



AERIAL PICTURE OF AUGUST 1995 LOOKING EAST ACROSS THE PROPERTY. CENTENNIAL PARK/JONES LAKE TO RIGHT OF PICTURE.

LOCOMOTIVE REPAIR TO INFORMATION TECHNOLOGY: BROWNFIELD DEVELOPMENT OF THE FORMER CN RAIL CAR SHOPS, MONCTON, NEW BRUNSWICK

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Commonly known as the “hub of the Maritimes”, Moncton, New Brunswick long served as the crossroads for passenger and freight rail services between central Canada and destinations in Nova Scotia, Newfoundland and Prince Edward Island. To support rail services, the Intercolonial Railway (later part of CN Rail), in 1910, established a service and repair facility in Moncton. As demand grew, the facility expanded to a time in the late 1940s, when it

had more than 5,000 employees.

The “Shops” did or made virtually everything needed to maintain rail cars and locomotives: logs into lumber; brass into engine fittings; steel into locomotive wheels. Activities were spread out over a 200+ acre site, with an additional 60 acres along the south side acting as the Franklin Marshalling Yard. While careful attention was given to liquid wastes, waste wood, steel and foundry sand were considered “inert” and buried on the site.

By the late 1980s, the demand for such support services had greatly diminished. In 1989, CN Rail closed the “Shops”, demolished the buildings (but left the basement slabs) and removed any recoverable equipment. Suddenly, Moncton had a large tear in its urban fabric, an abandoned property within 0.5 km of the downtown core. The property was now surrounded by an expanded city, but could no longer contribute to the city.



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ABANDONED CONCRETE FOUNDATIONS AND SUPPORTS OF POWER PLANT BUILDING AT FORMER CN RAIL CAR SHOPS PROPERTY (JUNE 1997). EXAMPLE OF REMNANTS OF OVER 25 BUILDINGS STILL ON THE SITE IN 1997.



EXCAVATION OF BURIED RAIL AND RAIL CAR REMNANTS IN WESTERN SECTOR (RECLAIM YARD) OF FORMER CN RAIL CAR SHOPS PROPERTY (JULY 1997).

With privatization of CN Rail in 1994, the Government of Canada retained extensive land holdings, including the 280-acre Moncton Shops and Franklin Yard property. In 1995, Canada Lands Company (CLC), a federal crown corporation, was given the mandate to sell and promote the re-development of the site. The Moncton Shops property is a classic brownfield:

- Centre of an urban community.
- “Abandoned” former industrial site.
- Departure of the business impacted the economy of the city.
- Vacant from 1989 to 1996, generating speculation that the property was “contaminated”.
- Community desire for re-development, but in a format that would be a positive contribution to the city.

As the environmental management advisors to CLC, we faced three major challenges:

1. A property of 280 acres.
2. While federal lands in 1996, sale of the property to private interests would shift contaminant management issues to provincial environmental regulatory control.



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EXCAVATION OF LUMBER AND WOOD WASTE DISPOSAL AREA IN WESTERN SECTOR (RECLAIM YARD) OF FORMER CN RAIL CAR SHOPS PROPERTY (JULY 1997).



ENVIRONMENTAL SITE ASSESSMENT TEST PITS IN PDU 1 OF FORMER CN RAIL CAR SHOPS PROPERTY (SEPTEMBER 1997).

3. CLC had responsibilities, defined by both federal government and internal policies, to ensure that the sale and development met the “best interests of the Government and citizens of Canada.”

To meet these challenges, we first developed a Property Management Protocol For Sustainable Development. Key aspects were:

- Development within the context of protection of the environment and economic constraints.
- Full and open transparency of the process to the community.
- Reduction in contamination levels to permit future development.
- Remedial actions based on risk reduction and risk management.
- Promotion of recycling and re-use of materials from the property.
- Promotion of site development that would re-construct the urban and economic fabric of Moncton.

The issue of land area was met through creation of 12 Property Development Units (PDUs) (10 land areas, groundwater, surface water). The scope of each area was defined by geography, potential contamination and potential development uses (office, residential, recreational).

To address concerns of potential or actual contamination, we developed a characterization program for each PDU that would provide a three-dimensional profile for each contaminant of concern, with a 95% degree of statistical confidence of the median value. Every activity was fully documented and information placed in a geographical information system (GIS). This system was the key to successful development of risk management and remedial action planning.

But how to get information to the general public? We first used the traditional format of newspaper interviews, “open houses”, presentations to City Council and newsletters/web page.



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STOCKPILING OF CRUSHED CONCRETE TO BE RECYCLED AS ROADWAY BASE IN NEW DEVELOPMENT (JUNE 1998).



ARTIST'S RENDITION OF DEVELOPMENT SCENARIOS FOR FORMER CN RAIL CAR SHOPS PROPERTY (2001)



AERIAL VIEW TO SOUTH OF FORMER CN RAIL CAR SHOPS PROPERTY (MAY 2002) SHOWING COMPLETED SOCCER AND BALL FIELDS IN MONCTON COMMON AND CONSTRUCTION OF BUILDING FOR FOUR ICE SURFACES.

INCO SPIRIT

Cultivator
 “Inco is reclaiming land the company has been using for the past 100 years,” says Lisa. “Trees are a big part of the job.” They are also a part of hers. Lisa oversees the Inco silviculture effort. The company grows about 100,000 seedlings annually in underground greenhouses and an additional 200,000 above ground. Each year, more than 300,000 trees are planted on ‘stressed’ lands and tailings areas. Away from work, Lisa is an active member of Women In Science and Engineering (WISE), a volunteer group devoted to showing girls that they can have a future in non-traditional fields like science and engineering.

Lisa Lanteigne
 Coordinator,
 Decommissioning
 and Reclamation
 Sudbury, Ontario
 Inco Employee: 8 years

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To integrate the community into the project, we initiated a “community roundtable” of 10 citizens (business people to university students), co-chaired by two distinguished Monctonians (Dr. Louis LaPierre of University de Moncton and Mrs. A. Landry, a former government minister). The roundtable both represented community interests and concerns to the project and provided a conduit for information flow to the community. They facilitated several “town hall” meetings that provided an opportunity to describe our successes to-date, but to also defend and explain our activities.

We began the process of brownfield re-development in October 1996. By April 1998, most of the property was assessed and remedial action plans for 7 PDUs and issues of groundwater and surface water were presented to the New Brunswick Department of Environment and Local Government. With their approval, remediation began in summer 1998. By summer 2000, the Property was ready to be sold.

About 60 acres in the eastern part of the Property are committed to the Emmerson Business Technology Park. The first two of 10 office buildings for information technology have been constructed and are occupied by companies such as AOL Canada. By 2007, Emmerson Park will provide up to 3000 “21st century” jobs, or nearly the same number of jobs as the former Rail Car Shops. The Honourable Henry Emmerson, former Minister of Railways and Canals and MP for Moncton in 1910, would be proud. The Franklin Yard lands are under negotiation for



DR. SCOTT MACKNIGHT OF OCL SERVICES (LEFT) AND MR. DON MACCALLUM OF CANADA LANDS COMPANY (RIGHT) AFTER RECEIPT OF THE 1ST PHOENIX AWARD FOR BROWNFIELD RE-DEVELOPMENT (INTERNATIONAL CATEGORY) AT BROWNFIELDS 2003 (PORTLAND OREGON).

VIEW WEST OF FORMER CN RAIL CAR SHOPS FACILITY IN LATE 1940s.

residential development. The crown jewel of the project, and that which best linked the property back into the community, is the 110 acre Moncton Common, a space provided for soccer fields, ball fields and a four-ice surface recreation centre.

The success story of the Moncton Shops brownfield re-development has

earned Canada Lands Company several awards, including two “brownie” awards by the Canadian Urban Institute (2002) and the first Phoenix Award for Brownfield Re-development (International Category) by the U.S. Environmental Protection Agency (October 2003). ■

For more information on this project, please contact Dr. Scott MacKnight at ocl@accesscable.net (OCL Services Ltd., Dartmouth, NS). Information is also provided at www.oclgroup.com and Canada Lands webpage at www.clc.ca.

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