



BRIDGING CONNECTIONS THAT LAST.

BUILT ON EXPERTISE.
DRIVEN BY PASSION.

Helping owners build, preserve,
renew, and replace bridges.

MACLEOD AND 162 AVENUE
DIVERGING DIAMOND, CALGARY, AB

HWY 11A BRIDGE AT
ROCKY MTN. HOUSE, AB

CALGARY ZOO SUSPENSION BRIDGE, CALGARY, AB


Integrated Expertise. Locally Delivered.

Building and Maintaining Critical Infrastructure

Bridges are more than structures, they connect people, communities, and economies.

As infrastructure ages and communities evolve, owners need trusted partners who can deliver new bridge infrastructure, preserve existing assets, and make informed investment decisions that create lasting value.

Integrated Expertise, Locally Delivered

ISL provides comprehensive bridge services across Western Canada, supporting municipalities, provinces, and private industry.

With local insight and in-house multidisciplinary expertise, we deliver integrated bridge solutions that support every stage of the bridge lifecycle.



WALTERDALE BRIDGE REPLACEMENT, EDMONTON, AB

BRIDGE EXPERTISE



Concept and Planning



Preliminary Engineering and Detailed Design



Tendering



Construction Management and Inspection



Assessment and Asset Management



Rehabilitation Design, Renewal and Replacements





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MACLEOD TRAIL AND 162 AVENUE INTERCHANGE

Project Location: Calgary, AB

- WINNER OF THE 2018 MINISTER'S AWARDS FOR TRANSPORTATION INNOVATION
- WINNER OF THE 2018 CEA SHOWCASE AWARD OF EXCELLENCE
- WINNER OF THE 2018 CEA SHOWCASE AWARD OF MERIT - PROJECT MANAGEMENT

Project Overview: The Macleod Trail and 162 Avenue Interchange transformed one of Calgary's busiest intersections into Canada's first Diverging Diamonds Interchange (DDI). The project improved mobility, safety, and capacity for motorists, transit users, pedestrians, and cyclists while supporting continued access to surrounding businesses and communities.



ISL's Role: As Lead Consultant, ISL provided functional planning, detailed design, public engagement, utility coordination, construction staging, and contract administration services. ISL guided the project from concept selection through construction, helping deliver an innovative interchange under an accelerated schedule.

What We Delivered:

- Planning and design for a major interchange improvement
- New bridge, roadway, pathway, and transit connections
- Stakeholder and community engagement
- Coordination with utilities and project partners
- Traffic management and construction planning
- Support through construction

Project Impact:

- Delivered Canada's first Diverging Diamond Interchange
- Improved safety and traffic flow for over 100,000 daily users
- Better connections for pedestrians, cyclists, transit users, and motorists
- Reduced congestion along a major transportation corridor
- Supported future growth and development

Connection in Action: This project improved connections across Calgary by creating a safer, more efficient transportation corridor that supports how people move today and into the future.





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WALTERDALE BRIDGE REPLACEMENT

Project Location: Edmonton, AB

 **ISL WAS PRIME ON THIS PROJECT.**
THE BRIDGE DESIGN WAS A JOINT
VENTURE BETWEEN DIALOG, COWI,
AND ISL.

Project Overview: The City of Edmonton replaced the aging Walterdale Bridge with an iconic through-arch structure that enhances a key commuter corridor, improves active transportation connections, and complements the surrounding river valley environment.

ISL's Role: As Prime Consultant, ISL led a multidisciplinary team that included DIALOG, COWI, and Al-Terra Engineering. ISL provided project management, bridge foundation, abutment design and retaining walls, roadway design coordination, stakeholder engagement, construction services, and contract administration. DIALOG and COWI designed the signature arch superstructure, while Al-Terra Engineering supported roadway design.

What We Delivered:

- Leadership and coordination for a complex bridge replacement project
- Bridge and roadway design to support a major transportation corridor
- Engagement with communities, stakeholders, and Indigenous groups
- Environmental and cultural assessments to inform project decisions
- Coordination with project partners and utilities
- Construction support and oversight throughout delivery

Project Impact:

- Delivered a new landmark bridge for Edmonton
- Improved traffic flow along a key downtown route
- Enhanced connections for pedestrians and active transportation users
- Reduced impacts to the North Saskatchewan River
- Balanced community, environmental, and cultural priorities



Connection in Action: This project created a lasting community landmark while improving connections between people, places, and destinations across Edmonton.



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HWY 1 BRADNER BRIDGE GRADE SEPARATION

Project Location: Highway 1 over Bradner Road, BC

Project Overview: The HWY 1 Bradner Bridge Grade Separation project replaced two aging overpasses carrying Highway 1 over Bradner Road as part of the Fraser Valley 1 Corridor Improvement Program. ISL delivered the structural design for the bridge replacements and supporting infrastructure, improving safety, accommodating future highway widening, and maintaining traffic on one of British Columbia's busiest transportation corridors throughout construction.

ISL's Role: ISL served as the structural design consultant, providing engineering services from concept through construction. Our team designed the replacement bridges, retaining walls, Nathan Creek Culvert, overhead sign structure foundations, and custom barriers, while developing staged construction and traffic management solutions and supporting construction through timely engineering review and coordination.

What We Delivered:

- Structural design for two replacement Highway 1 overpasses
- Design of retaining walls, Nathan Creek Culvert, overhead sign structure foundations, and custom barriers
- Evaluation of three bridge replacement options to optimize cost, constructability, and long-term performance
- Seismic design and geotechnical coordination for challenging soil conditions
- Staged construction planning and traffic management to maintain continuous Highway 1 operations



Project Impact:

- Improved safety and performance along a major freight and commuter corridor
- Maintained continuous traffic flow during bridge replacement
- Designed infrastructure to accommodate future Highway 1 widening
- Reduced project costs through innovative bridge and retaining wall design
- Enhanced cyclist safety with custom barriers and flare screens



Connection in Action: This project strengthened a critical transportation corridor by improving safety, maintaining traffic during construction, and supporting future growth along Highway 1.



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BC MOTT ENHANCED BRIDGE DECK INSPECTIONS

Project Location: Across British Columbia

Project Overview: The BC MoTT Enhanced Bridge Deck Inspections program provided comprehensive condition assessments for 20 bridges across British Columbia, giving the Ministry of Transportation and Transit the data needed to prioritize maintenance, rehabilitation, and long-term asset renewal. Using advanced drone technology alongside detailed field investigations and specialized materials testing, ISL delivered accurate, spatially referenced bridge condition information to support informed infrastructure investment decisions.

ISL's Role: ISL led the multi-year inspection program as prime consultant, coordinating field inspections, traffic control, materials testing, and reporting across geographically dispersed sites throughout British Columbia. Our team performed structural inspections, drone surveys, service life modelling, and life cycle cost analyses while managing project scope, schedule, quality, and sub-consultant coordination as the Ministry's single point of contact.



What We Delivered:

- Comprehensive condition assessments for 20 bridges across British Columbia
- Drone-based inspections with high-resolution imagery integrated into CAD drawings and 3D point cloud models
- Concrete testing, corrosion assessments, and delamination surveys
- Service life modelling and life cycle cost analyses to support asset renewal planning
- Program coordination, traffic control, materials testing, and reporting across multiple regions

Project Impact:

- Provided reliable condition data to support province-wide bridge renewal planning
- Improved inspection safety and quality through innovative drone technology
- Enabled precise, spatially referenced defect mapping for future maintenance planning
- Delivered consistent inspections across bridges ranging from 12 m to 380 m in length
- Earned repeat engagement from MoTT for a second consecutive multi-year program

Connection in Action: This project strengthened British Columbia's transportation network by providing the condition data needed to guide bridge maintenance, renewal, and long-term infrastructure investment.





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MILL CREEK PEDESTRIAN BRIDGES REHABILITATION AND REPLACEMENT

Project Location: Edmonton, AB

 **WINNER OF THE 2020 CEA
SHOWCASE AWARD OF MERIT FOR
TRANSPORTATION STRUCTURES**

 **WINNER OF THE 2021 CCE
AWARD OF EXCELLENCE FOR
TRANSPORTATION STRUCTURES**

 **INTERNATIONAL RECOGNITION. SHORTLISTED TOP 4 - NEW LIFE AWARD,
FOOTBRIDGE AWARDS 2022, MADRID.**

Project Overview: Mill Creek Ravine is one of Edmonton's most valued urban parks and active transportation corridors. The City sought to extend the service life of existing pedestrian bridges where practical, while replacing structures that offered greater long-term value through replacement. Through a detailed evaluation process, ISL developed a balanced rehabilitation and replacement strategy that preserved the character of the ravine while improving safety and reliability.

ISL's Role: ISL served as Prime Consultant and led a multidisciplinary team that included geotechnical, environmental, hydrotechnical, heritage, and public engagement specialists. ISL completed assessment, load rating, preliminary and detailed design, stakeholder engagement, permitting, construction services, and contract administration for the bridge rehabilitation and replacement program.



What We Delivered:

- Assessment of five pedestrian bridges to support future improvements
- Rehabilitation of historic timber bridges and replacement of aging structures
- Design solutions that balanced safety, functionality, and heritage value
- Environmental, heritage, and technical studies to support project planning
- Community and stakeholder engagement throughout the project
- Construction support and project oversight

Project Impact:

- Extended the life of key bridge assets by up to 25 years
- Preserved the historic character of Mill Creek Ravine
- Improved safety and reliability for trail users
- Maximized long-term value through strategic rehabilitation and replacement decisions
- Minimized disruptions during construction

Connection in Action: This project preserved important community connections by extending the life of valued infrastructure while enhancing safety, reliability, and the experience of park and trail users.





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CALGARY ZOO PEDESTRIAN BRIDGE

Project Location: Calgary, AB

Project Overview: Following significant damage during the 2013 floods, the Calgary Zoo sought to replace its iconic pedestrian bridge with a new landmark structure that would restore connectivity, enhance accessibility, and serve as a destination in its own right. The resulting 60-metre covered timber suspension bridge reconnects key attractions while celebrating the character and history of the original crossing.

ISL's Role: ISL served as the Prime Consultant and Bridge Designer, leading concept development, option evaluation, preliminary and detailed design, structural dynamics analysis, and construction support services. ISL worked closely with the Calgary Zoo to balance functionality, visitor experience, flood resilience, and architectural appeal.

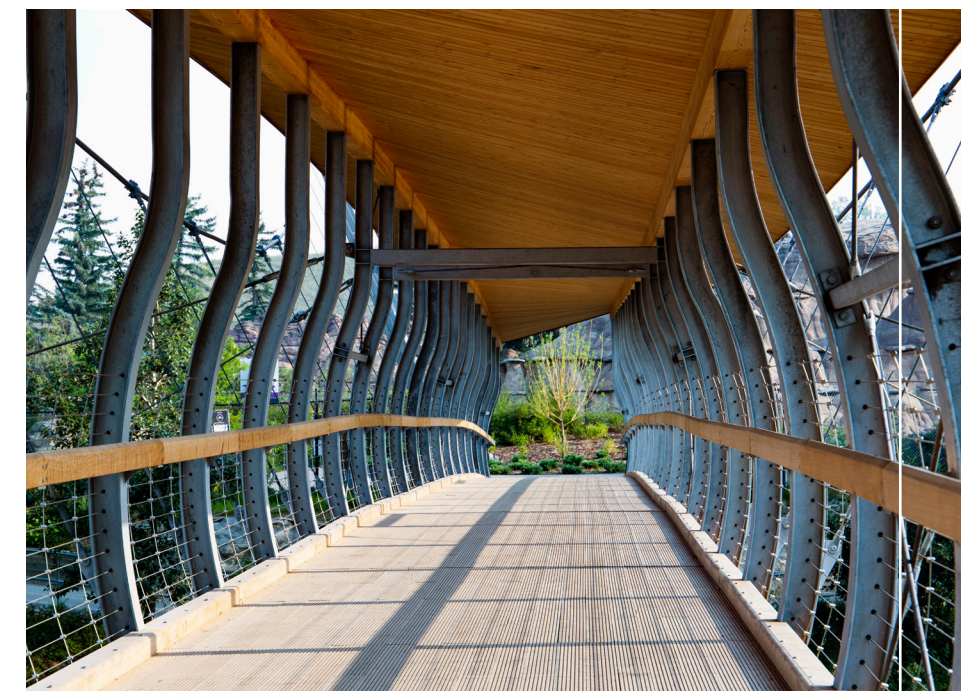


What We Delivered:

- Design of a new pedestrian bridge to restore an important community connection
- Evaluation of bridge options to identify the best long-term solution
- Accessible design to improve the visitor experience
- Flood-resilient design to support long-term performance
- Innovative construction solutions for a constrained site
- Construction support throughout project delivery

Project Impact:

- Restored a key pedestrian connection within the Calgary Zoo
- Created a new landmark and visitor destination
- Improved accessibility and the overall visitor experience
- Increased resilience to future flood events
- Preserved the character of the original bridge while meeting modern standards



Connection in Action: This project reconnected key destinations within the Calgary Zoo while creating a memorable community landmark that will serve visitors for generations to come.



Delivering Value Across the Bridge Lifecycle



Managing Aging Infrastructure

Bridge owners face increasing pressure to maintain aging assets while maximizing value and managing risk.



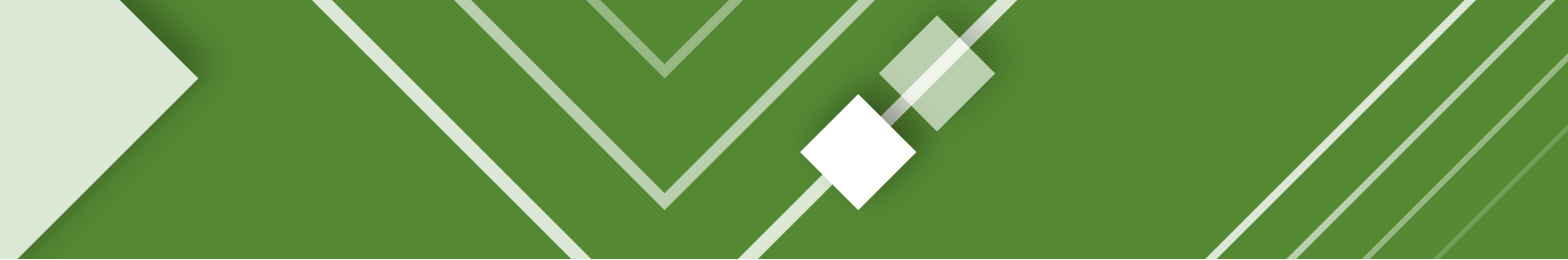
Balancing Renewal and Replacement

Strategic decisions help determine when rehabilitation can extend service life and when replacement delivers greater long-term value.



Delivering Resilient Infrastructure

New bridge investments must support growing communities, evolving transportation needs, and future generations.



TRANSPORTATION	MUNICIPAL AND COMMUNITY	BRIDGES	BUILDINGS AND STRUCTURES	LAND AND ENVIRONMENT
- Planning / Traffic - Design and Construction - Transit (BRT, LRT) - Signals / Lighting	- Municipal - Water (Process and Mechanical) - Community Development	- Concept and Planning - Preliminary Engineering and Detailed Design - Tendering - Construction Management and Inspection	- Buildings - Structures (Water) - Enhanced Project Delivery	- Heritage Services - Environment - Hydrogeology - Landscape Architecture and Urban Design - Community Planning and Engagement



KINSOL TRESTLE BRIDGE REHABILITATION, COWICHAN VALLEY, BC



SEA TO SKY SUSPENSION BRIDGE, SQUAMISH, BC



HWY 11A OVER N. SASK. RIVER REPLACEMENT, ROCKY MOUNTAIN HOUSE, AB

Beyond Bridges

Bridge infrastructure is more than the structures themselves. Delivering successful projects requires expertise in planning, design, construction, assessment, rehabilitation, and asset management.

Through integrated, multidisciplinary collaboration, we help clients build, preserve, renew, and replace bridge assets that keep communities connected and economies moving.

Let's Keep Communities Connected

From concept planning to replacement, ISL partners with bridge owners to build, preserve, renew, and replace critical infrastructure. Through integrated expertise and lifecycle-focused solutions, we help clients manage risk, maximize asset value, and keep communities connected for generations.



SPRING CREEK
PEDESTRIAN BRIDGE,
CANMORE, AB

ISL WAS PRIME ON THIS PROJECT. THE BRIDGE
DESIGN WAS A JOINT VENTURE BETWEEN
DIALOG, COWI, AND ISL.



WALTERDALE BRIDGE REPLACEMENT,
EDMONTON, AB

IF THESE IDEAS RESONATE, WE WELCOME THE CONVERSATION.

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