

With leading industry consultants in every area of engineering and construction from project planning to making independent project reviews, you'd think we could handle just about anything.





You'd be right.

We don't necessarily want to manage your whole engineering & construction project – but we can get you through some of the tough spots.

Carmagen Engineering specializes in these areas of project management practice

-  Planning for overall project execution
-  Validating cost estimates and control tools
-  Ensuring constructability of the facility
-  Providing contracting services
-  Supporting project procurement
-  Controlling the quality of engineering design
-  Making Independent Project Reviews
-  Strengthening construction planning and safety
-  Assisting in plant completion and start-up
-  Staffing the Owner's Project Team

Planning for Overall Project Execution

-  Evaluation of project execution strategies, assessment of risks, and development of approaches to minimize adverse risks
-  Front end engineering, including testing of design bases
-  Development of critical issues associated with the project
-  Developing staffing plans for all project phases and work locations

All the right people in all the right places.™

CARMAGEN
Engineering, Inc.



Validating Cost Estimates and Control Tools

- 🏗️ Objective and detailed appraisal of capital cost estimates for methodology and completeness
- 🏗️ Scoping and assessment of project cost control organization and systems for responsiveness

Ensuring Constructability of the Facility

- 🏗️ Develop and apply a structure program to apply comprehensive construction knowledge and experience from design development through construction

Providing Contracting Services

- 🏗️ Development of contracting strategies for the overall project and each major job, with appropriate commercial approaches for each anticipated contract
- 🏗️ Assistance for owner's legal and project functions in preparing bid documents to get targeted results
- 🏗️ Assistance with screening of potential bidders, identification of qualified bidders, and determination of a bidding slate for each job
- 🏗️ Assistance with planning for and administration of the bidding process, review of proposals, and preparation of an award recommendation for each contract

Supporting Project Procurement

- 🏗️ Definition and documentation of responsibility splits and interfaces between the Owner and contractor(s)
- 🏗️ Identification of procurement items critical to project schedule, quality, and/or cost
- 🏗️ Development of a comprehensive purchasing plan, including expediting, shop inspection, and related activities as well as cost-effective procurement of low-value items
- 🏗️ Development of a logistics plan appropriate to project size, complexity, and location, including packing and shipping, export/import considerations, receiving and temporary storage

Controlling the Quality of Engineering Design

- 🏗️ As an extension of the Owner's Project Team, conduct a program for selective, detailed review of engineering design for mechanical, machinery, fired equipment, instrumentation, safety, electrical, and civil engineering aspects of the facility



Making Independent Project Reviews

- 🏗️ Conduct planned, in-depth, quick-response appraisals of project performance at key milestones to give Owner's management an unbiased picture of strengths and weaknesses of the project

Strengthening Construction Planning and Safety

- 🏗️ Implement comprehensive planning of the entire construction process to provide basis for safe and effective worksite activities
- 🏗️ Perform specialized Construction Safety Execution Planning to provide specific worksite safety programs in appropriate depth and breadth to meet Owner's safety goals
- 🏗️ Provide specialized Mobile Crane/Lifting Safety Program including onsite training for crane operators, foremen, supervisors, and field engineers, as appropriate

Assisting in Plant Completion and Start-up

- 🏗️ Plan for and assist implementation of required coordination among contractors and project team at interface between near-completion of construction and initial operation of facility, including such items as detailed identification of systems for turnover, documentation of pre-startup checkout requirements, delineation of procedures for punch lists, turnover statements, records management, and close-out/acceptance

Staffing the Owner's Project Team

- 🏗️ Filling Project Manager and other PM Team leadership positions
- 🏗️ Filling PM Team gaps to meet functional or time requirements
- 🏗️ Fielding a completion PM Team

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Project Planning and Management



Our Project Planning and Management Team offers a wide range of expertise in fields such as Planning, Staffing and Coordination of Technical Specialist Support. The Project Team's experience includes Front End Loading and direction of Detailed Engineering, Project Management, and Cost Estimating. Representative members of our team are noted below.

David Aldrich	David has over 35 years of experience in the Project Management field. His areas of expertise include capital project management dealing with design and implementation of refinery and chemical plant facilities, as well as international experience in engineering and project management.
Robert Heinzman	Bob has over 40 years of experience in the development and management of major capital projects for the process industry. He has specific expertise at management/supervisory and working level roles, including project management/engineering, contracting/subcontracting, project execution planning, cost engineering and control, construction management/engineering, and schedule engineering and control.
Sam Zane	Over 40 years experience in the fields of project management, project controls and project "best practices." Considerable experience in the development and successful implementation of large complex projects on an international basis. Very broad experience with oil and gas projects in the upstream portion of the energy business. Skill areas include leadership, interpersonal relations, communications, cultural recognition, and negotiations.
Ed McGuire	Over 40 years of engineering and construction management experience, over 35 of those with ExxonMobil Research and Engineering Co. Has managed and supervised the construction of world-class refinery and petrochemical plant projects in Asia, North America, and Europe.
Bob Saterbak	Over 35 years of experience in project management, refinery technical management and process and maintenance operations. Strong background in refinery process, maintenance, and turnaround operations. Successful in developing and successfully implementing large complex projects from process design, detailed engineering, procurement, and construction through startup. The projects have been associated with operating refineries where the projects were integrated into existing operating facilities and/or installed during turnarounds.



<p>Tom Whelahan</p>	<p>Tom has over 40 years of experience in a variety of project management positions. Some of his positions have included contract engineer, front end offsites design engineer, subcontracts manager, project coordinator, and project purchasing manager. He has significant expertise in project contracting and planning.</p>
<p>Allen Hamilton</p>	<p>Over 30 years experience in the management and control of projects, including cost estimating, cost and schedule control and contract management. Projects have included buildings, pharmaceutical facilities, chemical plants, pipelines, offshore production facilities, mines, refineries, software, and site remediation. Project locations included US, Europe, Asia, Africa and South America.</p>
<p>Rob Hontz</p>	<p>Rob has 40 years experience in Project and Construction Management. He has had responsibility for Projects with over \$200 million in capital costs and has particular expertise in large equipment crane lifts.</p>
<p>Skip Downey</p>	<p>Skip has over 45 years of worldwide experience in Process Plant Layout Development. His areas of specialty include developing efficient, safe, and cost effective equipment and piping layouts for process plants.</p>
<p>Jim Morgan</p>	<p>Over 30 years of experience as analyzer material coordinator with procurement responsibilities, all aspects of stores operations including relief supervisor, and has provided overall procurement system consulting support for major projects. Was also an assistant operator of a delayed coking unit.</p>

Please contact us if you would like to receive the detailed resume of any of our expert engineers.

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