

Geophysics Research at Nutana Pioneer Cemetery

ISSUE

A request has been received from the University of Saskatchewan (USask) to complete a research project at the Nutana Pioneer Cemetery to prove and calibrate the use of the electrical resistivity surveys to map known grave locations.

RECOMMENDATION

That the Standing Policy Committee on Planning, Development and Community Services recommend to City Council that:

1. The request to complete geophysics analysis at the Nutana Pioneer Cemetery be approved;
2. City Council delegate its power to approve the alteration, disturbance, restoration, or repair of Nutana Pioneer Cemetery for research purposes to the General Manager, Community Services or their designate; and
3. That the City Solicitor be instructed to draft the required bylaw.

BACKGROUND

Through a previously established Research Connection, the City of Saskatoon (City) has been approached by Professor Terence Clark of the Anthropology Department of the College of Arts and Science at the University of Saskatchewan (USask) to utilize the Nutana Pioneer Cemetery, for a research project, to complete a ground penetrating radar survey and S4 soil probing, to further improve the data analysis of the techniques in locating graves.

DISCUSSION/ANALYSIS

Forensic geophysics is increasing in application and has recently been in the Canadian and Saskatchewan news regarding finding unmarked graves on the sites of residential schools.

USask is requesting to complete a research project using ground penetrating radar surveys and S4 soil probing to detect known grave locations at the Nutana Pioneer Cemetery, located close to the intersection of Ruth Street and St. Henry Avenue in the Exhibition neighbourhood. The proposed research expects to further calibrate the use of the geophysics techniques to map known grave locations. This will enable the technique to be used for locating unmarked graves in the future at other sites.

Nutana Pioneer Cemetery was designated as a Municipal Heritage Property in January 1982. City Solicitors reviewed the proposed project, in conjunction with The Heritage Property Act (Act) and Bylaw No. 6453, The Cemetery Bylaw, 1984 and determined that due to specific provisions that protect Nutana Pioneer Cemetery from any type of alteration or disturbance, City Council approval will be required.

The Nutana Pioneer Cemetery is a location of focus for USask due to proximity of the University, the cemetery being inactive and previous work completed on site by members of the USask geophysics and anthropology departments involved in the search for unmarked graves, at residential schools.

USask plans to complete a continued ground penetrating radar (GPR) survey at Nutana Pioneer Cemetery in addition to S4 soil probing to find the borders of burials, it does not probe deep enough to disturb conventional burials in the cemetery or to locate decomposition residue. A detailed summary of the proposed techniques is presented in Appendix 1.

FINANCIAL IMPLICATIONS

The research is funded by USask with no input required from the City of Saskatoon; therefore, there are no financial implications.

OTHER IMPLICATIONS

A brief summary of this request and notification of this report to Committee has been provided to the local Indigenous community, the Exhibition Community Association, the Municipal Heritage Advisory Committee, Meewasin and the Saskatoon Heritage Society.

Approval of this project will help in building the City's partnership with USask in addition to supporting research that supports Truth and Reconciliation Call to Action #75:

“to develop and implement strategies and procedures for the ongoing identification, documentation, maintenance, commemoration, and protection of residential school cemeteries or other sites at which residential school children were buried.”

This request is linked to issues that could be and are sensitive and emotionally triggering. Any work relating to locating marked and unmarked graves will be conducted with respect to the people buried and their families.

If successful, the techniques proposed in this application could be used in the future for locating unmarked graves at residential schools, which will continue to be sensitive and upsetting for communities, as well as for residential survivors, their families, and the families of children whose location remains unknown. However, this new technology could also help serve to provide closure and validation.

This is the second request in consecutive years and continued research is expected in future years.

Pursuant to subsection 23(5) of the Act, City Council may, through a specific or general bylaw, delegate any of its powers pursuant to the Act to Administration. The Act empowers City Council to approve any alteration, restoration, repair, disturbance, or addition to Nutana Pioneer Cemetery. Administration proposes that City Council delegate its authority to approve the alteration, disturbance, restoration, or repair of

Nutana Pioneer Cemetery for research purposes. Administration would, in practice only, approve research that is expected to result in minor alterations or disturbances to Nutana Pioneer Cemetery, which may necessitate corresponding minor restoration or repair work.

NEXT STEPS

If the recommendation is supported, USask will complete the fieldwork during fall 2023. The completed research will be shared with the City.

Upon City Council approval, the City Solicitor will draft a bylaw to delegate the authority to approve research requests to the General Manager, Community Services Division or their designate. The current plan is to include the delegation as a provision in the new Cemeteries Bylaw, 2024, which is anticipated to be presented to City Council at its December 20, 2023 meeting, with a coming into force date of January 1, 2024.

APPENDICES

1. Geophysics Summary

REPORT APPROVAL

Written by: Vanessa Heilman, Geotechnical Engineering Specialist

Reviewed by: Chris Zerebeski, Parks Superintendent
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Approved by: Lynne Lacroix, General Manager, Community Services

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