

Engineering Services

Professional engineers apply specialized knowledge to develop solutions for clients

Geotechnical Engineering

- Soil/Foundation Investigations and Design
- Dam and Impoundment Design and Instrumentation
- Arctic and Permafrost Engineering
- Arid and Tropical Terrain Engineering
- Deep Excavations
- Soil-Pipeline Interaction Analysis
- Slope Stability Analysis
- Shafts, Tunnels and Underground Openings
- Seepage Analysis and Control
- Dewatering Systems
- Numerical Analysis
- Landfill and Leach Pad Design
- Composite Liner Systems
- Tailings Dams and Waste Dumps
- Foundation Distress Investigations
- Ground Improvement
- Soft Ground Engineering
- Construction and Blast Vibration Monitoring
- Flood Control Structure and Shoring Design
- Grouting/Compaction Grouting Technology



Rock Mechanics and Engineering Geology

- Geologic Hazard Evaluations
- Subsidence Evaluations
- Fault Mapping and Hazard Analysis
- Slope Stability Analysis
- Borrow Source and Material Inventories
- Properties and Classification of Rocks and Rock Masses
- Rock Support and Anchors
- Tunnel and Shaft Investigations, Design and Instrumentation
- Pit Wall Stability
- Dam Site Investigations
- Pipeline Route Selection
- Avalanche Chute Investigations
- Blast Designs



Earthquake Engineering

- Risk and Hazard Assessments
- Liquefaction/Lateral Spread
- Dynamic Soil/Structure Interaction
- Site Response Analysis
- Seismic Design Criteria
- Ground Densification and Stabilization
- Earthquake Resistant Dam Design
- Fault Crossing Design

Water Resources

- Surface and Groundwater Engineering
- River Engineering
- Hydraulics and Hydrology
- Watershed Management
- Sedimentation/Scour Studies
- Hydrometric Surveys
- Water Supply Services
- Well Field Design
- Ice Processes
- Erosion Control
- Flood Studies/Control

Coastal and Offshore Engineering

- Offshore Site Investigations
- Shoreline Processes and Protection
- Dredging Systems and Hydraulic Fills
- Bulkhead and Cofferdam Design Parameters
- Stability of Underwater Cuts and Fills
- Arctic Coastal Processes
- Offshore Pipelines
- Foundation Designs for Drilling Platforms and Artificial Islands
- Breakwater Design
- Ports and Harbors



Materials Engineering

- Construction Materials Consulting
- Portland Cement Concrete Technology
- Shotcrete Technology
- Asphalt Concrete Technology
- Pavement Design Evaluation and Rehabilitation
- Research and Development of Materials and Products
- Building Science Technologies
- Failure Investigations and Rehabilitation of Structures
- Insurance Claims Investigations
- Non-Destructive Testing and Evaluation
- Alkali-Aggregate Reactions
- Material Resources

Construction Support Services

- Quality Assurance/Quality Control Programs
- Soil, Concrete and Asphalt Placement Monitoring
- Materials Testing
- Pile Inspection and Construction Monitoring
- Blast and Construction Vibration Monitoring
- Construction Specification Compliance
- Speciality Materials Testing
- Mass Grading Control



Field Services

- Supervision of Drilling, Coring and In-situ Testing
- Instrumentation of Earthworks, Rock and Permafrost
- Logistics Planning and Execution of Field Programs: Arctic, Offshore, Tropical and Arid Terrains
- Load Testing
- Geophysical Services
- Construction Monitoring

For a list of office locations, company contacts and other services refer to:
www.amec.com