

5. DESCRIPTION OF UNDERTAKING

5.1 ALTERNATIVES TO THE UNDERTAKING

For environmental and economic reasons, NML intends to mine certain deposits identified by another mining company and, in some cases, prepared or partially prepared for mining by that company. To the extent possible, it will use existing infrastructure or renovate/re-build infrastructure abandoned or decommissioned by that other mining company. Consequently, the present section cannot identify alternatives at the macro scale.

5.2 GEOGRAPHICAL LOCATION

[Figure 4.1](#) shows the geographical location of Sectors 2 and 3 in relation to Schefferville, Matimekush, Lac John and Kawawachikamach and the proposed route of access.

NML's claims in Sector 2 are located entirely in the Province of Québec, while those in Sector 3 are partly in the Province of Québec and partly in the Province of Newfoundland and Labrador. NML's claims in the Province of Newfoundland and Labrador are located in the region of Labrador West.

5.3 PHYSICAL FEATURES

5.3.1 Major Physical Features of the Undertaking

Figures [5.1](#) and [5.2](#) show the major infrastructure.

[Photograph 5.1](#) and [Figure 5.1](#) show the general location of the major infrastructure and the start of mining. [Photograph 5.1](#) illustrates well the contention that the area has been heavily affected by prior mining.

Figure 5.1: Preliminary Layout of Ore Processing Installations

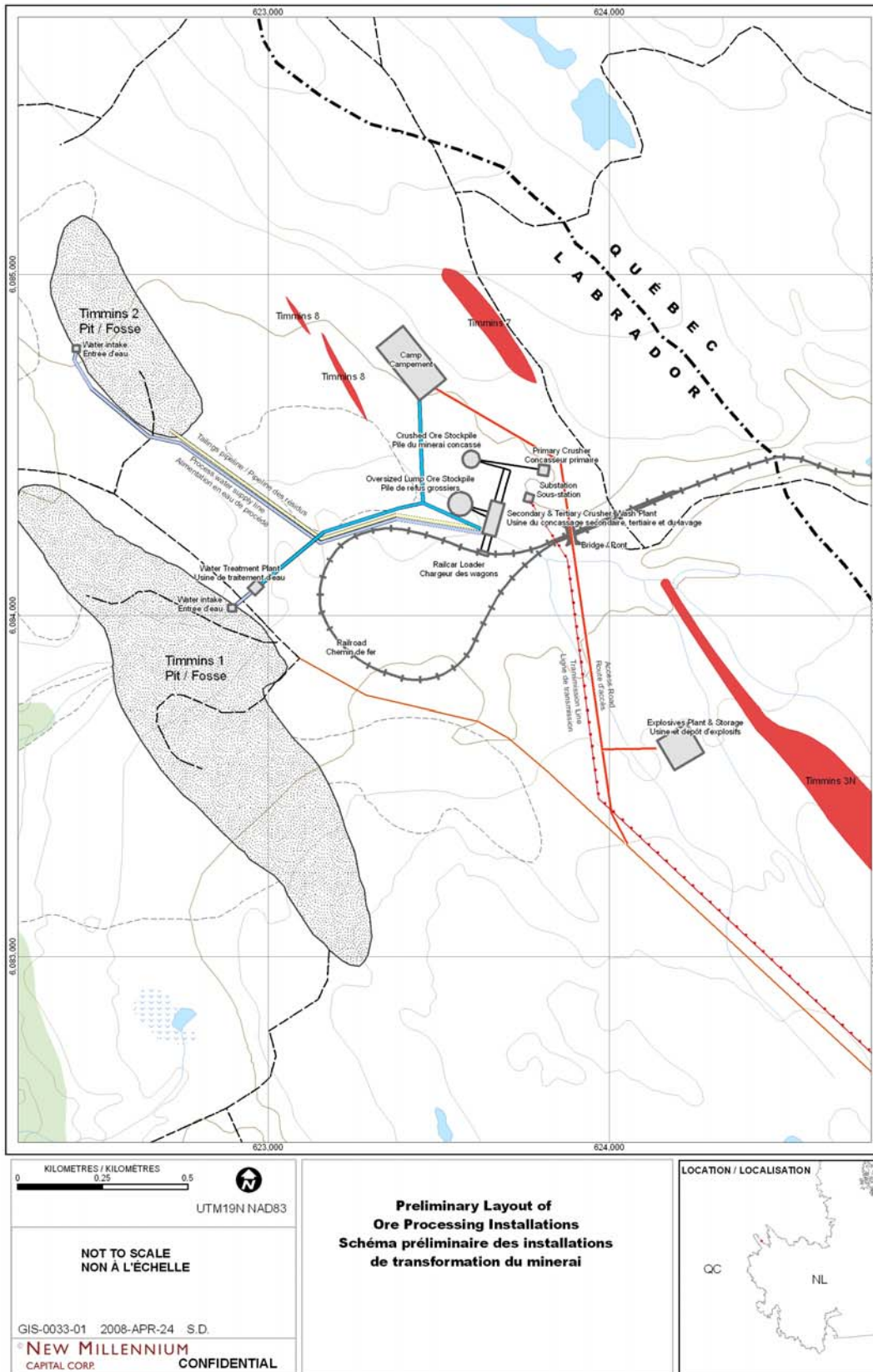
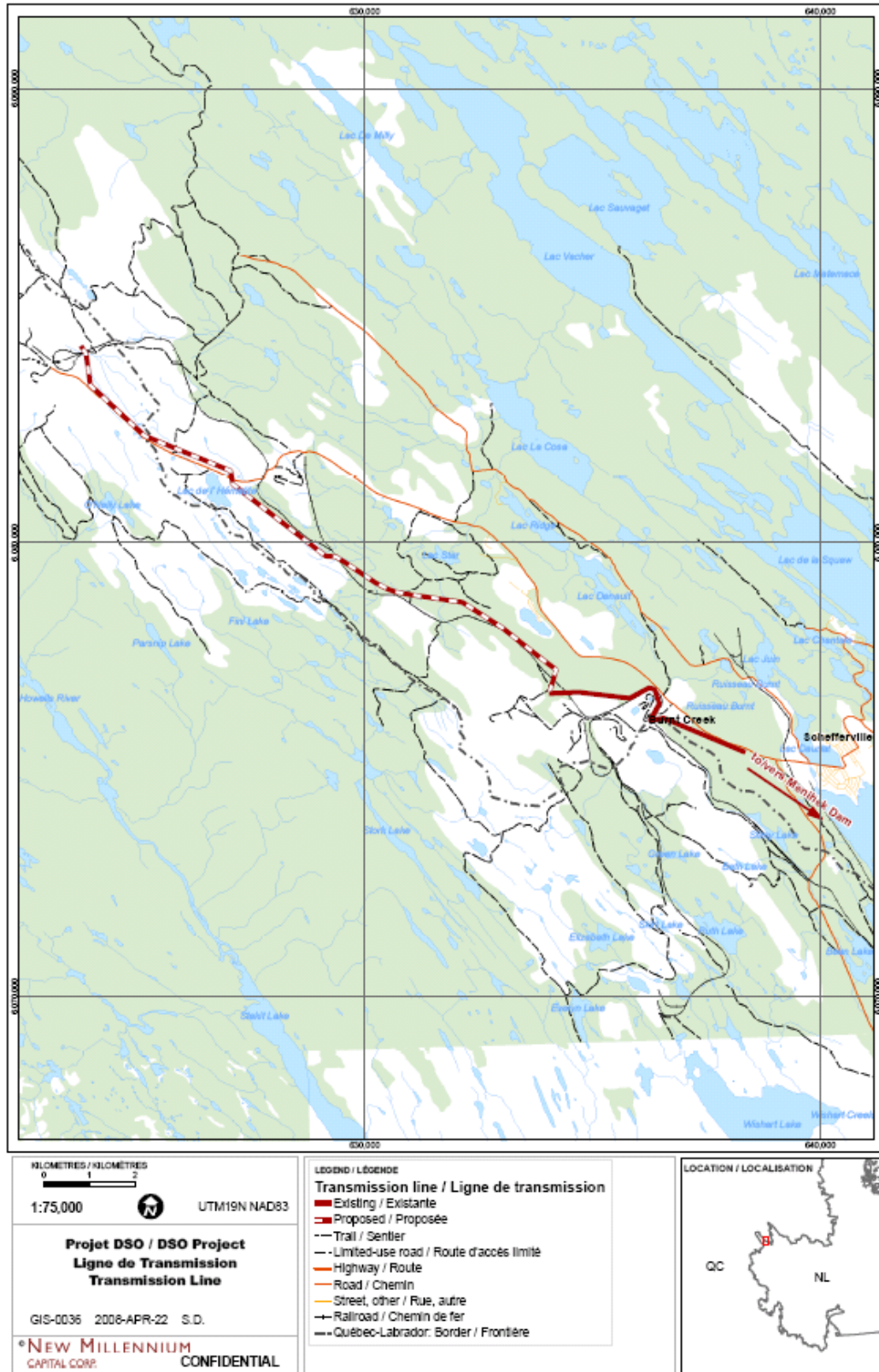
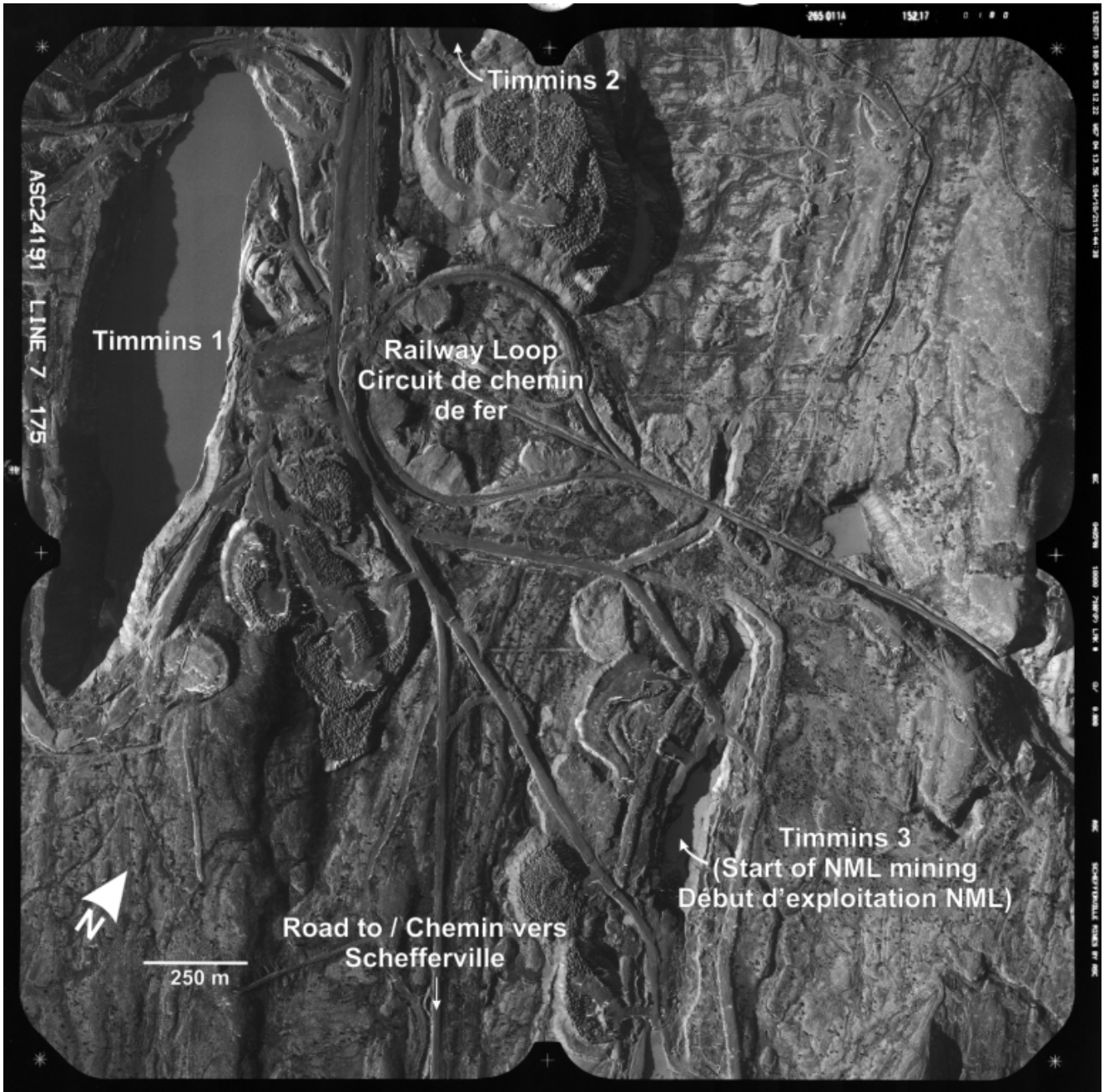


Figure 5.2: Location of the Proposed Transmission Line



Photograph 5.1: Aerial Photograph of Site of Major Infrastructure and Start of Mining



The principal facilities to be built, all of which will be located in Newfoundland and Labrador, are as follows:

- ore crushing, screening and washing facilities;
- railcar loading station;
- garage, tire workshop, machine shop and warehouse;
- mine dispatch, administrative/engineering office and laboratory;
- substation and on-site electricity distribution lines;
- electricity transmission line from the existing Schefferville substation, located in Québec, to a new substation in Timmins 1, in Newfoundland and Labrador ([Figure 5.1](#));
- access road;
- ties, rails and ballast on railbed from M353 to Timmins area, which will be located on the site of a mining operation in existence on 30 December, 1980;
- process water supply and distribution system;
- tailings disposal system into Timmins 2 pit;
- a fuel day tank;
- a plant and a storage facility for manufacturing and storing explosives by a third party;
- camp for construction and operations, including potable water, waste disposal and sewage treatment systems;
- dewatering wells and water disposal systems, because most of the mineralized zones in the Schefferville region extend under the groundwater table, which is usually within 15m of the surface (Drake 1981a: 289).

The fuel storage tanks will be located in Schefferville.

To the extent that fill is needed at the construction phase, priority will be given to obtaining it from the site of future pits.

The existing 69 kV electricity transmission line that extends north-west from the Schefferville Substation will be extended by ± 13.5 km to reach a new substation at Timmins 1, at which the voltage will be changed to 2-3 MW for the purposes of on-site

distribution lines¹.

The area to be affected by the Undertaking can be described as follows :

The Howells River basin, in which the following will be located:

- ore crushing, screening and washing facilities;
- railcar loading station;
- garage, tire workshop, machine shop and warehouse;
- mine dispatch, administrative/engineering office and laboratory;
- portion of the railway;
- process water supply and distribution system;
- tailings disposal system into Timmins 2 pit;
- a fuel day tank;
- a plant and a storage facility for manufacturing and storing explosives by a third party;
- camp for construction and operations, including potable water, waste disposal and sewage treatment systems;
- portion of the access road;
- portion of the electricity transmission line;
- substation and on-site electricity distribution line.

The Swampy Bay River basin, in which the following will be located:

- portion of the railway;
- portion of the access road;
- portion of the electricity transmission line.

The Knob Lake catchment, in which the following will be located:

- storage tanks.

¹ Following Chen (2003), voltage below 69 kV is considered to be distribution rather than transmission.