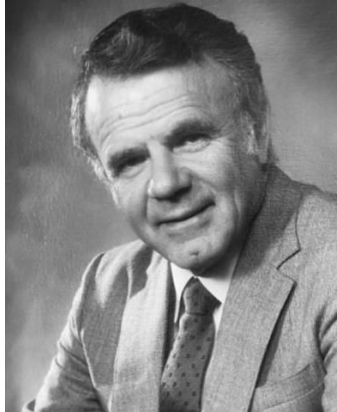


## Alexander (Alec) Rutka (1924-2022)

By M.A.J. (Fred) Matich



Alexander (Alec) Rutka, former Head of the Materials and Research Division of the Ontario Ministry of Transportation (the Ministry, and successor to the Ontario Department of Highways), passed away on August 25, 2022. Alec played an important role in the development and application of geotechnical engineering in highway transportation in Ontario, building on the notable achievements of his predecessor Frank Brownridge, the first head of the division.

Alec was born in Tapleystown, ON, near Hamilton, in 1924. He graduated from Saltfleet High School in Stoney Creek in 1943. He then went on to study civil engineering at Queen's University in Kingston, ON, receiving his BSc (Eng) in 1947. During the summers while attending Queen's, Alec worked with the Ministry as an engineering assistant in the soils laboratory.

Upon graduation, Alec was granted a full-time position as a Soils Engineer in the Soils Branch of the Ministry. His career began at a time when significant growth in the Ontario highway system was taking place, much of it over difficult terrain, which brought with it new challenges. These challenges included obtaining appropriate information on subsurface conditions at project sites, as well as research and testing in areas related to materials, design and construction of the associated earthworks and foundations.

The expansion of the highway system and associated demands for services, such as foundation design for major bridges, deep cuts and high earth embankments, together with pavement development, saw the formation of a Foundations Section in the division. This section included a team of engineers with high qualifications and experience in geotechnical engineering. The expanded highway system included the Trans-Canada Highway, highways 400 and 401 and Highway 11 to Fort Frances. These projects, which involved many geotechnical engineering challenges in site investigations and design as well as use of a variety of specialized construction techniques, were handled by the Foundations Section with assistance, at times, by expertise from outside the Ministry. Examples of the many projects and research studies that Alec was involved with are identified in the partial list of published papers that he authored or co-authored.

Alec became the Principal Soils Engineer, then Materials and Research Engineer and ultimately the Head of the Materials and Testing Division. He worked with the Ministry until 1983 when he retired at age 59, after which he continued to do some consulting.

Alec was an active member of the Canadian Good Roads Association (CGRA) from which he received the 1959 President's Medal for the best research paper entitled "Evaluation of Road Performance over Muskeg in Ontario". Alec was also active in organizations such as the American Association of State Highway and Transportation Officials (AASHTO) and the Roads and Transportation Association of Canada (RTAC). He was Chair of Soils and Materials Technical Committee of the RTAC from which he received the Distinguished Service Award in 1984.

Alec married Janet (nee Bartkiw) in 1950 and enjoyed 72 years of marriage. Together, they raised three children: John, an otolaryngologist (University Health Network, Toronto); Jim, a pediatric neurosurgeon (Hospital for Sick Children, Toronto); and Margaret, a geologist (Senior Geoscience Editor for the Ontario Geological Survey, Sudbury). Alec was the proud grandfather to Jacob, Lauren, Fiona, Daniel, Hana, and Marissa, and the great-grandfather to Henry and Teddy.

The author had the privilege of being associated professionally with Alec, as a geotechnical consultant to the Ministry and as a fellow member of RTAC.

A partial list of other publications that Alec authored, co-authored or in which he was acknowledged follows:

- 1960. "Correlation of Engineering and Pedological Soil Classifications in Ontario". Royal Society of Canada Symposium on *Soils in Canada*. Queen's University, Kingston.
- 1960. "Settlement at Bridge Approaches". CGRA Conference. Toronto.
- 1961. "Bridge Abutment Movements due to Artesian Pressures at Depth" (with L.G. Soderman). CGRA. Banff.
- 1962. "Experience with Canadian Varved Clays" (with V. Milligan and L.G. Soderman). *Journal of the Soil Mechanics and Foundation Division*. ASCE.
- 1963 "Foundations Aspects of the Rainy Lake Causeway" (with M.A.J.(Fred) Matich and P.F. Andersen). *Engineering Journal*. Engineering Institute of Canada.
- 1963 "Some Slope Failures Caused by Groundwater" (with V. Milligan). 17<sup>th</sup> Canadian Soil Mechanics Conference. Ottawa.
- 1963 "Principles of Geophysical Resistivity Techniques" (with A.S. Szenasi and G. A. Wrong). CGRA Conference. Saskatoon.
- 1964. "Stability of Slopes in Anisotropic Soils" (by K.Y. Lo with A. Rutka acknowledged). Ontario Ministry of Transportation Report No. 52.
- 1971. "Settlement Performance of the Burlington Bay Skyway" (by M.A.J.(Fred) Matich and A.G. Stermac with A. Rutka acknowledged). *Canadian Geotechnical Journal*.