

Summary of Qualifications

CM SOLUTIONS

Solutions for Project Success

www.thecmsolution.com

Water



Energy



Facilities



Transportation



Oil & Gas



Oil & Gas

CM Solutions supports global corporations in the design and construction of multibillion-dollar oil & gas refineries around the world. CM Solutions has developed schedule standards, trained team members, and ensured schedule updates and reporting meet construction deadlines.



OIL & GAS PROJECTS

CM Solutions is the partner you can trust to add depth of expertise in project controls. Since 2001, we have been helping contractors, owners, and agencies in the private and public sectors save time and money with proven project controls for construction management. Tightly managed schedules and budgets are the keys to success when multi-million-dollar projects are on the line.

Our Qualifications

- Experience** With over 20 years experience supporting complex projects for clients such as Chevron, Shell, Aramco Services, Conoco Phillips, and ExxonMobil, we are familiar with the unique challenges and nuances of oil and gas projects.
- Expertise** Experts with variety of backgrounds and certifications, including PE, PMP, PSP, PMI-SP and Six Sigma.
- Diversity** Federal, state and local certifications for SBE, DBE, WBE, WOSB, LBE and LBE.
- Presence** Headquarters in California, with locations in Washington, Arizona, Colorado, and Texas

Our Services

Program & Project Services	Planning and Scheduling	Cost Controls	Risk Management & Claims Avoidance	Executive Reporting & Dashboards
<ul style="list-style-type: none"> • Construction Management • Scope Management • Environmental Reviews, Permitting • Contract Compliance 	<ul style="list-style-type: none"> • CPM Scheduling • Project Planning • Time Impact Analysis • 4D & 5D Scheduling & Modeling 	<ul style="list-style-type: none"> • Program and Project Budgets • Cost Forecasting • Earned Value Management • Estimating 	<ul style="list-style-type: none"> • Claims Preparation • Management of Change • Schedule Risk Analysis • Time Impact Analysis 	<ul style="list-style-type: none"> • Dashboards for Complex Projects • Integrating Systems and Data • Power BI • Training for Project Teams

Integrated Capabilities Across Sectors



Transportation



Water & Wastewater



Energy



Facilities



Oil & Gas

\$11B

Project Value

Global

Locations

OIL & GAS

Fuels That Make Our World Go.



Refineries



Pipelines



Drill Sites



Clean Fuels

Richmond Refinery Modernization

Owner: Chevron
Location: Richmond, CA
Project Value: \$300 million

The Richmond Refinery modernization included new compressors, pipeline expansion and regulatory upgrades, including a replacement hydrogen plant and a collection of new sulfur removal equipment improvements.

CM Solutions provided schedules for constructability, engineering and procurement, as well as field scheduling for various plants that implemented BIM/4D scheduling.

Puget Sound Refinery (PSR) Improvement

Owner: Shell
Location: Anacortes, WA
Project Value: \$140 million

The Shell Puget Sound Refinery (PSR) constructed a rail unloading facility and a rail spur to the existing adjacent Anacortes Subdivision. CM Solutions served as lead scheduler for this project involving infrastructure improvements to the refinery.

CM Solutions developed the baseline schedule, provided updates and performed time impact analysis of changes, to ensure the overall quality and consistency of the CPM schedule.

Saudi Aramco Energy Efficiency and Gas NGL

Owner: Saudi Aramco
Location: Uthmaniyah, Saudi Arabia
Project Value: Multimillion

Project involved construction of an ethane deep recovery train.

CM Solutions developed FEL2/Select and FEL3/Define project schedules and assisted in the early stage of EPC schedule development. Our team also produced monthly status and critical path reports.

North Slope Natural Gas Refinery

Owner: ExxonMobil
Location: Point Thomson, AK
Project Value: \$2.3 billion

ExxonMobil brought Point Thomson online with production facilities designed to produce 200 million cu. ft. of gas and up to 10,000 barrels of natural gas condensate daily.

CM Solutions served as lead scheduler for the design firm, Worley Parsons. CMS developed baseline schedule standards and monthly update deliverables, managed and trained the scheduling team, and acted as construction team liaison.

SAMREF Oil Refinery Clean Fuels Project

Owner: SAMREF
Location: Yanbu, Saudi Arabia
Project Value: \$2 billion

SAMREF in Yanbu is one of the world's largest single-train crude oil refineries.

CM Solutions assisted the design firm, Worley Parsons, as assistant lead project scheduler for this EPC program. CMS provided quality control of 18-unit schedules, developed baseline schedule standards and monthly update deliverables, managed and trained the scheduling team, and liaised with the construction team.

Oil & Gas Project Index

Project Name	Project Type	Project Description	Owner / Agency	Project Value	Project Dates
Aramco Master Gas System Phase III	Oil & Gas, Gas Plant	<p>In an effort to reduce the burning of liquid fuels, the Aramco Master Gas System Phase III project will transport natural gas across Saudi Arabia to offset use of liquid fuels currently being consumed by power plants, desalinization plants, and industrial clusters. This project scope involves increasing compression capability at three existing compression stations and adding a new compression facility closer to end users.</p> <p><i>CM Solutions supports the design firm, Worley, with project controls specialists. The team is developing the FEL 3 design, LSTK bid packages, and cost estimate for compression facilities scope.</i></p>	Aramco Services	Multi-million	2023 - Present
Rodeo Renewed - Refinery Conversion	Refineries, Oil & Gas	<p>Phillips 66 is converting is San Francisco Refinery in Rodeo, California into one of the world's largest renewable fuels facilities. Upon completion, the facility will no longer process crude oils. Instead, it will use waste oils, fats, greases and vegetable oils to produce at least 800 million gallons per year of transportation fuels, including sustainable aviation fuel and renewable diesel and gasoline.</p> <p><i>CMS is providing planning and scheduling services, including the baseline schedule and ongoing updates and project status reports.</i></p>	Phillips 66	\$850M	2022- Present
Uthmaniyah & Shedgum Gas Plants	Oil & Gas, Gas Plant	<p>Aramco's Uthmaniyah and Shedgum gas compression plants are important elements of Saudi Arabia's Master Gas System, which is one of the world's largest hydrocarbon networks. Uthmaniyah was recognized by the World Economic Forum (WEF) as one of 16 facilities implementing cutting edge technologies to adapt in the current global energy landscape.</p> <p><i>CMS supported development of level 3 EPC schedules for Uthmaniyah Field Gas Compression Plant and and level 3 EPC schedules for the Shedgum Field Gas Compression Plants.</i></p>	Aramco Services	\$2.5B	2018-2019
Richmond Refinery Modernization	Refineries, Oil & Gas	<p>The Richmond Refinery is ranked among the major refineries in the U.S. This modernization project included new compressors, pipeline expansion and regulatory upgrades. It involved the construction of two of the Chevron Hydrogen and Energy Renewal Project's major components: a replacement hydrogen plant and a collection of new sulfur removal equipment improvements that remove naturally occurring sulfur contained in the feedstocks processed at the facility.</p> <p><i>CMS provided schedules for constructability, engineering and procurement, as well as field scheduling for various plants that implemented BIM/4D scheduling.</i></p>	Chevron	\$300M	2015-2018
Puget Sound Refinery (PSR) Improvement	Refineries, Oil & Gas	<p>The Shell Puget Sound Refinery (PSR) constructed a rail unloading facility and a rail spur to accommodate unit trains transporting Bakken crude oil from the mid-continent area.</p> <p><i>CMS served as lead project scheduler for this engineering and procurement project involving infrastructure improvements to the refinery. Our scheduler developed the baseline schedule, provided updates and performed time impact analysis of changes, while ensuring the overall quality and consistency of the CPM schedule.</i></p>	Shell	\$140M	2015-2018
Avalon Fueling Facility-Pier Replacement	Fueling Stations, Claims, Oil & Gas	<p>Project included replacing the old pier at Avalon and building a new fueling station facility.</p> <p><i>CMS prepared baseline schedule and monthly updates, and performed numerous Time Impact Analyses for the GC to resolve many unforeseen events. Over 552 days of delay were mitigated and the contractor received equitable entitlement.</i></p>	City of Avalon, CA	\$2M	2015-2016
Saudi Aramco Energy Efficiency and Gas NGL	Gas Well, Oil & Gas	<p>Project involved construction of an ethane deep recovery train.</p> <p><i>CM Solutions developed FEL2/Select and FEL3/Define project schedules and assisted in the early stage of EPC schedule development. Our team also produced monthly status and critical path reports.</i></p>	Aramco Services	Multi-million	2015-2016

Oil & Gas Project Index

Project Name	Project Type	Project Description	Owner/Agency	Project Value	Project Dates
Shark Tooth Drill Site 2S Development	Oil Wells, Oil & Gas	<p>ConocoPhillips Alaska (COPA) drilled the Drill Site 2S appraisal well to assess further development potential. The project required building a gravel road and a new drill site, power lines, pipelines and other new surface facilities.</p> <p>CMS served as lead project scheduler for this engineering and procurement project for the development appraisal well. Our scheduler developed the baseline schedule and provided updates while ensuring the overall quality and consistency of the CPM schedule. CMS also provided management and training to scheduling team members, and acted as construction team liaison.</p>	ConocoPhillips	\$475M	2013-2014
North Slope Natural Gas Refinery	Refineries, Oil & Gas	<p>This production facility was designed to produce and reinject 200 million cubic feet of gas per day, and produce up to 10,000 barrels of natural gas condensate per day.</p> <p>CMS served as the lead project scheduler for the design firm, Worley Parsons, providing overall quality and consistency control of the three-year phased project including sealift and truckable modules to the North Slope in Alaska from various locations throughout the world. CMS also developed baseline schedule standards and monthly update deliverables, provided management and training to scheduling team members, and acted as construction team liaison.</p>	ExxonMobil	\$2.3B	2012-2014
SAMREF Oil Refinery Clean Fuels Project	Refineries, Oil & Gas	<p>SAMREF is one of the world's largest single-train crude oil refineries. This project involved construction of major desulfurization facilities, including a new hydrotreater, that dramatically cuts sulfur levels in gasoline and diesel.</p> <p>CMS assisted the design firm, Worley Parsons, as assistant lead project scheduler for this EPC program. CMS provided overall quality and consistency control of 18-unit schedules, developed baseline schedule standards and monthly update deliverables, provided management and training to scheduling team members, and served as construction team liaison.</p>	Samref (Saudi Aramco & ExxonMobil JV)	\$2B	2009-2014
FCC and Alkylation Facility	Refineries, Oil & Gas	<p>CMS assisted the design firm, Worley Parsons, by providing weekly schedule updates, including earned value analysis to track project progress. CMS coordinated with the project team and management, provided weekly reports with updated schedule data incorporating change orders, and developed various cost and schedule reports for planning and analysis.</p>	Chevron	\$80M	2007-2009
Sulfur Recovery Unit	Refineries, Oil & Gas	<p>CMS assisted the design firm, Worley Parsons, to provide weekly schedule updates including earned value analysis for the purpose of tracking project progress. Responsibilities included coordination with project team and project management, update of schedule data for weekly reports, incorporation of change orders, and development of various cost and schedule reports for planning and analysis.</p>	Chevron	\$160M	2007-2009
Ultra Low Sulfur Diesel (ULSD) Hydrotreater Facility	Refineries, Oil & Gas	<p>The facility was modified to produce Ultra Low Sulfur Diesel (ULSD) to fulfill the California Air Resources Board's (CARB) 2000 Diesel Risk Reduction Plan.</p> <p>CMS assisted the design firm, Worley Parsons, by providing weekly schedule updates, including earned value analysis, to track progress and justifying funding. CMS coordinated with the project team and management, provided weekly reports with updated schedule data incorporating change orders, and developed various cost and schedule reports for planning and analysis.</p>	ConocoPhillips	\$300M	2005-2007