours/person. Actual hours expended were 30,709 which translates into a 191.93 equivalent head count at 160 hours/person including temporary personnel, resulting in the equivalent of 9.93 personnel over the plan.

Cumulative total hours incurred through February were 234,427 against a plan of 227,288 resulting in an over plan variance of 7,139 hours.

EQUAL OPPORTUNITY (EO) PERFORMANCE

EO performance for PDCD in February measured on a cost accrual basis under four categories - DBE, WBE and Minority and Women Affirmative Action was as follows:

- Cumulative DBE participation for the Fifth Annual Work Plan through the month, measured against a total cost basis was 18.2%, 1.2% over the goal of 17%.
- Cumulative WBE participation for the Fifth Annual Work Plan through the month, measured against a total cost basis was 4.7%, 1.7% over the goal of 3%.
- Minority and Women Affirmative Action performance for the month exceeded the established goals of 17% and 8% by 25% and 2% respectively.

SCHEDULE PERFORMANCE

- **Contractor Submittals** - During this period, 388 submittals were received per contract number as follows: A112 (17), A130 (47), A135 (34), A135BH (22), A141 (54), A145 (26), A146 (6), A165 (58), A171 (28), A175 (24), A610/A115 (25), A612 (1), A615 (1), A616 (2), A620 (18), A630 (14), A640 (1), A710 (4), A732 (0), A740 (5); A745 (1) and A795 (0); of the 388 received this period plus the 137 carryover from January, 292 packages were processed and returned to the contractors; the balance of 233 remain in review.
- **Constructibility Reviews** - Review underway of A147/100%, Civic Center Station, Stage II.
- **Training Programs** - During February, the following training program was underway: SAFETY TRAINING FOR UNDERGROUND CONSTRUCTION - Training in safety conduct during underground construction covering use of self-rescuers, fire extinguishers and other safety equipment.

COST PERFORMANCE - Fifth Annual Work Plan

- Total incurred costs of $1,313,001 for CM Direct Services (excluding General Condition Items) for the period were under the plan of $1,377,502 by $64,501. This variance results from the net effect of Other Direct Costs (ODCs) being under the plan by $58,667 and labor expenditures (total PDCD and subcontractors) being under the plan by $5,834.
- The cumulative costs for Total CM Services (Including General Condition Items) incurred through February were $11,015,636 against a plan of $11,154,273 resulting in an under plan of $138,637.
- The February CPR indicates an estimate at completion for the 5th AWP (including General Condition Items) of $17,624,762 versus a plan of $17,625,378 for an underexpenditure of $616.

GENERAL CONDITION ITEMS

General Condition Items (GCI's) expenditure of $49,767 for the period were over the plan of $44,192 for the period by $5,575. This report forecasts an estimate at completion (EAC) in the 5th AWP period for GCI's of $900,988, which is over the plan of $664,300 by $236,688.

GENERAL

- This "Monthly Contract Performance Report" covers progress relative to PDCD's CM Services contract with the RTD. By RTD direction PDCD no longer produces the "Monthly Construction Performance Report". An equivalent document is now produced by RTD with PDCD input and is entitled the "Monthly Status Report." A copy of the RTD report is distributed to previous recipients of the PDCD report as required.

Melvin L. Polacek
Construction Manager

SECTION II

MANPOWER PERFORMANCE

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II. MANPOWER PERFORMANCE

This CPR for the month of February compares actual manpower to the planned manpower in the approved 5th AWP. Table II-1, Page 10, illustrates planned staff vs. actual staff and variances for February.

During February, personnel assignments/deletions included the addition of 1 Inspector and 1 Change Control/Claims Specialist; and the deletion of 2 Inspectors, 1 Sr. Secretary (Admin.), 1 Planner/Scheduler, and 1 Clerk/Typist (field).

For the February period, under the approved 5th AWP, the total planned staffing level (including regular and as-required classifications) is 183. The actual staff (including regular, as-required and temporary classifications) was 200 resulting in 17 over the plan. The current actual staff by company for the February period is as follows:

Company	Staff Level	Company	Staff Level
The Ralph M. Parsons Company	56	Jenkins, Gales & Martinez, Inc.	9
Dillingham Construction, Inc.	50	Kal Krishnan Consulting	2
De Leuw, Cather & Company	22	Martin & Huang International	5
Better Personnel Employment Services	13	North Pacific Construction Management	5
Construction Control Services Corporation	20	Ochoa & Sillas	-
Dames & Moore	1	Randolph & Tate Associates	-
Engineering-Science, Inc.	4	Transmetrics	1
Jacobs Associates	9	WCI	3

The PDCD Manpower Chart on Page 11 illustrates planned manpower for Construction Services for the Fifth Annual Work Plan period. Actual equivalent manpower is shown for the months of July through February.

The February period had 160 available workhours/person. The plan provided for an expenditure of 29,120 hours, including "as-required" manhours, which would have generated a projected equivalent head count of 182.0 personnel @ 160 hrs/person. Actual hours expended were 30,709 which translates into an equivalent head count of 191.93 @ 160 hrs/person including temporary personnel, resulting in the equivalent of 9.93 personnel over the plan.

The hours expended for the period were 30,709 versus a plan of 29,120. The 1,589 manhours variance for the period is calculated as follows:

9.93 equivalent staff over plan @ 160 hours/period in plan =	1,589 hours
FEBRUARY MANHOUR VARIANCE TO PLAN	1,589 hours

Cumulative total hours incurred through February were 234,427 against a plan of 227,288 resulting in an over plan variance of 7,139 hours. (Page 22)

TABLE II-1 CONSTRUCTION MANAGEMENT STAFF COUNT - FEBRUARY FIFTH ANNUAL WORK PLAN

Phase II Construction Services

Regular/As-required/Temporary

Position	Planned	Actual	Variance
Construction Manager	1	1	0
Manager, Safety and Security	1	1	0
Safety Inspectors	2	2	0
Manager, Quality Assurance	1	1	0
Quality Assurance Engineer	1	1	0
QA/QC Inspector	1	2	1
Secretarial/Word Processing/Clerical/ Drafting/Courier	15	18	3
Labor Relations	0	0	0
Legal Counsel	1	0	(1)
Subtotal	23	26	3
Manager, Administration and Staff Support	1	1	0
Manager, Project Administration/Accounting	1	1	0
Senior Accountant	1	1	0
Senior Accounting Clerks	2	2	0
Office Manager	1	1	0
Arts Coordinator	0	0	0
Manager, Community Relations	1	1	0
Community Relations Coordinator	1	1	0
Manager, EO Administration	1	1	0
EO Administrator	1	1	0
Subtotal	10	10	0
DCM, Project Controls/Engineering Services	1	1	0
Manager, Project Controls	1	1	0
Technical Data Coordinator	1	1	0
Lead Cost Engineer	1	1	0
Cost Engineers	4	4	0
Lead Change Control	1	1	0
Change Control Specialist	1	1	0
Claims Proc. Spec.	1	1	0
Data Technician	1	1	0
Lead Planner/Scheduler	1	1	0
Planner/Schedulers	6	5	(1)
Lead Estimator	1	1	0
Estimators	3	2	(1)
Sr. Data Technician	1	1	0
Lead Document Control Specialist	1	1	0
Document Control Specialist	1	1	0
Shop Drawing Coordinator	1	1	0
Data Technician	2	4	2
File Clerk	1	1	0
Computer Support	0	0	0
Subtotal	30	30	0
Manager, Contracts/Procurement	1	1	0
Sr. Contract Administrators	2	2	0
Subtotal	3	3	0

Phase II Construction Services

Regular/As-required/Temporary

Position	Planned[1]	Actual[2]	Variance
Manager, Engineering Services/ Systems Integration	1	1	0
Drafting Technicians	3	1	(2)
Lead Architect	1	1	0
Architect	0	1	1
Lead Electrical Engineer	1	1	0
Electrical Engineer	1	2	1
Lead Engineer, Geotech. Section	1	1	0
Engineers, Geotech. Section	7	5	(2)
Lead Mechanical Engineer	1	1	0
Mechanical Engineer	1	2	1
Lead Structural Engineer	1	1	0
Sr. Struct./Struct. Engineers	2	5	3
Lead Systems Engineer	1	1	0
Systems Engineer	2	1	(1)
Office Engineer	0	1	1
Subtotal	23	25	2
DCM, Operations	1	1	0
Manager, General Services	1	0	(1)
Lead Utilities Engineer	1	1	0
Utility Engineer	1	1	0
Chief of Surveys	1	1	0
Party Chief	1	1	0
Instrument Person	2	2	0
Rod Person	1	2	1
Lead Environmental Engineer	1	1	0
Environmental Specialists	4	4	0
Engineer	0	0	0
Engineering Technician/Coordinator	1	1	0
Resident Engineers	9	9	0
Chief Inspectors	8	9	1
Sr. Inspectors/Inspectors	30	38	8
Office Engineers	11	12	1
Field Secretaries/Clerical	12	15	3
Manager, Systemwide Construction	1	1	0
Office Engineer	1	1	0
Resident Engineers	4	4	0
Secretary	2	2	0
Inspector	1	0	(1)
Subtotal	94	106	12
Totals	183	200	17

NOTES:

(1) The "Planned" staff count is taken directly from the RTD approved PDCD 5th AWP. It is the planned staff count for the reported month and includes both "Regular" and "As-required" classifications.

(2) The "Actual" staff count is the total actual staff count by Job Position. Included are regular, as-required and temporary staff.

LOS ANGELES **METRO RAIL**

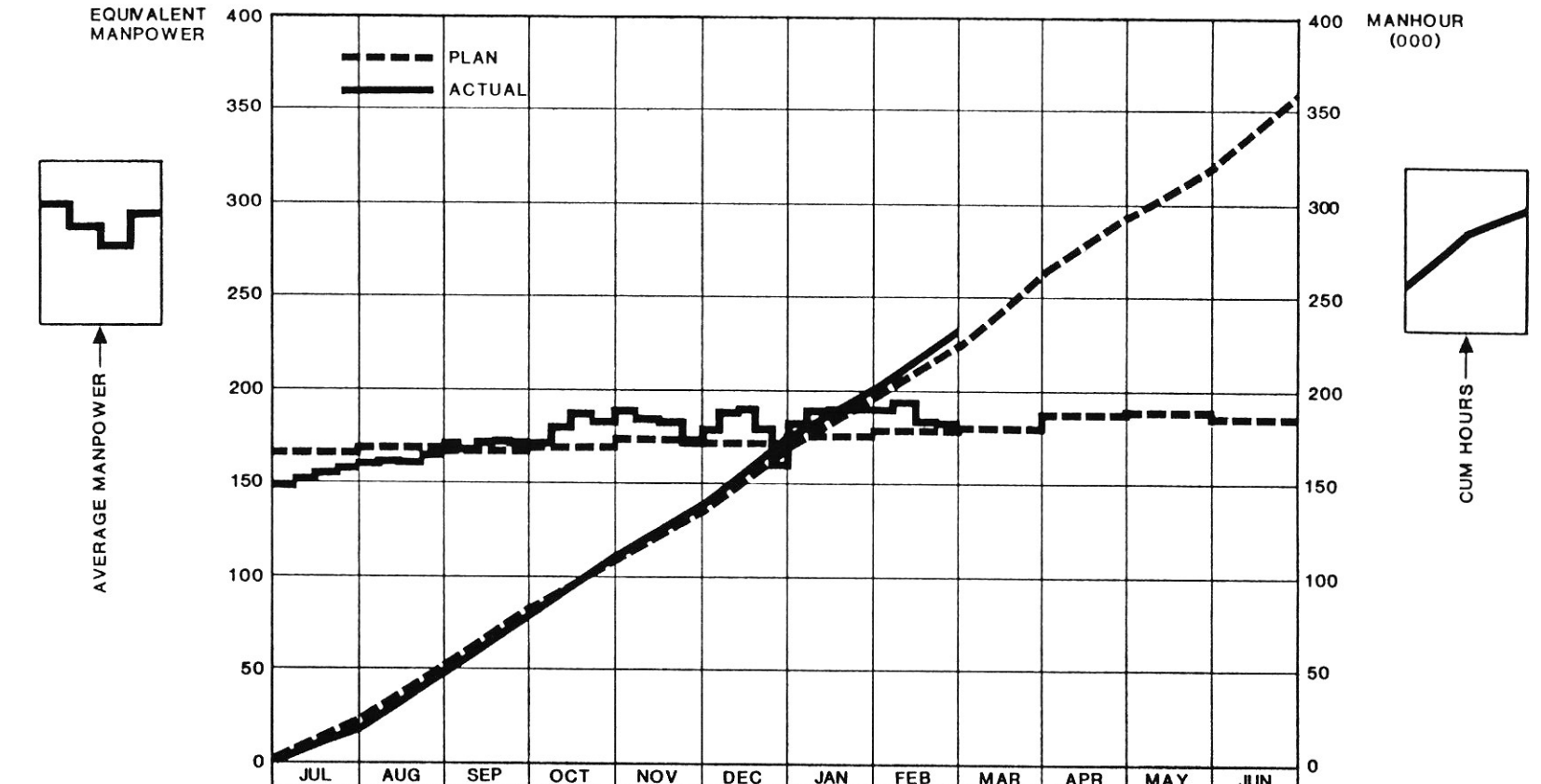
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CONTRACT PERFORMANCE REPORT

FIFTH ANNUAL WORK PLAN

PERIOD FEBRUARY 1989



		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
HOURS/MO	PLAN	25,720	27,360	32,304	27,360	25,200	33,120	27,104	29,120	36,520	30,160	30,400	35,952
	ACTUAL	23,616	26,406	33,771	29,131	26,925	34,955	28,914	30,709				
HOURS/CUM	PLAN	25,720	53,080	85,384	112,744	137,944	171,064	198,168	227,288	263,808	293,968	324,368	360,320
	ACTUAL	23,616	50,022	83,793	112,924	139,849	174,804	203,718	234,427				
EQ MANPOWER	PLAN	169	171	168	171	175	173	178	182	183	189	190	187
	ACTUAL	155	165	176	182	187	182	190	192				
AVAILABLE WORK HOURS		152	160	192	160	144	192	152	160	200	160	160	192

PDCD MANPOWER

FIFTH ANNUAL WORK PLAN
PDCD MANHOURS BY FUNCTIONAL DEPARTMENT

DESCRIPTION (MHRS)			1988 JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	1989 JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTALS
MANHOURS BY FUNCTIONAL DEPARTMENT															
A Project Management and Secretarial	Plan	current	2,736	2,880	3,456	2,880	2,592	3,456	2,736	2,880	3,600	2,880	2,880	3,456	36,432
		cumulative	2,736	5,616	9,072	11,952	14,544	18,000	20,736	23,616	27,216	30,096	32,976	36,432	
	Actual	current	3,052	3,037	3,625	3,063	2,619	3,625	3,274	3,414					
		cumulative	3,052	6,089	9,714	12,777	15,396	19,021	22,295	25,709					
C Facilities Construction Management	Plan	current	9,400	10,160	11,984	10,320	9,536	12,368	10,320	11,120	14,200	11,840	12,160	14,208	137,616
		cumulative	9,400	19,560	31,544	41,864	51,400	63,768	74,088	85,208	99,408	111,248	123,408	137,616	
	Actual	current	9,697	10,632	13,438	12,086	11,439	15,144	12,354	13,150					
		cumulative	9,697	20,329	33,767	45,853	57,292	72,436	84,790	97,940					
E Systemwide Construction Management	Plan	current	1,304	1,200	1,584	1,200	1,392	1,616	1,456	1,360	1,840	1,520	1,520	1,776	17,768
		cumulative	1,304	2,504	4,088	5,288	6,680	8,296	9,752	11,112	12,952	14,472	15,992	17,768	
	Actual	current	895	1,062	1,378	1,252	1,046	1,375	1,047	1,075					
		cumulative	895	1,957	3,335	4,587	5,633	7,008	8,055	9,130					
F General Services	Plan	current	1,984	2,080	2,464	1,920	1,744	2,272	1,832	1,920	2,360	1,920	1,920	2,272	24,688
		cumulative	1,984	4,064	6,528	8,448	10,192	12,464	14,296	16,216	18,576	20,496	22,416	24,688	
	Actual	current	2,083	2,408	3,642	2,644	2,554	3,051	2,172	2,155					
		cumulative	2,083	4,491	8,133	10,777	13,331	16,382	18,554	20,709					
K Project Controls	Plan	current	4,184	4,480	5,264	4,560	4,032	5,456	4,336	4,560	5,840	4,720	4,720	5,616	57,768
		cumulative	4,184	8,664	13,928	18,488	22,520	27,976	32,312	36,872	42,712	47,432	52,152	57,768	
	Actual	current	2,882	3,203	3,498	3,743	3,275	4,353	3,765	4,050					
		cumulative	2,882	6,085	9,583	13,326	16,601	20,954	24,719	28,769					
L Contracts/Procurement	Plan	current	456	480	576	480	432	576	456	480	600	480	480	576	6,072
		cumulative	456	936	1,512	1,992	2,424	3,000	3,456	3,936	4,536	5,016	5,496	6,072	
	Actual	current	445	471	509	407	388	447	385	422					
		cumulative	445	916	1,425	1,832	2,220	2,667	3,052	3,474					
M Engineering Services/ Systems Integration	Plan	current	2,976	2,960	3,536	2,960	2,672	3,536	3,128	3,600	4,280	3,520	3,520	3,968	40,656
		cumulative	2,976	5,936	9,472	12,432	15,104	18,640	21,768	25,368	29,648	33,168	36,688	40,656	
	Actual	current	2,440	3,048	4,247	3,284	3,063	3,762	3,329	3,847					
		cumulative	2,440	5,488	9,735	13,019	16,082	19,844	23,173	27,020					
N Community Relations	Plan	current	304	320	384	320	288	384	304	320	400	320	320	384	4,048
		cumulative	304	624	1,008	1,328	1,616	2,000	2,304	2,624	3,024	3,344	3,664	4,048	
	Actual	current	293	290	361	310	249	292	248	204					
		cumulative	293	583	944	1,254	1,503	1,795	2,043	2,247					

FIFTH ANNUAL WORK PLAN
PDCD MANHOURS BY FUNCTIONAL DEPARTMENT

DESCRIPTION (MHRS)			1988 JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	1989 JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTALS
P Safety and Security	Plan	current	456	480	576	480	432	576	456	480	600	480	480	576	6,072
		cumulative	456	936	1,512	1,992	2,424	3,000	3,456	3,936	4,536	5,016	5,496	6,072	
	Actual	current	272	320	352	344	416	512	424	464					
		cumulative	272	592	944	1,288	1,704	2,216	2,640	3,104					
Q Quality Assurance	Plan	current	304	480	384	320	208	464	224	400	320	240	240	464	4,048
		cumulative	304	784	1,168	1,488	1,696	2,160	2,384	2,784	3,104	3,344	3,584	4,048	
	Actual	current	240	263	441	406	352	481	406	411					
		cumulative	240	503	944	1,350	1,702	2,183	2,589	3,000					
R Project Administration	Plan	current	912	960	1,152	960	864	1,152	912	960	1,200	960	960	1,312	12,304
		cumulative	912	1,872	3,024	3,984	4,848	6,000	6,912	7,872	9,072	10,032	10,992	12,304	
	Actual	current	752	798	1,327	905	742	1,021	865	910					
		cumulative	752	1,550	2,877	3,782	4,524	5,545	6,410	7,320					
S EO Administration	Plan	current	304	320	384	320	288	384	304	320	400	320	320	384	4,048
		cumulative	304	624	1,008	1,328	1,616	2,000	2,304	2,624	3,024	3,344	3,664	4,048	
	Actual	current	152	152	152	192	272	360	261	266					
		cumulative	152	304	456	648	920	1,280	1,541	1,807					
T Labor Relations	Plan	current	0	0	0	0	0	0	0	0	160	0	160	0	320
		cumulative	0	0	0	0	0	0	0	0	160	160	320	320	
	Actual	current	0	0	9	9	0	4	0	0					
		cumulative	0	0	9	18	18	22	22	22					
U Legal Counsel	Plan	current	0	0	0	0	0	160	0	160	0	160	0	160	640
		cumulative	0	0	0	0	0	160	160	320	320	480	480	640	
	Actual	current	0	0	0	0	0	5	0	0					
		cumulative	0	0	0	0	0	5	5	5					
Subtotal (HOURS)	Plan	current	25,320	26,800	31,744	26,720	24,480	32,400	26,464	28,560	35,800	29,360	29,680	35,152	352,480
		cumulative	25,320	52,120	83,864	110,584	135,064	167,464	193,928	222,488	258,288	287,648	317,328	352,480	
	Actual	current	23,203	25,684	32,979	28,645	26,415	34,432	28,530	30,368					230,256
		cumulative	23,203	48,887	81,866	110,511	136,926	171,358	199,888	230,256					

FIFTH ANNUAL WORK PLAN
PDCD MANHOURS BY FUNCTIONAL DEPARTMENT

DESCRIPTION (MHRS)			1988 JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	1989 JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTALS
Other Direct Labor															
R. M. Parsons															
K Project Controls	Plan	current	0	0	0	80	80	80	0	80	0	80	0	80	480
		cumulative	0	0	0	80	160	240	240	320	320	400	400	480	
	Actual	current	0	582	8	65	82	26	68	44					
		cumulative	0	582	590	655	737	763	831	875					
L Procurement	Plan	current	0	0	0	0	0	0	0	0	0	0	0	0	0
		cumulative	0	0	0	0	0	0	0	0	0	0	0	0	
	Actual	current	0	0	0	0	2	0	0	0					
		cumulative	0	0	0	0	2	2	2	2					
M Engineering Services/ Systems Integration	Plan	current	160	320	320	320	320	320	320	160	160	160	160	160	2880
		cumulative	160	480	800	1,120	1,440	1,760	2,080	2,240	2,400	2,560	2,720	2,880	
	Actual	current	341	(189)	507	243	511	418	200	148					
		cumulative	341	152	659	902	1,413	1,831	2,031	2,179					
Q Quality Assurance	Plan	current	0	0	0	0	80	80	80	80	80	80	80	80	640
		cumulative	0	0	0	0	80	160	240	320	400	480	560	640	
	Actual	current	0	0	0	0	0	0	0	0					
		cumulative	0	0	0	0	0	0	0	0					
R Administration	Plan	current	0	0	0	0	0	0	0	0	0	0	0	0	0
		cumulative	0	0	0	0	0	0	0	0	0	0	0	0	
	Actual	current	0	83	80	(96)‡	61	73	52	96					
		cumulative	0	83	163	67	128	201	253	349					
Dillinghaa Construction															
K Project Controls	Plan	current	0	0	0	0	0	0	0	0	160	160	160	160	640
		cumulative	0	0	0	0	0	0	0	0	160	320	480	640	
	Actual	current	0	0	0	0	0	0	0	0					
		cumulative	0	0	0	0	0	0	0	0					
M Engineering Services/ Systems Integration	Plan	current	0	0	0	0	0	0	0	0	160	160	160	160	640
		cumulative	0	0	0	0	0	0	0	0	160	320	480	640	
	Actual	current	72	152	148	272	(160)	4	0	0					
		cumulative	72	224	372	644	484	488	488	488					
DeLeuw, Cather															
F General Services	Plan	current	80	80	80	80	80	80	80	80	80	80	80	80	960
		cumulative	80	160	240	320	400	480	560	640	720	800	880	960	
	Actual	current	0	0	0	0	0	0	0	0					
		cumulative	0	0	0	0	0	0	0	0					
M Engineering Services/ Systems Integration	Plan	current	160	160	160	160	160	160	160	160	240	240	240	240	2240
		cumulative	160	320	480	640	800	960	1,120	1,280	1,520	1,760	2,000	2,240	
	Actual	current	0	94	49	2	14	2	64	53					
		cumulative	0	94	143	145	159	161	225	278					
Subtotal	Plan	current	400	560	560	640	720	720	640	560	880	960	880	960	8,480
		cumulative	400	960	1,520	2,160	2,880	3,600	4,240	4,800	5,680	6,640	7,520	8,480	
	Actual	current	413	722	792	486	510	523	384	341					
		cumulative	413	1,135	1,927	2,413	2,923	3,446	3,830	4,171					
TOTAL DIRECT LABOR HOURS	Plan	current	25,720	27,360	32,304	27,360	25,200	33,120	27,104	29,120	36,680	30,320	30,560	36,112	360,960
		cumulative	25,720	53,080	85,384	112,744	137,944	171,064	198,168	227,288	263,968	294,288	324,848	360,960	
‡ Negative due to correction to prior period accruals.	Actual	current	23,616	26,406	33,771	29,131	26,925	34,955	28,914	30,709					234,427
		cumulative	23,616	50,022	83,793	112,924	139,849	174,804	203,718	234,427					

SECTION III

EQUAL OPPORTUNITY PERFORMANCE

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III. EQUAL OPPORTUNITY PERFORMANCE

DBE Participation

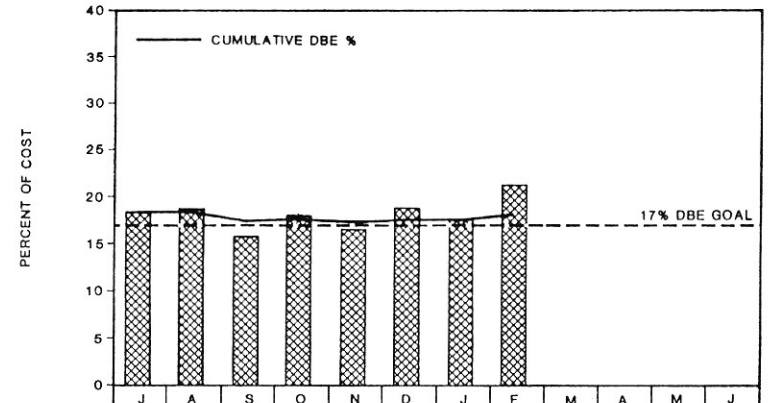
The monthly DBE participation for the Fifth Annual Work Plan for February, measured on the basis of accrued total cost was 21.2%, 4.2% above the 17% goal. The cumulative percentage for the Fifth Annual Work Plan was 18.2%, 1.2% above the 17% goal (Figure 1).

WBE Participation

The monthly WBE participation for the Fifth Annual Work Plan for February, measured on the basis of accrued total cost was 5.1%, 2.1% above the 3% goal. The cumulative percentage for the Fifth Annual Work Plan was 4.7%, 1.7% above the 3% goal (Figure 2).

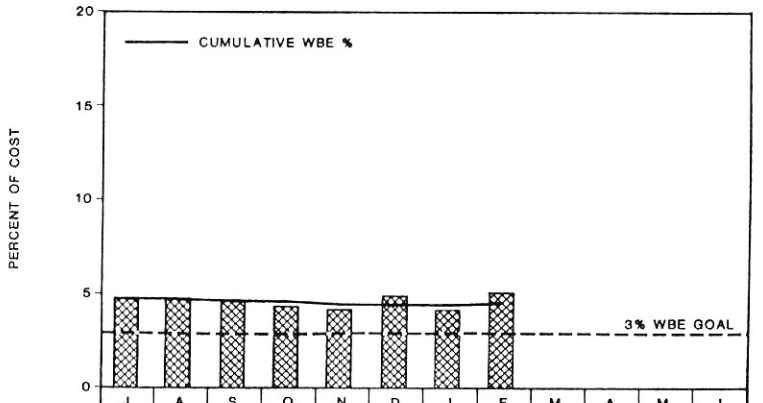
Affirmative Action Analysis

The Affirmative Action Analyses for minorities and women, as indicated in Figures 3 and 4, exceeds the established goals of 17% for minorities, and 8% for women by 25% and 2% respectively.



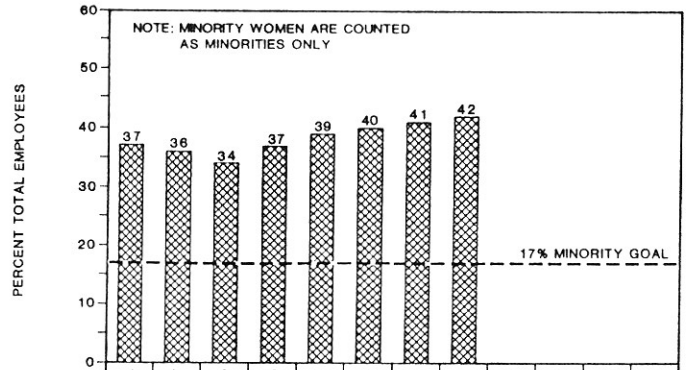
($000)	J	A	S	O	N	D	J	F	M	A	M	J
	1988						1989					
TOTAL MONTHLY COST	1,137	1,248	1,537	1,386	1,279	1,656	1,412	1,362				
CUMULATIVE COST	1,137	2,383	3,920	5,306	6,585	8,241	9,653	11,015				
MONTHLY DBE COST	210	234	244	254	212	312	250	289				
CUMULATIVE DBE COST	210	444	688	942	1,154	1,466	1,716	2,005				
MONTHLY DBE %	18.5	18.8	15.9	18.3	16.6	18.8	17.7	21.2				
CUMULATIVE DBE %	18.5	18.6	17.6	17.8	17.5	17.8	17.8	18.2				

FIGURE 1 - DBE ANALYSIS



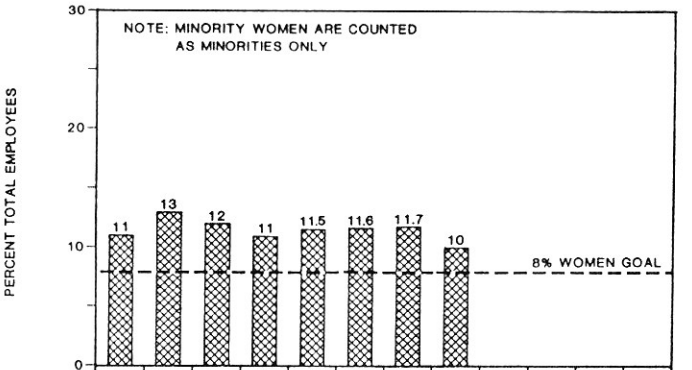
($000)	J	A	S	O	N	D	J	F	M	A	M	J
	1988						1989					
TOTAL MONTHLY COST	1,137	1,248	1,537	1,386	1,279	1,656	1,412	1,362				
CUMULATIVE COST	1,137	2,383	3,920	5,306	6,585	8,241	9,653	11,015				
MONTHLY WBE COST	54	60	72	61	55	81	61	70				
CUMULATIVE WBE COST	54	114	186	247	302	383	444	514				
MONTHLY WBE %	4.8	4.8	4.7	4.4	4.3	4.9	4.3	5.1				
CUMULATIVE WBE %	4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.7				

FIGURE 2 - WBE ANALYSIS



	J	A	S	O	N	D	J	F	M	A	M	J
	1988						1989					
TOTAL EMPLOYEES	156	165	186	191	191	198	204	200				
MINORITY EMPLOYEES	58	59	64	71	75	79	83	84				
MINORITY % OF TOTAL	37%	36%	34%	37%	39%	40%	41%	42%				
MINORITY GOAL VARIANCE	+20%	+19%	+17%	+20%	+22%	+23%	+24%	+25%				

FIGURE 3 - MINORITY AFFIRMATIVE ACTION ANALYSIS



	J	A	S	O	N	D	J	F	M	A	M	J
	1988						1989					
TOTAL EMPLOYEES	156	165	186	191	191	198	204	200				
WOMEN EMPLOYEES	17	21	22	21	22	23	24	20				
WOMEN % OF TOTAL	11%	13%	12%	11%	11.5%	11.6%	11.7%	10%				
WOMEN GOAL VARIANCE	+3%	+5%	+4%	+3%	+3.5%	+3.6%	+3.7%	+2%				

FIGURE 4 - WOMEN AFFIRMATIVE ACTION ANALYSIS

SECTION IV

SCHEDULE PERFORMANCE

IV. SCHEDULE PERFORMANCE

CONTRACTOR SUBMITTALS - During this period, 388 submittals were received from the Construction Contractors and 137 were carried over from January. 292 packages were processed (approved, approved-as-noted, rejected and reviewed for record only) and returned to the Contractors as shown in the following tabulation. The balance (233) are still under review.

Contracts	Carryover From Jan.	No. of Submittals Received in Feb.	Submittals Processed Within 30 Days	Submittals Processed In Over 30 Days	Carryover to March
A112	12	17	16	2	11
A130	33	47	35	3	42
A135	12	34	26	0	20
A135BH	5	22	21	0	6
A141	8	54	48	1	13
A145/A145A	5	26	8	2	21
A146	0	6	2	1	3
A165	24	58	42	2	38
A171	1	28	8	1	20
A175	8	24	21	1	10
A610/A115	6	25	25	0	6
A612	2	1	2	0	1
A615	5	1	5	0	1
A616	2	2	2	0	2
A620	3	18	4	1	16
A630	3	14	8	0	9
A640	1	1	1	0	1
A710	1	4	1	0	4
A732	1	0	0	0	1
A740	4	5	3	0	6
A745	1	1	0	0	2
A795	0	0	0	0	0
Total	137	388	278	14	233

Construction Package Reviews - Analysis of the activities on the "Design Packages Status Window Report, Current Period", (Page 19), shows the following document review:

- o Constructibility Reviews - Constructibility review underway of A147/100%, Civic Center Station, Stage II.

Training Programs

The following training program was underway during the February period:

SAFETY TRAINING FOR UNDERGROUND CONSTRUCTION - Training in safety conduct during underground construction covering use of self-rescuers; fire extinguishers and other safety equipment. Three separate sessions were held with representatives from PDCD (7), LACTC (10), CTC (9) and SCRTD (6).

DESIGN PACKAGE STATUS WINDOW REPORT - CURRENT PERIOD
1-28-89 TO 2-24-89

Contract #	Description	Pkg Type	Review Code	Schedule Receipt	Received	Schedule Complete	Actual Complete	SC	Remarks
A-147	CIVIC CENTER STATION (STAGE II)	DWGS	DC100%		02-14-89	03-06-89			
A-147	CIVIC CENTER STATION (STAGE II)	SPEC	DC100%		02-14-89	03-06-89			

**

4 records listed. 5 values listed.

Review Codes : LT60 - Less than 60% IP60 - In progress 60% PF85 - Prefinal 85%
PF90 - Prefinal 90% FS100 - Final submittal 100% DC100 - Final design complete 100%
CAR- Claims Avoidance Review CE - Check Estimate

NOTES : 1) Based on 3-1-89, MRTC Design Review Schedule

SECTION V

COST PERFORMANCE

MTA LIBRARY

V. COST PERFORMANCE

FIFTH ANNUAL WORK PLAN

Total incurred costs of $1,313,001 (Page 25) for CM Direct Services (without General Condition Items) for the period were under the plan of $1,377,502 by $64,501. This variance results from the net effect of Other Direct Costs (ODCs) being under the plan by $58,667 and Labor expenditures (total PDCD and subcontractors) being under the plan by $5,834.

The cumulative costs for Total CM Services (including General Condition Items) incurred through February were $11,015,636 against a plan of $11,154,273 resulting in an under plan expenditure of $138,637 (Page 25).

The February CPR forecasts (Page 25) an estimate at completion of $17,624,762 versus a plan of $17,625,378 for an underexpenditure of $616. Extracting the General Condition Items and reporting them separately, the February CPR forecasts a CM Direct Services estimate at completion of $16,723,774 versus a plan of $16,961,078 for an under plan expenditure of $237,304.

GENERAL CONDITION ITEMS

General Condition Items (GCI's) expenditure of $49,767 were over the plan of $44,192 for the period by $5,575. This report forecasts an estimate at completion (EAC) in the 5th AWP period for GCI's of $900,988 versus a plan of $664,300, for a projected overplan expenditure of $236,688. (Page 24)

LABOR COSTS

The average hourly labor rate, including burdens and fees, experienced for the period was $40.17/hr. compared to a plan rate of $42.56/hr., resulted in a difference of $2.39 per hour.

The variances can be summarized into two categories:

STAFFING VARIANCE	IMPACT ON JANUARY COSTS
9.93 equivalent staff over plan @ 160 hours at $42.56/hour =	$ 67,600

RATE VARIANCE
191.9 actual staff equivalent @ 160 hours
@ $2.39/hour = (73,400)

FEBRUARY COST VARIANCE TO PLAN $(5,800)

OTHER DIRECT COSTS

Other Direct Costs (ODCs) were under the plan for the period by a net of $58,667 as follows:

DESCRIPTION	CURRENT PERIOD DOLLARS BUDGET	ACTUAL	VARIANCE	CUMULATIVE DOLLARS BUDGET	ACTUAL	VARIANCE
(1)Field Office Expenses	59,264	50,874	- 8,390	474,869	417,349	- 57,520
(2)Office Equipment	14,552	1,861	-12,691	116,416	82,273	- 34,143
(3)Travel & Relocation	26,350	17,518	- 8,832	210,800	71,541	-139,259
(4)Vehicles & Maintenance	5,189	2,006	- 3,183	70,535	33,943	- 36,592
(5)Reproduction	5,980	- 7,426	-13,406	49,019	43,032	- 5,987
(6)Telephone & Telex	7,396	2,610	4,786	60,626	43,749	- 16,877
(7)Computer Operation Support	3,242	990	- 2,252	25,936	11,153	- 14,783
(8)Gross Receipt Tax	7,601	7,000	- 601	59,634	59,000	- 634
(9)Field Equipment	8,456	3,930	- 4,526	67,648	38,434	- 29,214
S/T ODC's	138,030	79,363	-58,667	1,135,483	800,474	-335,009

NOTES

(1) Field Office Expenses - underexpenditure due to underrun in equipment maintenance and supplies.
(2) Office Equipment - underexpenditure due to correction to prior period accruals.
(3) Travel and Relocation - underexpenditure due to planned travel being delayed.
(4) Vehicles & Maintenance - underexpenditure due to lower than planned maintenance costs.
(5) Reproduction - underexpenditure due to correction of prior period accruals.
(6) Telephone and Telex - underexpenditure due to lower communications cost.
(7) Computer Operation Support - underexpenditure due to lower than planned DMCS.
(8) Gross Receipt Tax - varies directly with the actual cumulative rate of expenditure per period.
(9) Field Equipment - underexpenditure due to correction of prior period accruals.

CM COST PERFORMANCE - FEBRUARY 1989
FIFTH ANNUAL WORK PLAN
CONSTRUCTION

($000)

	PLANNED	ACTUAL	VARIANCE	%
PDCD				
LABOR, BURDENS, FEE				
CUMULATIVE THROUGH JANUARY	$ 5,390	$ 5,347	$ (43)	-0.80%
CURRENT MONTH	776	814	38	4.90%
CUMULATIVE THROUGH FEBRUARY	$ 6166	$ 6161	$ (5)	-0.09%
TRAVEL AND ODC'S				
CUMULATIVE THROUGH JANUARY	$ 997	$ 721	$ (276)	-27.68%
CURRENT MONTH	138	79	(59)	-42.75%
CUMULATIVE THROUGH FEBRUARY	$ 1135	$ 800	$ (335)	-33.60%
SUBCONTRACTORS				
CUMULATIVE THROUGH JANUARY	$ 3,002	$ 3,004	$ 2	0.07%
CURRENT MONTH	463	420	(43)	-9.29%
CUMULATIVE THROUGH FEBRUARY	$ 3,465	$ 3,424	$ (41)	-1.18%
SUBTOTAL CM DIRECT SERVICES				
CUMULATIVE THROUGH JANUARY	$ 9,389	$ 9,072	$ (317)	-3.38%
CURRENT MONTH	1,377	1,313	(64)	-4.65%
CUMULATIVE THROUGH FEBRUARY	$ 10,766	$ 10,385	$ (381)	-3.54%
GENERAL CONDITION ITEMS				
CUMULATIVE THROUGH JANUARY	$ 343	$ 581	$ 238	69.39%
CURRENT MONTH	45	50	5	11.11%
CUMULATIVE THROUGH FEBRUARY	$ 388	631	$ 243	62.63%
TOTAL CM SERVICES				
CUMULATIVE THROUGH JANUARY	$ 9,732	$ 9,653	$ (79)	-0.81%
CURRENT MONTH	1,422	1,363	(59)	-4.15%
CUMULATIVE THROUGH FEBRUARY	$ 11,154	$ 11,016	$ (138)*	-1.24%
HOURS				
CUMULATIVE THROUGH JANUARY	198,168 hrs	203,718 hrs	5,550 hrs	2.80%
CURRENT MONTH	29,120	30,709	1,589	5.46%
CUMULATIVE THROUGH FEBRUARY	227,288 hrs	234,427 hrs	7,139 hrs	3.60%

*OFF BY 1 DUE TO ROUNDING

LOS ANGELES **METRO RAIL**

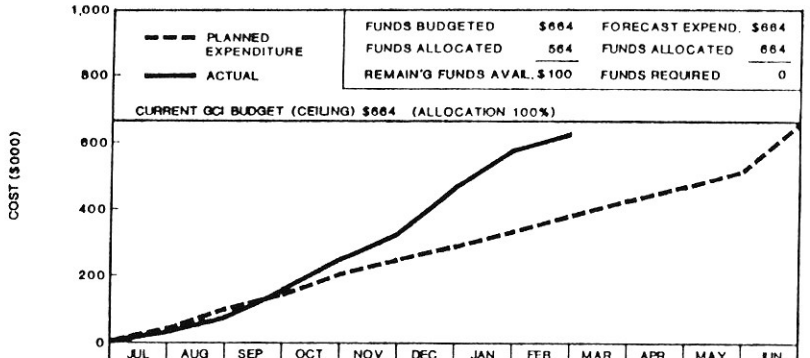
RTD

PDCD

CONTRACT PERFORMANCE REPORT

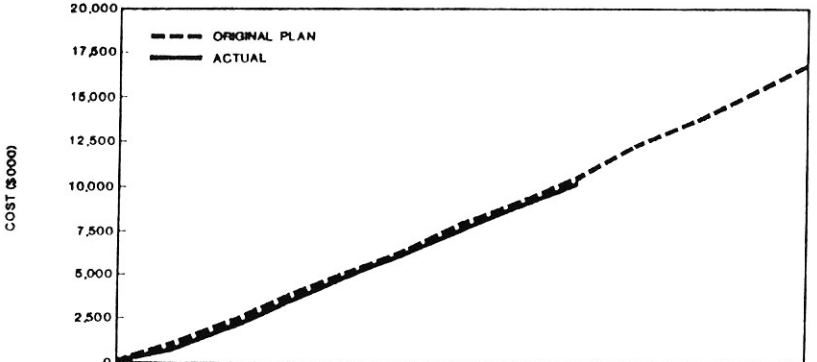
FIFTH ANNUAL WORK PLAN

PERIOD FEBRUARY 1989



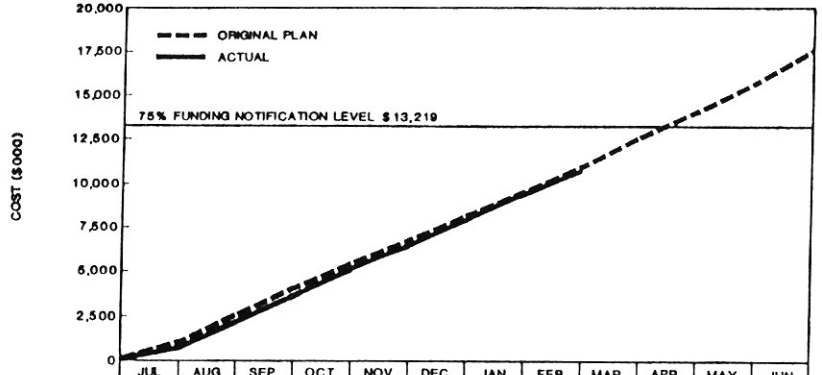
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
		1988						1989					
PLANNED EXPEND.		44	105	150	211	255	299	343	388	432	476	520	664
ACTUAL		39	80	166	260	333	470	581	631				
VARIANCE		(5)	(25)	16	49	78	171	238	243				
FORECAST	ETC	620	583	498	403	331	266	311	270				
	EAC	659	663	664	663	664	736	892	901				

GENERAL CONDITION ITEMS CUMULATIVE COST PERFORMANCE



		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
		1988						1989					
PLAN		1,244	2,556	4,060	5,359	6,564	8,111	9,389	10,767	12,446	13,669	15,302	16,961
ACTUAL		1,098	2,303	3,754	5,046	6,252	7,770	9,072	10,385				
VARIANCE		(146)	(253)	(306)	(313)	(312)	(341)	(317)	(382)				
FORECAST	ETC	15,867	14,657	13,207	11,916	10,709	9,117	7,660	6,339				
	EAC	16,965	16,962	16,961	16,962	16,961	16,867	16,732	16,724				

CM DIRECT SERVICES CUMULATIVE COST PERFORMANCE



		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
		1988						1989					
PLAN		1,288	2,662	4,210	5,570	6,819	8,411	9,732	11,155	12,876	14,345	15,822	17,625
ACTUAL		1,137	2,383	3,920	5,306	6,585	8,241	9,653	11,016				
VARIANCE		(151)	(279)	(290)	(264)	(234)	(170)	(79)	(139)				
FORECAST	ETC	16,487	15,242	13,705	12,319	11,040	9,385	7,971	6,609				
	EAC	17,624	17,625	17,625	17,625	17,625	17,625	17,624	17,625				

TOTAL CM SERVICES (INCLUDING G.C.I.'s) CUMULATIVE COST PERFORMANCE

PDCD CM SERVICES - 5TH ANNUAL WORK PLAN
COST REPORT FOR MONTH ENDING FEB 24, 1989
REPORT SUMMARIZED BY RESPONSIBILITY
CONSTRUCTION
GENERAL CONDITION ITEMS

RESPONSIBILITY CD-DESCRIPTION	CURRENT PERIOD DOLLARS BUDGET	ACTUAL	VAR.	CUMULATIVE DOLLARS BUDGET	ACTUAL	VARIANCE	ESTIMATE TO COMPL	AT COMPLETION DOLLARS BUDGET	ESTIMATE	VARIANCE
B GUARD SERVICES	7,750	9,605	1,855	62,000	51,337	-10,663	31,000	93,000	82,337	-10,663
D FIELD OFFICE TRAILERS	0	0	0	34,000	0	-34,000	0	34,000	0	-34,000
E CLEAN-UP OF FIELD SITES	0	0	0	0	10,730	10,730	10,000	0	20,730	20,730
F WTF EXPENSES	0	6,833	6,833	0	33,177	33,177	0	0	33,177	33,177
G SIGNS AND BARRICADES	0	0	0	0	36,372	36,372	0	0	36,372	36,372
X CONSTRUCTION PHOTO	3,525	3,329	-196	28,200	29,272	1,072	14,100	42,300	43,372	1,072
Y TESTING PROGRAM	32,917	30,000	-2,917	263,336	470,000	206,664	215,000	395,000	685,000	290,000
S/T ALLOCATED	44,192	49,767	5,575	387,536	630,888	243,352	270,100	564,300	900,988	336,688
Z UNALLOCATED	0	0	0	0	0	0	0	100,000	0	-100,000
S/T GEN. COND. ITEMS	44,192	49,767	5,575	387,536	630,888	243,352	270,100	664,300	900,988	236,688

PDCD CM SERVICES - 5TH ANNUAL WORK PLAN
COST REPORT FOR MONTH ENDING FEB 24, 1989
REPORT SUMMARIZED BY RESPONSIBILITY
CONSTRUCTION

RESPONSIBILITY CD	DESCRIPTION	CURRENT PERIOD DOLLARS BUDGET	ACTUAL	VAR.	CUMULATIVE DOLLARS BUDGET	ACTUAL	VARIANCE	ESTIMATE TO COMPL	AT COMPLETION DOLLARS BUDGET	ESTIMATE	VARIANCE
A	PROJECT MANAGEMENT	82,933	85,212	2,279	680,049	640,889	-39,160	372,181	1,049,100	1,013,070	-36,030
C	FAC. CONSTRUCTION	416,615	481,943	65,328	3,198,586	3,533,862	335,276	2,187,343	5,131,561	5,721,205	589,644
E	SYSTEMWIDE CONST	44,727	48,542	3,815	381,411	374,468	-6,943	273,271	605,480	647,739	42,259
F	GENERAL SERVICES	85,389	85,733	344	709,681	812,973	103,292	436,346	1,084,962	1,249,319	164,357
K	PROJECT CONTROLS	201,826	165,528	-36,298	1,624,540	1,210,318	-414,222	832,465	2,581,921	2,042,783	-539,138
L	PROCUREMENT	21,331	18,978	-2,353	174,916	155,949	-18,967	96,426	269,840	252,375	-17,465
M	ENG. SVCS./SYST. INTEGR.	177,234	174,116	-3,118	1,328,366	1,483,797	155,431	794,749	2,108,035	2,278,546	170,511
N	COMMUNITY RELATIONS	12,181	8,837	-3,344	99,883	86,797	-13,086	55,301	154,087	142,098	-11,989
P	SAFETY	22,141	20,534	-1,607	181,555	141,160	-40,395	97,686	280,081	238,846	-41,235
Q	QUALITY ASSURANCE	22,818	19,870	-2,948	153,325	149,822	-3,503	107,953	232,452	257,775	25,323
R	PROJECT ADMIN.	33,723	34,821	1,098	276,530	266,376	-10,154	154,476	436,598	420,852	-15,746
S	EQUAL OPPORTUNITY	14,803	11,212	-3,591	121,386	76,944	-44,442	60,328	187,260	137,272	-49,988
T	LABOR RELATIONS	0	0	0	0	1,443	1,443	10,702	21,405	12,145	-9,260
U	LEGAL	20,000	0	-20,000	40,000	3,887	-36,113	20,000	80,000	23,887	-56,113
	S/T LABOR-BRDN & OH	1,155,721	1,155,326	-395	8,970,228	8,938,685	-31,543	5,499,227	14,222,782	14,437,912	215,130
1	FIELD OFFICE EXPENSES	59,264	50,874	-8,390	474,869	417,349	-57,520	234,825	718,100	652,174	-65,926
2	OFFICE EQUIPMENT	14,552	1,861	-12,691	116,416	82,273	-34,143	52,732	181,900	135,005	-46,895
3	TRAVEL & RELOCATION	26,350	17,518	-8,832	210,800	71,541	-139,259	43,680	325,000	115,221	-209,779
4	VEHICLES & MAINT.	5,189	2,006	-3,183	70,535	33,943	-36,592	11,171	93,600	45,114	-48,486
5	REPRODUCTION	5,980	-7,426	-13,406	49,019	43,032	-5,987	29,592	75,600	72,624	-2,976
7	TELEPHONE & TELEX	7,396	2,610	-4,786	60,626	43,749	-16,877	20,000	93,500	63,749	-29,751
8	COMPUTER OPERATION SUPPT.	3,242	990	-2,252	25,936	11,153	-14,783	7,870	38,900	19,023	-19,877
9	GROSS RECEIPT TAX	7,601	7,000	-601	59,634	59,000	-634	35,700	94,230	94,700	470
A	FIELD EQUIPMENT	8,456	3,930	-4,526	67,648	38,434	-29,214	38,052	105,700	76,486	-29,214
	S/T ODC'S	138,030	79,363	-58,667	1,135,483	800,474	-335,009	473,622	1,726,530	1,274,096	-452,434
W	PDCD FEE	50,000	50,000	0	400,000	400,000	0	195,000	595,000	595,000	0
X	S/C FEE	33,751	28,312	-5,439	261,026	245,589	-15,437	171,177	416,766	416,766	0
	S/T FEES	83,751	78,312	-5,439	661,026	645,589	-15,437	366,177	1,011,766	1,011,766	0
	S/T CM DIRECT SVCS	1,377,502	1,313,001	-64,501	10,766,737	10,384,748	-381,989	6,339,026	16,961,078	16,723,774	-237,304
	S/T GEN. COND. ITEMS	44,192	49,767	5,575	387,536	630,888	243,352	270,100	664,300	900,988	236,688
	TOTAL CM SERVICES	1,421,694	1,362,768	-58,926	11,154,273	11,015,636	-138,637	6,609,126	17,625,378	17,624,762	-616

PERCENT OF BUDGET EXPENDED = 62%

NEGATIVE VARIANCE INDICATES UNDERRUN

SECTION VI

ADDITIONAL ACTIVITIES PERFORMED IN FEBRUARY

MTA LIBRARY

VI. ADDITIONAL ACTIVITIES PERFORMED IN FEBRUARY

The following activities performed by the CM functional organization are in addition to the activities presented in other sections of this report.

A. ADMINISTRATION AND ACCOUNTING

(1) Continued to assist the Resident Engineers in the supply of administrative material and the assignment/orientation of new field personnel at the field offices.
(2) Continued processing of personnel (acquisition and termination).

B. Quality Assurance

(1) Welding inspection activities included a continuation of reviewing welding submittals for A130, A135, A141 and A165; performed direct inspection of welding on A141 and continued to review welding being performed at Eckman, Paramount Steel and BARTEC.
(2) Conducted training session for A141 inspectors on taking of slump tests.
(3) Prepared draft of safety certification file content for Facility Contract A112.
(4) Continued to monitor S-E Technical performance and implemented cost control system that provides more timely information.
(5) Provided input to Contract General Conditions review.
(6) Conducted audit of A640 subcontractor.
(7) Continued participation in Safety Certification activities including monthly Safety Certification Team meeting.
(8) Conducted review of HDPE testing and documentation for A141, A165, A171 and A175.

C. Equal Opportunity Administration

(1) Monitored Equal Opportunity reporting requirements for Contract Nos. A112, A130, A135, A141, A145, A146, A165, A171, A175, A610/A115, A612, A615, A616, A620, A640, A710, A732, A740, A745 and A795.
(2) Conducted project site visits/employee interviews at the following sites: A112, A130, A135, A141, A146, A165, A171, A175 and A610/A115.
(3) Processed penalty assessments for the late submittal of the Monthly Employment Utilization Reports for Contracts A112, A130, A135, A141, A145, A165 and A175.
(4) Prepared Chronology of Correspondence pertaining to Carpenter Wage Rate issue.

(5) Sent directive for all affected Contracts requesting restitution for carpenters; A112, A121, A130, A135, A141, A145, A146, A165, A171, A175, A610/A115, A620, A640, A710 and A732.
(6) Prepared Summary of Contracts Awarded to P.I.E. Construction Company for RTD/EO.

D. Contracts and Procurement

(1) Submitted proposed Subcontract Amendment and request for District approval to increase Fifth Annual Work Plan funding for Field and Laboratory Testing services.
(2) Submitted proposed Amendment and request for District approval to increase Fifth Annual Work Plan funding for Subcontract with Engineering-Science, Inc., an Associate Subcontractor.
(3) Submitted annual agreement(s) recommendation for office products to District.

E. Community Relations

(1) Coordinated community notifications and traffic control assistance for A141, A145, A146, A165, and A175.
(2) Coordination and resolution of traffic mitigation concerns for tenants along Hill St. affected by A145 and A146 traffic access plans, for tenants in the 7th and Flower area affected by A165 and for tenants of Westlake St. affected by A175.
(3) Provided assistance to A141, A145, A146, A165 and A175 for problems caused by street closures and lane restrictions, blocked access and emergency closure of Hill St. between Temple and First Streets.
(4) Assisted RTD/LGCA in merchant advertising campaign for the 7th/Flower and 5th/Hill areas.
(5) Provided assistance to RTD in coordinating site visits and responding to media requests.
(6) Processed 33 inquiries/complaints.

F. Safety and Security

(1) Performed daily site safety, health and security surveillances on a two shift basis and prepared written reports for the A112, A130, A135, A141, A144, A145, A146, A165, A171, A175 and A610/A115 construction projects.
(2) Coordinated activities of the Systemwide Security Guard Service and the Systemwide Clean-up Service subcontractor.
(3) Completed revisions to the Construction Safety and Security Manual in conjunction with SCRTD and DIA.

G. Construction Operations

(1) Continued construction management (CM) services for Contracts A112, A130, A135, A141, A143, A144, A145/A145A, A146, A165, A171, A175, A610/A115, A612, A615, A616, A620, A630, A640, A710, A732, A740, A745, A750 and A795; monitoring of utilities relocations, and submittal reviews.
(2) Continued coordination of traffic control plans and street closures with city agencies for A141, A145, A146 and A165.
(3) Continued coordination of MOS-1 inspections with LADOT and processing of Master Agreement Work Invoices.
(4) Coordinated Caltrans' encroachment permit extension for crossing under Hollywood Freeway at Hill St. overcrossing (A141).
(5) Continued coordination of necessary requirements to obtain permanent occupancy permit for Amtrak machine shop (A141).
(6) Processed a total of 26 Traffic and Utilities related submittals.
(7) Continued monitoring for water and wastewater quality at A171 and A175, Ballona Creek, A141, A144, A145, 146 and the Los Angeles River.
(8) Completed compilation of December and January Los Angeles River monitoring records for District and LA County Replenishment District.
(9) Monitored geotechnical borings for soil and water contamination and reviewed dewatering submittals for A130 and A135.
(10) Prepared and submitted closure reports for underground tank sites at A112, A145, A165 and A175.
(11) Prepared and submitted January Discharge Monitoring Reports (DMR) to SCRTD for the California Regional Water Quality Board (CRWQCB).
(12) Continued monitoring removal and disposal of contaminated soil at A130 and A145.
(13) Reviewed first A750 proposals for asbestos abatement at A135 and claims for A135 Boiler Room Abatement.
(14) Provided technical support for successful variance to remove, haul and store oily soil at A144 and for site development plan for storage area.
(15) Continued checking contractor's control points and layout.
(16) Began performing as-built cross sections of AL Tunnel invert pour (A171).
(17) Continued monitoring instrumentation, building and ground settlement points on A141, A145, A146, A165, A171 and A175.
(18) Continued as-built survey of AR Tunnel (A141).
(19) Continued location survey at shop and yards contracts.
(20) Checked slabs poured at A141 and A175 excavations.
(21) Checked alignment of excavation at A165.
(22) Checked location of elevator shafts A141, A165 and A175.

H. Engineering Services

(1) Performed intensive field and office studies of the Civic Center Station overloaded struts, including surveys of damages, collection/review/dissemination of data, coordination of efforts to arrive at solutions, and inspection of additional instrumentation and strut jacking operations.
(2) Completed technical review of second iteration of A130 VEP to substitute compaction grouting for chemical grouting.
(3) Coordinated quick responses to check reports (ultimately proved baseless) that Italian Hall was settling near the A141 tunnel heading and that several inches of lateral movement had taken place in the soils around Civic Center Station.
(4) Coordinated effort with MRTC to complete review of first A130 tunneling machine submittal.
(5) Completed tabulating geology and predicted ground loads for 11 non-Metro excavations in downtown L.A. by assembling data already in PDCD and Dames & Moore files.
(6) Transmitted to RTD and MRTC a preliminary plan for a multiphase study to determine reason for Civic Center Station strut overloads.
(7) Made intensive efforts to clear CalTrans permits in order to get geotechnical instrumentation installed prior to arrival of A141 tunneling machine at the Hollywood Freeway.
(8) Responded to 98 requests for information or documentation clarification from various Contractors.
(9) Processed 57 field inquiries with MRTC to obtain clarification of design requirements.
(10) For Contract A112 - Approved 8 Contractor submittals for concrete calculations for car and truck hoist pit, wheel borer machine, reflected ceiling plan, prefabricated roof expansion joint - product literature, material certificates on joint compound & tape, rail joint interface, and concrete mix design.
Approved-as-Noted 6 Contractor submittals for fire protection data Certificates of Compliance for electrical data, wheel boring/press machine, electrical manhole, and truck hoist wheel truing calculations.
Rejected 4 Contractor submittals for HVAC duct insulation, ventilating fixed louvers, and ladder non-skid stripes.
(11) For Contract A130 - Approved 18 Contractor submittals for mill certificates for soldier piles, Benonite specifications, rebar release #25 at "U" section wall, mix designs for slurry wall for 6" slump to 8" slump, rebar release #26/added hairpin dowels, material certifications, certificates of treatment for lagging, steel mill test report "U" section retaining wall base slab, storm drainage system junction structure reinforcement, rebar certificates for cable trench, mill test reports "U" section retaining walls, tieback tendons & HDWE for soldier pile and lagging system, rebar release #52 and #61,

Certificates of Compliance and sample submittal, mix design for grouting tiebacks, vehicle access bridge design calculations/drawings VB-1 and VB-2, and other rebar mill test reports.

Approved-as-Noted 12 Contractor submittals for ground support system, U-wall 2-cell box drawings, rigid conduit, pipe bends, nipples and couplings, retaining wall lift drawing, tieback details and schedule, data sheets-pipe jacking and excavation shoring system drawings and calculations, proposed temporary sanitary sewer, calculations for anchorage for support of excavation, hollow metal frame and door schedule, lift drawing for two-cell box, and tunnel lift drawings.

Rejected 8 Contractor submittals for slurry wall calculations, 600V cable, lift drawings, for "U" section retaining wall, dewatering plan, Certificate of Compliance for precast concrete manholes, ground support system, pile layout, wall elevation, tieback details, storm drain shoring design and calculations, and "U" section retaining wall corrosion control details.

(12) For Contract A135 - Approved 13 Contractor submittals for low carbon track spikes, variance request supporting farertite, border steel tests, supplement for slurry wall anchorage - calculations and details, welding procedures/passenger building, revised trackwork procedure, data sheets for concrete pumps, material certificates, mix designs, chain link fences, and certified mill test report.

Approved-as-Noted 5 Contractor submittals for electric ductbank details, rigid conduit, pipe bends, nipples and couplings, and ground rods catalog data.

Rejected 6 Contractor submittals for 600V and 35 KV cable, cylinder breaks, electrical ductbank suspended from vehicular bridge, welding procedures - passenger bridge, and lift drawings for platform #3.

Reviewed for Record Only 2 Contractor submittals for calculations for temporary railroad bridge, and geotechnical observation well readings.

(13) For Contract A135BH (Baggage Handling) - Approved 13 Contractor submittals for proposed use of shotcrete, steel stitch plate calculations, certificates of compliance for building block material, ventilation details, hardware schedule, concrete mix designs, structural steel material certificates, form designs, building basement plans, and certified mill test reports.

Approved-as-Noted 6 Contractor submittals for welder certification, anchor bolts data, concrete mix designs, and excavation support and sewage ejection pit.

Rejected 2 Contractor submittals for building basement floor plan, and a floor hatch.

(14) For Contract A141 - Approved 36 Contractor submittals for under-platform vent assemblies, galvanized rigid steel conduit data, compaction grouting drawing and protection of structures, various concrete lift drawings, rebar welding procedures, rebar reinforcement drawings, material certificates for sprinklers and wet standpipe system, delivery receipts and mill test reports for rebar, volclay type I panel method of installation, electric FS & FD cast device boxes, and Geofon new personnel resumes.

Approved-as-Noted 7 Contractor submittals for revised rebar configuration details, various concrete lift drawings, welding certificates, and laser package.
Rejected 5 Contractor submittals for pipe sleeves, concrete mix designs, and forming wall design calculations/progressive shoring wall working drawings.
Reviewed for Record Only 1 Contractor submittal for deflection of back flanges of waler readings.

(15) For Contract A145 - Approved 2 Contractor submittals for excavation support details, and kick out calculations/soldier pile #275.
Approved-as-Noted - 6 Contractor submittals for temporary utility supports for telephone ducts, main service electrical equipment and boards, station fire protection materials, welding procedures, and concrete mix designs/storm drain and sanitary sewer installation.
Rejected 2 Contractor submittals for fuse data for Equitable Building switchboards, and pile encroachment plan.

(16) For Contract A146 - Approved 2 Contractor submittals for L.A. Jewelry Center work area, and California Jewelry Mart work area.
Rejected 1 Contractor submittal for worksite traffic control plan - Bank of America through Robinson's.

(17) For Contract A165 - Approved 26 Contractor submittals for traffic detour plan, air flow charts ventilation program, various lift drawings, rebar in exterior walls, rebar for S.W. blast relief shaft slab and walls, S.E. blast relief shaft walls, Roosevelt Bldg. footings, rebar shop drawing for roof slab, sample protection board for (HDPE), and product data for curing compounds.
Approved-as-Noted 14 Contractor submittals for cap beam support details, galvanized steel conduit, support system Flower Street bracing, Flower Street N. bulkhead pile layout and B level brace, embeds and non embeds, support system 7th Street bracing, exterior wall form panel, base slab wall lift drawings, rebar drawing roof slab, design calculations B and C level bracing 7th St. bulkheads, and cement dewatering procedures.
Rejected 4 Contractor submittals for station interface with Home Savings, station column welding procedures, and design calculations and drawings for ground support system.

(18) For Contract A171 - Approved 2 Contractor submittals for tunnel lining arch forms, and invert concrete placements.
Approved-as-Noted 3 Contractor submittals for electrical requirements during construction, cast-in-place concrete lining lift #2 arch, and embedded track drains.
Rejected 3 Contractor submittals for catalog data for galvanized rigid conduit, and permanent electrical material concrete anchors.
Reviewed for Record Only 1 Contractor submittal for AL tunnel alignment.

(19) For Contract A175 - Approved 4 Contractor submittals for plumbing contractor's requirements, formwork materials, exposed finished concrete data, and domestic cold water line support.

Approved-as-Noted 9 Contractor submittals for shoring drawings, calculations for interface support system, pipe welders' qualifications and procedures, roof support for north blast relief shaft, manufacturer's data - deluge water lines, manufacturer's data - wet standpipe and sprinkler lines, and manufacturer's data - domestic thread/weld-o-lets 3/4" deluge and sprinkler non-embedded lines.
Rejected 7 Contractor submittals for data type L sleeve and seal, wall sleeve penetrations, welder and welding operator qualifications test reports/mill test reports, certificate of compliance for concrete finish materials, and manufacturer's literature - seamless welded fittings/deluge and wet standpipe.
Reviewed for Record Only 2 Contractor submittals for elevator interface, and various electrical drawings.

(20) For Contract A610 - Approved 22 Contractor submittals for catalog cuts - casing pipe, notarized certificates of compliance Portec rail anchors, fabrication bending and replacement special MH #75 rebars, No. 8 single crossover 16' track center, No. 8 lateral switch electrified, No. 8 lateral frog details, plates for 16'6" switch - electrified, plates for 16'6" switch - non-electrified, 16'6" switch point and details - non-electrified, stock rails for 16'6" switch No. 8 turnout, closure and buffer rails No. 8 turnout, closure and buffer rails No. 8 turnout, 16'6" switch point and details electrified, crossover connecting rails No. 8 single/double, plates for 16'6" switch derail, heavy car cleaning platform drawings, insulated joint gap and required end post thickness, certificate for bonded joint qualification test, specifications for bonded insulated joints, catalog cut for standard toggle switch, and procedure for explosive depth hardening and certificate of hardness.
Approved-as-Noted 2 Contractor submittals for sketches for christy valve boxes, and tee rail guard rail.
Rejected 1 Contractor submittal for procedure for adjusting rail and anchoring continuous welded rail.

(21) For Contract A612 - Approved 1 Contractor submittal for Monthly Progress Report.
Rejected 1 Contractor submittal for test procedures.

(22) For Contract A615 - Approved 3 Contractor submittals for management plan, Monthly Progress Report - December 1988, and installation instructions.
Rejected 2 Contractor submittals for quality assurance program, and test program plan for protective coverboard.

(23) For Contract A616 - Approved 2 Contractor submittals for Lot #7 production fastener test results, and Lot #7 production elastomer test results.

(24) For Contract A620 - Approved 2 Contractor submittals for electrical component data and specifications, and circuit breaker details.
Approved-as-Noted 2 Contractor submittals for track and cable plans, and ATC vehicle equipment schmatic diagrams.
Rejected 1 Contractor submittal for reliability demonstration plan.

(25) For Contract A630 - Approved 1 Contractor submittal for installation data on rectifier transformers.
Approved-as-Noted 6 Contractor submittals for equipment installation data, management plan, and installation data low voltage power switchgear.
Rejected 1 Contractor submittal for a partial contract schedule.

(26) For Contract A640 - Approved-as-Noted 1 Contractor submittal for EMC control plan.

(27) For Contract A710 - Reviewed for Record Only 1 Contractor submittal for voltage requirements for escalators and elevators.

(28) For Contract A740 - Approved 2 Contractor submittals for transition ducts at fans, and December Progress Report.
Approved-as-Noted 1 Contractor submittal for test reports for under platform/overhead trainway exhaust fans.

(29) Completed incorporation of basic changes in as-built drawings for Contract A161.

I. Project Controls

(1) Processed Change Requests: A112-CR-087, A112-CR-100, A112-CR-101, A112-CR-102, A112-CR-013, A112-CR-104, A112-CR-106, A130-CR-023, A135-CR-036, A141-CR-093, A141-CR-098, A141-CR-099, A144-CR-017, A145/145A-CR-119, A145-145A-CR-121, A145/145A-CR-127, A146-CR-030, A165-CR-036, A165-CR-046, A165-CR-047, A165-CR-049, A165-CR-050, A165-CR-051, A165-CR-052, A165-CR-053, A175-CR-041, A610/A115-CR-017, A610/A115-CR-017B, A610/A115-CR-042 (dwgs. only), A610/A115-CR-048, A610/A115-CR-054 and A610/A115-CR-055.

(2) Processed Change Notices: A130-CN-015, A135-CN-006, A135-CN-013, A135-CN-014, A141-CN-055, A141-CN-057, A145/145A-CN-034, A145/145A-CN-036, A165-CN-023, A165-CN-024, A175-CN-020A, A175-CN-021, A175-CN-021A, A175-CN-023, A610/A115-CN-025, A610/A115-CN-026, A620-CN-023, A620-CN-024, A640-CN-001 and A745-CN-003.

(3) Processed Change Orders: A112-CO-009, A130-CO-007, A130-CO-008, A135-CO-008, A135-CO-101, A141-CO-010P, A141-CO-030A, A141-CO-032, A141-CO-033, A141-CO-034, A141-CO-035, A141-CO-036, A141-CO-038, A145/145A-CO-028B, A145/145A-CO-051, A145/145A-CO-070, A145/145A-CO-073, A145/145A-CO-076, A145/145A-CO-077, A146-CO-021B, A165-CO-016, A175-CO-021, A175-CO-022, A175-CO-023, A610/A115-CO-004, A610/A115-CO-007A, A610/A115-CO-008A, A610/A115-CO-009A, A610/A115-CO-012A, A610/A115-CO-034, A616-CO-009, A620-CO-004 and A732-CO-001.

(4) Processed through TRACS, executed Change Orders: A112-CO-005A, A135-CO-002K, A135-CO-002L, A135-CO-002M, A135-CO-002N, A135-CO-006, A135-CO-006A, A141-CO-022, A141-CO-027, A141-CO-032, A141-CO-033, A144-CO-007, A145-CO-052, A145-CO-068, A145-CO-069, A610-CO-007 and A610-CO-027.

(5) Processed Potential Claims: A112-PC-004, A112-PC-062, A112-PC-101, A141-PC-097, A165-PC-101 and A175-PC-023.

(6) Processed Change - Technical Evaluations: A112-CTE-099, A141-CTE-092, A141-CTE-093, A141-CTE-094, A145/145A-CTE-099A, A610/A115-CTE-029B and A616-CTE-010.
(7) Processed Force Accounts: A141-FA-010F, A141-FA-010G, A141-FA-010K, A145/145A-FA-021, A146-FA-009, A146-FA-013, A165-FA-001, A610/A115-FA-004, A610/A115-FA-004A, A610/A115-FA-007, A610/A115-FA-007A, A610/A115-FA-008, A610/A115-FA-008A, A610/A115-FA-009, A610/A115-FA-009A, A610/A115-FA-012 and A610/A115-FA-012A.
(8) Processed Monthly Payment Estimates for 18 Contracts: A112, A130, A135, A141, A144, A145, A146, A165, A171, A175, A610/A115, A616, A620, A640, A710, A732, A740 and A745.
(9) Completed a Close-out Audit on 3 Force Account Change Orders: A141-CO-10G, A145-CO-021 and A145-CO-037.
(10) Continued testing PC TRACS for potential use on the project.
(11) Began preliminary data preparation for 6th AWP.
(12) Finalized procedures associated with Force Account work and Force Account close-out audit.
(13) Rejected Part I Schedule for A630.
(14) Approved as noted Part I Schedule for A732 and Part II for A112 and A145.
(15) Continued review and analysis of revisions to A141 Part II Schedule.
(16) Prepared contractor progress inputs to RTD Monthly Status Report.
(17) Prepared an evaluation of the first version of the proposed Document Control system for PC's.
(18) Prepared/submitted semi-monthly 250 page Claims Log.
(19) Reviewed/marked-up weekly Change Action Status calendar.
(20) Reviewed/marked-up weekly Notice of Action report.
(21) Prepared/submitted semi-monthly Force Account Change Order Close Out Status report.
(22) A130 VE-002 prepared estimate for Cost Reduction Incentive Proposal - Compaction Grouting in lieu of chemical grouting.
(23) A130: Reviewed estimate for contractor proposed credit to substitute materials, duct bank.
(24) A130-CR-021: Reviewed contractors proposal for concrete water cement ratio change, attend meeting.
(25) A135-CR-004: Continued material take off and estimates on changes and review subcontractor quotes, submittals etc., LAUPT Baggage Handling Facilities.
(26) A141: Prepared tunnel equipment rates of Stand-By rates for access delay. Evaluated contractor proposal.
(27) A141-CR-064: Prepared estimate and reviewed contractors proposal for replacing 36" air duct.
(28) A141-CR-079, A145-CR-100, A165-CR-027 and A175-CR-029: Prepared estimate and evaluated changes for Trainway clearance.
(29) A145-CR-116: Evaluated scope of work, prepared estimate for temporary and permanent telephone manhole No. 793 and attended meeting.

(30) A145-CR-113: Evaluated realignment of Sewer in 5th Street and associated cost estimate.
(31) A145 and A130: Evaluated Contractor's proposed Equipment Rates for Force Account Work.
(32) A146: Prepared equipment ownership and operating rates for tunnel equipment for Force Account.
(33) A146-CR-028A: Prepared estimates for Grout Plant and Grouting Operations.
(34) A165-CR-015: Prepared estimate for street light revisions.
(35) A165-CR-033: Prepared estimate for opening east Mezzanine Boiler room.
(36) A165-CR-041: Began review of pavement reconstruction 7th/Figueroa intersection.
(37) A620-CR-001: Prepared estimate for revision to project schedule and attend meetings.
(38) A745-CR-006: Prepared alternate estimates for equipment handling due to revised delivery schedule.
(39) General - Prepared miscellaneous ROM estimates, reviewed Resident Engineer estimates, and reviewed proposed wage rates for Force Account work.

J. CM Meetings in February 1989

Date	Agency/Company	General Subject
January 31, Feb. 7,14,22	RTD/MRTC	Project Status Review
January 31, Feb. 1,2,3,6	MRTC, RTD, Tutor-Saliba/Groves, Wagner	A141 - Civic Center Station Strut Overloads and Stress Distributions
January 31	A135/Tutor-Saliba	Fire Water Piping Welding
February 1	Caltrans	Temporary Sanitary Sewer Submittal (A130)
February 1	MRTC, Utilities	Phase II Kick-Off Meeting
February 1	Mayor Bradley	Visit to A165
February 1	RTD	A745-CR-006 Availability of Stations for Equipment Delivery
February 2,9,16,23	California Engineering	A610/A115 - Duct Bank Details
February 3,10,17	RTD	CM Progress Review
February 3	City of L.A.	Overload Permit (A145)
February 3	LADOT	ATSAC Pull Box (A141)
February 6,21	MRTC, RTD	A710 - Elevator Machine Room and Architectural Details
February 6,13,20,27	RTD	CCB Meeting
February 7	RTD/P.E.	Contract A144 - WTP Operations Status Report
February 7,8,14,24	RTD	A620-CR-001 - Revision to Schedule - Extended Duration

Date	Agency/Company	General Subject
February 7,8,14	MRTC	A145 - Additional Strain Gauges for 5th/Hill Station Struts
February 7,9,14,21,27	MRTC, RTD	A165, A175 - Conduit Requirements for Elevator Machine Room/Pit
February 7	LADOT	A145 Traffic Submittals
February 7,9	RTD, DIA	60% Review B330 Safety Specifications
February 8	RTD	Safety Certification Files for Facility Contracts
February 8	RTD, BAH, MRTC, LAFD, LACOFD, LAPD, RTD Police	F/LS Safety
February 8,23	RTD, DIA, Argonaut, Contractors, LAFD	Project Safety Review
February 8	RTD, Caltrans	Hollywood Frwy./Hill St. Overcrossing Encroachment Permit Extension (A141)
February 8	RTD/Program Controls	Biweekly Status Meeting
February 8	CalTrans	A141 - Permit to Install Instrumentation Prior to Tunneling Beneath Hollywood Freeway
February 8,15,22	LADOT	Weekly LADOT MOS-1 Inspection
February 9	RTD	Emergency CCB Meeting
February 10,20	RTD	A130 Compaction Grouting Proposal
February 10	Home Savings, Tenants	Lebanon St. Opening (A165)
February 10	Converse Consultants	A141 - Briefing on Civic Center Station Strut Overload Problem
February 13	Tutor-Saliba/Groves, Geofon, Inc.	A141 - Problems with Monitoring A141 Instrumentation
February 13	MRTC, Utilities	Phase II Preliminary Borings
February 14	MRTC, RTD	A710 - Elevator Hoistway
February 14	MRTC	Tabulation of Design Loadings for Local non-Metro Excavations
February 15	MRTC	A130 - Tunneling Machine Submittal
February 15	RTD/Contractor	A145 Temporary & Permanent Manhole 793
February 15	RTD, DIA, MRTC, USBM	Underground Safety on Metro Rail - Milwaukee Tunnel Disaster
February 15	Glendale Chamber of Commerce	Metro Rail Tour

Date	Agency/Company	General Subject
February 16	MRTC, Tutor-Saliba-Perini	A130 - Discuss PDCD Comments on Slurry Wall Submittal
February 16	Caltrans	A141 Encroachment Permit
February 20	A640 Bechtel/Axyl (Subcontractor)	Audit
February 20	Shank-Ohbayashi	A171 - Clarification of Submittal on Line and Grade Corrections
February 21	A135	Used Steel for R.R. Bridge
February 21	RTD/Contractor	A135-004 Baggage Handling Facilities, Dry Wall Negotiations
February 22	RTD/Contractor	A130-CR-021 Water Cement Ratio Change
February 22	MRTC, Tutor-Saliba-Perini	A135 - Discuss PDCD Comments on Railroad Bridge Submittal
February 22	RTD/CTC/LACTC	Metro Rail Tour
February 22	A175 Tutor-Saliba & A171 S/O	Fire Water Piping Welding
February 22	RTD/LAFD/Booz Allen/MRTC	Safety Certification Meeting
February 23	L.A. Times	Metro Rail Briefing
February 23	MRTC, Tutor-Saliba/Groves	A141 - Monitoring of Hollywood Freeway Above Tunnels
February 24	Guy F. Atkinson, Woodward Clyde Consultants	A145 - Suplementary Strain Gauges for 5th/Hill Station
February 24	Caltrans, Tudor-Saliba	A141 Encroachment Permit
February 24	A165 Granite	Fire Water Piping Welding
February 24	RTD/Taylor	As Builts
February 24	MRTC	A141 - Strut Overload Study Presented in a Research Format

SECTION VII

SUMMARY OF ACTIVITIES PLANNED FOR MARCH

MTA LIBRARY

VII. SUMMARY OF ACTIVITIES PLANNED FOR MARCH 1989

A. Administration and Accounting

(1) Continue to provide priority administrative and accounting assistance to construction field operations.
(2) Continue the recruitment and termination of personnel as required.

B. Quality Assurance

(1) Conduct shop surveys at ORECOR, Tri-Industries and BARTEC.
(2) Develop and implement Data Base III programs to correlate subcontractor's Call Notification, test reports and invoices.
(3) Develop and implement system for tracking and analyzing concrete test report data and develop system for tracking Deficiency Notices and non conformances.
(4) Continue to support R.E. Staff on concrete inspection and test, HDPE testing and welding inspection.
(5) Continue to monitor subcontractor cost and technical performance.
(6) Conduct shop survey on A745 HVAC subcontractors.
(7) Continue to monitor concrete placement activities.

C. Equal Opportunity Administration

(1) Conduct contract compliance site visits, employee interviews and monitor reporting requirements for Contract Nos. A112, A130, A135, A141, A145, A146, A165, A171, A175, A610/A115, A612, A615, A616, A620, A630, A640, A710, A732, A740, A745 and A795.

D. Contracts and Procurement

(1) Upon receipt of District approval, issue Request for Quotations for five additional Personal Computers. If results of RFQ are advantageous to PDCD and District, issue procurement instrument.
(2) Upon receipt of District approval, issue amendment to increase Fifth Annual Work Plan funding for Field and Laboratory Testing services Subcontract.
(3) Upon receipt of District approval, issue amendment to increase funding for Fifth Annual Work Plan funding for Associate Subcontract with Engineering-Science, Inc.

(4) Issue Change Order to the Photographic Services Subcontract for additional requirements to accommodate multiple reprint orders to reduce cost of such reprints.
(5) Upon receipt of District approval, issue annual agreement(s) for office products.

E. Community Relations

(1) Continue tenant notifications on traffic access issues for A141, A145, A146, A165 and A175.
(2) Continue expanded communication activities with A130, A145, A146, A165 and A175 tenants regarding ongoing and pending construction activities.
(3) Continue implementing CR Work Plan; conduct community presentations; the dissemination of construction information; and responding to complaints and inquiries.

F. Safety and Security

(1) Continue to monitor safety, health and security activities on all active construction sites on a two shift basis.
(2) Provide specialized underground safety training/indoctrination for PDCD staff, SCRTD, MRTC and visitors.
(3) Continue to monitor activities of the Security Guard Service and the Site Clean-up Service subcontractor.
(4) Submit the revision of the Construction Safety and Security Manual for final approvals.
(5) Update the Emergency Response Plan.

G. Construction Operations

(1) Continue construction management (CM) services at Contracts A112, A130, A135, A141, A143, A144, A145/A145A, A146, A165, A171, A175, A610/A115, A612, A615, A616, A620, A630, A640, A710, A732, A740, A745, A750 and A795; monitoring of utilities relocations, and submittal reviews.
(2) Continue coordination and MOS-1 inspection with LADOT.
(3) Continue coordination of necessary requirements to obtain permanent occupancy permit for AMTRAK Machine Shop (A141).
(4) Continue monitoring of Ballona Creek and Los Angeles River discharges from A141, A144, A145, A171 and A175.
(5) Continue review of Contractor's monitoring for wastewater discharges at A144, A145, A146, A171 and A175 and noise monitoring for A171.
(6) Complete Site Assessment and Closure Reports for contaminated soils in A112, A165 and A175.

(7) Continue monitoring removal and disposal of contaminated soil at A130 and A145.
(8) Start asbestos abatement work for REA building, A135 and air monitoring at A165.
(9) Submit February Discharge Monitoring Report and Los Angeles River Report.
(10) Continue to monitor instrumentation, building and ground settlement marks, various contracts.
(11) Continue to check Contractor's control points and layouts.
(12) Continue to perform survey tasks as requested by R.E.s.
(13) Continue to perform as-built cross section of AL Tunnel invert pour (A171).
(14) Continue to perform as-built survey of tunnels for Contracts A141 and A146.
(15) Continue location surveys in shop and yards contracts.

H. Engineering Services

(1) Continue inspecting instrumentation and analyzing data in Contracts A130, A135, A141, A145, A146, A165 and A175.
(2) Begin wrap-up report on A171 geology and instrumentation results.
(3) Complete tabulations of Civic Center Station excavation time history, all strut and tieback jack and lockoff loads, and instrumented strut jack loads vs. strain gauge readings.
(4) Continue to process Contractor's submittals for Contracts A112, A130, A135, A135BH, A141, A145, A146, A165, A171, A175, A610/A115, A612, A615, A616, A620, A630, A640, A710, A732, A740, A745 and A795.
(5) Continue to produce A161 as-built drawings.
*(6) Complete constructibility review for Contract A147/100%, Civic Center Station, Stage II; and start constructibility review of A135B/100%, Union Station Modification, West Entrance.

I. Project Controls

(1) Process Monthly Payment Estimates for all active contracts.
(2) Process through TRACS all the executed Change Orders.
(3) Continue close-out audits for Force Account Change Orders.
(4) Continue testing PC TRACS.
(5) Continue preparations of 6th AWP.
(6) Review Monthly Contractor Progress Reports.
(7) Prepare contractor progress inputs to RTD Monthly Status Report.
(8) Prepare project schedule evaluation report for RTD Board of Directors.

*See Page 41.

DESIGN PACKAGE STATUS WINDOW REPORT - NEXT 30 DAYS
2-25-89 TO 3-31-89

Contract #	Description	Pkg Type	Review Code	Schedule Receipt	Received	Schedule Complete	Actual Complete	SC	Remarks
A-135B	UNION STATION MODIFICATION (WEST ENTRANCE)	DWG	FS100%		02-27-89	03-17-89			
**									
A-147	CIVIC CENTER STATION (STAGE II)	DWGS	DC100%		02-14-89	03-06-89			
A-147	CIVIC CENTER STATION (STAGE II)	SPEC	DC100%		02-14-89	03-06-89			
**									

4 records listed. 4 values listed.

Review Codes : LT60 - Less than 60% IP60 - In progress 60% PF85 - Prefinal 85%
PF90 - Prefinal 90% FS100 - Final submittal 100% DC100 - Final design complete 100%
CAR- Claims Avoidance Review CE - Check Estimate

NOTES : 1) Based on 3-1-89, MRTC Design Review Schedule

SECTION VIII

SUBCONTRACTOR/CONSULTANT STATUS

VIII. SUBCONTRACTOR/CONSULTANT STATUS

The following 5th AWP Subcontract Status Report provides a current status of subcontracts awarded to the twelve associate and four consultant subcontractors. The Report shows major milestones for each subcontractor action from receipt of the requisition, execution of the document and includes an abbreviated description of the subcontract amendment issued.

FIFTH ANNUAL WORK PLAN SUBCONTRACT STATUS REPORT

FEBRUARY 24, 1989

SUBCONTRACT NUMBER	SUBCONTRACTOR	REQUI-SITION	REQ FOR PROPOSAL	NEGOTIATION COMPLETE	JV APPROVAL	DATE TO SC	RETURNED FROM SC	CONSENT REQUESTED	CONSENT RECEIVED	NTE AMOUNT	DATE EXECUTED	REMARKS
1-SC-3369-1	BETTER PERSONNEL EMPLOYMENT SERVICES											
	AMEND. NO. 11	08/03/88	04/08/88	06/08/88	07/25/88	06/13/88	06/13/88	06/14/88	08/11/88	$420,632	08/11/88	FIFTH AWP
	CHANGE ORDER NO. 4	N/A	N/A	N/A	N/A	11/04/88	11/08/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
2-SC-3369-1	CONSTRUCTION CONTROL SERVICES CORP.											
	AMEND. NO. 11	08/03/88	04/08/88	06/08/88	07/25/88	06/17/87	06/20/88	06/27/88	08/15/88	$1,482,039	08/31/88	FIFTH AWP
	CHANGE ORDER NO. 3	N/A	N/A	N/A	N/A	11/04/88	11/28/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
3-SC-3369-1	DAMES & MOORE											
	AMEND. NO. 10	08/03/88	04/08/88	06/08/88	07/25/88	06/27/88	06/28/88	06/30/88	08/15/88	$234,577	08/16/88	FIFTH AWP
	CHANGE ORDER NO. 3	N/A	N/A	N/A	N/A	11/04/88	11/15/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
4-SC-3369-1	ENGINEERING-SCIENCE											
	AMEND. NO. 10	08/03/88	04/08/88	06/20/88	07/25/88	07/06/88	07/15/88	07/18/88	08/12/88	$228,002	08/15/88	FIFTH AWP
	CHANGE ORDER NO. 3	N/A	N/A	N/A	N/A	11/04/88	12/07/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
	AMEND. NO. 11	12/30/88	N/A	N/A	**	01/16/89	01/25/89	01/27/89		$477,824		INCREASES FUNDS
5-SC-3369-1	HAYAKAWA ASSOCIATES											
	AMEND. NO. 10	08/03/88	04/08/88	07/15/88	07/25/88	08/02/88	08/19/88	08/24/88	09/16/88	$133,484	09/16/88	FIFTH AWP (TERMINATED)
6-SC-3369-1	JACOBS ASSOCIATES											
	AMEND. NO. 13	08/03/88	04/08/88	06/09/88	07/25/88	06/22/87	06/28/88	06/30/88	08/15/88	$996,419	08/16/88	FIFTH AWP
	CHANGE ORDER NO. 4	N/A	N/A	N/A	N/A	11/04/88	12/06/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
7-SC-3369-1	JENKINS, GALES & MARTINEZ, INC.											
	AMEND. NO. 13	08/03/88	04/08/88	06/08/88	07/25/88	07/18/88	07/29/88	07/29/88	08/23/88	$738,465	08/23/88	FIFTH AWP
	CHANGE ORDER NO. 3	N/A	N/A	N/A	N/A	11/04/88	11/15/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE

**IN PROCESS

FIFTH ANNUAL WORK PLAN SUBCONTRACT STATUS REPORT (Contd)

FEBRUARY 24, 1989

SUBCONTRACT NUMBER	SUBCONTRACTOR	REQUI-SITION	REQ FOR PROPOSAL	NEGOTIATION COMPLETE	JV APPROVAL	DATE TO SC	RETURNED FROM SC	CONSENT REQUESTED	CONSENT RECEIVED	NTE AMOUNT	DATE EXECUTED	REMARKS
8-SC-3369-1	MARTIN & HUANG INTERNATIONAL											
	AMEND. NO. 11	08/03/88	04/08/88	06/08/88	07/25/88	07/13/88	07/18/88	07/25/88	08/18/88	$486,299	08/18/88	FIFTH AWP
	CHANGE ORDER NO. 4	N/A	N/A	N/A	N/A	10/06/88	10/11/88	N/A	N/A	N/C	10/06/88	REVISED IPR
	CHANGE ORDER NO. 5	N/A	N/A	N/A	N/A	10/31/88	11/02/88	N/A	N/A	N/C	10/31/88	ADMINISTRATIVE
9-SC-3369-1	NORTH PACIFIC CONSTRUCTION MANAGEMENT											
	AMEND. NO. 13	08/03/88	04/08/88	06/29/88	07/25/88	07/18/88	07/29/88	08/03/88	08/23/88	$435,803	08/23/88	FIFTH AWP
	CHANGE ORDER NO. 5	N/A	N/A	N/A	N/A	11/04/88	11/15/88	N/A	N/A	N/C	11/04/88	ADMINISTRATIVE
10-SC-3369-1	OCHOA & SILLAS											
	AMEND. NO. 7	08/03/88	04/08/88	06/14/88	N/A	07/19/88	07/21/88	07/25/88	08/15/88	$79,600	08/16/88	FIFTH AWP
11-SC-3369-1	RANDOLPH & TATE ASSOCIATES											
	AMEND. NO. 7	08/03/88	04/08/88	04/10/88	N/A	07/20/88	08/08/88	08/08/88	08/18/88	$10,000	08/18/88	FIFTH AWP
15-SC-3369-1	MUESER RUTLEDGE CONSULTING ENGINEERS (JAMES GOULD, Ph.D)											
	AMEND. NO. 6	09/23/88	N/A	06/15/88	N/A	06/21/88	06/21/88	06/23/88	08/12/88	$20,000	08/12/88	FIFTH AWP
18-SC-3369-1	GEO GRAY/ PHOTOGRAPHY											
	AMEND. NO. 3	06/13/88	N/A	N/A	N/A	08/18/88	08/19/88	07/01/88	08/18/88	$42,300	08/22/88	FIFTH AWP
19-SC-3369-1	WORK CENTER, INC.											
	AMEND. NO. 5	05/25/88	N/A	N/A	N/A	08/12/88	08/26/88	06/27/88	08/11/88	$60,000	08/26/88	FIFTH AWP
21-SC-3369-1	SMITH EMERY CO.											
	AMEND NO. 3	06/13/88	N/A	N/A	07/25/88	08/23/88	08/29/88	06/16/88	08/29/88	$395,000	08/31/88	FIFTH AWP
	CHANGE ORDER NO. 4	N/A	N/A	N/A	N/A	12/30/88		N/A	N/A	N/C	12/30/88	ADDS ITEMS
	AMEND. NO. 4	**	N/A	N/A	**			02/15/89		$595,000		INCREASES FUNDS

**IN PROCESS

FIFTH ANNUAL WORK PLAN SUBCONTRACT STATUS REPORT (Contd)

FEBRUARY 24, 1989

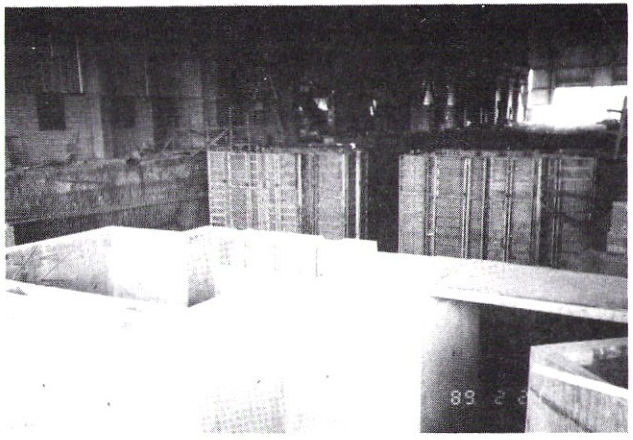
SUBCONTRACT NUMBER	SUBCONTRACTOR	REQUI-SITION	REQ FOR PROPOSAL	NEGOTIATION COMPLETE	JV APPROVAL	DATE TO SC	RETURNED FROM SC	CONSENT REQUESTED	CONSENT RECEIVED	NTE AMOUNT	DATE EXECUTED	REMARKS
22-SC-3369-1	COLEMAN SECURITY SERVICES INC.											
	AMEND. NO. 3	06/13/88	N/A	N/A	N/A	08/15/88	08/17/88	06/15/88	08/15/88	$93,000	08/18/88	FIFTH AWP
29-SC-3369-1	SUBWAY TERMINAL BLDG (A'45/'46 SITE OFFICE LEASE)	N/A	N/A	N/A	N/A	N/A	N/A	06/01/88	06/02/88	$55,910	N/A	EXER 1YR OPT
33-SC-3369-1	F.E. ENDACOTT (CONSULTING AGREEMENT)	05/16/88	N/A	N/A	N/A	06/16/88	07/05/88	07/06/88	08/16/88	$61,000	08/16/88	FIFTH AWP
34-SC-3369-1	BASMACIYON-DARNELL INC. (COMPLETED)											
35-SC-3369-1	MARY & SON MAINTENANCE (SITE CLEAN-UP)	06/27/88	06/27/88	07/21/88	07/25/88	08/10/88	08/11/88	07/13/88	08/12/88	$60,000	08/15/88	FIFTH AWP
36-SC-3369-1	STARLITE SAFETY SUPPLIES (COMPLETED)											
37-SC-3369-1	KAL KRISHNAN	08/25/88	09/12/88	10/19/88	N/A	12/15/88	12/19/88	11/04/88	12/12/88	$98,000	12/20/88	NEW ASSOCIATE
	AMEND. NO. 1	N/A	N/A	02/17/89	N/A	02/23/89		N/A	N/A	$94,130		RATE ADDITIONS
38-SC-3369-1	EDWARD D. GRAF (CONSULTING AGREEMENT)	08/10/88	N/A	N/A	N/A	08/12/88	08/16/88	08/10/88	09/07/88	$50,000	09/07/88	
39-SC-3369-1	O'LEON CONSULTING ENGINEERS CO.	08/25/88	09/12/88	10/18/88	N/A	12/15/88	12/29/88	11/04/88	12/12/88	$99,075	12/30/88	NEW ASSOCIATE
40-SC-3369-1	TRANSMETRICS	08/25/88	09/12/88	10/19/88	N/A	12/15/88	12/29/88	11/04/88	12/12/88	$55,350	12/29/88	NEW ASSOCIATE
	CHANGE ORDER NO. 1	N/A	N/A	N/A	N/A	01/26/89	02/01/89	N/A	N/A	N/C	01/26/89	ADMINISTRATIVE

**IN PROCESS

SECTION IX

CONSTRUCTION PROGRESS PHOTOS

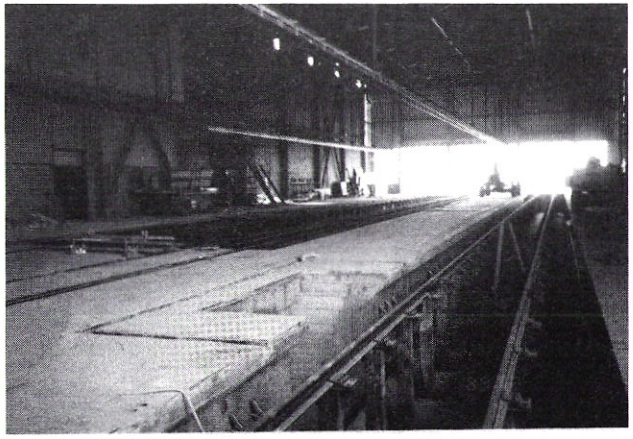
MAIN SHOP BUILDING
CONTRACT A112



CAR HOIST PITS CONSTRUCTED AND FORMED. METALS SHOP WALLS IN BACKGROUND



BLOWDOWN FACILITY WALL A. NOTE SCRUBBER ENCLOSURE FRAME AND OBSERVATION TOWER STRUCTURAL STEEL



S & I TRACKS 3, 2 AND 1 INSTALLED. NOTE STINGER RAILS INSTALLED AND SUBSTATION BLOCK WALL



TRUCK HOIST PITS PLACED AND BACKFILLED. BRAKE SHOP AND LAYDOWN AREA WALLS IN BACKGROUND

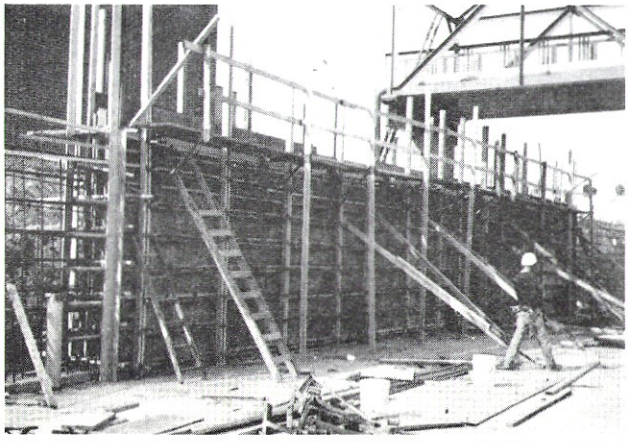
YARD LEADS & TRANSFER ZONE
CONTRACT A130



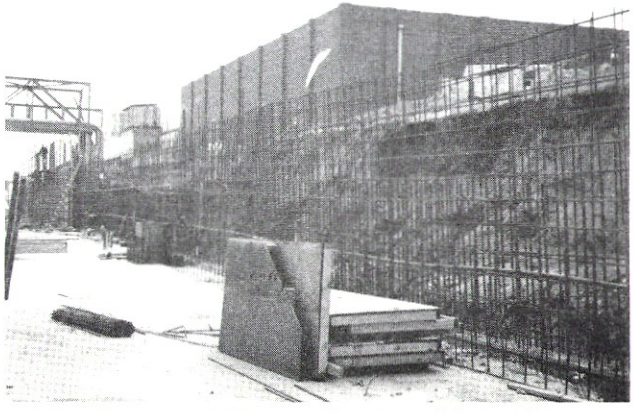
480 VOLT LIGHTING DUCTBANK



DRILLING TIEBACKS - BOX STRUCTURE AREA



EXTERIOR WALL FORM - WEST RETAINING WALL



"U" WALL REINFORCEMENT - WEST WALL

LOS ANGELES **METRO RAIL**

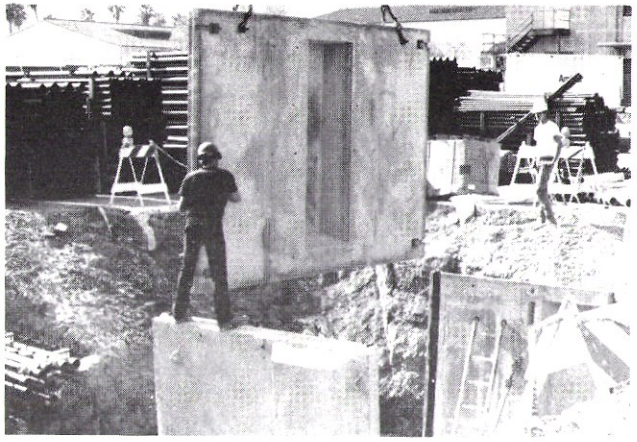
RTD

PDCD

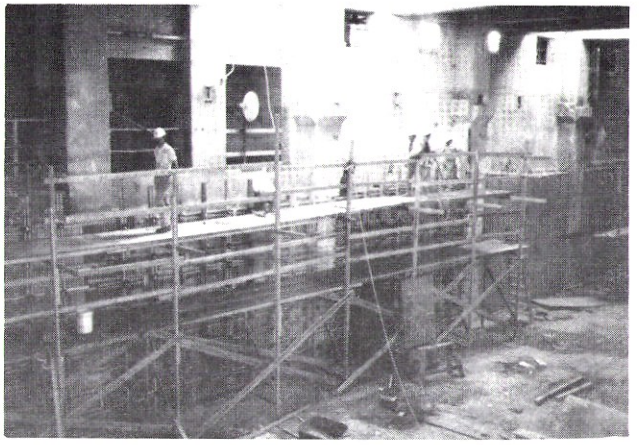
CONTRACT PERFORMANCE REPORT

PERIOD FEBRUARY 1989

UNION STATION
CONTRACT A135



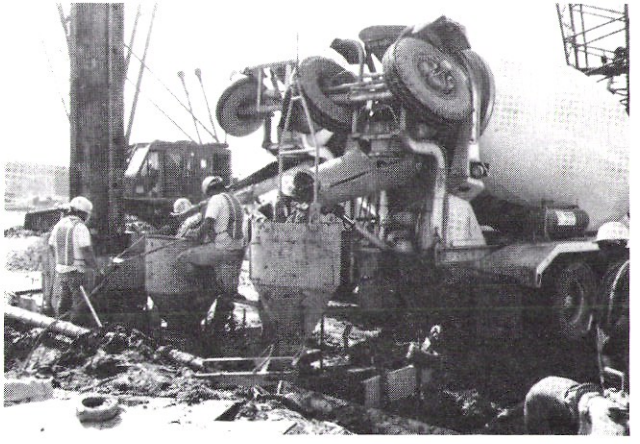
INSTALLATION OF 35 KV MANHOLE



FORMING AND PLACEMENT OF CONCRETE FOR "C" LINE WALL



REALIGNMENT OF TRACKS 6, 31 AND 7



PLACEMENT OF CONCRETE FOR SLURRY WALL

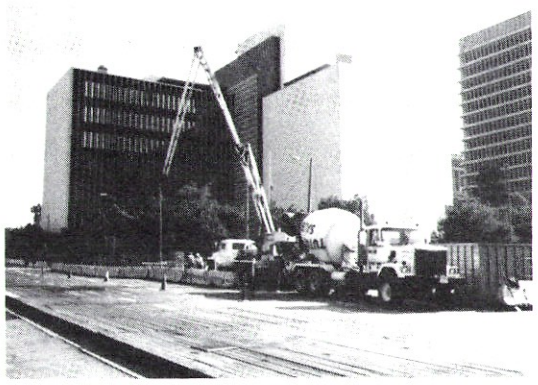
LOS ANGELES **METRO RAIL**

PDCD

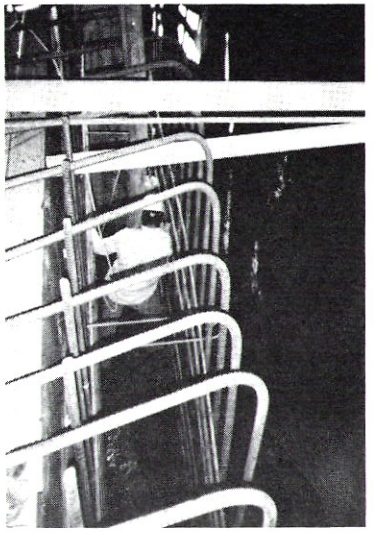
CONTRACT PERFORMANCE REPORT

PERIOD FEBRUARY 1989

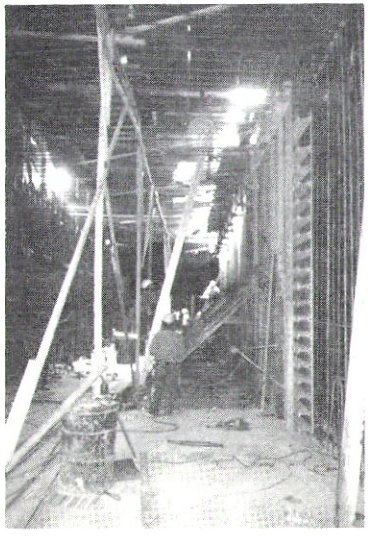
CIVIC CENTER STATION AND TUNNEL
CONTRACT A141



PUMPING CONCRETE FOR
THE NORTH BLAST RELIEF SHAFT WALL



PLACING CONCRETE FOR NORTH
BLAST RELIEF SHAFT WALL



INSTALLATION OF WALL FORMS IN
THE SOUTH BLAST RELIEF SHAFT



WALL FORMS IN THE SOUTH BLAST
RELIEF SHAFT

LOS ANGELES **METRO RAIL**

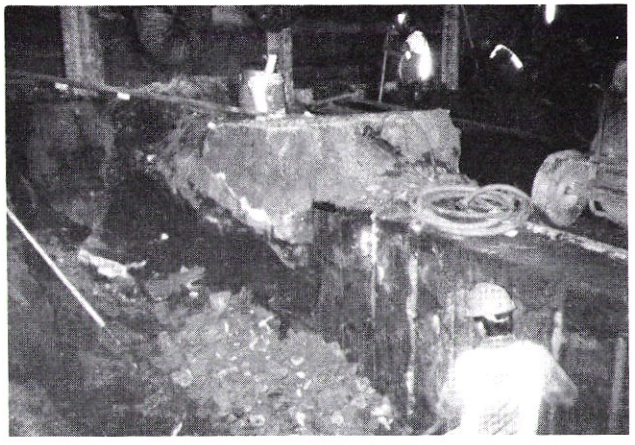
RTD

PDCD

CONTRACT PERFORMANCE REPORT

PERIOD FEBRUARY 1989

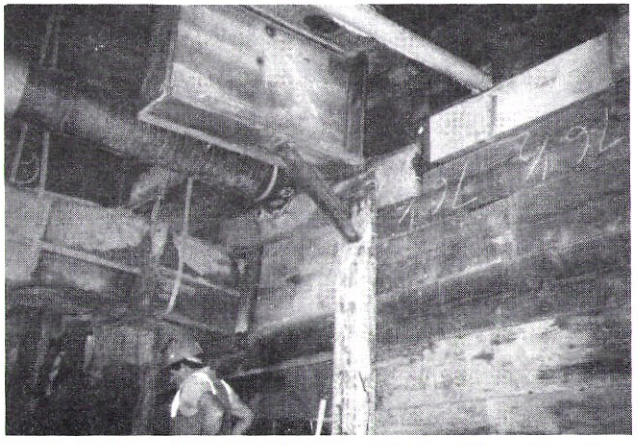
5TH/HILL UTILITY RELOCATION AND 5TH/HILL STATION STAGE I
CONTRACT A145/A145A



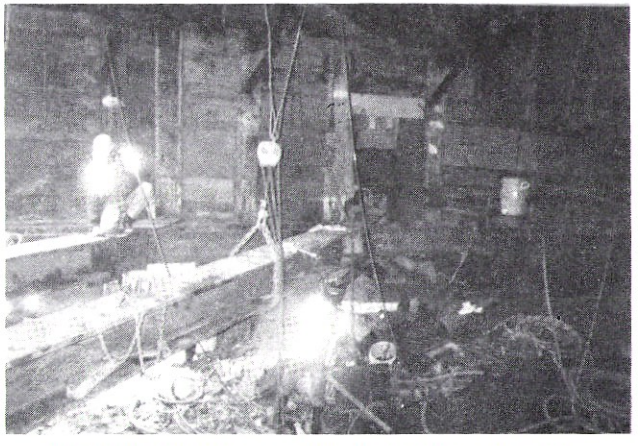
TELEPHONE LINE NO. 54 UNDER 4TH AND HILL INTERSECTION



RECEIVING PIPE STRUTS FOR LEVEL 2 SUPPORT

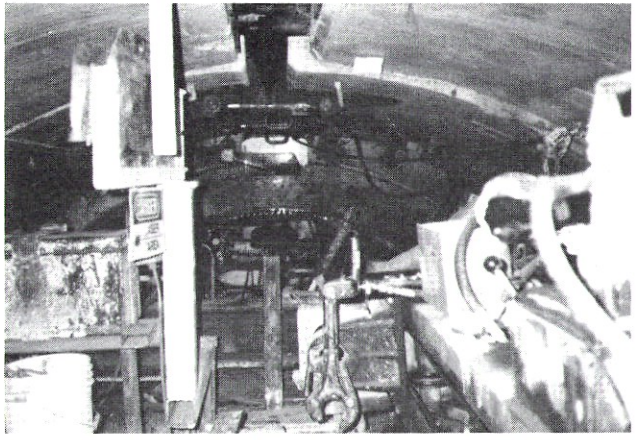


LAGGING OPERATION AND UTILITY SUPPORT IN THE STATION'S NORTH END UNDER 4TH ST.



INSTALLATION OF LEVEL 2 CORNER BRACES AT THE SOUTH BULKHEAD

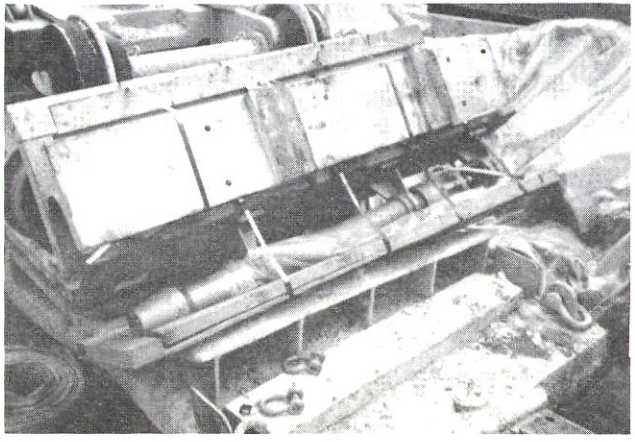
TUNNELS FROM 5TH/HILL TO 7TH/FLOWER
CONTRACT A146



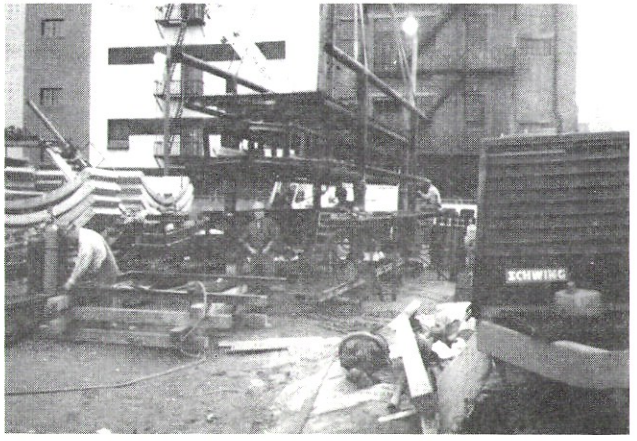
REAR END OF TUNNEL SHIELD AND LASER TARGET. ALSO SHOWS HYDRAULIC JACKS USED FOR EXPANSION IN CROWN OF PRECAST CONCRETE TUNNEL SEGMENTS



MODIFICATION OF RIGHT 1/4 ARCH BREASTING TABLE ON FRONT OF TUNNELLING MACHINE. TUNNEL FACE IS TO THE RIGHT

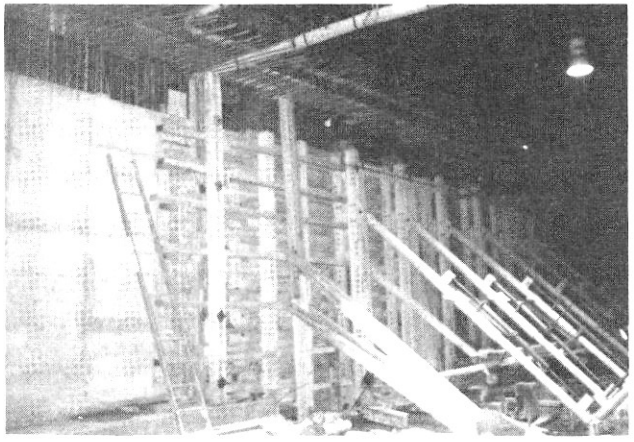


MOYNO PUMPS TO BE USED FOR CHEMICAL GROUTING

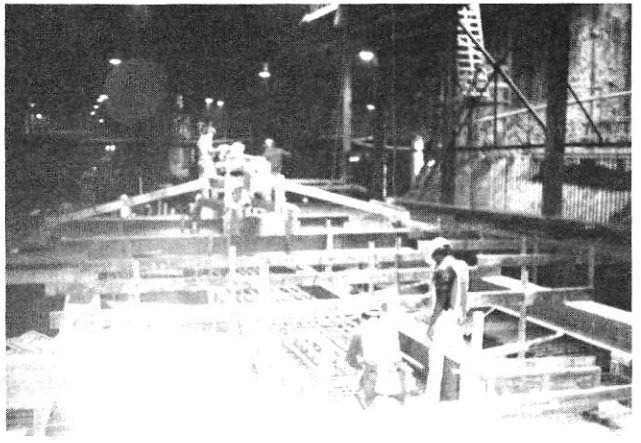


ASSEMBLING FRAME OF CHEMICAL GROUT PLANT

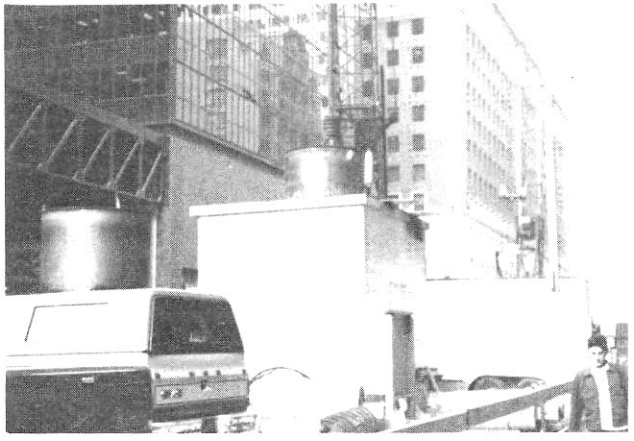
7TH/FLOWER STATION
CONTRACT A165



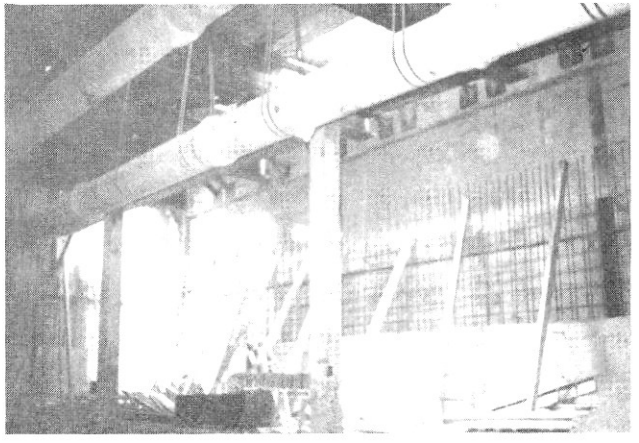
EXTERIOR WALL - WEST SIDE FLOWER ST.
LRT STA 13+83 TO STA 13+21



BASE SLAB PREPARATION FOR 450 CU. YD. POUR

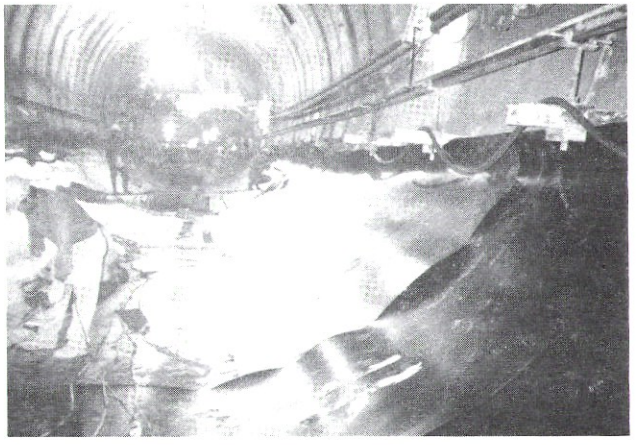


VENTILATION FAN - EAST END OF 7TH ST.

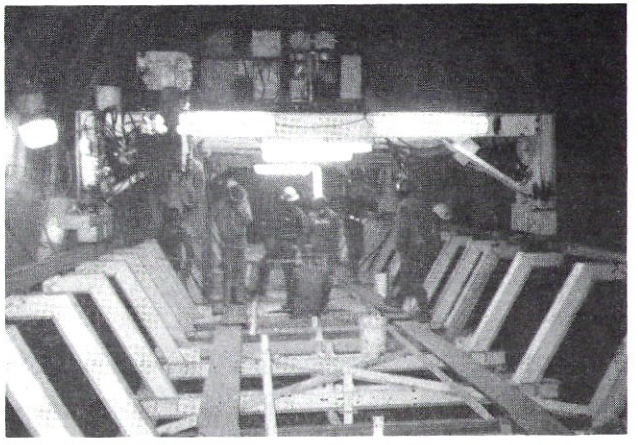


CALIFORNIA COMMERCE BANK -
BUILDING CLOSURE WALL

LINE SECTION - 7TH/FLOWER TO WILSHIRE/ALVARADO
CONTRACT A171



AL TUNNEL; HDPE BEING PLACED IN INVERT
STA 244+50 TO 242+60



AL TUNNEL - INVERT FORMS IN PLACE -
FORM CARRY IN USE



AL TUNNEL COMPLETED INVERT CONCRETE
STA 240+00 TO 241+50

LOS ANGELES **METRO RAIL**

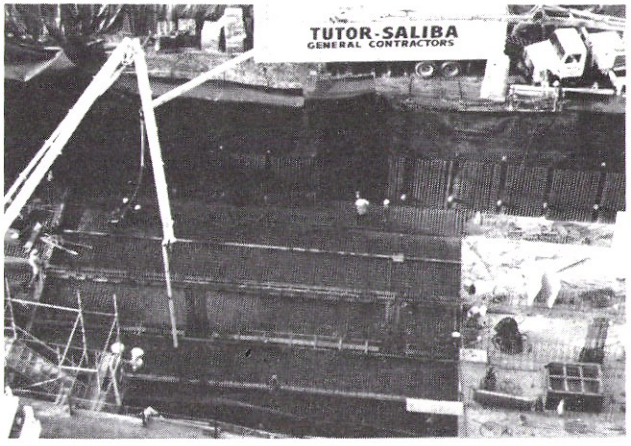
RTD

PDCD

CONTRACT PERFORMANCE REPORT

PERIOD FEBRUARY 1989

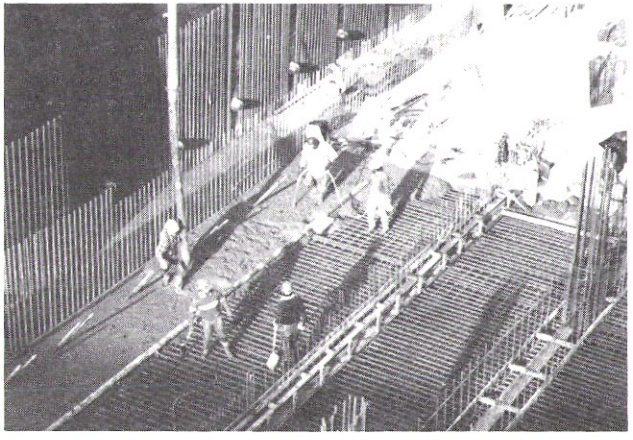
WILSHIRE/ALVARADO STATION - STAGE I
CONTRACT A175



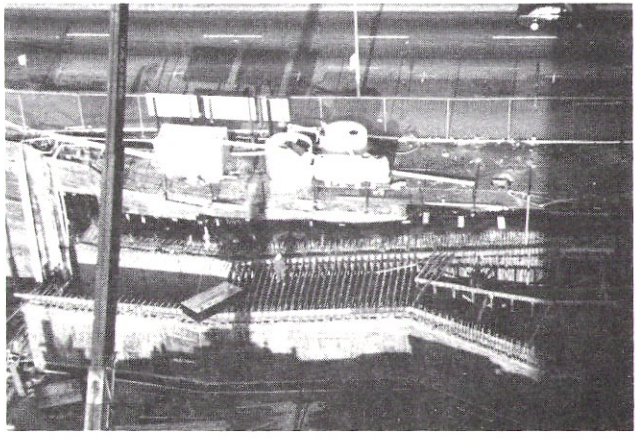
OVERHEAD VIEW OF THE PLACEMENT OF REINFORCING STEEL SUPPORT FOR BASE SLAB CONSTRUCTION



WEST END VIEW OF STATION SHOWING INSTALLATION OF HDPE LINER AND REINFORCING STEEL



CONSTRUCTION OF SECOND BASE SLAB



OVERHEAD VIEW OF ROOF SLAB CONSTRUCTION AT THE NORTH BLAST RELIEF SHAFT

LOS ANGELES **METRO RAIL**

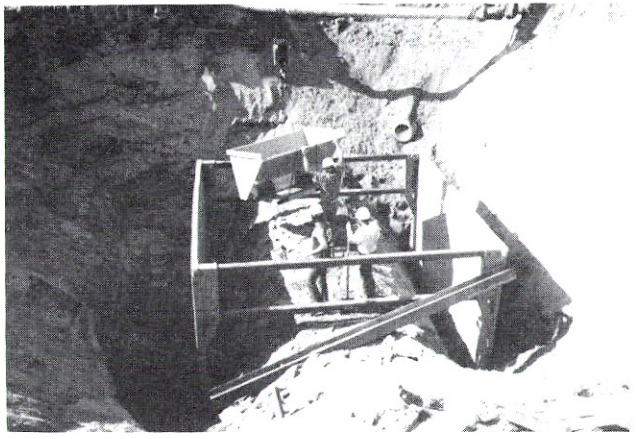
RTD

PDCD

CONTRACT PERFORMANCE REPORT

PERIOD FEBRUARY 1989

TRACKWORK INSTALLATION/YARD STORAGE AREA
CONTRACT A610/A115



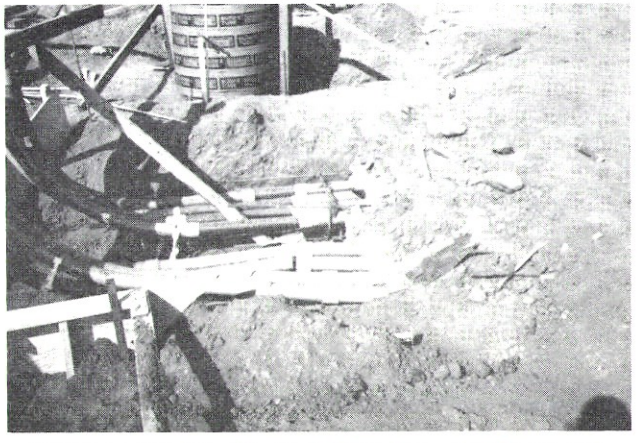
EXCAVATION FOR MH 75 TIE-IN WITH EXISTING 12' ARCH STORM DRAIN, LOOKING NORTHWEST (CO-024)



INSTALLATION OF 6" FIRE PROTECTION WATER LINE CONNECTING TO FIRE HYDRANT 1 LOCATION, LOOKING NORTHEAST TOWARDS 4TH STREET BRIDGE



INSTALLATION OF TRACTION POWER DUCT BANKS, LOOKING SOUTH TOWARDS 4TH STREET BRIDGE



INSTALLATION OF ELECTRICAL DUCT BANK STUB-UPS AND FORMWORK FOR LIGHT POLE FOUNDATION