



Sustainability Advisory Services

Your Project. Our Passion.



LEED® and its related logo, is a trademark owned by the U.S. Green Building Council® and is used with permission.

Who is RAM?

As a leading multi-disciplinary firm, our team provides project management, construction management, procurement, and engineering services throughout Canada, US, and the Caribbean. Experts in heavy civil and infrastructure solutions, our people specialize in the transportation, utility, infrastructure, and energy industries.

Since its foundation 13 years ago, RAM has been involved in major municipal infrastructure projects as construction and project managers, designers, field engineers, inspectors, and quality managers. Our goal is to provide personalized services tailored to each individual client's needs supported by a multidisciplinary team of specialists and professionals.



Sustainability Services

We recognize that our clients value the importance of being sustainable and resilient, which includes, having the ability to recover, prevent and mitigate impacts using sustainable practices. RAM has extensive experience incorporating sustainable and environmentally friendly design and construction principles into our projects. Our team includes:

- **Envision Sustainability Professionals (ENV SP)**
- **LEED® Accredited Professionals**
- **British Columbia Certified Erosion Sediment Control Lead (BC-CESCL) Professionals**



Sustainability



The relevance of sustainability in modern society has continued to rise – and therefore, in the face of climate change, evolving societal needs, and economic disruptions – projects cannot be designed or constructed in the same manner as historic practices. An emphasis on continuous innovation in the area of sustainability is required to lead our communities towards sustainable development. While the role of sustainability in businesses remain contentious, RAM has chosen to integrate sustainability and social responsibility directly into our business strategy, as we continue to strive towards being a truly sustainable business.

Since our inception in 2007, sustainability has been at the forefront of our business philosophy – the premise of our firm's sustained success is established on the equally important sustained successes of our people, our clients, our communities, and our environment. This holistic business model, combined with our latest market insights on sustainability tools and applications, enables us to deliver ever-evolving, innovative, and sustainable business solutions to our projects.



RAM Planting Trees for One Tree Planted Organization

Our Workplace

The sustainability of our workplace is considered through:

- **Measuring and Tracking Employee Well-being**
- **Employment Diversity**
- **Health and Safety**
- **Employee Learning & Development**
- **Team Expansion**
- **Wellness Programs**
- **Culture**

RAM's sustainable operations have been enacted through many of our strategic policies and practices.

We've also taken considerable measures to locate our head-office near public transit to reduce employee GHG emissions. The incorporation of sustainability within our business has proven successful - we have been recognized as a "Recruiting and Hiring Champion" with BC Builders Code, as well as "Canada's Fastest Growing Professional Services Firm" by Canadian Business and Maclean, signifying our dedication towards growing inclusively and celebrating diversity.



Gender Based Analysis+ at RAM

We are GBA+ supporters and recognize how various identity factors can influence the experience of different individuals.

RAM uses GBA+ in our recruiting and hiring practices to be more gender inclusive. At RAM, we are dedicated to addressing the need for more women to pursue careers in science, technology, engineering and mathematics (STEM). Despite this increase in the representation of women in engineering – both within the profession and in university engineering programs – women are still under-represented in this field. RAM is committed to increasing the representation of women in the profession so that it is more diverse and inclusive.



RAM Signs BC Builder's Code "Acceptable Worksite" Pledge

Our Environment

Within our projects, RAM has extensive experience with environmental conservation laws and permitting as we have been and/or currently involved in highly sensitive municipal/utility infrastructure projects, along with environmentally sensitive projects. Our company takes pride in conserving the environment and our best management practices place safety and environment first. We holistically address client concerns by minimizing project impacts to the environment and society.



Our Community

RAM believes in the principle of “shared value”, whereby a business has more to gain by partnering with external social and environmental organizations to better achieve sustainability objectives.

To that end, we have strategically partnered with organizations that our employees are passionate in engaging with, including:

- BC Children's Hospital
- Canadian Blood Services
- Greater Vancouver Food Bank
- BC Cancer Foundation
- Dress for Success

Within our workplace, RAM considers our environmental sustainability through:



RAM Donates Non-Pershable Food Items to Greater Vancouver Food Bank

Greenroads



Infrastructure projects are defined by unique opportunities and challenges, including diverse funding streams, contrasting stakeholder priorities, and a variety of triple-bottom line impacts. The engineering industry's approach to infrastructure projects is changing due to the need for integration, risk and reward sharing, and joint funding for these large-scale, complex projects to be successful.

Refer to **Case Study 1** of this package to read more about the Greenroads Certified South Fraser Perimeter Road project.

A “Greenroads” Project is a transportation project that is designed and constructed to a level of sustainability substantially higher than current common practices.

Greenroads includes five core content areas:

- Environment & Water
- Construction Activities
- Materials & Design
- Utilities & Controls
- Access & Livability



*South Fraser Perimeter Road Project
- Greenroads Certified*

Rating System

The Greenroads rating system seeks to recognize and reward roadway projects that exceed public expectations for environmental, economic, and social performance. Fundamentally, it helps to identify the sustainable attributes of a highway project, examples of which are:

- Define what features contribute to sustainability on the project
- Provide accountability for sustainability on roadway projects
- Measure and track specific sustainability goals over time
- Encourage new and innovative practices

Envision™ Sustainable Infrastructure Framework



Infrastructure projects are defined by unique opportunities and challenges, including diverse funding streams, contrasting stakeholder priorities, and a variety of triple-bottom line impacts. The engineering industry's approach to infrastructure projects is changing due to the need for integration, risk and reward sharing, and joint funding for these large-scale, complex projects to be successful.

RAM's team includes Envision Sustainability Professionals (ENV SP) looking to support the sustainable performance and resiliency of physical infrastructure. These improvements will allow RAM to implement more cost-effective, resource-efficient and adaptable long-term infrastructure investments.

The Envision Framework for Sustainable Infrastructure supports high performance through more sustainable choices in infrastructure development. It provides a flexible system of criteria and performance objectives to assist decision makers and help project teams identify sustainable approaches during different phases of the project. These objectives are then continually referenced throughout the project's operations, maintenance, and end-of-life phases.

The framework includes 64 sustainability and resilience indicators, organized around five categories as shown in the graphic below.



ENV SP Services

RAM's team can provide the following ENV SP services for your next project.

- Planning and Design
- Development of Sustainable Approaches
- Project Monitoring
- Verification Guidance and Submission

Tools Used

- Envision Summary Points Table
- Envision Credit Evaluation Scoresheet

Leadership in Energy and Environmental Design[®]



Leadership in Energy and Environmental Design (LEED) is the most popular green building rating system in the world, that is virtually applicable to any vertical construction project, including homes, high-rises, and communities. By adopting LEED principles into projects, the sustainability of the project can be enhanced.

Our staff have managed the LEED Certification process on projects, including the University of Calgary's \$65 million-dollar design-build Aurora and Crowsnest Hall, which have both successfully received LEED Silver Certification.

We have a thorough understanding of the environmental obligations under government legislations across British Columbia, allowing us to manage erosion and sediment control from design to monitoring – a requirement for any LEED project.

Whether it's guiding your project towards LEED Certification or providing advice in incorporating LEED principles in your project, RAM's LEED Accredited Professionals (LEED AP, LEED GA) have the experience and resources to turn your project into reality.



University of Calgary's Aurora Hall successfully received LEED Certification

British Columbia Certified Erosion and Sediment Control Lead (BC-CESCL)



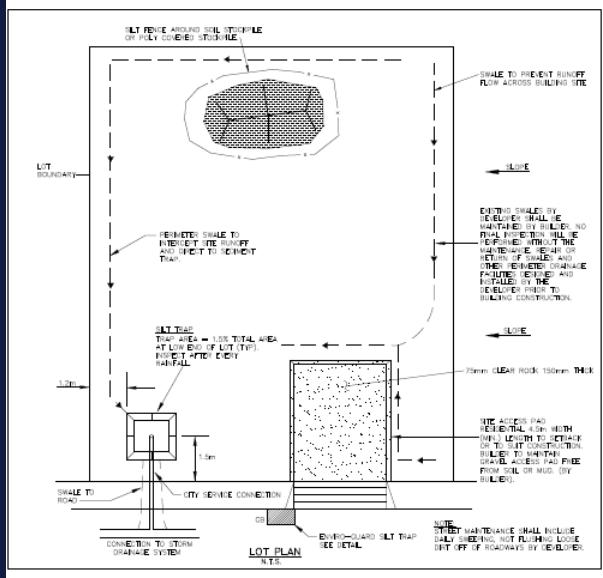
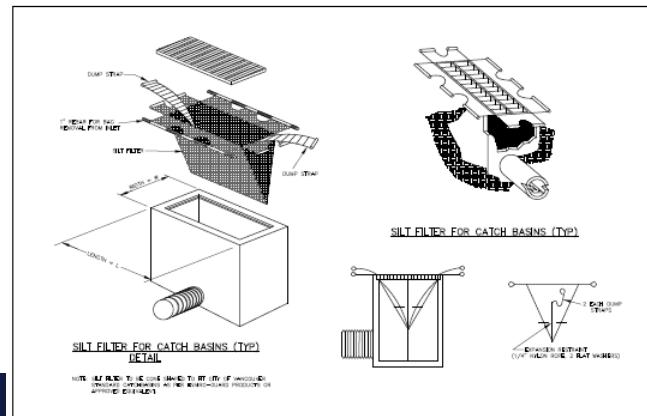
BC-CESCL is a certified program by the Erosion and Sediment Controls (ESC) Association of BC. The certificate allows ESC practitioners, like site personnel, inspectors, contractors and site superintendents demonstrate understanding and commitment to effective ESC on sites.

RAM's Civil Engineering Team

RAM's Civil Engineering team includes Certified Erosion and Sediment Control Leads (BC-CESCL) who have experience creating extensive ESC plans that account for site preparation, site servicing, and construction and completion of land development projects. With over 40 years of team design experience, our Civil Engineering team prides itself on retaining design staff with heavy civil construction experience backing their design with a 'rubber meets the road' mentality.

Whether we are executing feasibility studies; verifying economics and potential risks to planning subdivisions in outlining lot layouts and densities; or detailing the design of storm, water, sanitary, and roadworks; our team has the skills, resources and knowledge to guarantee successful delivery.

We understand the management of erosion and sediment control and the obligations under government legislations in different areas.



Highway 17 - South Fraser Perimeter Road

Approximately 40 km long, the South Fraser Perimeter Road (SFPR) is a new four-lane expressway along the south side of the Fraser River. SFPR is part of Highway 17 in Metro Vancouver, which connects the Tsawwassen Ferry Terminal in southwest Delta to 176 Street (Highway 15) in North Surrey. Strategically located, SFPR also connects to Highways 1, 91, 99 and the Golden Ears Bridge.

RAM's Role

RAM was retained by the joint venture FTG Constructors, comprising of Ledcor, Dragados, BelPacific and Vancouver Pile Driving. This \$700 million P-3 project was structured as a design, build, operate, finance and maintain. RAM provided construction and project management services for technical design review in two disciplines: earthworks and utilities. RAM staff were integrated into the joint venture team and directly managed \$230 million of construction scope.



Sustainable Practices

The Project is a combination of both new and reconstructed alignments using mostly asphalt pavements with approximately 20 concrete structures, removing heavy truck traffic from local roads, reducing travel times through the region, improving cycling and transit, and the access to major trade gateways and industrial areas. Ecological improvements include several wildlife crossings, preservation and restoration activities, and a variety of stormwater management facilities throughout the facility.

The project featured both openness and transparency: approximately 5,000 local residents and stakeholders participated in the extensive consultation process to ensure that the project reflected community, economic, agricultural and environmental values.



“This innovatively designed and financed highway in Metro Vancouver was part of the Pacific Gateway Program to improve the movement of people and goods through the region.



- *The Canadian Council for Public-Private Partnerships (CCPPP)*

Awards

- National Awards for Innovation and Excellence in Public-Private Partnerships (P3s) - Silver Infrastructure Award
- Greenroads Accreditation





@ramconsulting

www.ramconsulting.com

@ramconsultingltd

@ramconsultingltd



Your Project. Our Passion.