



Project Management
Condition Assessments
Engineering & Design
Construction Administration
Asset Management



## **SOLUTIONS FOR**

- MUNICIPALITIES
- INDUSTRIAL CLIENTS
- DEVELOPERS
- OTHER CONSULTANTS
- ARCHITECTS
- GENERAL CONTRACTORS
- BUSINESS OWNERS

# At work for you

# ADDRESSING THE NEEDS OF YOUR BUSINESS

PROF&E offers project management and consulting services from relatively simple assessment projects to large, complex infrastructure projects. We have resources to fully support our clients from the environmental assessment stage through design and to start-up and commissioning. Our portfolio includes water and wastewater infrastructure, facilities and transportation projects. Projects include pumping stations, reservoirs, water and wastewater storage and treatment facilities, and pipelines. We also provide specialized construction services such as construction management and administration, structural investigations and construction claims.

PROF&E has a multi-disciplinary team to focus on condition assessment and asset management. With our broad range of skills and experiences, we provide comprehensive review of the facilities including corrosion prevention and mitigation. We specialize in heavy corrosive environments such as digesters, chemical plants, headworks buildings, incinerators, etc. Our ideas and recommendations help optimize opportunities for improved services and processes and reduce costs.

# **About PROF&E**

PROF&E Ltd. is a 100% Canadian owned company with our head office located in Toronto. Established in 2012 we focused on property assessments and improvements. Today our principal service markets are in Project Management, Water & Wastewater consulting, Facilities and Sustainable Development, Asset Management and Business Support services.

PROF&E has formed strategic alliances with key professional consultants that further enable us to provide quality, cost effective, and holistic services for our clients.



### PROJECT SUPPORT

Consistently delivering high quality projects is the objective of many of our clients. Experienced technical staff can provide advice to owners, engineers, equipment suppliers, contractors, and other participants involved in the development of industrial, infrastructure and other municipal and commercial projects on all aspects of design and construction, including tendering and bidding documentation, design and engineering agreements, alternative delivery methodologies, project and construction management.

### MANAGING RISK & ASSET FAILURE

Risk assessment is a process to ensure that organizational controls are implemented to identify and address risk in an organization. Risk assessment can be outlined as the identification, measurement, and quantification of risks to ensure that maximum effort is provided to address those areas of greatest risk exposure. For asset intensive organizations such as Utilities and Municipalities, PROF&E's risk assessment service provides a comprehensive analysis of risk associated with operations, maintenance and business at the Corporate and Operational level.

Our risk assessment and management process ensures the efficient allocation of resources to make informed decisions to manage service reliability in a practical, realistic and manageable way.





#### **PROJECT MANAGEMENT**

PROF&E project management services are a continuum of management monitoring, control and response to project events. Our Change Management process follows from the work breakdown schedule we prepare and confirm from project initiation through to project close. Change management input results from tracking progress against the baseline (the project work-plan) for cost, schedule, scope, risk and quality issues.

Our process includes an analysis of project events and the impacts to the projects in these and other areas. Throughout the project we maintain procedures for project control and record keeping giving all participants the information to make corrections as needed, and to bring the project to completion on time and on budget. Specific components of our project management approach includes:

Scope & Cost: Understanding the objectives is the first step in outlining the project scope—we carefully consider project goals and utilize proven statistical analysis techniques to manage project costs. Where the costs are not included these are identified under separate cover. This will allow the Region to assess the benefits prior to the project award and set the scope, cost and schedule in line with alternatives evaluation and selection. Schedule: Schedule management is based on an understanding of critical path tasks, resource analysis and careful use of project float. Typical delays (risks) in the work such as availability of operations staff and weather are analyzed as part of risk management and impacts to schedule monitored. We allocated time for key deliverables to circulate and review information at milestone and quality gates.

**Communications**: Most organizations list communication as one of the most needed areas for improvement. We recognize this and build in activities to foster open communication and transparent progress information. Communication not only keeps everyone up-to-date on the project progress, but also facilitates buy-in and ownership of major project decisions and milestones.

**Risk**: Risk identification and qualitative and quantitative analysis is completed during project planning and included in the project plans. Monitoring and response to risk is part of the change management process. Classic risk management provides 3 actions to risk; accept, mitigate or avoid. Generally we use this concept in our approach and list out the action to each risk identified at the beginning of the project and during the project. Our approach is to simplify this process in order to gain the most value from it by evaluating each major project task or event and possible risks with a corresponding action.

**Quality Management**: Our Quality Management Plan starts with our Quality Assurance process. This includes process checklists and audit forms to address QA/QC procedures for the project. We use standard or typical templates from our company procedures and tailor them to meet project and client needs.

#### **CONDITION ASSESSMENT**

A key outcome for infrastructure management is the assurance that existing assets are being managed and maintained effectively and efficiently, and that they fully support the delivery of the organization's services.

The professional staff of PROF&E has expertise and experience in developing condition assessment programs and performing condition assessments to support the management of assets and to develop maintenance and capital plans to ensure technical and financial performance of the assets. Our condition assessments are tailored to our client's needs and include:

- A review of existing drawings, specifications, maintenance records, facility reports, and inventory data from which we develop a field schedule and testing plan.
- Comprehensive site inspection & assessment to identify facility needs, Health & Safety issues, internal standards, code violations, energy saving opportunities, structural and other issues. Invasive, non-destructive and destructive testing and visual inspection techniques are employed depending on project requirements.
- Interviews with operations, maintenance and management staff to obtain first hand equipment and system knowledge.
- Condition grades are assigned identify needs.
- Evaluation of asset condition and priorities, recommended repairs or replacement and development of maintenance programs and multi-year Capital Plans.

#### **CONSTRUCTION ADMINISTRATION**

Since the early 1990's, PROF&E has provided engineering and construction administration services to owners and consultants. We maintain exceptional expertise and technical knowledge across every phase of construction and provide services for project administration, control and coordination of construction, bid package preparation and sub-contractor management, schedule and claims analysis, structural investigations and design of construction support systems.

We also offer constructability reviews of the plans and specifications with a focus on the build-ability, bid-ability and efficiency of construction on our projects or as a stand-alone service. The reviews are not limited to work sequence, completeness of construction documents, coordination of the documents among the various engineering disciplines, adequacy of lead time for material and equipment procurement, site restrictions and access.

#### ASSET MANAGEMENT

At PROF&E we think of Asset and Business Management as a program or a series of business processes that has a goal of providing a transparent, consistent framework for decision-making to balance services, risk, and costs. It is built on analytical methods centered on life cycle costs and information on asset performance. We support our client's management staff to combine managerial, financial, statistical, technical, and operational skills to manage the performance of service and assets including capital rehabilitation & replacement planning.

PROF&E can assist clients to develop asset management plans and frameworks for business operations, optimizing asset performance, identifying and reducing risk and minimizing cost.

#### **ENGINEERING & DESIGN**

PROF&E provides technical services for a wide range of Water infrastructure including treatment, transmission, conveyance, collection and storage. Our senior engineers have been providing services to the water sector for over 20 years. We are committed to client satisfaction through the quality and excellence of our services. We place considerable emphasis on communication skills and close partnership with our clients by providing support and technical knowledge to achieve goals jointly. We combine innovative approaches using the latest technology and ideas with sound practical skills and experience.

**Drinking Water & Wastewater Service Areas** 

- Facility Design & Contract Management
- Compliance Management
- Process Optimization
- Distribution & Collection Systems

Water and wastewater systems both involve challenges in planning, designs, construction, commissioning, and operation and maintenance. PROF&E meets this challenge by utilizing technical and organizational expertise to implement innovative and affordable solutions to allow our clients to manage and meet increasingly stringent water and wastewater quality and regulatory requirements.

# PROF&E Ltd.

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