



Design and Construction and Operations Consulting Services

BMT in Canada offers a wide range of pipeline design, construction and operations support with a broad background in system design, analysis, hazard mitigation and regulatory and code compliance. Our specialized engineering, science and professional services in these areas provide practical and innovative solutions, backed by more than 60 years of combined experience.

Front End Engineering Design

- Design Conceptualization
- Design Review
- Schedule and Estimate Development
- Cost Optimization Studies (Value Engineering)
- Design Basis Memorandum (DBM) Preparation
- P&ID Review

Aboveground Piping Design and Analysis

- Conceptual Layout and Alignment
- Valve Station and Pigging Facilities
- Nozzle Load Evaluation
- Flange Leakage Check
- Specialty Support Design
- Hydraulic Analysis: Steady State Analysis, Transient Surge, Water Hammer Analysis, Surge Suppression



Below Ground Pipeline Design and Analysis

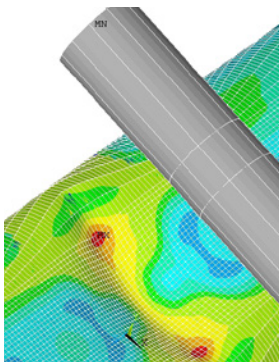
- Pipeline Layout Planning
- Backfill Specification
- Buoyancy Control
- Global and local Buckling Analysis
- Crossing Design and Analysis
- Lower-in Analysis
- Valve Chamber Design and Analysis
- Geo-Hazard Assessment
- Construction Support

Services and Solutions

We support our clients at every stage of the project lifecycle with high-quality products and services, backed by trusted experts across sectors, geographies and disciplines.

HDD Profile Design and Analysis

- HDD Drill Path Design
- Pipeline Pull Back Design and Analysis
- Drilling Mud Pressure and Volume Calculation
- Over Bend Tie-in Design and Backfilling
- Installation and Operating Stress Analysis
- Construction Risks and Mitigations
- Budget and Schedule Planning



Design & Drafting

- Pipeline Crossing Replacement (EPC & EPCM)
- Pipeline Replacement
- As-Builts
- Process Flow Diagrams (PFDs)
- Piping & Instrumentation Diagrams (P&IDs)
- Foundation Plans & Details
- Mechanical Equipment Layout
- Structural Steel Supports
- Building Plan & Elevation
- Pipeline & Pipeline Facilities
- Site Layouts / Grading Plans
- Piping Layouts
- Piping Isometrics
- Bill of Material (BOM) generation
- Schematics
- 2D to 3D conversion
- Electronic 2D files
- Physical 2D files (vellum, pdf, word)

Other BMT Related Services

- Integrity Assessment of Features Identified in Inspection
- Geotechnical and Hydrotechnical Hazard Assessment & Mitigation
- Forensic and Failure Investigation to Define Root Cause
- Materials and Welding Engineering Services
- Risk-based Integrity Management Support



T: +1 613 592 2830
E: energy@bmtglobal.com

HALIFAX • CALGARY • VANCOUVER • VICTORIA