#### **CURRICULUM VITAE**

# EHAB SHAHEEN, BSc, MSc, PEng, PMP

PO Box 280, Naples, FL 34106 USA

# Authorized to work for any US employer

## **CONTACT**

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# **WORK AUTHORIZATION**

Legally authorized to work for any employer and for unlimited periods of time in Canada and USA

## **SUMMARY**

- ➤ Highly experienced in driving large programs, including multiple small, mid-sized or large projects simultaneously, with limited resources in fast-paced, changing priorities, and ambiguity environments.
- Results-driven and highly competent with more than 20 years of successful experience managing and supporting large-scale projects for leading Oil and Natural Gas companies.
- ➤ Offers a unique blend of technical and managerial experience in positions of progressive responsibility.
- Engineering expertise and background include mechanical, environmental and process engineering, compliance, codes, quality assurance, and safety regulations.
- > Solid background in design of pipelines and facilities for oil and gas projects.
- Experienced with governmental regulations, environmental processes, permits, proposals, and contracts.
- ➤ Proven leadership skills with an ability to motivate a dynamic engineering and or technical team to achieve targeted goals.
- ➤ Highly organized with track record of always completing projects within pre-set budgets and deadlines.
- ➤ Talented problem solver who works well under pressure with ability to make sound decisions in calm manner. Take initiative and work collaboratively with project team.
- Proficient at developing and implementing policies, procedures, processes, and technical documents.
- ➤ Identifies resistance and performance gaps, and works to develop and implement corrective actions
- Able to set priorities and multitask while managing high-volume and complex workload.
- > Successfully coach and develop/inspire technical teams to be their best and building rapport with individuals at all organizational levels.
- > Implement effective change management strategy (MOC) and plan.
- Risk Management (Qualitative and Quantitative).
- > Subject matter expert in root cause failure analysis.
- Effective communication, multi-tasking, problem and conflict resolution skills.

## PROFESSIONAL EXPERIENCE

Sr. Project Manager WorleyParsons Pipelines Consultant 2013 – 2020

- ➤ Senior Project Manager for design and construction of 500km NPS 36 Enbridge-Wood Buffalo Extension Pipeline and facilities (WBEP) and 150km NPS 36 Athabasca Pipeline Twinning Optimization (APTO).
- Senior PM for the design and construction of Enbridge Line 10 replacement NPS 20, 36 km pipeline project.
- Project scope of work (SOW) included pipeline and associated mainline block valves (MLBVs).
- Full project cycle management from project charter to project close-out.
- > Create major project documents, but limited to:
  - Risk Management Plan.
  - Project Execution Plan (PEP).
  - Project Communication Plan (PCP).
  - Safe & Sustainable Engineering for Asset Lifecycle (SEAL).
- ➤ Project controls and scheduling along with invoicing and resource loading. Some tasks, but not limited to: cost control, trend management, change control and client reporting (e.g. earned value management).
- Collaborate with quality control and health & safety teams.
- Periodic client reporting of project progress and cost updates, monthly, Bi-weekly and weekly.
- ➤ Coordinate engineering deliverables, update deliverables progress.
- Manage client and team meetings.
- Manage weekly meeting for project needs list, change and risk management. Report any scope, cost and schedule impacts to clients.
- Manage project cost estimate (multi estimate classes) and coordinate presentations and review meetings. Create cost estimate documents:
  - Basis of Estimate (BOE).
  - Estimate Preparation Plan (EPP).
  - Construction schedule based on crew management.
  - Construction Execution Plan (CEP)
- Assist Enbridge pipeline integrity team with pipeline integrity and stress analysis studies (Enbridge Line 19, 27, 36, and 37).
- > Ongoing post-construction stress mitigation studies.
- Procurement and third party vendor management.

# Projects

- 500km, NPS 30 and 36 pipelines project.
- Investigate pipe integrity for six (6) pipeline crossings installed by pipe hammering for the Enbridge L10 Replacement Project. With full Finite Element Analysis (ABACUS).
- Line 10 replacement NPS 20, 36 km pipeline project. Complete detailed engineering design along with Construction support and as built.
- Scotford Gasoline and Distillate Class III and IV cost estimate for NPS 8 and NPS 10 pipelines. With option to upsize both pipelines to NPS 10 and NPS 12.

#### Clients

Enbridge Pipelines, Shell Canada, Nexen Energy.

Pipelines General Program Manager (GPM) TideWater Midstream and Infrastructure LTD. 2018 – 2019

- Overall management of pipeline department, resource management and interview new resources.
- Scrum and Agile PM implementation and management.
- ➤ General Project Manager for 4 gas pipeline projects in from inception, engineering, construction and commissioning, and close-out.
- Supervise and mentor pipelines project managers.
- > Develop General pipelines management tools and procedures.
- ➤ Conflict resolution, problem solving and stakeholder management.
- ➤ Implement and develop PM tools, procedures and processes.
- ➤ Management of change (MOC), request for information (RFI), and landowner concerns, etc.
- ➤ Approval of large change orders (excess of \$1 MM), and project deviation records.
- Weekly and monthly progress reporting preparation and presentation to Tidewater management, overall risk, as well as pipeline department needs
- ➤ Procurement management, develop construction SOW, vendor and construction contractor selection.
- Regulatory and environmental applications support and management.

# Senior Project Manager Universal Pegasus (UPI) 2018 – 2019

- Sr. Project Manager for the Trans Mountain Expansion Project (TMEP), NPS 24 Reactivation project.
- ➤ Pipeline Subject Mater Expert (SME) for the Imperial Oil Water Down to Finch pipeline project.
- > Sr. PM of the Nooksack River HDD. The Nooksack River is in the northwest part of the state of Washington, USA.
- > Sr. PM of the Plains Midstream Traffic Accommodation plan projects.
- > Sr. PM for the Alliance Pipelines (APL) metering station in Illinois for the supply of natural gas for the J Powers electrical generation plant in Illinois, USA.

# Sr. Project Manager CH2M Consultant 2016 – 2018

- ➤ Design and construct two parallel 10.5 km NPS 12 Produced Emulsion and NPS 16 Boiler Feed Water.
- ➤ High temperature insulated pipelines (operating temperature 130°C and design temperature 140°C), with a design life of 40 years.
- Design a state of the art, Pipeline Monitoring System (PLMS), with fibre optics, two wire and mass balance system integrated into a full data acquisition control system completed with proper programming.
- Early project coordination; prepare project schedule, man-hour estimate and budgeting, work breakdown structure (WBS).
- Responsible project implementation, initialization, management, planning, reporting and risk assessment
- Manage and coordinate Class III project cost estimate, presentations and review meetings. Develop cost estimate documents.
- > Full procurement scope and management, fabrication of materials and pre-heater systems.

Sr Project Manager Program Manager Consultant GEMINI Corp 2012 – 2013

- ➤ Project Manager for three Full-Service Terminals (FST) projects.
- ➤ Assist develop and implement QA/QC procedures.
- Resource allocation and management as per projects/clients'.
- > Complete yearly performance reviews, salary and level adjustments.
- ➤ Create business development opportunities including marketing planning, presentations, cost estimates, contracts and proposals.
- ➤ Maintain department level of expertise in existing areas offered and expand the scope of services offered to Clients.
- ➤ Coordinate/prepare project schedule, budget and scope details.
- > Regulatory and environmental applications support.
- ➤ Cost and change control, schedule and client reporting (e.g. earned value management). Invoice management, and coordination with accounts receivable and payable requirements.
- Scoping Study, DBM, EDS, PEP, and CEP development.

# Projects

- Full Service Terminals (FST) and water treatment plants (\$ 35M+ each).
- Two compressor stations (\$1.5M+).

#### Clients

• EnCana and Pembina Pipelines.

Program Manager/
Team Lead
Pipelines and Terminals
Cimarron Integrity
2008 – 2012

- Program management for integrity and regulatory compliance projects.
- Lead pipeline and facilities integrity research and development (R&D).
- ➤ Participate with conference journals in 2010 International Pipeline Conference (IPC):
  - Statistical Predictive Modeling: A Methodology to prioritize Site Selection for Near-Neutral pH Stress Corrosion Cracking.
  - Spill Consequence Analysis: A Method to Prioritize Integrity Excavations of Liquid Pipelines.
- Prepare and present Semi-Annual report for Exxon Mobil and Imperial Oil international integrity review committee, to approve the overall integrity budget.
- > Develop and update annual project list and plan including high-level scope and budget.
- Mentor project team (10-15 engineers and technologists), while manage and support projects throughout full project life cycle.
- > Complete yearly performance reviews, salary and level adjustments.
- > Disseminate pertinent new or changing regulations.
- ➤ Create business development opportunities including marketing planning, presentations, cost estimates, contracts and proposals.
- Maintain department level of expertise in existing areas offered and expand scope of services offered to clients.
- Attend government and/or industry conferences, forums, and chair workshops, to be up to date with technical developments and management skills.

- > Continuously update personal and/or other staff knowledge of relevant regulatory information in various jurisdictions.
- > Regulatory and environmental applications support.
- ➤ Cost and change control, schedule and client reporting (e.g. earned value management). Invoice management, and coordination with accounts receivable and payable requirements.
- Manage field/construction, inspections, and integrity dig programs.

# Projects

- Pipelines and facilities projects approximately 74 projects annually.
- Horizontal Directional Drilling (30 HDD), block and surge valve/pump design and installation and PL Integrity (e.g. 200 dig program). Ex. Projects: Alberta Products Pipeline (APPL), Enbridge PL 4 and 5, Access PL 42" dil. Bit., EnCana Big Foot PL, etc.
- Pipeline and Facilities Integrity Management and Inspection. (e.g. ILI tool selection, A/G Surveys, ILI run results analysis, CP, remediation, Data Base Management, DOC Remediation, terminal inspection, offshore PL removals, SCC, pitting corrosion, Dent management, non-linear analysis, API 579).
- Project Manager/Technical Witness for litigation cases (\$30M+).
- Terminal and pipeline inspection and risk assessments.

# **Clients**

 Imperial Oil Limited, EnCANA, SemCAMS, Enbridge Pipelines, ACCESS Pipelines, MaZeppa.

Head of Section Engineering Solutions/ Program Manager Det Norske Veritas (DNV Energy Canada) 2007 – 2008

- Management and leadership of the Engineering Solutions Department.
- Responsible for Pipeline Internal/External Corrosion, Failure Analysis, Material Integrity/Selection and laboratory/Testing facilities.
- ➤ Overall management of divisional project work and technical details for each project. Allocate of resources and providing leadership to multiple disciplinal technical team as well as mentoring and coaching (Engineers, Consultants, 3<sup>rd</sup> Parties, Technologists, Drafting, Department Admin., and PC).
- ➤ Inspire manage and support projects throughout all project cycle phases from conceptual idea, detailed design, execution, commissioning & start-up and project close out.
- ➤ Prepare departmental business plan and budgets. Customer Service/Program Manager (CSM/PM)/Project Sponsor (PS) and manage projects to achieve budgetary and profitability goals for DNV.
- ➤ Work cooperatively with Management team in and throughout DNV globally to ensure activities are coordinated and initiatives do not overlap.
- Execution of the growth strategy for DNV Energy Canada Operation.

# Projects

- Subject matter expert/technical witness for litigation cases (\$30M+).
- Imperial terminal and pipeline risk assessment and management.
- Imperial pipelines and facilities integrity management and inspection.
- Liquid and LNG offshore and onshore pipelines and facilities.
- Research and Development (R&D).

- Projects ranged from medium to large projects (\$ 5M->\$30M+).
- Pipeline internal corrosion (e.g. bacteria induced corrosion).

## **Clients**

Shell, Suncor, InterPipeline Fund (IPF), Pembina, CNRL, Husky, BP

Project Construction Manager Research Development Consultant Shaheen Enterprises Inc. 2004 – 2011

- ➤ Civil Structural Health Monitoring (SHM). Bridge structural monitoring.
- ➤ Retrofitting of historical buildings using sprayed fibre reinforced polymers (FRP), Carbon, Aramid and Glass fibres.
- > Structural soundness of mechanical (mortar-less) interlocking masonry for retaining walls.
- ➤ Enhance and improve Ultra High Performance (UHP) Concrete properties such as durability, fracture toughness and tensile and flexural strength.
- ➤ Defect free concrete mixtures. Reactive Powder Concrete with Carbon fibres. Perfecting concrete mixtures for high strength and flexural properties.
- > Study and improve fracture properties of concrete structures.
- > Post-tensioning of concrete structures.
- > Corrosion of concrete reinforcements.
- > Sprayed glass fibre reinforced polymer masonry columns under concentric and eccentric loading.
- > Improve strength of structural adjustable steel teleposts.

# **\*** Civil structural and research projects

- Strength of structural adjustable steel teleposts for residential and commercial applications. Assist regulatory applications and approvals with industry Canada.
- Study strength of steel manhole covers under cycling and compressive sustained strength (creep).
- Study and improve properties of concrete mechanical interlocking masonry.
- Corrosion free pot-tensioning of concrete structures (slabs, girders and columns) using FRP reinforcing rebar.
- Sprayed historical FRP reinforced material for retrofitting of historical structures.
- Testing and construction of UHPC (Ductal<sup>TM</sup>) for the Shawnassey LRT metro station.
- Test concrete interlocking masonry wall under simulated wind (tornado or hurricane). Study and improve wall performance using finite element analysis (ABACUS<sup>TM</sup>).
- Investigate UHPC (Ductal<sup>TM</sup>) cyclic loading and fracture mechanics.
- Civil materials root cause failure analysis.

#### Clients

City of Calgary, Lafarge, Ironman Steel Structures, Interlocking Masonry Corp, Suncor.

Project Manager Consultant Triumph EPCM 2000 – 2008

- Scoping Study, DBM, EDS, PEP, and CEP development.
- Supervise, train and mentor project team, manage and support projects throughout all cycles; conceptual idea, detailed design, execution, commissioning & start-up and project close out.
- > Regulatory and environmental applications support.
- ➤ Coordinate/Prepare Project Schedule Estimate and Budget.
- > Cost Control, Trends, Change Control and Client Reporting.
- > Directing Procurement and Purchasing Functions.
- Engineering, procurement and construction management (EPCM)
- > Company procedure development and review.

# ❖ Pipelines (Oil and NG/LNG) and Refining & Petrochemicals Facilities Projects

- Well tie-ins, facilities/compressor and pumping stations.
- Various pipeline and pipe rack projects.
- SAGD projects and peripheral pipelines.
- Pilot plants (e.g. WRITE Process (DRU), Supercritical Solvent De-Ashphaltine Unit (SCSDA).
- Commercial Upgraders. Storage caverns.
- Rail car offloading/loading facilities.
- Regulatory Application and Environmental Impact Studies (EIA).

# Clients

 MEG Energy, Real Resources, Access Pipelines, Secure Energy, Kinder Morgan, Enbridge, Triumph EPCM, Williams Energy Canada, CDX Canada Co., Ember Resources Inc.

Metallurgy Specialist Project Manager Consultant (PMInc) Optima Hatch 2006 – 2008

- > Corrosion mitigation and material integrity.
- ➤ Material selection & evaluation.
- > Develop corrosion manuals.
- Failure analysis & evaluation.
- Codes/Standards: NACE, ASME/ASTM, API, CSA Z662.
- > Capital design projects (small projects department).

## **Pipelines and Facilities Projects**

- Treated Water Pipeline.
- Stainless Steel Corrosion in Fluoride Environments.
- Pump Material in Brine Environment.
- Riser design and installation.

#### Clients

Hatch Optima/Hatch Energy.

# President/Program Manager Shaheen Enterprises Inc. 1998 – 2013

- ➤ Real Estate Acquisition.
- Manage and Interface full cycle Multi-Residential Construction projects. Inception to construction completion and real estate sales.
- Manage and interface with architect design group, city permit acquisition, bank commercial load acquisition, building and construction code compliance, and real estate sales.
- ➤ Overall project planning, resource allocation, time and risk management, benchmarking, budget and stakeholder management.
- Estimated project costs, performed take-offs and developed project proposals, schedule and procurement plans.
- Supervise staff and general labour. Manage daily project completion and trades coordination. On time delivery of materials and trades to maintain overall schedule. Risk management.
- Estimating and Budgeting, Procurement, Scheduling.
- > Company accounting and book keeping.
- ➤ Become member of Alberta New Home Warranty (ANHW) program.

# Projects

High end, luxury, multi-unit residential town houses.

#### **AWARDS**

> Imperial Oil (APPL) Project Manager (PM) Recognition Award
Alberta Products Pipeline (APPL) recognition award for:
"Flawless Project Execution and Completion"

2011

## **EDUCATION**

❖ BSc American University in Cairo/Mechanical Engineering
 ❖ MSc University of Saskatchewan/Corrosion and Wear

# **PROFESSIONAL AFFILIATION**

- > The Association of Professional Engineers, Geoscientists of Alberta (APEGA).
- Engineers and Geoscientists of British Columbia (EGBC).
- Professional Engineers Ontario (PEO).
- > Canadian Association for Mechanical Engineers (CAME).
- ➤ National Association of Corrosion Engineers (NACE).
- > ISIS (Intelligent Sensing for Innovative Structures), NCE.
- ➤ Project Management Institute (PMI), PMP.
- American Concrete Institute (ACI) peer reviewer.

## **NOMINATED POSITIONS**

**Banff Pipeline Workshop Session Co-Chair**  Management of Stress Corrosion Cracking Managing Pipeline Integrity

2011