**PAVEMENT AND MATERIALS ENGINEER ❖ MANAGER**

Registered Professional Engineer with twenty years of expertise in planning, design, testing, documentation, implementation, procurement, auditing and leadership in the highway construction industry. Enjoys solving complex problems using subject-matter knowledge and innovation, to offer high-quality solutions to stakeholders in a fast-paced, collaborative team environment. Ability to liaise with internal and external stakeholders. Analytical, budget-conscious individual able to meet project deadlines and maintain a high level of quality throughout projects.

**Areas of Strength**

* Project Management
* Pavement and Asset Management
* Product Quality Control and Assurance
* Investigative Methodologies
* Pavement Design
* Life Cycle Cost Analysis
* Specification Development
* Auditing
* Procurement and Proposals
* Non-Destructive Testing

**Technical Expertise**

* Hot Mix Asphalt Production QC/QA
* Marshall and Superpave Mix Design
* Cold Mix Asphalt Recycling
* Seal/Chip Seal
* Warm Mix Asphalt Additives and Processes
* Falling Weight Deflectometer & Analysis
* Light Weight Deflectometer & Analysis
* Ground Penetrating Radar
* High Speed Inertial Profilers
* Pavement Distress Evaluations
* PCC Design and Control
* Flexible and Rigid Pavement Design
* Pavement Rehabilitation Strategies
* Construction Materials Testing
* Shallow Foundations

**Post Secondary Education**

**Masters Certificate in Project Management**

*St. Mary’s University, Sobey School of Business, Halifax, NS, 2016*

**Master of Engineering – Civil Engineering**

*Dalhousie University, Halifax, NS, 2008*

**Bachelor of Engineering – Civil Engineering**

*Dalhousie University, Halifax, NS, 2001*

**Professional Employment Experience**

**Province of Nova Scotia, Department of Transportation and Infrastructure Renewal**

**Highway Construction Services Division**, Fall River, NS

*Division Manager*

*2012 – 2018*

*Pavement Management Engineer*

*2008 – 2012*

As **Division Manager**, led a multi-disciplined team of sixteen personnel comprised of engineers, technicians and administrators while being accountable for two operational budgets with a combined value of approximately $2.5 million. Oversaw the timely delivery of services in support of the Provincial Capital Program as well as other initiatives and programs, including but not limited to the procurement of highway construction and maintenance tenders, the annual collection and processing of the provincial highway network data, auditing of completed projects, pavement strength data collection, the advancement of computer applications, pavement design, pavement and asset management, the administration of Standing Offer Agreements and Inspection Services Agreements. As the Chair of both the Standard Specification Steering Committee and Division 4 (Pavements) Technical Team, collaborated with internal and external stakeholders in the development and updating of the Department’s Standard Specifications. Participated in other committees including the Nova Scotia Asphalt User Producer Association (NSUPA), Transportation Association of Canada (TAC) Chief Engineers Council Standing Committees and the Joint Committee on Contract Documents (JCCD) – Standard Specification for Municipalities.

As **Pavement Management Engineer**, recruited to develop and incorporate the Pavement Management System (PMS) into the planning processes used for the Capital Highway Improvement Plan. Team Lead for the monitoring of construction, highway data collection and the administration of inspection agreements. Developed and revised standard specifications and special provisions used for construction and maintenance tenders. Provided technical support to all levels of the Department with respect to issues related to construction, quality control and assurance, and the interpretation of specifications or testing data. Developed pavement designs incorporating FWD, core and distress data and recommended rehabilitation treatments for future capital projects along with an estimated budget and timeframe for the work to be completed.

**Maritime Testing Limited**, Dartmouth, NS

*Project Manager – Materials Division*

*1999 – 2008*

As **Project Manager**, concurrently held the additional titles of Laboratory Supervisor and Supervising Engineer for the CSA/CCIL Certified Concrete Laboratory. Managed quality control testing programs for various clients that included aggregate production, asphalt concrete mix designs, asphalt concrete mix production, laydown operations and smoothness testing. Administered and developed inspection testing programs and quality management documentation. Developed project proposals and cost estimates to grow the business. Maintained laboratory and technician certifications, including the development of safe work practices. Strong field and laboratory testing background of construction materials (soils, concrete and asphalt). Managed the pavement strength testing program on the behalf of the Province that included the analysis of the data collected and providing pavement design parameters.

**Affiliations**

* Engineers Nova Scotia - Member
* Canadian Technical Asphalt Association - Member
* Nova Scotia Asphalt User Producer Association - Member
* Transportation Association of Canada
  + Chief Engineers Council Standing Committee for Pavements – Secretary
  + Chief Engineers Council Standing Committee for Soils and Materials - Member
* Joint Committee on Contract Documents – Standard Specification for Municipal Services

**Certifications**

* Emergency First Aid / CPR, St. John’s Ambulance
* Defensive Driving, Transportation & Infrastructure Renewal
* Transportation of Dangerous Goods
* Workplace Hazard Materials Information System (WHMIS)
* Occupational Health and Safety Committee Member Representative, NSCSA
* Confined Space Awareness, NSCSA
* Respectful Workplace for Employees and Managers, Public Service Commission
* The Working Mind for Managers and Supervisors, Mental Health and Wellness in the Workplace, Public Service Commission
* Leadership Development Program – Supervisor, Public Service Commission
* AutoCAD 14, Level I and II, Nova Scotia Community College (Continuing Education)

**Volunteer Work**

* **Halifax County United Soccer Club**, *Team Coach - Boys Grassroots U8 and U10*, 2016 – 2018
* **Kingswood Elementary School**, *Parent School Association Event Volunteer*, 2013 - Present