



Exponent®
Engineering & Scientific Consulting

Gary Bagga

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Professional Profile

Mr. Gary Bagga has over 25 years of broad-based experience in Project Management, Program Management, Engineering Design and Engineering Management. He has in-depth experience in project planning, engineering design, scheduling, estimating, risk analysis, construction execution and project controls.

He has managed a challenging portfolio of greenfield and brownfield projects. His roles ranged from managing the Operations Projects team to Project Manager for large projects in oil and gas facilities, power projects, petrochemical plants, mining, infrastructure and other industrial plants. He has managed teams delivering complex projects in live industrial facilities while ensuring the team performs safely and meets Operations' requirements. He has delivered projects through various stages from conception, engineering, planning to construction and commissioning.

He has worked with Energy Companies, Utilities, Government, and Industrial Companies. He has successfully delivered a variety of projects and programs from \$500k to \$10B. He has led multi-year facilities, roads, maintenance, and field development programs. He has worked on bridges, roads, pipelines, buildings, transmission lines, substations, power plants, chemical plants, refineries, midstream and upstream oil and gas facilities, manufacturing plants, data centers, control rooms, EV infrastructure and new technology development.

Academic Credentials & Professional Honors

B.A.Sc., Applied Science, University of British Columbia, 1994

B.S., Science, University of Toronto, Canada, 1990

Association of Professional Engineers of British Columbia – Most Outstanding Graduate Award

Licenses and Certifications

Professional Engineer, Alberta, #68087

Professional Engineer, British Columbia, #63497

Professional Engineer, Manitoba, #51665

Professional Engineer, New Brunswick, #L7175

Professional Engineer, Ontario, #100662008

Professional Engineer, Saskatchewan, #82865

Project Management Professional (PMP)

Academic Appointments

Research Assistant, Department of Civil Engineering, University of British Columbia, 1993-1994

Teaching Assistant, Department of Mathematics, University of British Columbia, 1992-1994

Prior Experience

Regional Manager, CBRE ExxonMobil Alliance, 2021-2023

Manager of Projects, Orica, 2019

Project Manager, Cenovus, 2013-2017

Project Manager, ExxonMobil, 2006-2012

Professional Affiliations

Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Project Management Institute (PMI)

Project Experience

Managed a regional field delivery team responsible for developing and executing complex projects at ExxonMobil refineries, data centers, research labs, campuses and mid-stream terminals in Canada and North US. Successfully led a team of project and development managers to deliver complex brownfield projects at Imperial Oil Ltd. (IOL) IOL Sarnia, Nanticoke and Strathcona refineries, ExxonMobil (EM) data centers and EM Joliet refinery.

Oversaw development of comprehensive project budgets and work plans on a challenging multi-year program. Monitored budgets to ensure projects are being delivered within budget, on time and at the expected level of service delivery reliability. Introduced new KPI tracking tools to improve execution performance in the project portfolio.

Led a high performing team responsible for executing challenging brownfield projects at a chemical manufacturing plant. Successfully led a complex project portfolio including NOx and N2O Abatement, Distributed Control System upgrade and several other challenging projects in the Ammonium Nitrate plant. Managed engineering contractors, construction, and procurement from vendors all over the world.

Member of site leadership team responsible for HSE, overall plant performance, reliability, change management, risk management, corporate initiatives, reporting, government, and community relations at a chemical manufacturing facility. Introduced several new processes at the plant to increase predictability in execution. Introduced a new contractor selection and management process, engineering deliverables efficient execution and project controls to achieve predictability and efficiency.

Managed plant turnaround using the seven-phase methodology to ensure minimum downtime while executing in a safe and cost-effective manner.

Successfully led key Operations Projects at Foster Creek and Christina Lake SAGD Facilities in Northern Alberta. Major projects included Directive 81 Compliance (\$150MM), Brackish Water Piping and Equipment (\$200MM), Fire Protection System (\$100MM), Casing Gas Debottleneck Project (\$200MM), Safety Shut Down System (\$50MM) and Solvents Re-Injection New Technology Projects (30MM). Achieved significant improvement in cost, schedule and forecasting on these challenging Brownfield projects. Projects required setting clear goals, team re-alignment and stakeholder management to achieve the enhanced results.

Focused on Continuous Improvement in project execution and work processes. Improved performance through new initiatives such as Brownfield planning guide, integrated project forecasting and competitive bidding in several execution areas. These resulted in schedules improving from delays of 6 months to on target execution. Cost forecasting improved from variability of over 100% to less than 10%.

Overall responsibility for preparation of key project engineering deliverables such as detailed drawings, Design Basis Memorandum, Project Execution Plan, Project Charter while coordinating input from key stakeholders such as Operations, Engineering, Construction and Commissioning teams. Led a team of Engineering Procurement (EP) consultants, Construction and Commissioning teams and other professionals to develop project documents for several challenging Brownfield projects. The projects were completed below estimated costs while meeting project safety, schedule, and quality goals.

Led execution planning of a new Greenfield shale gas development (\$450MM) that included a gas pipeline and processing facilities in Northeastern British Columbia. Developed the Project Execution Plan, Construction Execution Plan, Contracting Plan, Commissioning and Start-up Plan and Safety Plan. Progressed the project through key stages from conceptual planning to construction and commissioning. Managed early construction planning including transportation plans, equipment and materials handling, field execution plans and mobilization of construction contractors. This resulted in project being completed within estimated costs while exceeding SSHE and schedule goals.

Acted as Area Coordinator for all conventional projects in the Northwest Territories, Northern and Central Alberta (total value over \$100 MM, work completed with total costs below budget). Responsible for overall program cost stewardship, capital planning and early execution planning of projects in the area. Led a team of Project Managers working on the Norman Wells Projects (total value \$50MM, six projects) and executed the projects with no recordable incidents and within the project cost, schedule, and quality goals. Norman Wells is an especially challenging area due to remoteness, permafrost, limited transportation windows and availability of resources.