## Water Resources Engineering Infrastructure Management

## Gordey Drainage Project Assessment, Detailed Design and Construction

Municipal District of Greenview No. 16

The Gordey Drainage Project is located in the Municipal District of Greenview No. 16 (MD), approximately 22 kilometers east of the Town of Valleyview. The purpose of the project was to mitigate flooding and erosion resulting from a series of small watercourses from a drainage basin with relatively steep slopes. The project drains into Sweathouse Creek, which is a tributary of the Little Smoky River.



Gordey Drainage Project

Municipal District of Greenview No. 16

## Key Team Members

Location

Nico Wyngaarden, P. Eng.

François Tacail, P.Eng.

In August 2007, the MD engaged Sameng Inc. to assess the Project and determine an optimum rehabilitation strategy. The assessment was intended to develop a strategy that outlines the condition of the project, potential problems, and possible solutions with associated cost estimates. The scope of work included:

- A physical assessment of the project;
- Determining land use and ownership, and the status of easements;
- Identifying any erosion concerns;
- Assessing the condition of farm and field crossings, and drop structures;
- Identifying options for maintenance, repair or rehabilitation of the project.

Sameng Inc. completed the project assessment in the fall of 2007. Subsequently, Sameng was retained to provide design, tender, construction and post-construction engineering services for the rehabilitation of the project. Project construction commenced in December 2013 and was substantially completed in January 2015. Services provided by Sameng include:

- Review of existing project history and design;
- Site inspections and surveys;
- Hydrologic and hydraulic assessment and project design;
- Regulatory approvals through Fisheries and Oceans Canada, Alberta Environment and Transport Canada;
- Preparation of detailed design and construction drawings and specifications;
- Preparation of the tender package and tender period advisory services;
- On-site construction period services;
- Post-construction period services;
- Construction contract administration.



The rehabilitated project included 4400 metres of channel excavation, 4 farm/field crossings, 6 culvert drop structures, 16 gabion drop structures and the rehabilitation of the existing steel sheetpile weir.



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