// IDENTIFICATION

PROJECT TITLE: L'aménagement du territoire dans la communauté d'Inukjuak, Nunavik

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STUDY PROGRAM: Master's program in Aménagement du territoire et développement régional

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// ABSTRACT

(auround 250 words)

The rising population, overcrowded housing, the pressure of urban and economic development and the warming climate are all factors that create the necessity of better land use planning in the communities of Nunavik, Canada. In this context, the link between land use planning and permafrost knowledge is strong. A better understanding of the permafrost conditions supports better decision making and therefore promotes a better adaptation of the communities facing the challenge of climate change and better planning of village growth due to more housing development. The study of the foundation types on permafrost terrain in the community of Inukjuak shows the necessity of the technical integration of the permafrost in the land use planning process in the community.

// INTRODUCTION

(including the research problem)

The main objective of this project was to evaluate how an improved understanding of permafrost conditions can be used in the process of urban planning in northern communities. In this case, this study is base in the community of Inukjuak. More precisely, this study analyses how to take advantage of the information, already made available by the CEN on the permafrost condition maps, in order to select the best building foundations, determine the most secure zones for future expansion and orient the planning in a general way.

// THEORETICAL FRAME

The rising population, overcrowded housing, the pressure of urban and economic development and the warming climate are all factors that create the necessity of better land use planning in the communities of Nunavik, Canada.

// METHODOLOGY

In order to reach the different objectives, the methodology includes several important methodological steps. The inventory of the actual buildings and the untouched space, the use of the most recent permafrost map produced by the CEN (adaptation of the urban environment: the impact on the urban drainage, snow, temperature regime of the ground, etc.) and the evaluation of the physical capacity of the environment (adequacy between different types of foundation and the permafrost properties map).

// RESULTS AND DISCUSSION

By the specific methodology, links are made between the current use of the territory and the spaces to be developed, as well as between the foundation types and the permafrost conditions. The different steps of the research show, for the community of Inukjuak, a lack of consideration for the permafrost conditions in the choice of development sites and for the type of foundations used, especially since 2000.

// CONCLUSIONS

The results of the project show that the works that provides important information on the current or future conditions of the territory are essential, not only for land-use planning processes, but also for the adaptability of communities to climate changes.