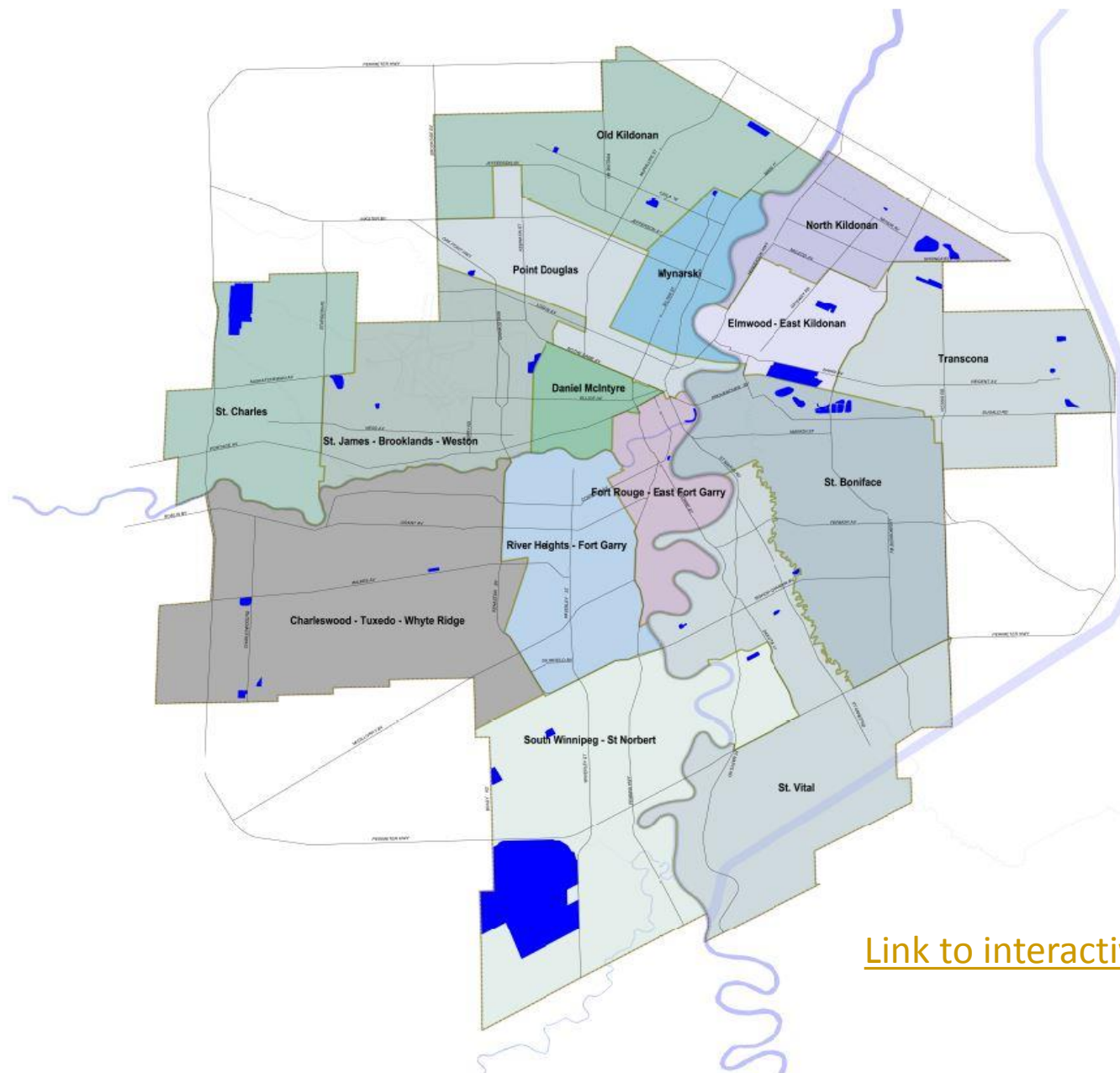


CLOSED LANDFILLS

IN THE CITY OF WINNIPEG

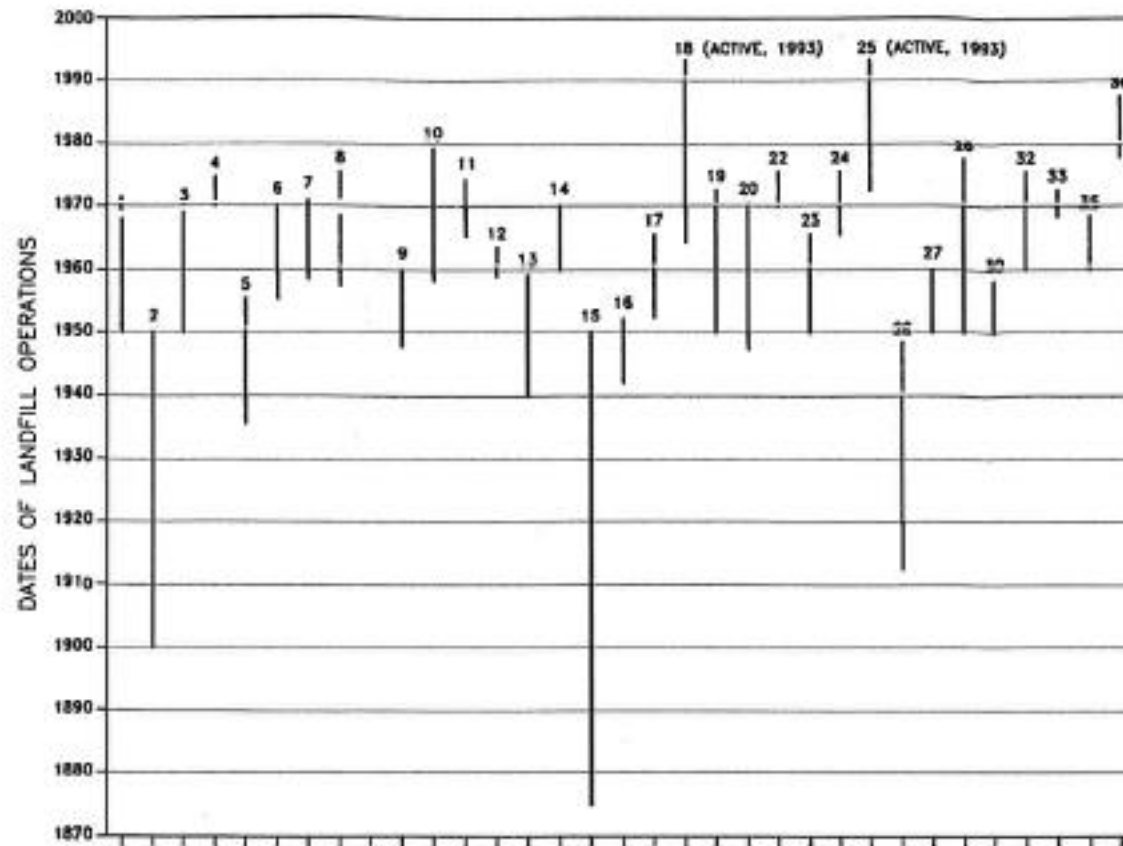




[Link to interactive map](#)

OLDER LANDFILLS

Manitoba landfills did not need to be registered until 1976



LANDFILL MONITORING

- Landfills are monitored to protect environment and human health
- We monitor:
 - Surface water
 - Groundwater
 - Leachate
 - Landfill gas
 - Equal parts of methane and carbon dioxide



LANDFILL GAS MONITORING

- Every City of Winnipeg landfill has a methane control zone
- Control zones vary from 0-90 metres around sites
- Uses direct read landfill gas analyzer
- Landfill gas probes installed in the subsurface around control zones
- Methane tests in surrounding buildings



METHANE GAS POLICY – LANDFILL ENVIRONMENTAL PROGRAM

- Methane Gas Policy initially adopted by Council in June 1979
- In October 1984, Council approved continuation of Methane Gas Policy – Landfill Environmental Program



CLOSED LANDFILLS

■ Capped and closed landfills are unstable areas due to:

- Buoyancy
- Leachate
- Settlement and slumping
- Landfill gas



■ These factors make developing a closed landfill difficult

Marlene Street Complex

Supply and Install Park Sign, 2 Metal Waste Receptacles, Ornamental Boulders, and Planting (refer to planting detail)

Supply and Install 7 Wooden Bollards w/ Chain for Vehicle Access as per SCD-777

Supply and Install 9 ??? Trees as per SCD-777

Sidewalk

Hydro Box

MTS

Ditch

Gas Pipe

MTS

Ditch

HIP

Gas Pipe

Supply and Install 2.4m (8') Wide Granular Path (???) as per SCD-646

Supply and Install 3 ??? Trees as per SCD-777

High Point

Supply and Install Backless Tache Bench and Granular Seating Node as per SCD-777 and SCD-777

Supply and Install Backless Tache Bench and Granular Seating Node as per SCD-777 and SCD-777

Supply and Install 3 ??? Trees as per SCD-777

Hydro Tower

Hydro Tower

HIP

HIP

HIP

A



CONTRACTOR TO CONFIRM ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION. LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.



THE CITY OF WINNIPEG
Planning, Property and Development Department
Planning and Land Use Division
Unit 15 - 30 Fort Street, Winnipeg, MB, (R3C 4X5)

DESIGNED BY	NS	CHECKED BY	
DRAWN BY	NS	APPROVED BY	
HORIZ. SCALE	1:1000	MANAGER, PARK AND OPEN SPACES	DATE
VERT. SCALE		MANAGER, PLANNING AND LAND USE DIVISION	DATE
DATE	APRIL 2014		

DRAWING TITLE	DRAWING NO.
MARLENE STREET PARK PATH DEVELOPMENT PROPOSED DESIGN	M.094-C
SITE ADDRESS	BID OPPORTUNITY NO. 374-2014

CLOSED LANDFILL USES

CLOSED LANDFILL IMPROVEMENT PROGRAM

- The program was developed as a response to the Disposition Study (2015)
 - Landfill Status Report for Closed Landfills
 - Landfill Environmental Risk Report for Closed Landfills
 - Landfill Rehabilitation and Cost Estimate Report
 - Landfill Land Use Potential Report
- The study provides recommendations for improvements to landfill infrastructure and the existing environmental monitoring program