



JAMES M. BOLIN



James M. Bolin is a Senior Executive Consultant for Long International, and has over 25 years experience in all aspects of project and construction management, pre-construction planning, and project cost/schedule controls. His qualifications include claims and change order analysis and resolution, preparation of fixed-cost proposals and budget baseline planning, site management and coordination, prime and subcontract development and administration, materials expediting and procurement, and critical path method (CPM) delay analysis, schedule development, progressing and reporting. This diverse expertise has been obtained through involvement on numerous project types, including: oil production facilities, pipelines, pump stations, water and wastewater treatment plants, mineral processing facilities, water storage, hydroelectric plants, hospital/medical, transit, airports, communications, and environmental remediation. The value of these

projects has ranged from US\$50,000 to US\$360 million.

Through his proven experience in working for management consulting, engineering and construction companies, Mr. Bolin provides clients with superior analytical and problem solving skills that are effective in mitigating or resolving construction performance and contract related issues.

EDUCATION

Bachelor of Science, Civil Engineering Technology, University of Southern Colorado (1981)

Professional degree program, majoring in Mining Engineering, Colorado School of Mines (1974-1979)

PROFESSIONAL AFFILIATIONS

American Association of Cost Engineers (AACE)

CERTIFICATIONS

Licensed General Contractor: Pikes Peak Regional Building Department, El Paso County, Colorado

Class A-1 Building Contractor's License (No. 17332)

City of Littleton, Colorado, Class A Building Contractor's License (No. A00111)

OSHA 40-Hour Hazardous Waste Training

OSHA Site Supervisor's Training

TECHNICAL EXPERIENCE

Representative U.S. and international engineering and construction technical experience includes:

- Construction claims analysis, preparation and defense.
- Project baseline planning, including CPM schedule development, status updating, and performance measurement.
- Recovery plan development and implementation.
- Contract and subcontract administration and management.
- Cost estimating and estimate evaluation.
- Project cost controls and cash flow preparation, analysis and reporting.
- Progress payment billing preparation and review.



- Project controls systems development, integration and implementation.
- Materials and equipment expediting and procurement.
- Change order pricing and negotiations.
- Contractual entitlement evaluation.
- Direct and indirect cost damages assessment.
- Analysis of project delay, disruption, acceleration and productivity related issues affecting planned cost and schedule performance.
- Interrogatory preparation and response.
- Document discovery and research.
- Arbitration proceedings and litigation support.

PROJECT EXPERIENCE

Mr. Bolin's project management and claims experience includes the successful completion of engagements for private sector owners, Federal and local governments and municipalities, financial institutions, general contractors, engineering and architectural consulting firms, and law firms. Representative listing of projects includes the following:

Petroleum Refining, Petrochemical, Chemical, and Industrial Facilities

- Assisted in the development of the preliminary evaluation of the contractor's costs, in support of the owner's claim, on a \$197 million expansion on an existing cement plant facility located in Texas. Investigated the contractor's performance and cost expenditures in relation to the respective contract and the contractor's fiduciary responsibilities.
- Analysis of an EPC contractor's detailed CPM schedules associated with a \$138 million delay and disruption claim on a gas plant project in Saudi Arabia. Assisted in the preparation of a detailed schedule time impact analysis to determine the contractor's entitlement to a time extension, and an as-built but-for delay analysis to determine the contractor's entitlement to compensable delay. Completed a comparative assessment between the project's radiography records for the rejected pipe joint welds, and the results that were developed from the owner's Radiography Expert's interpretation of the films. Worked on preparing a rebuttal report that addressed the contractor's comments and criticisms that were based on the initial Expert Report.
- Involved in the preparation of a contractor's total cost claim for a styrene plant revamp project, located in Texas. The initial value of the project was \$5.3 million. An additional \$4.3 million was paid to the contractor as the result of the approval of approximately 200 Field Change Orders and the addition of two small bore pipe packages. The claim, which was successfully negotiated, requested an additional \$4.2 million for loss of productivity, for payment on unresolved Owner-Directed Change Orders, and other outstanding issues.
- For Stearns Catalytic Corporation, developed a fixed-price estimate for the direct field manhours and costs to erect and install the structural steel and miscellaneous metal items, exterior coverage, architectural, pyrocrete/grouting, and the process and air handling equipment for the CPF-3 and Drill Site Modules Fabrication Project for ARCO Alaska's 1986 Sealift.
- Prepared a series of independent check estimates for comparative review in the evaluation of an \$80 billion tax claim on a petrochemical project. Developed detailed cost estimates for project alternatives not covered by the petitioner.



- For Project Construction Corporation, responsible for developing estimates for all direct and indirect costs associated with the North Slope Directives (change orders) on ARCO Alaska's 1985 North Slope Module Interconnect Project. Prepared and estimate of the costs to complete the remaining Lower-48 work transferred to the North Slope's scope of work.
- Evaluated a claim by the Operator of a chemical storage facility associated with delays and cost overruns caused by scope changes and Hurricane impacts. Operator alleged that the cost of the facility significantly increased as a result of owner-caused changes and impacts from Hurricanes Katrina and Rita, and that the owner agreed to compensate the Operator for the Hurricane impacts. The owner alleged that the Operator mismanaged the project, and that the delays and cost increases were primarily caused by other problems not related to the Hurricanes.
- Consultant for the development of an independent analysis that addressed the relocation of Aldrich Chemical Company's benchtop chemical manufacturing facilities in Milwaukee, Wisconsin to a potential alternate and functionally equivalent property. The report included an evaluation and quantification of utilized space and interior construction of the company's existing facilities, a detailed estimate of the costs required to purchase and renovate a comparable building at an alternative site, and a schedule that provided a conceptual timeline for the design and construction for renovating the building's facilities.
- Prepared a general contractor's claim for the construction of a \$170 million cement plant. Worked on reviewing documents and in analyzing change orders, subcontractor work and extra work orders, design drawing issues, and equipment deliveries.
- As a Consultant to Pacific Northwest Sugar Corp., L.P. developed a 1,200-activity master schedule for a new \$98 million sugar beet refinery project. Initiated meetings and discussions with the client, design engineering and environmental consulting firms to detail and accurately define the scopes of work for the project. Established the work breakdown structure for the project. With the corporate accounting department, developed the cost code of accounts. Integrated the master schedule activity coding and breakdown with the coding and breakdown created for the job cost system. Prepared graphics and summary schedules for presentation at public and Board of Directors' meetings.
- Developed cost estimates for all change orders impacting the Lower-48 field budget for Stearns Catalytic Corporation on ARCO Alaska's 1985 Sealift Waterflood Project. Provided support to ARCO Alaska in determining the estimated engineering and construction costs for potential changes to the structural, mechanical and process systems designs.

Heavy Civil and Mining Projects

- Responsible for the design and construction of a Stream Bank Restoration Project for Colorado Springs Utilities, FEMA, USDA/Natural Resources Conservation Service, Fountain Mutual Irrigation District as the Project Manager. Developed the GMP proposal, based on estimated unit prices. Prepared the schedule and subcontractor bid documents. Negotiated the prime contract agreement. The project involved the reconstruction of a section of the Fountain Creek stream bank that was eroded and damaged during a flood event. The scope of work included the restoration and armoring of the embankments with rip-rap, constructing a series of four-drop structures (combination sheetpile and grouted rip-rap), construction of a gated irrigation ditch inlet and de-siltation structure, and the restoration of a section of asphalt paved road.
- Engaged by a general contractor to prepare lump sum estimates that resulted in the award of three separate contracts at First Mississippi Gold's Getchell Mine in Nevada. The contracts involved the material procurement, construction and installation of the site utilities, pump stations, transmission and distribution piping, and the leaching solution collection facilities. Responsible for developing project schedules. Supervised the procurement of permanent material items.



- Prepared a cost estimate for a general contractor's proposal to reconstruct the primary crushing facility for Newmont Mining Corporation, which had been severely damaged by fire. Following the receipt of contract award, served as superintendent/field engineer for the project. The project was of high priority, requiring a fast-tracked, 10-hours per day, 7-days per week schedule. Was involved in the supervision of craft personnel, recruiting, procurement and purchasing, scheduling, and change order management for the project.

Municipal and Utility Projects

- For MWH Constructors, prepared the subcontract RFP packages for the City of Tacoma, Washington's \$77 million Central Treatment Plant Upgrade and Expansion Project. Responsibilities also included addressing bidder RFI questions, developing addendum documents, reviewing bidder proposals, outlining bidder selection recommendations to management, and preparing and finalizing the Subcontract Agreement documents.
- For the City of Fort Collins, Colorado's Utility Department prepared independent cost estimates for the construction of design-build utility and municipal facility projects. Involvement on the contract included the preparation of the task budgets, the management and preparation of the cost estimates, and meeting with the client to review and reconcile variances between the contractors' and the independent estimates.
- Responsible for developing the cost estimate and project schedule for design and construction for a guaranteed maximum price proposal (GMP) for the City of Longmont, Colorado's Wastewater Treatment Plant Expansion. Received successful award of the contract for design and construction, based on competitive bid.
- For the Western Pennsylvania Conservancy's Frank Lloyd Wright Fallingwater House Site Utility Improvement Project, prepared a guaranteed maximum price proposal (GMP), based on conceptual design for the design and construction of new underground domestic water, non-potable water, sanitary sewer piping and fiber optic cable communications systems. Because of the historical significance and difficult subsurface conditions that are relative to the site, a majority of the utilities were required to be installed using directional boring methods.
- Project Manager for Colorado Springs Utilities' Hanna Ranch Sludge Pipeline and Pump Station Project. The scope of work for the project included replacing 12,000 LF of buried twin 8-inch D.I. pipe with a single 16-inch FRP pipe, replacing the mechanical piping, equipment and electrical in the existing pump station, and rehabilitating the existing concrete sludge storage reservoir. Solely responsible for preparing the GMP proposal and the project schedule. Oversaw the construction and permanent material procurement.
- For the City of Hillsborough, Florida, involved in the preparation of GMP proposals for 20-MGD and 40-MGD plant expansion options, based on preliminary level drawings. Completed developing the quantities for the options and supported the estimate pricing and the final proposal preparation.
- Defended a county in Florida from a \$4.1 million in alleged delay and disruption damages claim by a general contractor for the construction of a municipal park project. Evaluated the contractor's entitlement to costs and delays that the contractor purported to be based on outstanding change orders and unresolved issues related to potential change for conditions and impact. Based on the findings, the contractor's claims were grossly overstated and unsupported for which the owner received a favorable settlement.
- As a Consultant to Metropolitan Water District of Southern California, prepared a conceptual budget estimate, valued at \$2.1 billion, for the task elements defined for the design and construction of an 800,000 acre-foot reservoir project. Included within this estimate were the costs for planning, design and engineering, archeology, land acquisition, right-of-way, geologic investigation, project management and facilities construction, etc. Assisted in project planning and the development of the preliminary project schedule.



- Supervised the development of a series of definitive budget estimates totaling \$500 million for the design and construction of three separate water treatment facility projects located in Egypt at Suez, Ismailia and Port Said for U.S. AID. The estimates were based upon take-off quantities. A combination of composite crew and unit pricing methods were employed in developing these estimates.
- Engaged by City of Sunnymead, California Waste Water Treatment Plant in California to prepare a definitive cost estimate for constructing a 6.0-MGD expansion, valued at \$36 million. Responsibilities included all phases of material take-off and pricing. Served as construction manager for the project. Managed site inspection, contract compliance and quality control related to the construction of the tertiary treatment facilities. Reviewed the contractor's monthly progress payment requests. Provided an independent analysis and negotiated general contractor's change orders. Maintained a daily accounting of the contractor's staffing, equipment and completed activities.
- For the City of San Fernando, California served as lead construction manager for the construction of a 2.1 MG concrete reservoir and transmission pipeline project. Supervised the construction management activities for the project. Established project and quality controls, including all aspects of progress updating and reporting. Reviewed monthly progress payment and schedule submittals. Evaluated and resolved the costs and time impact associated with contractor's change orders and claims.
- For a general contractor, supervised the coordination of field and home office project support activities for U.S. AID's Greater Cairo Egypt Waste Water Project, Contract No. 20. The value of the project was \$50.4 million. Engaged in purchasing and expediting permanent materials, equipment and supplies. Responsible for the processing and approval of vendor invoices. Maintained project documents and files. Assisted corporate attorneys and legal consultants in assembling information used in supporting project claims.
- Developed the estimated costs associated with the site work, including clearing, grubbing, roadway construction, slope stabilization, drainage, structural excavation and backfill for a general contractor, as part of a proposal for the Anchorage Water District's Eklutna Lake Diversion project. Also was responsible for the take-off and pricing of the structural and miscellaneous metals. Involved in preparing the proposed schedule for the project. The estimated value of the project was \$14.5 million.

Power Plant Projects

- Engaged by a general contractor to develop the material quantities and direct costs for the rock and common excavation, compacted backfill, temporary and permanent access for a proposal for a \$14.8 million expansion of the Bureau of Reclamation's Shoshone Canyon Hydroelectric plant in Wyoming. Assisted in preparing the schedule, included in the bid submittal.

Transportation Projects

- Served as the principal for a long-term consulting agreement for the U.S. Federal Highway Administration's Central Federal Lands Highway Division. Responsible for managing client relations and assigned consultants. The scope for the contract included supporting eight project managers and approximately twenty functional managers and team leaders in the development and management of the schedules for approximately 250 active projects. In addition to being responsible for the development, operation and implementation of the scheduling system, updated the status for each schedule on a monthly basis, prepared schedule progress and resource loading/forecasting reports, and routinely provided training, technical assistance and guidance to users.
- Principal, responsible for managing a long-term contract with Denver International Airport to provide independent estimating services on an on-call basis. Served as the client representative for the contract. Managed project tasks, including development of the budgets for each task, preparation and delivery of the estimate documents, and the internal reviews.



- Assisted design-build contractor with developing a 12,000 activity, cost loaded rolling wave schedule for the Southern New Jersey Light Rail Transportation Project. The work involved preparing a CPM schedule for a \$605 million project that involved the design and construction of a 45-mile commuter rail transit line that is to extend between Trenton and Camden, along an existing rail corridor.
- As a Consultant to Hanjin Engineering & Construction Co., Ltd., developed the craft labor man-hours by construction trade and by task as part of a recovery plan for a project valued at \$79.5 million to construct the A.B. Won Pat International Airport Terminal project, located in the U.S. Territory of Guam. The man-hours were based upon material quantity take-offs prepared by the Korean contractor's engineering staff. Interfaced with other consultants and assisted in preparing a resource loaded master schedule. Reviewed the man-hour estimate and schedule with the owner's consultant.

Commercial, Industrial, and Institutional Building Projects

- On behalf of the insurer, evaluated property damage claims associated with flood-damaged industrial buildings and manufacturing facilities following a flood in Indiana. Prepared comparative cost estimates for the damaged equipment and facilities to test the reasonableness of the damage claims alleged by the owner.
- Managed project and construction management services for \$12.5M in remodel and improvement projects as the construction manager and owner's representative to Centura Health. Included were a Children's After Hours Emergency Room, Day-Surgery Center Remodel, Mammography/Ultrasound Relocation, Operating Room Expansion, ICU Waiting Room, Clinical Lab Relocation, Newborn Intensive Care Unit Relocation, and Hospital Entry Vestibule Projects. Services include representing the owner's interests during the design phase, defining the scopes of work and developing the work packages, preparing the bid solicitation documents, evaluating contractor proposals, preparing the contracts for issuance to the subcontractors, managing and coordinating the construction, commissioning, and closeout.
- Provided cost management services on four major hospital projects for Centura Health, including Littleton Adventist Hospital Expansion, Penrose/St. Francis Bed Tower Expansion, St. Mary Corwin Hospital Expansion and Parker Adventist Hospital. Total value of the projects was approximately \$300.0M. Responsible for preparing cost report updates and forecasts, based on approved invoice and cost information, for each project on a monthly basis. Met with corporate and hospital administration to review monthly cost status. Also on a monthly basis, met with corporate accounting to review and reconcile any cost variances. Assisted corporate and hospital administration during project audits and in resolving any cost issues.
- Assisted the Sutter Health Corporation in developing a detailed template schedule that addressed a typical project's scope of work, starting from project inception, through design, construction, occupancy and close-out. This schedule was used as part of the foundation for Sutter Health's Enterprise Project Management System (EPMS) that was implemented to support a \$4.5 billion projected capital expenditure in healthcare projects.
- Engaged in dispute resolution services to a general contractor in support of a \$25 million claim on the construction of the Hoover Dam Visitor Center and Parking Structure in Nevada. Responsible for the research and evaluation of the contractor's issues for RFIs and change orders in support of the legal effort to prepare a breach of contract claim. Developed narratives, tables, graphs and schedules that summarized and demonstrated the level of issue caused impacts on construction. Assisted with evaluating the variances between the Project Adjusted As-Planned Schedule and the As-Built Schedule. Conducted damages analysis and prepared the concrete supplier's claim.



- Enlisted by the Tokai Bank, the project's lender, to independently conduct monthly evaluations of the construction progress on a 32-story corporate headquarters office complex located in Glendale, California and valued at \$132 million. Completed monthly site inspections. Reviewed architect's and contractor's monthly progress billings. Solely prepared a monthly report to bank officers that offered a comparative analysis of reported versus observed progress status for each major pay item.

Environmental Remediation Projects

- For Kaiser-Hill Company, conducted an independent audit of the program's fiscal year schedule performance and reported earned value for work completed at the U.S. Department of Energy's Rock Flats Environmental Technology Site (RFETS). Prepared an expert report that was based on interviews with project planning managers, and from an evaluation of information from the baseline and current schedules. Presented the findings to management.
- Assigned by the Kaiser-Hill Company as a member of the independent "Red Team" that was designated to evaluate the overall integrity and recommend improvements for the \$500.0 million/year lifecycle baseline plan, prior submittal to the U.S. Department of Energy for review. Served as the estimating expert for the team.
- Assisted the Kaiser Hill Company's Estimating Group. Provided an independent analysis and evaluated subcontractor change orders for the construction of the Building 440 Addition, TRU Waste Shipping Facility. In addition, prepared budget estimates for the construction of a Gas Generator Testing System and for the installation of the TRU waste container lid stands.
- As the Project Manager for the Monroe Municipal Utilities Authority's Temporary Wellhead Treatment Facilities Project in Williamstown, New Jersey, was responsible for managing the overall design and construction of the project. The scope of work involved the construction of activated carbon water treatment systems at two well site locations. These systems were designed to remove mercury from the groundwater used for municipal domestic purposes that was determined to exceed the EPA threshold limits. The work was performed on a 6 days-per-week and 10 hours-per-day schedule under emergency conditions. The contract, which contained provisions for a GMP, was successfully completed on time and within budget.
- As a consultant to Safe Sites of Colorado (SSOC) served as the Schedule Integrator for the Schedule Management and Integration Division for work at the Rocky Flats Environmental Technology Site (RFETS). Assisted with managing and coordinating approximately 20 schedulers whose efforts support a \$200 million/year decommissioning and dismantlement program. Primary responsibilities included the development of the architecture for the SSOC integrated master project schedule, maintaining the integrity of this schedule, preparation of standardized scheduling procedures and guidelines that enhance the levels of accuracy, consistency, and overall efficiency of the scheduling system, and the formation of summary reporting to corporate management.
- For the Iowa Department of Transportation, prepared a cost estimate and construction schedule that was based on a conceptual level of design for a groundwater treatment system that was located in a large maintenance service yard. Served as project manager, overseeing and supervising all aspects of project planning, construction of a treatment system designed to pump and treat hydrocarbon contaminated groundwater.
- Prepared detailed cost estimate, based upon conceptual level design, for the decommissioning of George Air Force Base, located in Adelanto, California. The scope of work for the project included the removal and disposal of 36 concrete oil-water separators (500 to 15,500 gal.), the installation of bio-venting and air sparging systems, and the recovery and removal of medical waste.



- Prepared a detailed estimate of the construction costs, based upon conceptual design information, for the decommissioning of Mather Air Force Base, located in Sacramento, California. The work scope for the project included the removal, transport, and treatment of hydrocarbon and heavy metal contaminated soils, and the installation of air sparging and bio-venting systems.
- For Williams Pipeline Company, constructed a groundwater recovery and treatment system, required after a contractor ruptured a 6-inch gasoline transmission line, spilling approx. 25,000 gallons of fuel. Served as project manager for the project and was responsible for planning and supervising the construction of buried utilities and piping, and the installation of the mechanical, electrical and controls for the pump and treat system.

PROFESSIONAL EXPERIENCE

Long International, Inc.

Littleton, Colorado

As a Senior Executive Consultant with Long International, Mr. Bolin provides claims analysis services on projects for both owners and contractors. Specific responsibilities include job cost analysis, schedule analysis, document database development, and arbitration/litigation support. He provides clients with CPM schedule delay and acceleration analysis, job cost variance modeling, change order impact analysis, issue identification, correlation of impacts to schedule activities, claims preparation and negotiations, and damages quantification. Mr. Bolin is heavily involved estimating project costs, productivity analysis, and cost control and monitoring.

MWH Constructors, Inc.

Broomfield, Colorado

As the Contracts Administrator, was responsible for subcontract procurement for a construction program with a \$1.2 billion awarded project backlog. Assisted the project team in identifying the breakdown and content of the subcontract work packages. Developed and issued to bidders, the subcontract scopes of work and the Requests for Proposal (RFP) document packages for design-build and CM at Risk types of water and waste water treatment plant projects, ranging in value from \$65 million to \$140 million. Assisted in the review and evaluation of bidder's proposals. Prepared and finalized the Subcontract Agreements to the selected bidders.

Capstone Planning and Control, Inc.

(formerly Project Controls Associates, Inc.)

Broomfield, Colorado

As Principal of the Construction Management Division, supervised and coordinated a staff comprised of eight professionals involved in providing construction management, cost estimating, scheduling, and project controls consultant services. Responsible for staffing, project planning, employee development, identification of standards and practices, client relations, market and business development, budgeting, establishing and attaining measurable goals, and profitability. Provided guidance, assistance, and oversight on projects to ensure that client and internal corporate expectations were met.

As Senior Project Manager, provided project and construction management services for commercial and institutional projects. Assisted client companies with developing pre-construction estimates, budget plans and schedules, and with problem mitigation. Developed and maintained program schedules, based upon individual client requirements. Generated, analyzed and reported performance measurement to client's management in order to facilitate decision-making functions. Provided guidance to the project controls



specialists through a comprehensive QA/QC program to ensure product quality. Represented clients' interests in evaluating and negotiating contractor change orders. Responsible for the management and coordination of work required under specific tasks or contracts, including the monitoring of project budgets and deliverables, meeting contractual requirements, and ensuring client satisfaction.

CH₂M Hill Constructors, Inc.

Englewood, Colorado

As a Senior Construction Engineer, responsible for providing and managing a variety of planning and control functions on design-build projects. Pre-construction and startup activities included conducting design constructability reviews, preparation of cost estimates and schedules, contract and subcontract administration and management, material procurement, and the setup of project and task charge numbers. During the construction phase, became involved in the overall management of the project, including the prosecution and coordination of the work activities, resolving and mitigating problems and conflicts, profit/loss, and change order management.

Project Controls Associates, Inc.

Boulder, Colorado

As Senior Project Control Specialist, tasked to Safe Sites of Colorado, LLC's Schedule Management and Integration Division as the Schedule Integrator. Assisted with managing and coordinating approximately 20 schedulers whose efforts supported a \$200 million/year decommissioning and dismantlement program for the U.S. Department of Energy's Rocky Flats Environmental Technology Site. Primary responsibilities included the development of the architecture for the SSOC integrated master project schedule, maintaining the integrity of this schedule, preparation of standardized scheduling procedures and guidelines that enhance the levels of accuracy, consistency, and overall efficiency of the schedule system, and the formation of summary reporting to corporate management.

Provided project controls services to the Kaiser-Hill Company in support of the site capital projects at the Rocky Flats Environmental Technology Site, including the Criticality Alarms & Safeguards Systems, Site Infrastructure, and the Master Safeguards and Security Agreement Projects. Responsible for schedule development, fiscal budget planning, performance, and cost statusing. Evaluated internal and construction contractor's change orders. Prepared conceptual level estimates for 17 different alternatives that addressed the draining, dismantling and disposing of the process systems located in Building 771.

Independent Consultant

Various Client Companies

As an independent consultant, provided claims analysis, project management and controls services to a number of clients, including:

Pacific Northwest Sugar Company (Imperial-Holly and Columbia River Sugar Co. J.V.), Moses Lake Washington - Responsible for developing a 1,200-activity master schedule for the construction of a \$98 million sugar beet refinery. Met with client and consulting firms to accurately define the scopes of work for the project. Established the work breakdown structure for the project. Developed the cost code of accounts. Prepared graphics and summary schedules for presentations at public and Board of Directors' meetings.



Fischbach & Moore, Inc., Denver, Colorado - Assisted in the development of construction claims for the work completed on the Alaska Native Medical Center Replacement Hospital and the Detroit Veterans Hospital Projects.

Hanjin Engineering & Construction Co., Ltd., Seoul, South Korea - Through Hill International, developed the craft labor manhours by construction trade and by task, required to complete the A. B. Won International Airport Terminal expansion located in Guam. Assisted Hill's Consultants in preparing a resource loaded master schedule.

Peterson Consulting L.P., Denver, Colorado - Evaluated the outstanding change orders in support of the general contractor's \$25 million claim on the Hoover Dam Visitors Center. Developed narratives, tables, graphs and schedules that summarized and demonstrated the levels of issue caused impacts on construction. Assisted with evaluating the variances between the Project adjusted as-planned schedule and the as-built schedule. Conducted damages analysis and prepared the concrete supplier's claim.

Montgomery Watson Constructors, Inc., Boulder, Colorado - Developed cost estimates and construction schedules for various private industrial and DOD environmental remediation projects, including those for the George and Mather AFCEE base closure contracts. Served as Project Manager for the construction of groundwater treatment systems for Iowa DOT and Williams Pipeline Company.

Kellogg Corporation

Littleton, Colorado

As a Senior Claims Analyst, prepared litigation documentation and analysis support for construction claims. Evaluated claims issues and entitlements. Provided cost estimate analysis and change order evaluation services.

Metropolitan Water District of Southern California

Los Angeles, California

As Senior Estimator (Consultant), responsible for the development and implementation of estimating procedures for a \$2.1 billion water storage reservoir project located in Hemet, California. Prepared conceptual and preliminary estimates for design engineering and construction, analyzed subcontractor bid proposals, and interfaced with project personnel in developing a PC based performance measurement system.

James M. Montgomery Consulting Engineers, Inc.

Pasadena, California

As Supervising Estimator, provided estimating services to various company divisions and outside clientele. Prepared conceptual, preliminary and detailed final budget estimates for the construction of domestic and overseas public works and municipal types of projects. Supported projects under construction, providing an independent analysis of claims and change orders. Responsible for training staff, scheduling and assigning work activities, and the review of estimates.



As Senior Construction Management Engineer, provided construction supervision and inspection services on a number of public works projects having values from between \$250 thousand and \$36.0 million. Responsible for establishing project and quality controls, including all aspects of progress updating and reporting. Reviewed monthly progress payment and schedule submittals. Evaluated and resolved the costs and time impact associated with contractor's change orders and claims.

Schmueser & Associates, Inc.

Rifle, Colorado

As Chief Estimator, responsible for the preparation of estimates for a small general contractor specializing in heavy industrial, petrochemical and mine development projects. Developed project schedules and established cost controls. Managed the purchasing and expediting efforts. Prepared monthly progress billings. Supervised craft personnel and directed construction activities.

Harrison Western Corporation

Golden, Colorado

As the Manager of Project Support for a joint-venture with Fluor Constructors, supervised the coordination of overseas and home office project support activities for a USAID wastewater project in Egypt. Engaged in purchasing, expediting, and approving and processing vendor invoices. Managed project files and records. Scheduled and monitored overseas shipments. Assisted legal staff in supporting project claims leading to agreed project termination.

As an Estimator for the Mechanical Division, prepared fixed-cost estimates for the civil and structural portions of hydro-electric and EPA Superfund projects. Developed preliminary construction schedules.

Stearns Catalytic World Corporation

Denver, Colorado

As a Project Estimator for the Petrochemical Division, involved in the preparation of preliminary and definitive budget estimates for Lower 48 module fabrication and North Slope module tie-ins and interconnects on ARCO's Kuparuk project. Evaluated change orders in support of the 1985 and 1986 Sealift's Lower 48 and North Slope construction efforts. Assigned to the project team involved in preparing the lump sum bid for constructing the 1986 Sealift's process modules.

Jasper Construction Company

Wheat Ridge, Colorado

As an Office Engineer, estimated material quantities and direct costs for lump sum bids. The types of projects included earthen dams, hydro-electric plants, water and waste water plants, pump stations and pipelines.

Stearns Roger Engineering Corporation

Denver, Colorado

As a Project Systems Analyst for the company's Mining Division, prepared conceptual cost estimates and estimating standards while assigned to Exxon's Colony Oil Shale Project.