MANDATE
Labrador Iron Mines (LIM) and Tata Steel Minerals of Canada (TSMC) are leading Canadian producers of iron ore (weekly average production capacity of 200,000m.t). These mines are located near Schefferville, northern Quebec, in a zone of discontinuous permafrost where temperatures can reach -55°C in the winter (north of latitude 54). They were looking to significantly increase their capacity to transport iron ore to the port of Sept-Îles and wished to connect other deposits in the region with to their rail network.

DESCRIPTION
SYSTRA Canada (formerly CANARAIL) was hired to provide technical assistance in needs analysis, design, and Engineering Procurement Construction and Management services for two terminal yards, a loop of more than 480 cars, and a railway link of over 30km. The mandate responsibilities evolved to include areas of storage and loading of ore, generating major civil engineering and construction supervision work, as well as environmental protection requirements. All aspects related to railway operations and rolling stock were also included in this mandate.

- Operating capacity analysis, including train size and speed, strategic planning for long-term operations;
- Various geodesic and geotechnical investigations, hydrology, management of water flow and environmental protection;
- Railway alignment and sidings meeting AREMA railway standards, security study and design of three level crossings for mining trucks of over 80 tons, rolling stock specifications and management, procurement, track and infrastructure maintenance specifications;
- Contract management and onsite supervision of contractor’s work; Auditing of work quality; Verification against BoQ; and Final acceptance;
- Rolling stock inventory management, inspection of onsite car repairs, First Article Configuration Inspection (FACI) and Field Acceptance Testing (FAT), standards compliance certificates for cars and operating recommendations.

The project faced significant challenges such as planning the work without impacting on-going mining operations during the winter.

CONFIDENCE MOVES THE WORLD

CLIENT
Labrador Iron Mines Holdings Limited (LIM) and Tata Steel Minerals of Canada (TSMC)

COUNTRY
Canada

YEAR
2011

DURATION
3 years

VALUE OF PROJECT
$20 M

TYPE OF SERVICES
Technical Assistance

Projects: 11-093 – 13-094 – 14-094