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PERSONNEL:

89 employees in Manitoba

OTHER TETRA TECH OFFICES

Calgary - Edmonton – Mississauga - Montreal – Pickering - Regina - Saskatoon - Sudbury –
– Thunder Bay - Toronto – Vancouver – Victoria – multiple locations in the US - Los Angeles
(Corporate HQ) - Addis Ababa - Aimagy - Bangkok - Beijing – Belo Horizonte - Bogota –
Doha - Dubai - Incheon - Kabul - New Delhi - Manila - Mexico - Paris - Perth - Rio de Janeiro -
Rodenbach - Santiago - San Salvador - Sao Paulo - Swindon

Tetra Tech is a leading provider of consulting, engineering, program management, construction, environmental and technical services. We support government and commercial clients by providing innovative solutions to complex problems focused on water, the environment, energy, infrastructure, mining and natural resources. With a storied Canadian history that can be traced back to W.L. Wardrop & Associates in Winnipeg (1955), Tetra Tech now has 14,000 employees and 330 offices worldwide.

FIELDS OF SPECIALIZATION

ENGINEERING SERVICES TO INDUSTRY

Aerospace

- Environmental Assessments
- Process Engineering
- Research and Development
- Materials Handling

- Specialized Components and Mechanisms
- Machine Design
- Product Design
- Prototype Development
- Reliability and Maintainability Assessments
- Product and Quality Assurance
- Materials Engineering



- Ventilation and Dust Recovery Systems
- Plant Engineering
- Chemical Engineering
- Custom, Real-Time Software Development
- Control & Instrumentation Systems
- Building Environmental Systems
- Energy Conservation Studies and Retrofits
- Site Development
- Plant and Workshop Air Quality Control
- Forensic Engineering
- Cold Climate Engineering
- Computer Science

Computer Systems and Applications

- System Hardware Studies
- Set-up Configuration
- Local Area Networking Design & Implementation
- Wide Area Networking Design & Implementation
- Commissioning
- Documentation
- Troubleshooting
- Quality Assurance
- Operator Training and Support
- Computer Analysis
- Computer-Aided Design
- Computerized Scheduling
- Process Analysis
- Database Management

Computer Software

- Custom Software Development
- Software Customization
- System Software Studies
- Real-Time Control Software
- Systems Integration
- Software Testing, Commissioning and Quality Assurance
- Training
- Complete Systems
- Industrial Process Monitoring and Control Systems
- Industrial Plant Control Systems
- Custom Equipment Control Systems
- SCADA Systems

- Factory Automation Systems
- Data Acquisition System
- Nuclear Reactor Control and Safety Shutdown Systems
- Automatic Passenger Counting Systems for the Transit Industry
- Wireless/Radio Frequency Design and Implementation

Advanced Manufacturing Technology

- Existing Operation Audits
- Time and Motion Studies
- Efficiency Improvements
- Reliability and Maintainability Assessments
- Feasibility Studies
- Process Analysis
- Conceptual Design
- Custom Machine Design
- Product Engineering
- Plant Layout
- Process Development
- Robotics
- Automation Systems
- Custom Software
- Flexible Manufacturing Systems
- Prototype Development
- Detailed Design
- Construction Drawings
- Project and Construction Management
- Start-up Assistance
- Product and Quality Assurance
- Personnel Training

Transit Systems

- Automatic Passenger Counting Systems
- Route Ridership Reporting and Analysis
- System Performance Analysis
- Schedule Adherence
- Rail yard Switching and Control Systems
- Train Tacking Systems
- Traffic Studies

Transportation

- Airports
- Highways and Road Safety
- Pavement Design
- Pavement Management Services



- Ports and Harbours
- Roads and Highways
- Terminal and Service Centers
- Traffic Engineering and Control
- Transportation Planning
- Urban, Public Transit

Engineering Analysis (Computer Modelling)

- Finite Element and Difference Techniques
- Computer Simulations
- Design Verification and Optimization
- Structural Evaluation
- Thermal Analysis
- Thermal Hydraulics
- Noise Control
- Computer Fluid Dynamics
- Failure Diagnosis and Analysis
- Reliability Analysis
- Vibration Analysis
- Fatigue Analysis
- Seismic Analysis
- Pressure Vessel Qualifications
- Computer-Aided Design
- Computer-Aided Engineering

Energy

- Co-Generation
- Energy Process Integration (PINCH)
- Energy Conservation Studies and Retrofits
- Energy Audits
- Refrigeration Systems
- Heat Pump Technology
- Research and Development
- Ethanol Plants
- Fuels and Biomass
- Fuels and Biomass
- Electric Vehicles
- LNG Vehicles
- Solar Energy Systems
- Nuclear Systems
- Hybrid Electric/Fuel Systems
- District Heating and Co-Generation
- Electric Power Generation - Hydroelectric
- Electric Power Generation - Nuclear
- Electric Power Generation - Thermal
- Electric Power Systems Analysis

Energy Geo-Sciences

- Coal Exploration/Mining
- Oil and Gas Production/Storage/Distribution
- Solar Energy
- Wind Energy

Environmental

- Environment Audits, Site Assessments and Remediation
- Environmental Impact Assessment
- Approval, Licensing and Permitting, Litigation
- Air Pollution Control
- Outdoor Noise Monitoring and Control
- Computer-Based Pollutant Dispersion Modelling
- Workplace Environment Enhancements (Air Quality, Noise and Vibration)
- Reduction of Waste, Effluents and Air Emissions from Industrial Processes
- Water Quality Studies
- Treatability Studies
- Wastewater Treatment
- Solid and Hazardous Waste Management
- Public Information and Consultation
- Air Quality Management
- Groundwater Resources
- Industrial Hygiene and Safety
- Laboratory and Treatability Studies
- LEED (Leadership in Energy and Environmental Design)
- Record of Site Condition
- Risk Assessment
- Surface Water Resources
- Underground Storage Tank Management

Enviro-Geoscience

- Hydrogeology and Groundwater
- Waste Management/ Mitigation/Disposal

Project Management

- Planning and Design
- Scheduling
- Procurement and Expediting
- Construction Quality Control
- Construction Management



- Budget and Cost Control
- Design/Build Management
- Maintenance Management
- Start-up and Commissioning
- Personnel Training
- Risk Management
- Contract Administration
- Project Control and Risk Management
- Related Management Services
- Value Engineering

Mechanical Engineering

- Industrial Plants
- Process Piping
- HVAC
- Refrigeration
- Energy Conservation Retrofits
- Waste Heat Recovery
- Robotics
- Materials Handling
- Solar Energy
- Nuclear Systems
- Machine Design
- Product Design and Prototyping
- Specialized Components and mechanisms
- Test Facilities
- Materials Engineering
- Computer Aided Engineering

Chemical and Process Engineering

- Industrial Processes
- Bioprocessing
- Pulp and Paper
- Food Processing
- Fuels from Biomass
- Ethanol Plants
- Biotechnology
- Mineral Processing
- Chemical Waste
- Environmental Control and Abatement
- Pilot Plants
- Membrane Separation Technology
- Ultraviolet Disinfection
- Microwave Processing
- Desalination

Electrical Engineering

- Power Generation
- Power Transmissions and Distribution
- BCIN Certification

- Motors and Generators
- Substation and Switchyards
- Distribution
- Load and Demand Management
- Energy Conservation
- Standby Power Systems
- Building Automation
- Systems
- Illumination and Lighting
- Communications
- Registered Code Agency

Instrumentation Engineering

- Instrumentation and Control Systems for Plant Process and Equipment Control
- Direct Digital Control Systems
- Computer-Based Controls, Custom Real-Time Software
- Smart Field Instrumentation
- Primary and Final Elements
- Automation Systems
- Embedded Systems
- Data Acquisition Systems
- Distributed Control Systems
- SCADA Systems
- Programmable Logic Control Systems

Structural Engineering – Buildings

- Structural Design and Analysis
- Foundations
- Structures
- Buildings
- Tunnels
- Investigations
- Capacity Certifications
- Infrastructure Rehabilitation
- Water Retaining Structures
- Advanced Composite Materials
- Commercial
- Industrial
- Inspections and Investigations
- Institutional
- Parking Facilities
- Food and Beverage
- Restoration and Repairs

Structural – Other

- Bridges
- Bunkers and Silos
- Dams and Locks



- Nuclear
- Tanks and Shells
- Towers

Building Science

- Building Design for Arctic Conduit
- Diesel Power Generation
- Ice Road Design
- Permafrost Investigation
- Petroleum, Oil and Lubricant Storage and Handling
- Building Envelope Consultation
- Forensic Engineering
- Sick Building Investigation
- Air Quality
- Noise and Vibration
- Energy Audit
- Pollution and Toxin Monitoring
- Materials Evaluation
- Workplace Environment Improvement
- Expert Witness
- Registered Code Agency
- Technical Audit
Inspections/Investigations
- LEED (Leadership in Energy and Environmental Design)
- Preliminary and Final Design
- Repair/Restoration
- Roofing and Water Proofing

Pressure Vessels

- Design Modifications
- Process Piping Design

Bridge Engineering

- Overpasses
- River Crossings
- Pedestrian Bridges
- Feasibility Investigations
- Hydraulics
- Geotechnical
- Preliminary and Detailed Design
- Inspection and Contract Administration
- Inspection Reports
- Load Rating
- Strengthening

Nuclear Engineering

- Nuclear Systems
- Spent Fuel Handling and Storage

- Remote Maintenance and Repair
- Remote Handling and Tooling
- Radioactive Waste Management
- Reactor Control and safety Systems
- Process Systems
- Test Equipment
- Stress, Thermal and Thermal Hydraulic Analysis
- Reliability Analysis

Aerospace Engineering

- Studies
- Research and Development
- Systems Engineering
- Design and Supply
- Finite Element Analysis
- Vibration Analysis
- Computer-Aided Design
- Flight Hardware
- Ground Support Equipment
- Quality Assurance
- Integration and Test Facilities
- Space Robotics
- Satellite Test Rigs
- Speciality Mechanisms and Components
- Reliability and Maintainability Analysis
- Material Engineering
- Computational Fluid Dynamics
- Verification Planning
- Documentation

Municipal Engineering

- Wastewater Collection and Treatment
- Water Supply, Treatment and Distribution
- Storm Water Management
- Hydrogeology
- Street, Highways, Roads, Land Drainage
- New Town Sites
- Subdivision Servicing
- Solid Waste Management
- Urban Infrastructure Renewal
- Infrastructural Rehabilitation

Hydrogeological

- Groundwater Resource Planning and Management
- Aquifer Parameter Analyses, Geophysical Survey



- Remote Sensing Analyses
- Borehole Specifications
- Infiltration Galleries
- Dewatering Systems
- Hydrocarbon Contaminant Recovery
- Computer Modelling
- Pollution Plume/Leachate Study
- Groundwater Heating and Cooling
- Heat Pump Applications

Hydrotechnical

- Hydrologic Studies
- Computer Modelling
- Geomorphic Studies
- Sediment Transport Studies
- Flooding and Drainage
- Intakes and Outfalls
- River Crossings
- Riprap Design
- Scour Protection
- Stream Bed Dredging and Borrow

Planning

- Regional Development
- Strategic Investment
- Economic
- Community Plans
- Land Use
- Subdivisions
- Recreational
- Drainage Studies
- Site Plans
- Urban and Rural Design

Fisheries

- Maritime/Harbour Engineering
- Transshipment Equipment

Forensic

- Investigation and Settlement of Claims
- Structural Failure

Forestry

- Pulp/Paper Plants, Products

Geophysics

- Mining Geophysics

Geotechnical

- Aggregate Exploration and Evaluation
- Foundations

- Site Investigations
- Soil and Rock Mechanics
- Soil Stabilization

Industrial

- Manufacturing Facilities
- Plant Maintenance
- Food & Beverage

Marine & Coastal

- Erosion Protection
- Ports and Terminals
- Shore Erosion Processes and Assessments
- Waterfront Planning

Mineral Geoscience

- Mineral Exploration
- Mineral Reserves
- Mining Geology
- Rock Mechanics

Mining Engineering

- Blasting Control
- Iron and steel Works – Rolling/Casting/Forging/etc.
- Metallurgy Extractive Ferrous Metals
- Non-Ferrous Metals – Fabricating/Rolling/Forging/Casting Extruding/etc.
- Open Pit/Underground Mining

SERVICE OFFERED

- Feasibility Studies
- Research and Development
- Prototype Development
- Engineering Analysis
- Machine Design
- Product Development
- Quality Assurance
- Site Selection and Development
- Conceptual Design
- Process Design
- Predesign
- Definitive Cost Estimate
- Detailed Design
- Reliability and Maintainability Assessments
- Computer Simulations
- System Integration
- Plans and Specifications

- Tendering and Evaluation
- Procurement
- Expediting
- Show Drawing Review
- Layout Surveys
- Project and Construction Management
- Fast Tracking
- Planning
- Construction Inspection
- Contract Administration
- Start-up Commissioning
- Maintenance Management

Temporary Works

- Structural Shoring

TYPICAL PROJECTS

- Engineering Services for the Design and Construction of the Northern Alberta Bundle Project
- Replacement of the Ness Ave. at Sturgeon Creek Bridge, Winnipeg, Manitoba
- Detailed Design, Permitting of construction Administration Service for Lambton Hazardous Waste Landfill Expansion
- Soil Treatment Facility Design, Siting, Geotechnical Investigation and Roadway Engineering Services, South Bay, Manitoba
- Replacement of Existing Bridges on Highway No. 26 over Jackfish River, C.S. 26-01 km 6.81, Saskatchewan
- Engineering Services for the Condition Assessment of Qulliq Energy's Cambridge Bay Power Plant
- Owner's Advocate for the Winnipeg Convention Centre Expansion Project
- Disraeli Bridges Replacement

- Osborne Street Bridge Rehabilitation and Widening Project
- South Pointe Subdivision Phase 2 Preliminary Design
- Inuvik to Tuktoyaktuk Highway
- Detailed Design and Contract Administration Services for Ferry Road and Riverbend Combined Sewer Relief Works
- Owner's Advocate for Winnipeg Airport Authorities, James Richardson Armstrong International Airport
- Thunder Bay International Airport Runway 07-25 Extension/Gate Planning
- Provencher Paired Bridges Construction
- Mosaic Potash Esterhazy, K2 Heavy Media Building Refurbishment - Esterhazy, SK
- BCHydro John Hart Dam Geotechnical Services
- Construction Management Services: Rabbit Lake, Key Lake and McArthur River Operations
- Whole Foods Market Environmental Sustainability Master Service Agreement
- Prairie Creek Project Basic Engineering and Procurement
- Agrium Compaction Plant Dust Collection Project
- Port of Montreal Feasibility Study
- TransCanada Pipelines Ecological Assessments, SK, MB and ON