

HARBOURFRONT TRUNK SEWER OVERFLOW CONTROL And KING STREET WATER TREATMENT PLANT WASTE MANAGEMENT CLASS ENVIRONMENTAL ASSESSMENT

EXISTING CONDITIONS

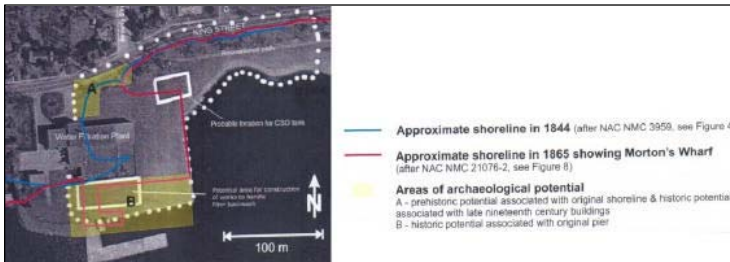
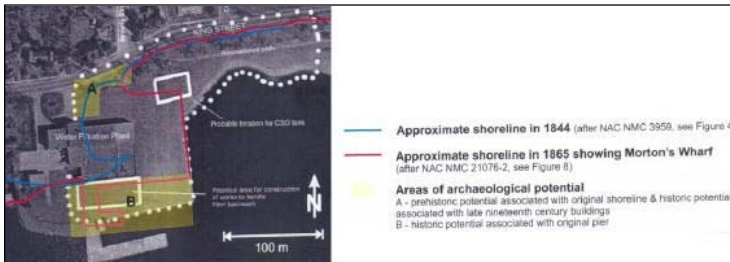
NATURAL ENVIRONMENT

The firm of ESG International has reviewed natural environment in the project area. Generally, the area consists of a highly urbanized environment, shoreline park areas such as Douglas Fluhrer Park, Emma Martin Park and the Lake Ontario waterfront area near the King Street water plant and manicured park areas that include shoreline alteration to protect against erosion.

ARCHAEOLOGICAL RESOURCES

An archaeological review was completed by Heritage Quest of Kingston. The map to the right shows the potential for encountering archaeological artifacts in the Brock Street to River Street portion of the overall project area.

A review of the King Street West area has also been completed by Heritage Quest. See the map below.



GEOTECHNICAL CONDITIONS

Information on subsurface geotechnical conditions has been gathered from various sources such as engineering records for existing underground works. The geotechnical specialist firm of Inspec-sol Inc., of Kingston, has been contracted to complete the review and conduct exploratory fieldwork. A total of eight boreholes were placed in the project area in late November 2002 to confirm soil and rock conditions.

SUBSURFACE CONTAMINATION

Contamination of soil, groundwater, and bedrock by previous land use will increase the cost of new infrastructure, and could also pose environmental or health and safety risks.

Over its history, the project area has seen a wide range of different land uses. These have included heavy industries, bulk fuel storage facilities, service stations, coal storage and handling facilities, and a former coal gasification plant site. A review of available information regarding all properties within the project area has been conducted to identify known or potential subsurface contamination. There is significant potential, in a number of locations, that subsurface contamination will be encountered during construction. This has been a key consideration in examining route alternatives for new interceptor sewers and in estimating project costs.



SEWER SYSTEM STATUS

Measurements of flow in the sewer system have been made at a number of strategic locations in 2002. This information has been used in developing a computer model of system hydraulics to assist with designing overflow control works.

