# Archaeological Monitoring of Geo-technical Drilling Operations at The Manitoba Children's Museum Heritage Resource Impact Assessment

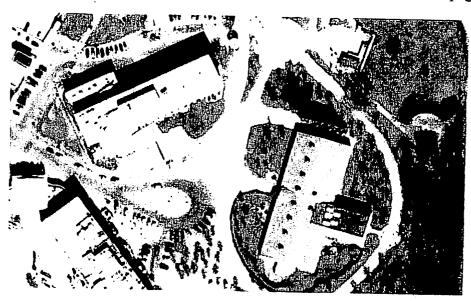
Manitoba Heritage Permit A65-09 Culture, Heritage & Tourism Historic Resources Branch

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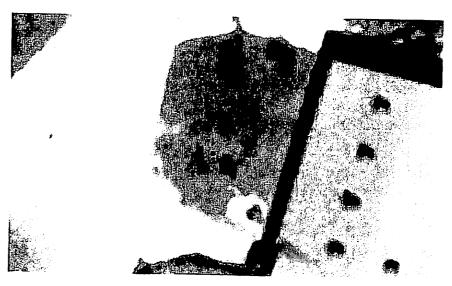


### **Executive Summary**

On February 12, 2010 Perry Blomquist (Archaeological Services Officer) of the Historic Resources Branch Archaeological Assessment Services Unit conducted archaeological monitoring of the geo-technical drilling operations that took place at the location of The Manitoba Children's Museum within The Forks District of the City of Winnipeg.



Working in conjunction with Syverson | Monteyne Architecture Inc., ENG-TECH Consulting LTD conducted geo-technical drilling to assess the suitability of the proposed placement of an addition to the museum. Three bore holes were excavated and sediments were collected from various depths for inspection and further testing by ENG-Tech driller Rod Girouard. Due to the drilling location's proximity to other known archaeological sites in the immediate vicinity, it was imperative that such a ground disturbance be monitored and assessed for impacts to heritage resources as well. Each of the three bore holes yielded a small amount of archaeological materials.

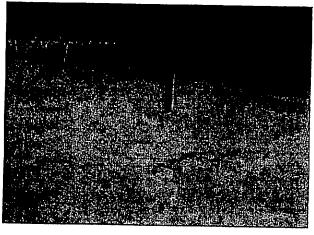


#### Methods

Archaeological monitoring of activities causing ground disturbances are conducted primarily through the visual inspection of exposed sediments by the consulting archaeologist. The drilling operations undertaken for this project required that each of the holes were excavated to differing depths. As all of the holes were dug deeper than the length of a single auger drilling rod (~5 feet), cuttings were conveniently extracted and visually inspected at controlled intervals. In expectation of recovering archaeological materials closer to the surface, sediments from within the first stages of drilling were closely examined and found to contain cultural material. Cuttings were examined for both artifacts and geological indicators of potential heritage resources. Sediments were inspected while still in place within the auger blades immediately after extraction and again after being removed and piled next to the boreholes as backdirt. Sediments extracted closer to the surface were examined for archaeological deposits of a cultural nature while those sediments from the deepest portions were inspected for items of paleontological significance.



View north of first bore hole.

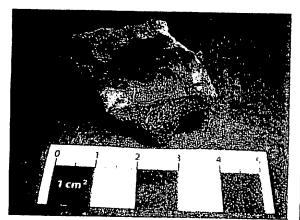


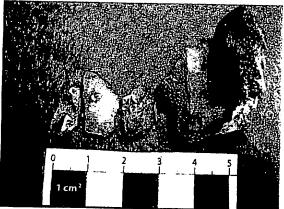
View NE (downslope) from hole 1 showing marked locations of holes 2 and 3.

#### Results

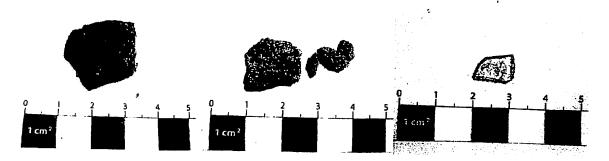
Each of the three bore holes excavated yielded a small amount of archaeological artifacts. All artifacts recovered were found within 3 metres of the ground surface and no items of paleontological significance were encountered within the deeper sediments. The small number of artifacts retrieved were composed mostly of recent, historic garbage (possibly construction fill) found close to the surface. A single, fragmented mammal bone was found and determined to be a cervical vertebra. The remainder of the artifact assemblage is comprised mostly of coal, ash, window glass, clinkers and bits of unidentifiable oxidized iron.

Hole #1: Fragmented Mammal bone; Cervical vertebra **Depth of Discovery:** 300 centimetres below surface.

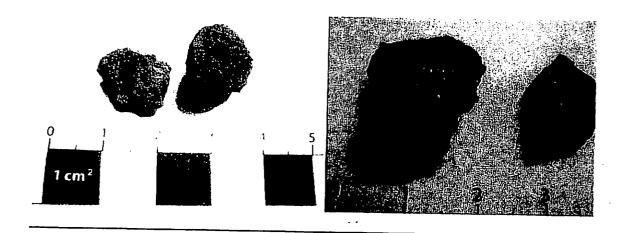




Hole #2: Coal, ash, window glass and clinker Depth of Discovery: 91 centimetres below surface.



Hole #3: Coal, ash and oxidized iron Depth of Discovery: 152 centimetres below surface.



## **Summary and Recommendations**

From the three bore holes drilled, only a small number of archaeological items were retrieved. Based on the relatively recent deposition of these historic items and that they were found near the ground surface within deposits related to dumping or in-filling (likely within the last 50-60 years) it has been determined that the location of the drill holes represents an area with very little archaeological concerns as it relates to the upper 1-1.5 metres. The presence of bone fragments at a depth of three metres however, indicates that a cultural layer may possibly exist below the upper disturbed portions.

The amount of previous ground disturbances stemming from construction and infilling activities has resulted in a small area that will be unaffected (archaeologically) from further construction. Due to the proximity of this location to other known, intact, significant heritage sites, those areas that fall outside the immediate vicinity of the proposed work site boundaries should be treated as possibly housing potentially significant heritage resources. Any further modification to the proposed worksite plan that falls outside those boundaries will require prior additional investigation for heritage resources based on the type and scope of work proposed.

Perry Blomquist Archaeological Services Officer Historic Resources Branch March 2010