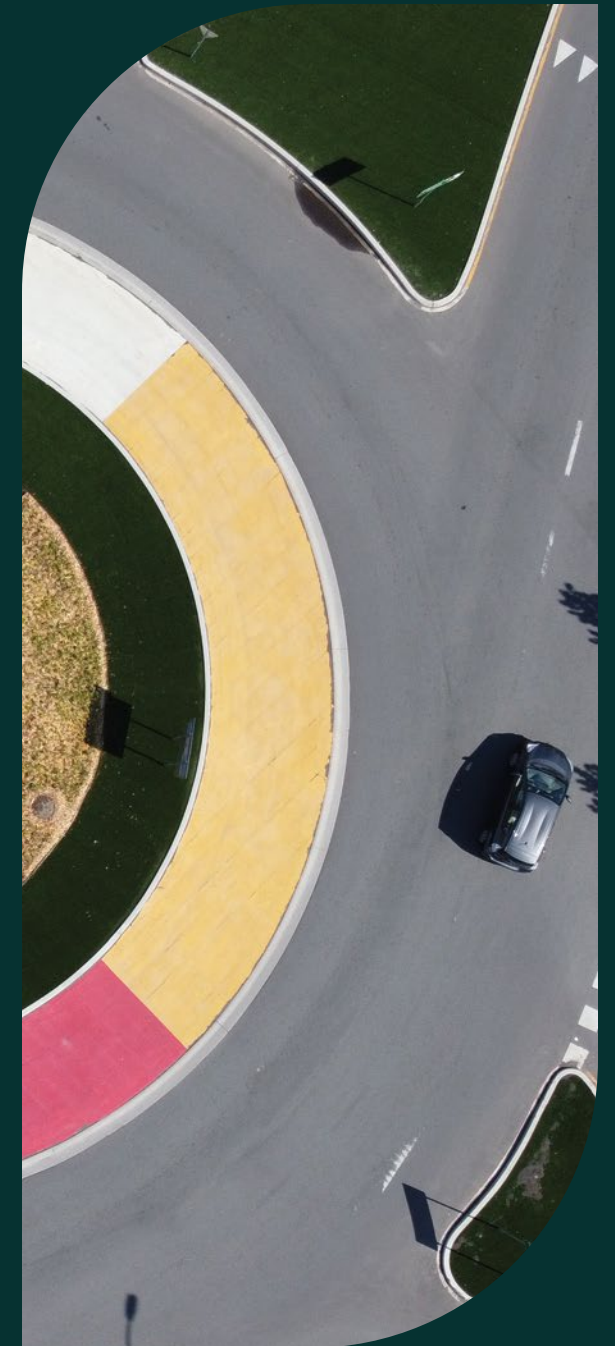
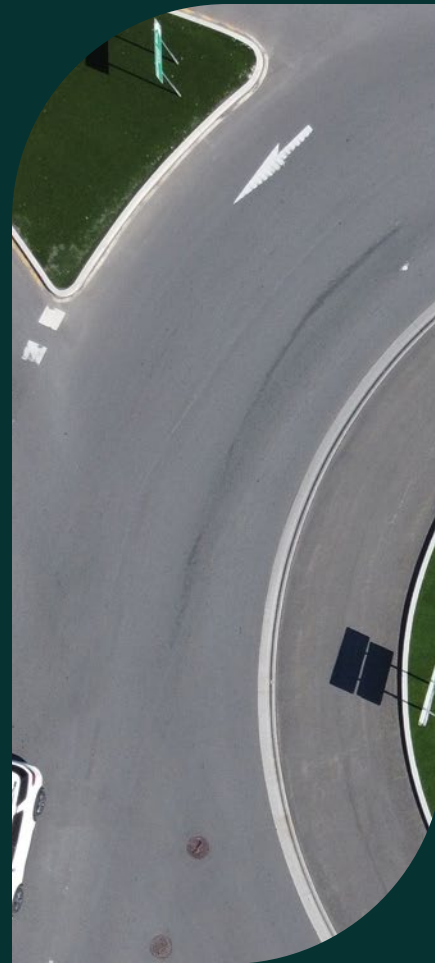




Engineering
for people

INTEGRATED SERVICES FOR
BUILDING
SUSTAINABLE
COMMUNITIES
IN ONTARIO





A LEADER IN CONSULTING ENGINEERING



EMPLOYEE-OWNED AND CLIENT FOCUSED

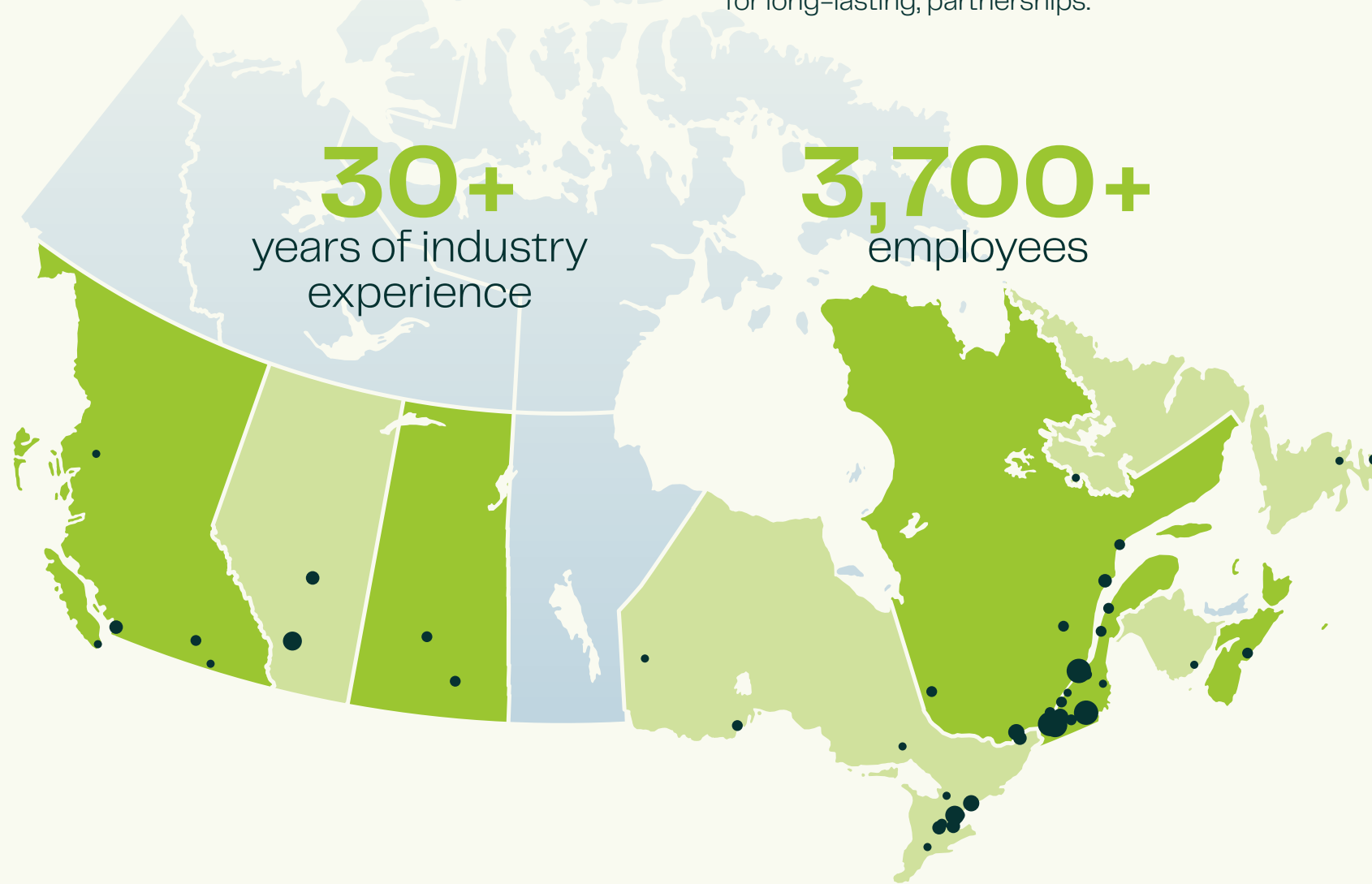
With more than 30 years of industry experience, CIMA+ is the consulting engineering firm of choice across Canada. Our interdisciplinary team works hand-in-hand with clients to deliver exceptional results on projects large and small.

We are proud to be employee-owned and rated one of Canada's best employers. This unique business model supports our strong culture of excellence, entrepreneurial spirit, and accountability. Clients love working with our talented roster of professionals and we take pride in delivering successful projects that set the stage for long-lasting, partnerships.

45+
offices across
Canada

30+
years of industry
experience

3,700+
employees



“ We wish to make a difference with our employees, clients, and business partners to shape an inclusive, fair and carbon neutral world. We must work towards this ideal that is not contrary but rather complementary to the sustained growth we are aiming to achieve. ”

Denis Thivierge, P. Eng.
President and Chief Executive Officer

Cover page Edward/Redwood Roundabout
Photo: City of Thunder Bay



CANADA 2023



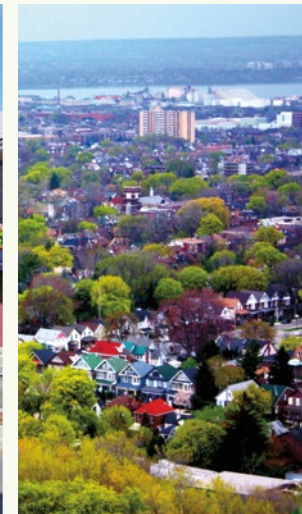
CIMA+ OFFERS AN INTEGRATED APPROACH TO BUILD SUSTAINABLE COMMUNITIES

Whether your project's scale is small, medium or large, CIMA+ is able to support your efforts, from the conceptual planning stage to the completion of the project. To create great communities and vibrant public spaces, our professionals promote energy efficiency, sustainable development and value engineering.

These measures are integrated as needed from the beginning of project development to commissioning and project closure, with the highest consideration given to project scope, cost constraints and schedule. We strive to offer our clients state-of-the-art solutions that result in significant cost savings.

Municipalities often require a wide range of professional services. With CIMA+, you have access to a one-stop shop in the provision of engineering services in urban and rural

planning and development review, municipal infrastructure, transportation, energy and buildings, as well as environmental, geomatic and landscape services. For our clients, this multidisciplinary approach means greater efficiency and reduced costs, since our teams can more easily share information about clients' needs, standards and processes.





OUR EXPERTISE IN PLANNING AND LANDSCAPE ARCHITECTURE

URBAN AND REGIONAL PLANNING

CIMA+'s Planning team has undertaken numerous projects in the National Capital Region, as well as for small to medium sized municipalities across Ontario.

We assist municipal clients in their strategic land development decisions by offering innovative and sustainable solutions in land use planning, urban design and landscape architecture, master planning and accessible design.

We have worked with municipalities in Ontario to update their Official Plans according to the Provincial Policy Statement (PPS). Changes to the updated PPS include,

for example, the promotion of green infrastructure, a sustainable land use vision, and recognizing the impacts of climate change. CIMA+'s Planning team also has extensive experience working on zoning amendments, support studies, subdivisions and site plan designs, and approval applications for municipalities of all sizes. Furthermore, our team has completed accessibility audits for over 300 municipal facilities across Ottawa and provided professional testimony at the Ontario Municipal Board in defense of municipal plans.



LANDSCAPE ARCHITECTURE

CIMA+ is experienced in developing sustainable landscape master planning and management, including multidisciplinary park design and construction projects.

Our team provides landscape services which are integrated into diverse municipal projects. Such services may include engineering support for parks, road reconstruction, streetscape design, stormwater management (SWM) pond planting and slope stabilization, as well as various building projects. Our landscape design services are personalized according to your needs and may include the following components:

- Playgrounds
- Splash pads
- Sport facilities
- Multi-use trails
- Shade structures
- Site furniture
- Planting

Tree inventory and assessment services are completed by an ISA Certified Arborist and can include the following:

- Tree preservation plans
- Environmental assessment
- Tree appraisal
- Risk assessment
- Butternut Health Assessment
- Construction impact assessment and management recommendations



1 CIMA+ recently contributed to the development of a strategic plan for three blocks of federal office buildings along Ottawa's Sparks Street Mall, fronting Parliament Hill.

2 CIMA+ provided strategic planning direction for a major mixed-use downtown development site in Kingston. Design meetings (or "charrettes") focused on sustainable development while respecting the city's unique historical character.

3 CIMA+ provided the subdivision concept plan development and planning approvals for a context-sensitive residential development in the City of Clarence Rockland.

4 The master plan and 3D renderings of Victoria Square, a park located in Colborne, ON, which serves as the central gathering space for many events in the community.



OUR EXPERTISE IN MUNICIPAL INFRASTRUCTURE

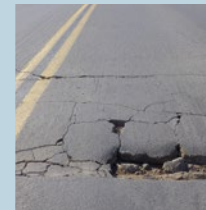
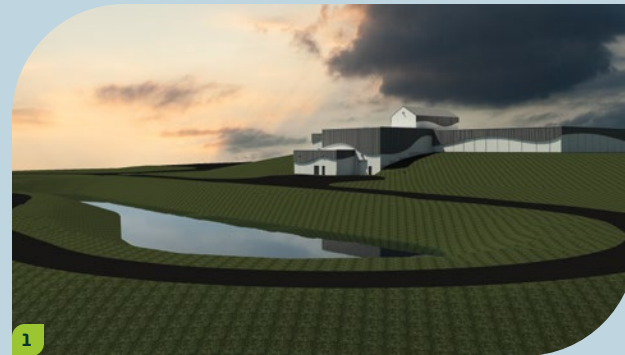
WATER AND WASTEWATER SERVICES

Our Water and Wastewater team provides innovative and cost-effective water and wastewater solutions that serve a wide range of unique municipal needs.

Our clients choose CIMA+ because of our reputation and return to us for peace of mind. We have the ability and expertise to deliver a complete spectrum of services, from environmental assessment and funding acquisition through to project closeout and commissioning. Whether you require system optimization, replacement of worn distribution or collection infrastructure, upgrades to an existing facility or ground-up construction of an entirely new wastewater treatment plant (WWTP), well house, reservoir or water tower, our seasoned professional staff will guide your project from milestone to milestone, ensuring quality every step of the way.

Our water and wastewater services include:

- Water supply, storage and distribution
- Wastewater collection, pumping and treatment
- Capacity studies and condition assessments
- 3D building information modelling (BIM)
- Process instrumentation and control systems
- Construction administration and inspection



1 CIMA+ provided engineering services for the detailed design, construction administration, site inspection and commissioning services for the new 40-million litre Victoria Reservoir in the Town of Caledon to support the region's rapid residential and commercial growth.

LINEAR INFRASTRUCTURE

CIMA+'s linear infrastructure team delivers engineering design services for capital works projects to municipalities throughout Ontario.

Whether your needs are driven by growth or the need to repair or replace aging infrastructure, CIMA+ will supervise the planning, design, rehabilitation and implementation of all your core linear municipal infrastructure assets. This includes sanitary sewers, watermains, storm sewers, and pavements, as well as associated assets such as sidewalks, cycling or multi-use paths, and street lighting.

CIMA+ also offers a wide range of support services to our municipal clients to assist with management of their long-term infrastructure needs, and work regularly with various municipal departments to prepare multi-year replacement and rehabilitation programs.

Our experienced team of engineers can suggest work plans that meet budgets and schedules while respecting the environments in which we work. Sustainable development concerns are always reflected in the way we approach the design and rehabilitation of urban infrastructure assets and in our innovative public communication techniques and technologies.

Our team offers the following additional services:

- Engineering survey services as a component of municipal projects as well as completion of independent engineering surveys and associated base plan drafting as required
- 3D scanning for sites with large amounts of installed equipment (electrical substation, pumping station)
- Coordinating with Ontario Land Surveyor (OLS)

2 To provide the most environmentally sound and cost-effective solution to manage the Town of Petrolia's wastewater and leachate, CIMA+ led a Schedule C Class Environmental Assessment (EA), a facility condition assessment, and the preliminary and detailed design for the upgrade and expansion of the WWTP.



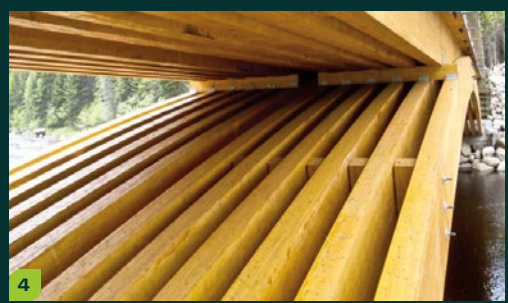
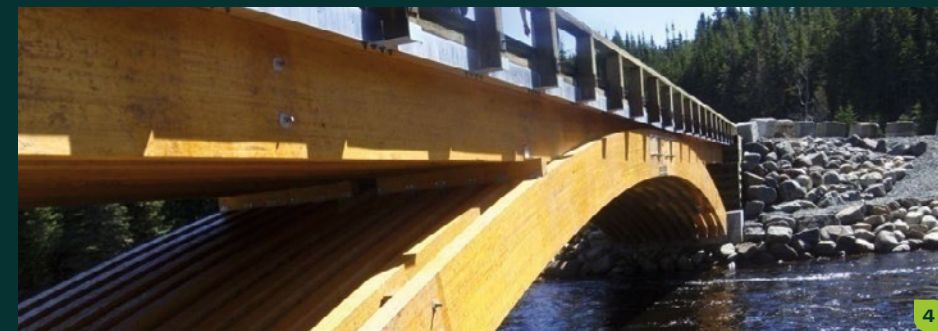
3 Our team has provided robotic total station and GPS surveying for clients on over 250 construction projects in our various sectors of expertise. Surveys are completed using a robotic total station and/or GNSS GPS equipment to capture surface feature details and cross-sections.



OUR EXPERTISE IN TRANSPORTATION

CIMA+ provides transportation and traffic expertise geared towards small and medium municipalities, including safety, engineering and planning services. We currently act as the go-to engineering firm for specialized services for small municipalities that are not able to sustain a full-time specialist.

Several of CIMA+'s transportation team members have come from municipal engineering backgrounds, and therefore have an excellent understanding of urban and rural transportation planning and design needs. This allows us to provide expert services to help you solve local problems. These services include road safety reviews, traffic operational reviews, guide rails and roadside safety, railway crossing reviews, traffic signal timing and design, roundabout planning and design, traffic signage and pavement markings, bicycle facility design, mobility master plans, traffic calming, transportation modelling, traffic impact studies and peer reviews, red light camera reviews, sustainable transportation policy development and Class EA studies for transportation facilities. In addition, our Transportation team has extensive experience working with MTO to update their Ontario Traffic Manual, and supporting our municipal clients as expert witnesses during Ontario Municipal Board hearings.



1 A typical bustling urban intersection reviewed through the ISRSR process
2 A typical rural road being examined for potential roadside safety upgrades
3 A typical multitrack at-grade crossing with pedestrian facilities

4 Award winning timber arch bridge made of local eastern spruce allowing for a 44% reduction in greenhouse gases (GHG) compared to a conventional structure





OUR EXPERTISE IN BUILDINGS

INTEGRATING ENERGY EFFICIENCY AND SUSTAINABILITY FOR GREENER BUILDINGS

LEED® is a standard of excellence recognized worldwide in the sustainable design and construction field. Obtaining a LEED certification has many benefits for owners and occupants, including greater water and energy performance, better acoustics, increased comfort, etc. Many of our public and private sector clients require their projects to be LEED certified.

CIMA+'s LEED Accredited Professionals offer support throughout all phases of a project, starting with the preliminary design phase to help stakeholders gain a new understanding of the different components of green buildings. During design meetings (or "charrettes"), we propose alternative and sustainable solutions

that respect the specified budget and schedule. Design specifications are then developed so that contractors properly apply the standards during construction. Once the project is completed, our team can train on-site managers and assemble the certification file.

Examples of CIMA+ projects	Savings (%)	Savings (kWh)
Update to an existing office building and addition	52%	618,815
Addition to a convention centre	30%	609,000
Building survey for a sports centre	77%	508,300
New fire station with geothermal energy	61%	543,503



Over the past 50 years, CIMA+ has earned an enviable reputation in the construction of different types of buildings with varying degrees of complexity. We have been involved in many municipal projects such as recreation centres, community centres, police service buildings, fire stations, multipurpose complexes, as well as water and sanitary pumping stations, including standby power sources.

Our experience extends to the provision of mechanical, electrical and structural engineering, communications systems and IT services for any building project. We offer a range of services from design to implementation, including functional and technical programs, the preparation of plans and specifications and consulting related to various contracting approaches.



- 1 Huron Child care centre in Ottawa, ON | Certified LEED Silver
- 2 Goulbourn Multi-Use Recreation Complex in Ottawa, ON
- 3 Sports and community centre in NDG, QC | LEED Gold certification in progress
- 4 Recreation Centre in St-Isidore, ON
- 5 Plateau des Grives Commercial development in Gatineau, QC | Certified LEED® Core and Shell
- 6 Fire station #6 in Gatineau, QC | Aiming for LEED-NC Gold
- 7 RCMP Cornwall Regional Task Force Building – Certified LEED Silver
- 8 Fire Hall in Maberly, ON





OUR EXPERTISE IN ENVIRONMENTAL SERVICES

Having managed hundreds of projects in Canada and abroad, CIMA+ provides a large variety of environmental services.

Our multidisciplinary team of experts – GIS specialists, geographers, biologists, arborists, fisheries experts, hydrogeologists, geologists, contaminated sites specialists and environmental technicians – maintains the relevant registrations, certifications and training to uphold the highest standards of excellence which include: the Ontario Stream

CIMA+'s Environmental team:

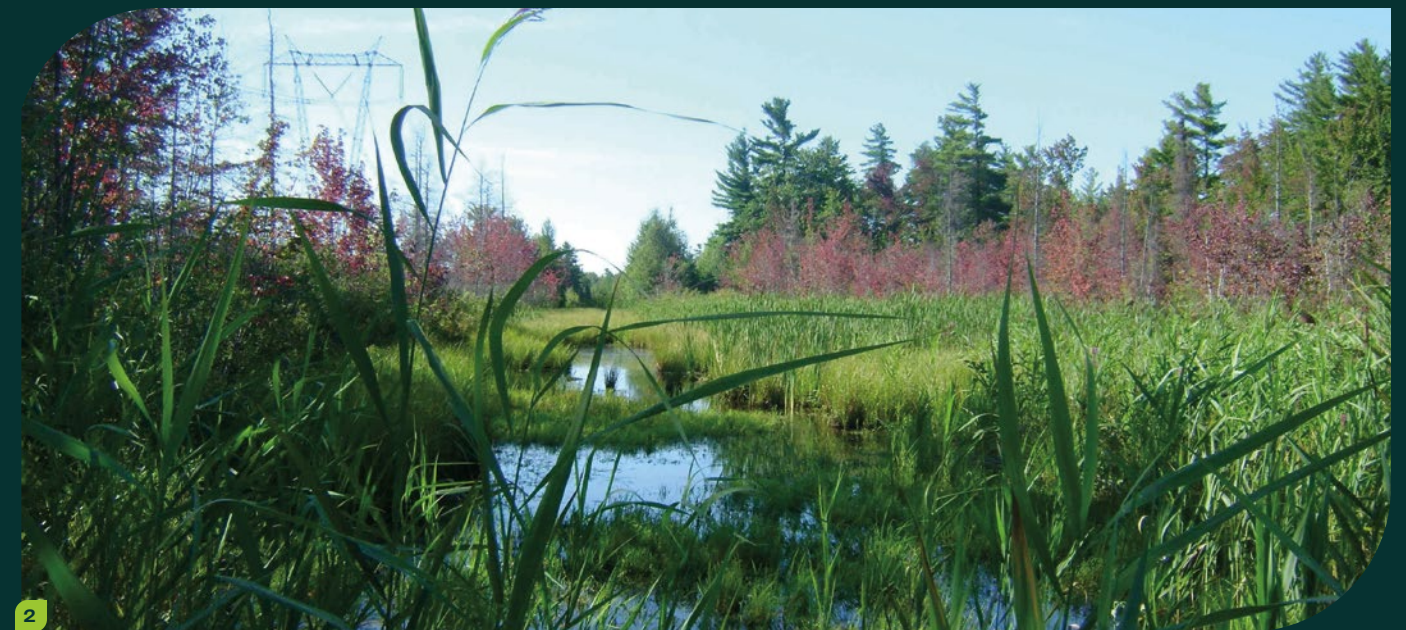
- Conducts Environmental Assessments (EA) to assess the environmental impacts of a proposed project and provide mitigation measures
- Monitors worksites to ensure environmental specifications are met
- Offers ecological and natural resource environmental services, including assessments, investigations and scoped and/or detailed surveys of habitat, flora, fauna and Species at Risk (SAR)
- Conducts Phase I, II and III Environmental Site Assessments (ESAs), develops remedial action plans, provides environmental remediation services, and develops strategies to manage risks and brownfields sites

Assessment Protocol (OSAP), Ontario Wetland Evaluation System (OWES), Certified Butternut Health Assessors (BHA), MTO/DFO/OMNR Fisheries Protocol training, Certified Environmental Professionals (EP) and Qualified Professionals (QP) under Reg. 153/04.

- Ensures environmental compliance, and conducts environmental audits
- Obtains the necessary permits from the applicable authorities (DFO, MECP, MNRF, etc.)
- Provides various components of environmental planning, such as conducting research and historical searches



1



2

1 CIMA+'s Field Technicians perform detailed habitat assessments, focusing on Species at Risk

2 Site location of a detailed wetland survey performed by CIMA+ for a development project



OUR EXPERTISE IN ENERGY

CIMA+ provides expertise in energy engineering, assisting public and private clients with all aspects of a project, from the layout design to the implementation of renewable projects of all sizes, including biomass, hydro, photovoltaic and wind. To achieve a greater level of overall project integration, our services also include 3D scanning, substations for various applications and voltages, distribution poles structures and gantries.

To ensure that the design is cost effective and will operate reliably and safely, our specialists can provide power system studies on, amongst other things, short circuit, arc-flash, protection coordination, power-flow, flicker, harmonics, grounding, power factors, harmonics, transient stability, reactive and shunt compensation, and lightning. We offer expertise in automation (RTU/SCADA), protection and control, as well as communications systems which facilitate operations and data collection. Having worked on numerous projects utilizing the Ontario Feed-in Tariff (FIT) program, our team offers our clients value engineering project delivery solutions.

Finally, we can assist in energy audits, conservation strategies, factory and site testing, the preparation of tests, plans and schedules, operations and maintenance, validation testing, power up and start up procedures as well as assistance to ensure proper operation and prevent premature equipment failures. We also prepare tendering documents and specifications for various types of projects and programs, to meet client requirements.



1 100kW rooftop photovoltaic on the St-Isidore Recreation Centre in Nation Municipality, ON

2 Wind farm in the Gaspésie region, QCe

3 Transmission line in Drumheller, AB



OUR EXPERTISE IN PROJECT MANAGEMENT

At CIMA+ we take the guess work out of Project Management. Whether for requirements definition, needs analysis, solution optimization or third party validation, our multidisciplinary experts remain available to address your concerns.

Our proprietary project management process is fully aligned with the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK). Given that our corporate structure is founded in engineering, we leverage state of the art tools such as MS Project, Primavera P6 and @RISK software to augment our effectiveness and ensure all deliverables are of the highest quality and affordably priced in the following areas:

- Procurement services
- Project estimation services
- Cost and quality control
- Schedule tracking
- Scope monitoring and control
- Project management ethics
- Project recovery services

We have established Project Management Offices (PMOs) and the collateral tools/techniques required to make them succeed. Variance in PMO implementation can be significant based on complexity; as such, the breadth of our services can include the optimization of administrative and operational support for projects, and the tools used to monitor them. Over the years CIMA+ has collaborated with several clients to establish:

- Project management standards
- Project management consulting and mentoring
- Project management training across organizations
- The provision of integrated project support services and project personnel
- Portfolio management approaches including capability and capacity planning and at risk management and analysis



1 Retrofit of a 30,000 sq.ft. multifunctional Conference Centre
2 Multiple mandates for the Montreal-Trudeau airport expansion

3 Analysis of a new light rail transportation system (LRT) with a team of 50 SMEs/specialists



OUR EXPERTISE IN GEOGRAPHIC INFORMATION SYSTEMS

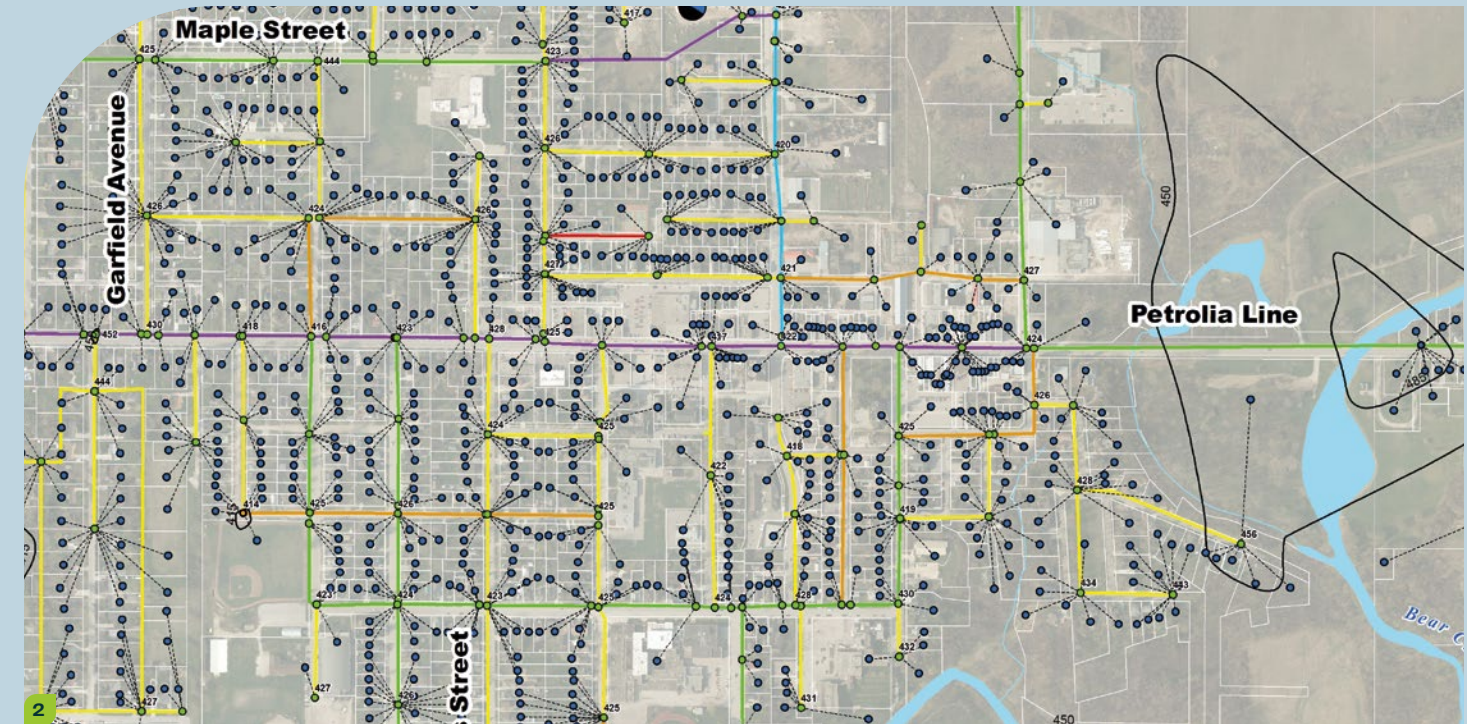
Geographic information systems (GIS) include several activities that share the management of spatially referenced data. At CIMA+, our Geomatics team has expertise in implementing GIS and related technologies to support a wide range of projects and activities in the areas of land use planning, infrastructure design and asset management.

Working in partnership with our urban and rural planning team and design experts, we are able to deliver GIS services that effectively blend technology with a solid understanding of subject matter to create useful datasets and effective analysis procedures.

We take pride in the long-term relationships we have established with many municipalities, because they reflect our ability to build and sustain useful GIS databases and systems that address both routine and evolving needs.

We offer assistance with:

- Asset inventories and management
- Official plan schedules
- Zoning by-law schedules
- Database design
- System architecture
- Data migration
- Data visualization
- Digital Cartography
- Special Studies.



1 To help the Town of Petrolia better understand the potential impact of future developments. We developed an integrated hydraulic model of its water distribution system using spatial processes to quickly and accurately allocate water demands. We created a series of GIS-based maps to visualize modelling results.

2 As a component of an Environmental Assessment (EA) to plan for the management of biosolids, we used GIS datasets to show existing conditions around the Highland Creek Wastewater Treatment Plant and along potential haul routes.



FOR MORE INFORMATION, CONTACT US:

info@cima.ca

CIMA+ HEAD OFFICE

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WE HAVE A LOCAL PRESENCE FROM COAST TO COAST, ALL ACROSS CANADA.

Baie-Comeau Beauce Bécancour Barrie Bowmanville Burlington Calgary – Airport Calgary – Downtown
Clareville Edmonton – Downtown Edmonton – West Gatineau Granby Guelph Halifax Kelowna Kitchener
Labrador City Laval Lévis London Longueuil Mississauga Montréal Oakville Ottawa Québec City Red Lake
Regina Rimouski Rivière-du-Loup Rouyn-Noranda Saguenay Saint John, NB Saskatoon Sept-Îles Sherbrooke
Sorel-Tracy St John's, NL Sudbury Terrace Terrebonne Thunder Bay Toronto Vancouver Victoria West Kootenays

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