

CANADIAN PROJECTS LIMITED

#240, 523 Woodpark Blvd SW Calgary, Alberta T2W 4J3 Phone: (403) 508-1560 Fax: (403) 238-5460 www.canprojects.com

Intermediate/Senior Civil Engineer

Role

To provide civil engineering design expertise for the design and construction of renewable energy projects and associated works. The ideal candidate has extensive civil engineering experience covering earthworks and structures. The position duties include the following:

Project Planning, Assessment and Coordination

- Project strategizing to ensure key issues are identified early such that the project development can satisfactorily addresses all major technical factors to gain approvals, meet adequate quality and performance requirements and be economic.
- Undertake preliminary analysis, system/layout optimization, energy assessments and project economics to determine the best site development scenario.
- Coordinate the data gathering and design drafting preparation of the general arrangement drawings and associated supporting information.
- Prepare regulatory technical submissions including project definition documents and associated for development permit, water licence and land tenure applications followed by the project development plan including project description, environmental assessment review, and mitigation / compensation strategy and associated information documents.

Civil Project Design

- <u>Civil Design</u> Undertake detailed analysis of project sites in prairie, foothills, and mountainous regions to layout siteworks and design civil components such as roads, stream crossings, drainage works, building sites, substation works, borrow and waste sites, laydowns, construction works for crane erection, and works staging areas. Understanding of regulatory requirements for renewable energy projects, constraints mapping, work scheduling and associated design considerations.
- <u>Drainage Engineering</u> Utilizing open channel and conduit analysis to determine flow and water level variations around projects sites, water courses, and structures including erosion protection, sediment transport, culvert sizing, flood routing, and associated mitigation solutions.
- <u>Structures Design</u> Undertake foundation and superstructure design for civil structures including wind towers, substations, buildings, bridges, weirs, intakes and dams. Includes comparison analysis of various types of structures to optimize structural, geotechnical, risk and cost considerations. Technical familiarity with the current technology of large equipment support systems, FEM analysis, best practises and regional code requirements.
- <u>Detailed Cost Evaluation</u> Derive quantities for civil projects and review cost estimates
 to accurately determine best options, overall economic viability and optimize the civil
 works design for entire projects including Balance of Works (BoP) components, hard
 and soft costs and provide cost analysis reports.



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Qualifications:

- Civil Engineer with a wide variety of civil design assignments. Strong hydrotechnical background is an asset.
- Professional registration in Alberta, Saskatchewan and/or British Columbia. Registration in Ontario. Yukon or the Northwest Territories is an asset.
- Consulting Engineering experience of at least 10 years, working in a multidiscipline engineering design environment and capable of working on several major projects simultaneously.
- Some field construction experience monitoring and reporting on large civil projects in different regions and seasons of the year. Demonstrated ability to identify and correct field challenges on a timely basis with realistic cost, low risk solutions.