

**City of Clarence-Rockland, ON
2018 Annual Operations Monitoring Report
Final Report**

Prepared For:

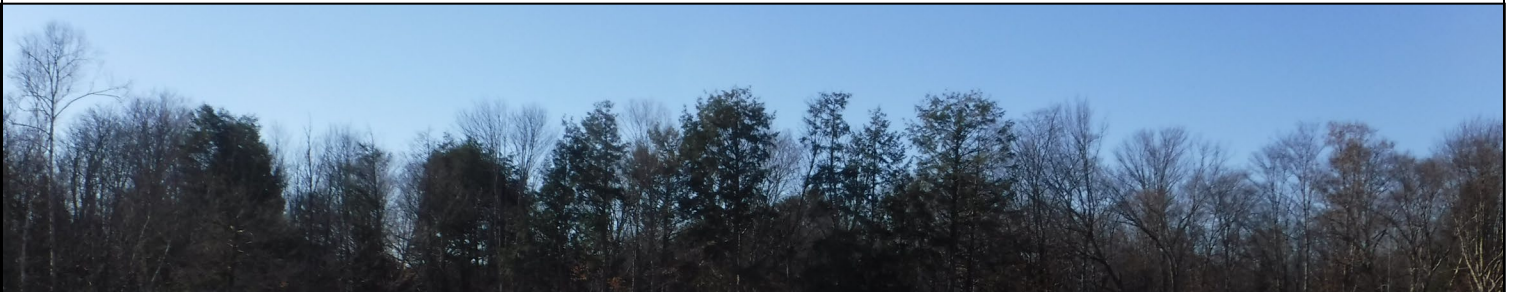


Clarence-Rockland

Prepared by

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Jp2g Project No. 17-6021B
March 2019

 **Jp2g Consultants Inc.**
ENGINEERS • PLANNERS • PROJECT MANAGERS

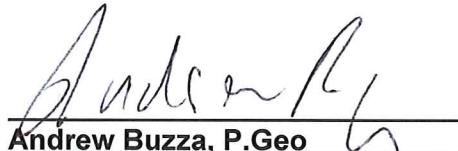


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Jp2g Consultants Inc. Signatures

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Principal | Environmental Services

EXECUTIVE SUMMARY

The City of Clarence-Rockland own and operate a landfill located on Lot 15, Concession IV, United Counties of Prescott and Russell (**Figure 1**). In 2001, the Ministry of the Environment issued an amended provisional ECA No. A471203 dated October 18 for the expansion of the landfill site (50 ha total site area, 12 ha footprint, and an additional 740,000m³ of waste). This 2018 annual report was prepared to satisfy Conditions 6.6 and 6.7 of the revised ECA A471203 dated October 21, 2009 as amended. The City also operates a transfer facility (Provisional ECA No. 1998-6QQ13K) issued on June 26, 2006 for leaf and yard waste. Activities related to the Leaf and Yard Waste are included in this report. Results of Environmental Monitoring are provided under separate cover.

During 2018, waste was deposited in the north section of the landfilling area. Based on a site survey completed in January 2019, the measured volume of waste and daily cover deposited at the landfill during 2018 was approximately 15,000m³.

The 2018 existing conditions plan is shown in **Figure 2**. Final contours are provided in **Figure 3**, and **Figures 4, 5 and 6** illustrate the waste cross sections. Using the actual volumes measured over the last five years (2014-2018), the average per capita landfilling rate was calculated to be 0.6m³/year, which is lower than the design per capita of 0.832 m³/year. At this rate (the 5-year average of approximately 15,000 cubic metres), the landfill's remaining capacity of approximately 535,000 cubic metres would reach capacity in over 30 years.

Based on the information presented in this report, the following summarizes the main recommendations for 2018:

1. Continue with the groundwater, surface water and landfill gas monitoring programs to demonstrate continued compliance with regulatory requirements. Consider installing new well adjacent to the weigh scale for assessment of landfill gas migration.
2. Continue with the operation of the leaf and yard collection in Rockland. In 2018 the leaf and yard waste facility was open to the public from April to the end of November 2018.
3. Review strategy developed for the Waste Recycling Study and implement recommendations to further improve diversion.
4. Conduct the staff refresher training for WHMIS, First Aid as required. Review ECA conditions and operating practices.



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Appendix C – HHW Activities 2018
Appendix D – Cover Material Report
Appendix E – Waste Diversion Report
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1.0 INTRODUCTION

The City of Clarence-Rockland own and operate a landfill site (the Site) located on Lot 15, Concession IV, United Counties of Prescott and Russell (**Figure 1**). The Ministry of Environment, Conservation and Parks (MECP, previously named the MOE, MOEE and MOECC) issued an amended provisional ECA No. A471203 dated October 18, 2001 for the expansion of the Site (50 ha total site area, 12 ha footprint, and an additional 740,000m³ of waste). In January 2002, the City began waste disposal operations within Cell 1 of Phase 1 of the landfill expansion. ECA No. A471203 was later amended on October 21, 2009 (replacing former ECAs) and more recently amended on September 9, 2015 and August 19, 2016.

A small wetland /pond was created on Site for treatment of contaminated runoff and its operation is covered through ECA 3362-6D7PL4 dated June 24, 2005 issued under the OWRA. Details on the required monitoring as outlined in the ECA are provided in the Environmental Monitoring Report that is provided separately.

Provisional ECA No. 1998-6QQ13K was issued on June 26, 2006 for the operation of a waste transfer station for leaf and yard waste. This report summarizes the waste quantities, operational issues and reporting requirements of the operation of the leaf and yard waste transfer facility that is located on rue Industrielle in Rockland (ECA No. 1998-6QQ13K).

A copy of all ECAs are reproduced in **Appendix A**.

For file continuity, many details of this report are copied and or repeated in part or in whole from the report produced by the consulting firms previously retained for the Site (Stantec Consulting and Golder Associates Ltd.), and from Jp2g Consultants Inc. 2017.

2.0 PURPOSE OF ANNUAL REPORT

The reporting requirements for the landfill site is outlined in Condition 6 - Record Keeping and Reporting of ECA No. 471203 dated October 21, 2009, specifically Conditions 6(6) and 6(7). Condition 6(6) requests that a written report on the development, operation and monitoring of the site be completed annually (the “Annual Report”). The Annual Report shall be submitted to the District Manager, by March 30, of the year following the period being reported on. In this instance, the reporting date is March 30, 2019 to document the 2018 activities that were completed at the landfill site. Condition 6(7) outlines the required contents of the Annual Report. There are typically two components to the report; environmental monitoring results and operational details. The environmental monitoring report addresses the requirements of sampling as outlined in ECAs No A471203 and 3362-6D7PL4. The environmental monitoring report is submitted separately.

3.0 SUMMARY OF REPORTING REQUIREMENTS

The conditions established in the Environmental Compliance Approval provide the guidelines for the operation of the landfill. Condition 1 is administrative with the balance of conditions being directly related to the operation and monitoring of the site. A compliance summary table for ECA No. 471203 is provided in **Appendix B**.

A summary of reporting requirements as outlined in Item 6(7) of the ECA are listed below and discussed in subsequent sections.

- A- calculations of the volume of waste landfilled, the daily and intermediate covers, the final cover and the overall volume of the site capacity used during the reporting period;*
- B- a comparison of the actual capacity used to the estimates of the capacity estimated;*
- C- an estimate of the remaining site life;*
- D- any changes in operations, equipment, or procedures used at the Site, any operating problems encountered, and corrective actions taken;*
- E- details on the monitoring program undertaken, outlining monitor locations, analytical parameters sampled, and frequency of sampling;*
- F- an analysis and interpretation of the surface water and groundwater monitoring data, a review of the adequacy of the monitoring program, conclusions of the monitoring data, and recommendations for any changes that may be necessary;*
- G- summary of inspections undertaken at the Site;*
- H- summary of any public complaints received, and the responses made;*
- I- summary of activities undertaken at the HHW depot;*
- J- a discussion of cover stockpile activities including use, timing, locations and erosion protection;*
- K- status update on the final cover placement, and seeding activities undertaken in the closed sections of the Landfill;*
- L- a discussion of the waste diversion performance achieved by the Owner reported on a per capita basis;*
- M- a statement as to the compliance with all conditions of this Certificate and the other relevant Ministry's groundwater and surface water requirements.*
- N- recommendations respecting any proposed changes in the operation of the Site;*
- O- and any other information that the Regional Director or the District Manager may require.*

4.0 LANDFILL SITE OPERATIONS

4.1 Site Capacity and Site Life

Approved Site Capacity

The August 2000 City of Clarence-Rockland EPA Landfill Expansion Design, Operation and Maintenance Report (Stantec, 2000) states that the total capacity of the landfill, once developed to the final contours, will contain 974,000 cubic metres. This total waste disposal capacity is comprised of 740,000m³ contained within the expansion area of 5 hectares and 234,000m³ (existing) within the former 1994 interim expansion of the landfilling area to 6.9 hectares.

Remaining Service Life

The landfill service life ends when 740,000 cubic metres of air space has been consumed by waste when final waste contours are reached. In the Environmental Assessment documentation, the design service life was estimated to be approximately twenty-five (25) years based on the following assumptions:

- population projection based on a design population 26,657 for 2002 that included the former municipalities of Rockland, Clarence, North Plantagenet and the Village of Plantagenet;
- achieving a waste compaction density of 600 kg/m³;
- using 20% of total volume for daily cover; and
- using a per capita waste generation of 0.832m³/year which includes waste from all sectors (residential, commercial and institutional).

Based on a survey completed in January 2019, the calculated material placed in the landfill site in 2018 was 14,819 m³. A summary of the waste depositions and remaining capacity are provided below and in **Table 1**.

2018 Deposition Volume:

- 14,819 m³
- 2014-2018 range = 12,388 to 17,962m³
- 2014-2018 average = 15,038m³

Remaining Capacity:

- ACAD: 541,061m³ +/-
- Algebraic: 534,658m³
- Avg 537,860m³
- RPD = 1.12%

The 2018 volume (14,819 cubic metres) is lower than the previous year and lower than the 5-year average and is in the order of 0.58m³/capita/year based on the 2018 prorated Clarence Rockland population of 25,589. The elevated values for 2017 were likely in part attributed to the extreme flooding events that occurred in eastern Ontario in the spring of 2017. The 2018 per capital waste volume is slightly less than the design per capita value of 0.82 m³/year.

Based on the five-year average from 2014 to 2018 (14,878 m³/year) the estimated site life is estimated to be greater than 30 years. (537,860 m³ avg remaining / 15,000 m³ 5-year avg).

Over time, as the depth of the waste increases, it is anticipated that increased compaction and organic decomposition will result in some capacity being regained. The remaining capacity in 2008 was adjusted to reflect this. And similarly, in 2017, a total site survey was completed, and the remaining capacity adjusted to reflect this.

Table 1 is adapted from Stantec (2016) and provides a summary of estimated remaining capacity, remaining capacity based on the latest site survey. The per capita waste volumes are based in the Clarence-Rockland populations and pro-rated for 2018.

Table 1: Remaining Capacity in Expansion Area

Year	Clarence-Rockland Population	CR Design Vol. (m ³)	CR Annual Vol. (comparative survey) m ³	CR Remaining Vol (m ³)	m ³ per capita	
	Note 1 & 2	Note 3	Note 4	Note 5	Per yr	Per 5 yr avg
2001				740000		
2002	21,754		11,100	728,900	0.51	
2003	22,335		23,300	705,600	1.04	
2004	22,931		13,745	691,855	0.60	
2005	23,543		21,929	669,926	0.93	
2006	22,124		17,422	652,504	0.79	0.77
2007	22,394		19,072	633,432	0.85	0.84
2008 ^{Note 6}	22,667		21,665	690,825	0.96	0.83
2009	22,944		15,904	674,921	0.69	0.84
2010	23,224		16,420	658,501	0.71	0.80
2011	23,507		14,360	644,141	0.61	0.76
2012	23,794		11,460	632,681	0.48	0.69
2013	24,084		14,040	618,641	0.58	0.62
2014	24,378		12,388	606,253	0.51	0.58
2015	24,675	14,122	16,730	580,736	0.68	0.57
2016	24,976	13,897	13,270	567,466	0.53	0.56
2017 ^{Note 6}	25,281	15,224	17,962	549,504	0.71	0.60
2018	25,589	15,390	14,819	534,685	0.58	0.60
2056	40,079	22,043		12,685	0.00	0.55

Notes

Note 1 Population for Clarence Rockland adjusted by Census in 2006 and 2011

Note 2 Population is based on a yearly increase of 1.0122 (Census 2006 to 2011 showed annual geometric increase to be 1.0122).

Note 3 Design criteria is based on a 5-year running average (in 2018, 5-year running average is 0.60 cubic metres/capita/year).

Note 4 Actual volumes measured each based on yearly site surveys

Note 5 Remaining volume adjusted yearly to reflect quantities from surveys

Note 6 Complete site surveys completed to assess waste settlement.

4.1.1 Waste Deposited in 2018

The 2018 waste contours and waste footprint are shown on the Existing Conditions Plan (**Figure 2**). **Figure 3** shows the final contours and **Figures 4, 5 and 6** identify waste sections of the landfill.

During 2018, waste was continued to be deposited in the north portion of the site. In January 2019, Jp2g Consultants Inc. completed a topographic survey of the waste mound using a “Spectra Precision SP80 GPS and calculated a volume of approximately 15,000m³ of waste/cover deposited as reported in **Section 4.1**.

4.2 Changes to the Site Operations, Equipment of Procedures

The Municipality has confirmed the following operational changes in 2018. They include:

- In August 2018, the scale was fully functional and used to measure all incoming loads and invoice clients on a per weight basis.
- In April 2018, the new “Dome” household waste (HHW) depot opened.
- In November 2018, new Geoware software system was introduced to facilitate the daily operations and all incoming waste.
- Staffing as required

Regarding the actual landfilling, there have been no operational changes or problems. A new loader was purchased in 2018.

Windrow composting of leaf and yard material continued in 2018, within the limits and requirements of the ECA. Although no compost is currently cured and ready for use, this practice has permitted a perceived significant reduction in the volume of material in a short period of time. This is in contrast to the “static pile” method that was historically used.

In 2016, an emergency response plan for fire and or medical was established and all concerned staff were trained on the emergency response plan. A copy of the plan is kept on site at all times.

The site entrance reconfiguration has been completed, and the use of weigh scales to calculate fees for waste disposal was operational in the spring 2018.

4.3 Environmental Monitoring – Groundwater and Surface Water

Details on the environmental monitoring completed at the site in 2018 are provided by Jp2g Consultants Inc. under separate cover. The details include as discussion on monitoring locations, the direction of groundwater flow and compliance with applicable guidelines. As requested in ECA 3362-6D7PL4, sections of the Environmental Monitoring Report provide details on surface water conditions at the site and an evaluation of the results in comparison to provincial guidelines. Recommendations for future monitoring are provided.

4.4 Summary of Inspections undertaken at the Site.

As per ECA Conditions 6(1) and 6(2) there are requirements for inspection and records of HHW transfer operations. ECA Conditions 6(3) and 6(4) relate to the landfill site. In 2018 there were no MECP Inspections. the following inspections and responses were completed and provided to the MOECC.

4.5 Summary of Complaints

In 2018, the Municipality did not receive any complaints from the public that were related to the operations of the landfill site.

4.6 HHW Activities

A summary of activities undertaken at the HHW depot in 2018 is summarized by the Municipality in **Appendix C**.

4.7 Interim Cover Material

A summary and discussion of cover stockpile and use is summarized by the Municipality and is provided in **Appendix D**.

4.8 Final Cover Material

The Municipality reports that a large amount of interim and a small amount of final cover was placed on the northern toe in 2017. The next anticipated need for significant final cover placement and associated seeding is anticipated to be in 2019. Subsequent to the placement of any final cover the following annual report will provide documentation.

4.9 Waste Diversion

The Municipality has provided details on waste diversion. A summary is provided in **Appendix E**.

4.10 Compliance with Conditions of the ECA

A compliance summary table is provided in **Appendix B**.

4.11 Changes to the Operation of the Site

Windrow composting for Leaf and yard waste was initiated in 2017 and continued in 2018 as outlined in Section **4.2**. Weigh scales and a new HHW dome were introduced in 2018.

4.12 Additional Information

In 2018, the banks of the pond were inspected and any areas that were thought to be low were “bolstered” and raised. The staff gauge that had been knocked over has been re-established. Accordingly, recordings will be again initiated in 2019.

5.0 WASTE TRANSFER STATION

Provisional Environmental Compliance Approval (Certificate of Approval) No. 1998-6QQI3K was issued on June 26, 2006 for the operation of a waste transfer station for leaf and yard waste (reproduced in **Appendix A**). Conditions 1 through 16 are general conditions dealing with definitions, compliance, interpretation, legal obligations, adverse effects, change of owner, inspections and information and record retention. Conditions 17 through 46 address the operations and maintenance of the transfer station and are summarized in the form of a compliance Summary Table provided in **Appendix F**.

In accordance with Condition 46 an annual report covering the previous year is required.

A summary of reporting requirements outlined in Condition 46 of the ECA are located below and discussed in the subsequent sections:

- A - a detailed monthly summary of the type and quantity of all wastes received and transferred from the site, including the destination of the waste;
- B - any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the site and during the facility inspections and any mitigative actions taken;
- C - a statement as to compliance with all Conditions of this Provisional Certificate of Approval and with the inspection and reporting requirements of the Conditions herein;
- D - a summary of any complaints that were received as a result of the operation of this site, and a summary of mitigative actions taken to resolve the complaint; and
- E - any recommendations to minimize environmental impacts from the operation of the site and to improve site operations and monitoring program in this regard.

5.1 Waste Types Received

The certificate of approval for the transfer station permits the acceptance of leaf and yard waste for transfer to the landfill for final disposal. The site supervisor conducts daily inspections and like 2017 noted that only grass clippings, garden refuse, leaves, hedge clippings, wood products, branches and natural Christmas trees were accepted at the site.

All waste accepted at the transfer station is transferred to the City of Clarence Rockland landfill site. Records of the number of loads and volume of material delivered to the landfill site are maintained at the Municipal Office.

5.2 Site Operations

The Site Supervisor conducts daily site inspections and completes daily reports. The reports address the conditions of the ECA and include a section for comments and actions required, if any. The City should maintain copies of the daily inspection reports and a copy of this report onsite for a minimum of one calendar year following submission of the annual monitoring report. The site custodian also records the number of residents that use the site.

5.3 Complaints

During 2018, no complaints were received from the public regarding the transfer station.

5.4 Recommendations

The following recommendations are made for the Transfer Station for the 2019 operating season:

- Should the transfer station remain open, continue with the record keeping so that the loads transferred off site are counted.
- Review the requirements of the ECA No. 2009-A471203, record keeping, and emergency procedures with the site attendant. This should be included as part of the refresher courses to be offered following the completion of site improvements
- Conduct a site inspection and implement any necessary changes or repairs (such as gate or fencing repairs, modifications to signage).

6.0 RECOMMENDATIONS

Based on the information presented in this report, the following summarizes our main recommendations for 2019, these being;

1. Continue with the groundwater, surface water and landfill gas monitoring programs to demonstrate continued compliance with regulatory requirements. Consider the installation of a new well adjacent to weigh scale for assessment of landfill gas migration. Assess landfill gas in all buildings.
2. As indicated in the Solid Waste Management Strategy, the City of Clarence-Rockland should review the feasibility to include organics collection (source separated organics and leaf and yard waste) for the next collection contract, to be renewed in 2021. Many elements of the Proposed Food and Organic Waste Framework (November 2017), drafted under the Waste-Free Ontario Act, are pointing towards an emphasis on the diversion of food and other organic waste, which could mean requirements for the City of Clarence-Rockland to put in place a collection system for these types of waste. While the Leaf and Yard Waste Transfer Station is practical at this point in time, in the larger picture, should the City be required to collect source separated organics (projection from the Proposed Food and Organic Waste framework, puts this date a 2027), it will be more practical to collect L&Y waste curbside at the same time.
3. Prepare base of Cell 3 to allow a seamless progression of waste from Cell 2. Relocate the brush and compost pile to accommodate this move.
4. Undertake a detailed topographic survey of the active waste fill areas to provide an annual waste deposition.
5. Review strategy developed for the Waste Recycling Study and implement recommendations to further improve diversion.

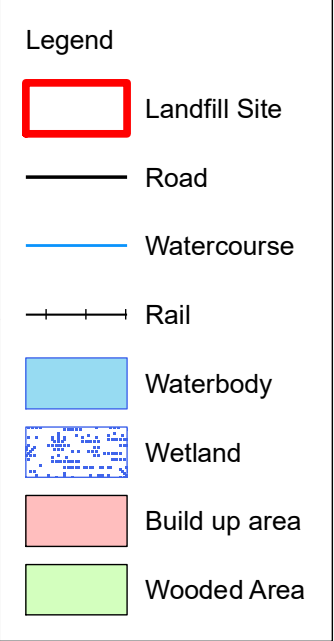
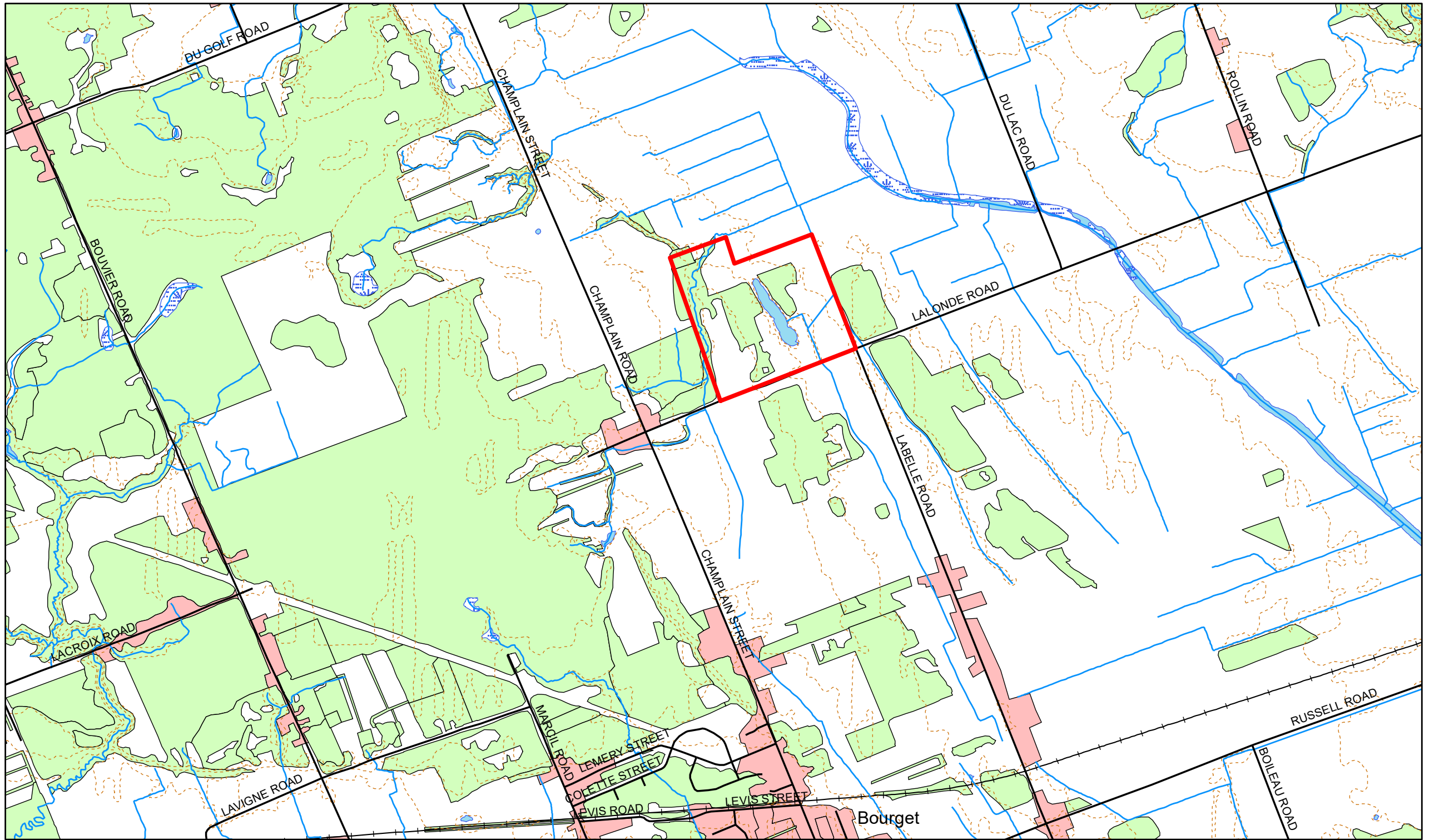


6. Conduct the refresher training for WHMIS, First Aid, and review ECA conditions and operating practices as required.
7. Continue the use of the entrance weigh scales to be able to more accurately invoice clients on a per weight basis.
8. Continue with the operation of the new HHW depot
9. Investigate the potential to divert clean chipped wood (branches) to an appropriate facility, within the limits and requirements of the ECA.

7.0 LIMITATIONS AND USE OF REPORT

This report has been prepared for the exclusive use of the City of Clarence Rockland for the purpose of annual operations monitoring and reporting at the subject property. Any use that a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third parties. Jp2g Consultants Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

FIGURES



Data from Land Information Ontario
Landfill site boundary approximate



Jp2g Consultants Inc.
ENGINEERS • PLANNERS • PROJECT MANAGERS

Clarence-Rockland WDS

Bourget, ON

1:25,000

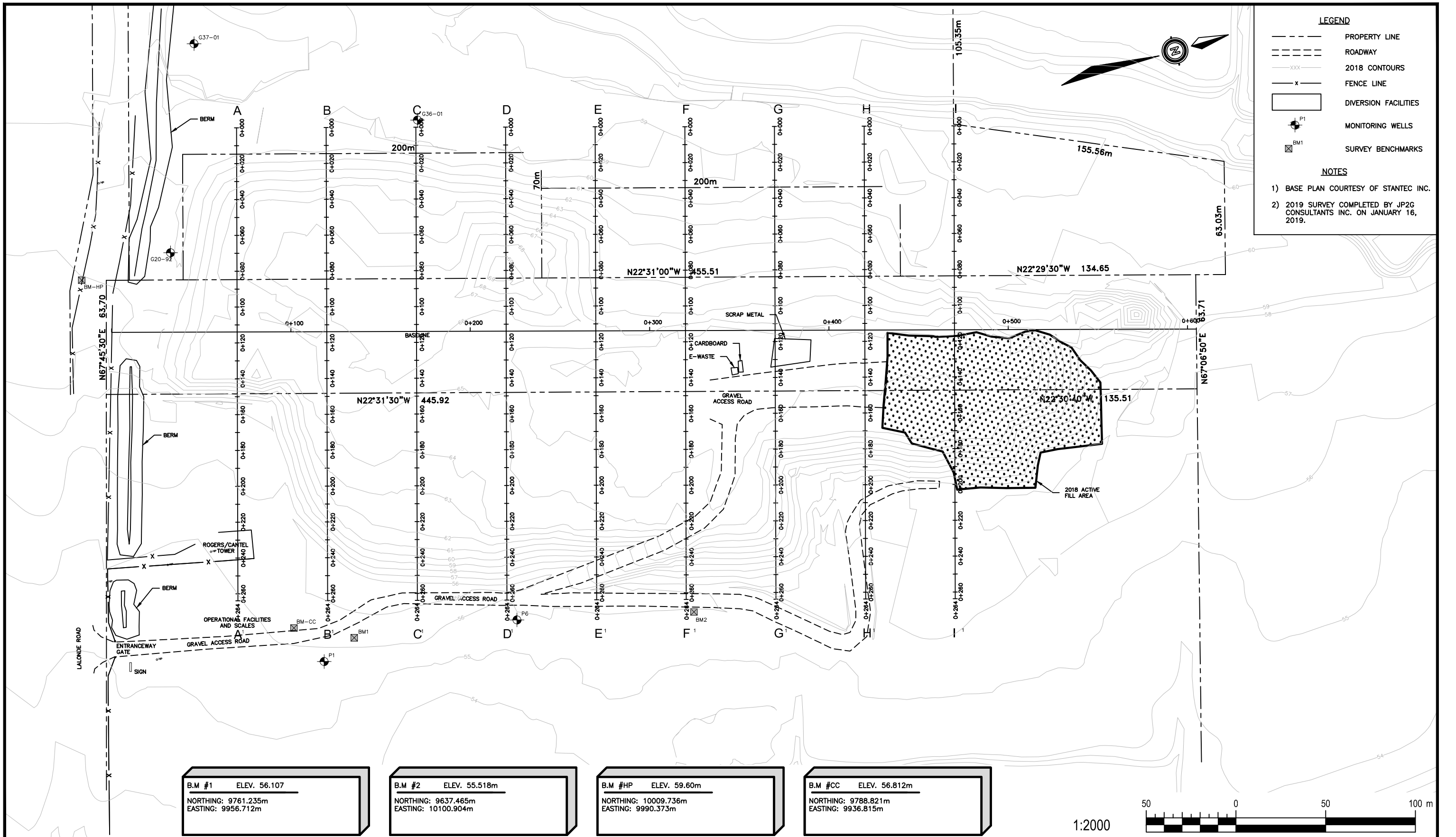
Project No.
17-6021A

Figure 1- Site Location Plan

Drawn By: PJ

Checked by: AB

Date: February 2017



LEGEND

- PROPERTY LINE
- ROADWAY
- 2018 CONTOURS
- x- FENCE LINE
- [] DIVERSION FACILITIES
- P1 MONITORING WELLS
- ⊠ BM1 SURVEY BENCHMARKS

NOTES

- 1) BASE PLAN COURTESY OF STANTEC INC.
- 2) 2019 SURVEY COMPLETED BY JP2G CONSULTANTS INC. ON JANUARY 16, 2019.

B.M. #1 ELEV. 56.107
NORTHING: 9761.235m
EASTING: 9956.712m

B.M. #2 ELEV. 55.518m
NORTHING: 9637.465m
EASTING: 10100.904m

B.M. #HP ELEV. 59.60m
NORTHING: 10009.736m
EASTING: 9990.373m

B.M. #CC ELEV. 56.812m
NORTHING: 9788.821m
EASTING: 9936.815m



No.	DATE	BY	REVISIONS



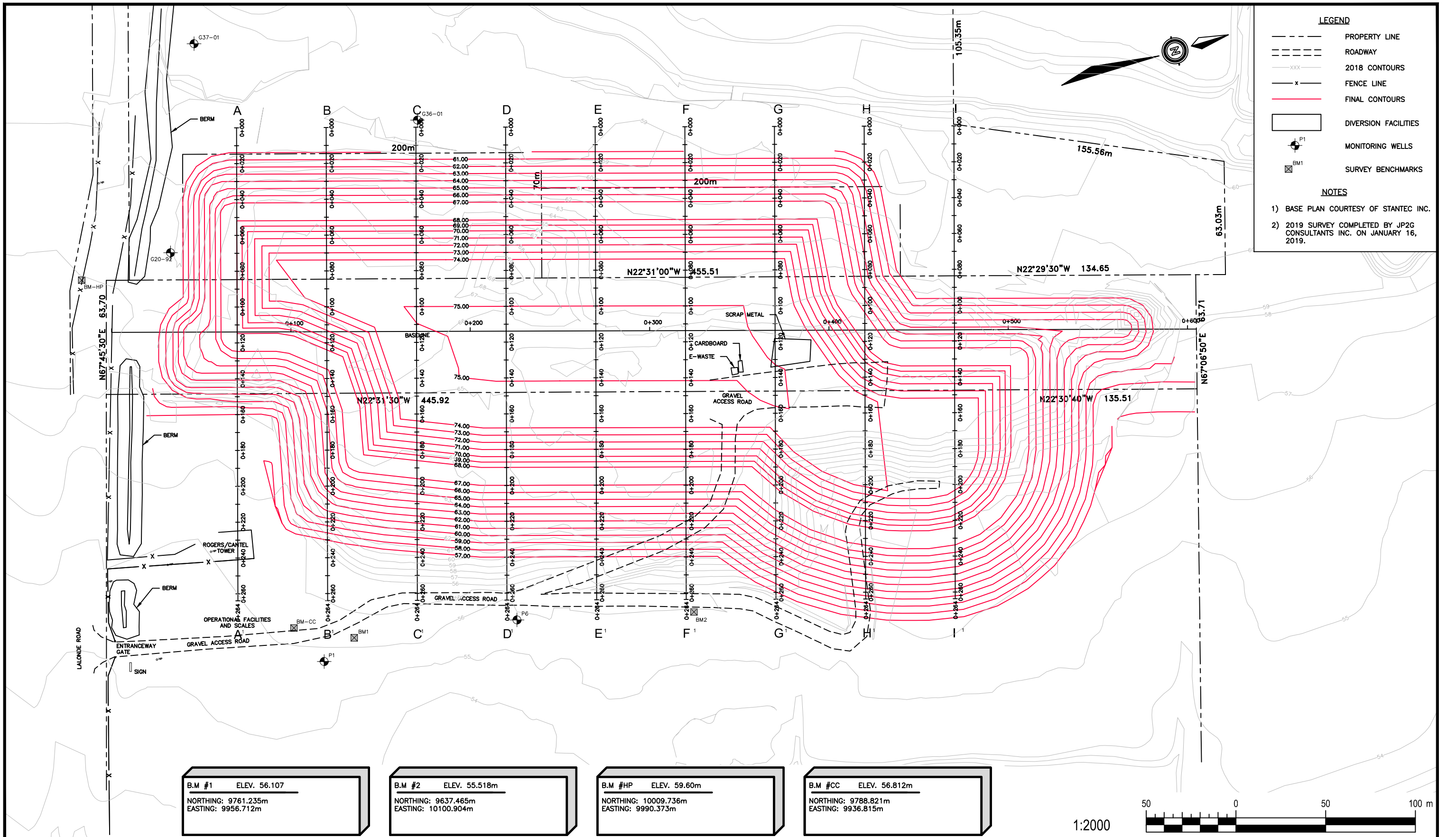
DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	1:2000

CLARENCE-ROCKLAND WASTE DISPOSAL SITE

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

2018 EXISTING CONDITIONS PLAN

PROJECT	17-6021C
PLOTTED	05-MAR-2019
FIGURE	2



LEGEND

- PROPERTY LINE
- ROADWAY
- 2018 CONTOURS
- x- FENCE LINE
- FINAL CONTOURS
- DIVERSION FACILITIES
- P1 MONITORING WELLS
- ⊠ BM1 SURVEY BENCHMARKS

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EASTING: 9990.373m

B.M. #CC ELEV. 56.812m
NORTHING: 9788.821m
EASTING: 9936.815m

No.	DATE	BY	REVISIONS

Jp2g Consultants Inc.
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DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	1:2000

CLARENCE-ROCKLAND WASTE DISPOSAL SITE
LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

FINAL CONTOURS

PROJECT	17-6021C
PLOTTED	05-MAR-2019
FIGURE	3

NOTES

-
- The graph displays four profiles of a cross-section, likely a landfill or embankment, plotted against stationing (0+000 to 0+260) and elevation (54 to 78). The profiles are labeled as follows:
- TOP OF FINAL COVER:** The highest profile, showing a peak elevation of approximately 71.5 at station 0+050.
 - TOP OF WASTE:** The second highest profile, showing a peak elevation of approximately 68.5 at station 0+050.
 - HISTORICAL SURFACE:** The third highest profile, showing a peak elevation of approximately 65.5 at station 0+050.
 - 2017 SURFACE:** The lowest profile, showing a peak elevation of approximately 65.0 at station 0+050.
- All profiles show a sharp drop in elevation around station 0+150, followed by a relatively flat section at a lower elevation (around 56 to 58) from station 0+160 to 0+260.

Profile view graph showing elevation (54 to 78) versus stationing (0+000 to 0+280). The graph displays four profiles: 'TOP OF FINAL COVER' (highest), 'TOP OF WASTE' (second highest), 'HISTORICAL SURFACE' (third highest), and '2017 SURFACE' (lowest). All profiles show a peak around station 0+080 and a sharp drop after station 0+120.

No.	DATE	BY		REVISIONS



DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	
AS SHOWN	

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

CROSS SECTIONS A-A' AND B-B'

PLOTTED 06-MAR-2019

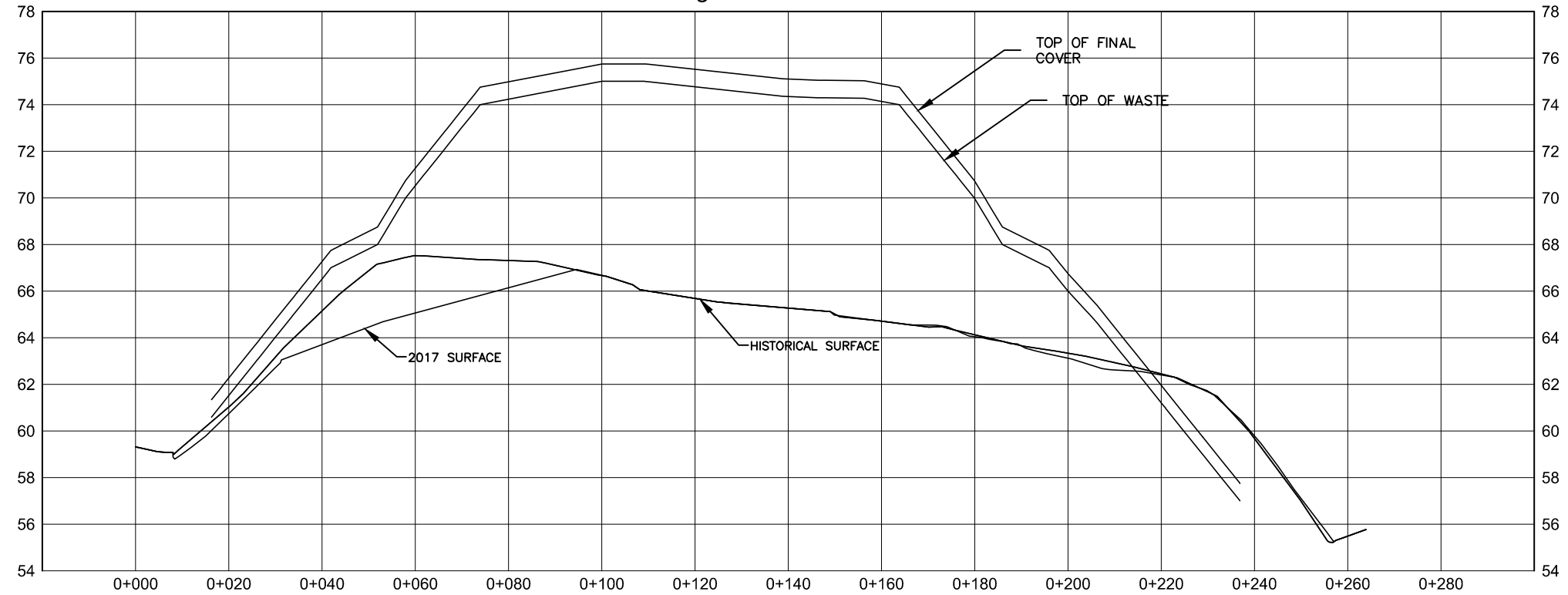
FIGURE

4

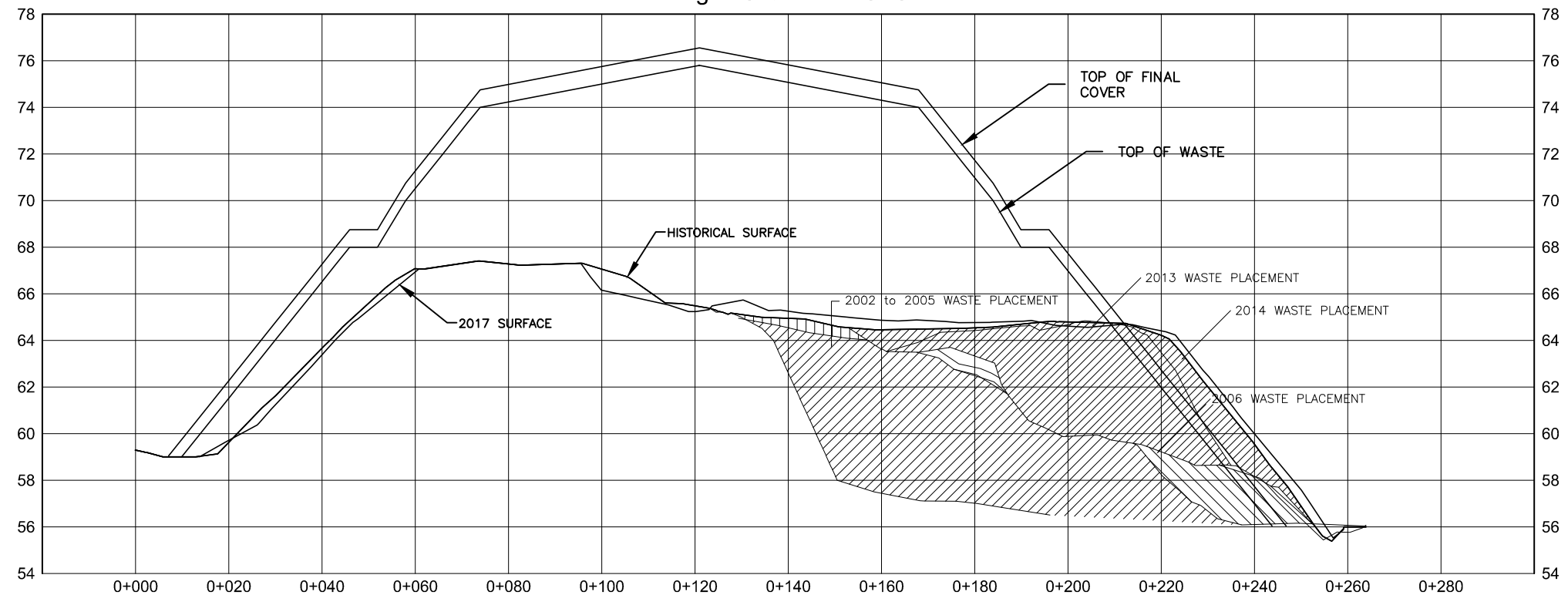
NOTES

- 1) BASE PLAN AND EXISTING INFORMATION COURTESY OF STANTEC INC.
- 2) 2017 SURVEY COMPLETED BY JP2G CONSULTANTS INC. ON NOVEMBER 29, 2017.

Alignment C-C¹ Profile



Alignment D-D¹ Profile



No.	DATE	BY			REVISIONS



DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	AS SHOWN

CLARENCE-ROCKLAND WASTE DISPOSAL SITE

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

CROSS SECTIONS C-C¹ AND D-D¹

PROJECT 17-6021C

PLOTTED 06-MAR-2019

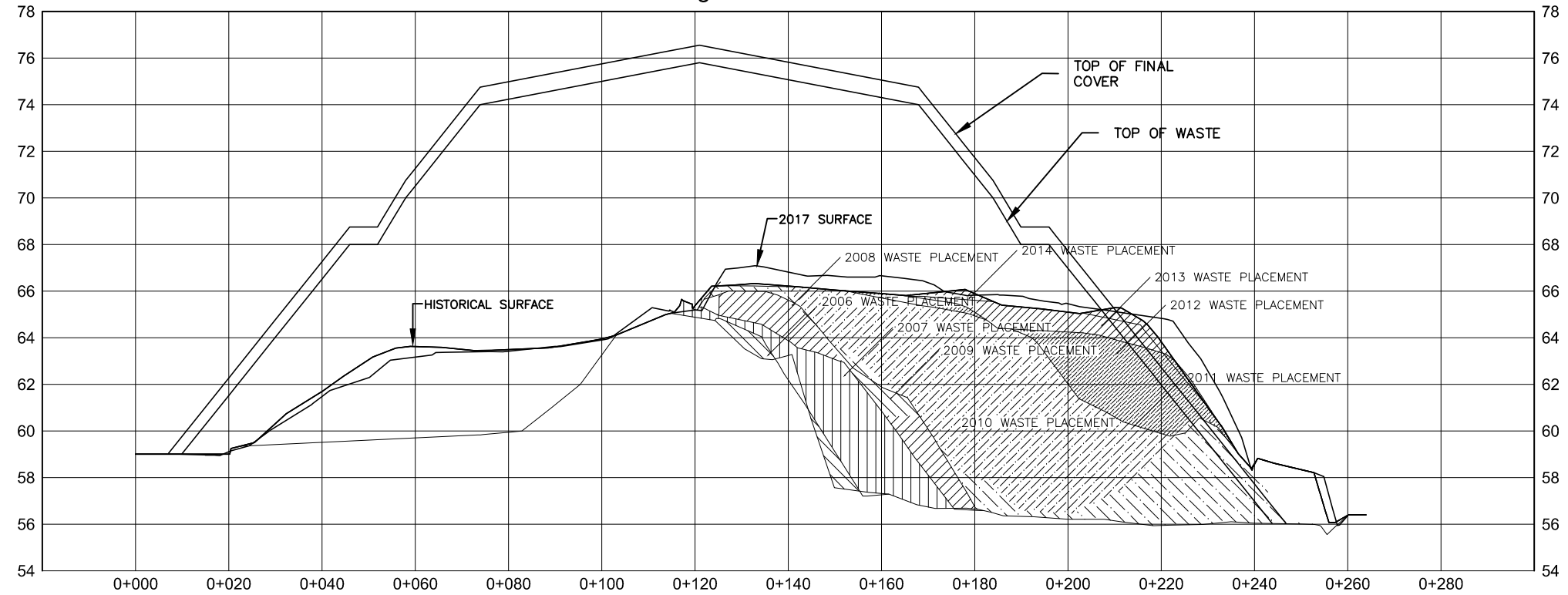
FIGURE

5

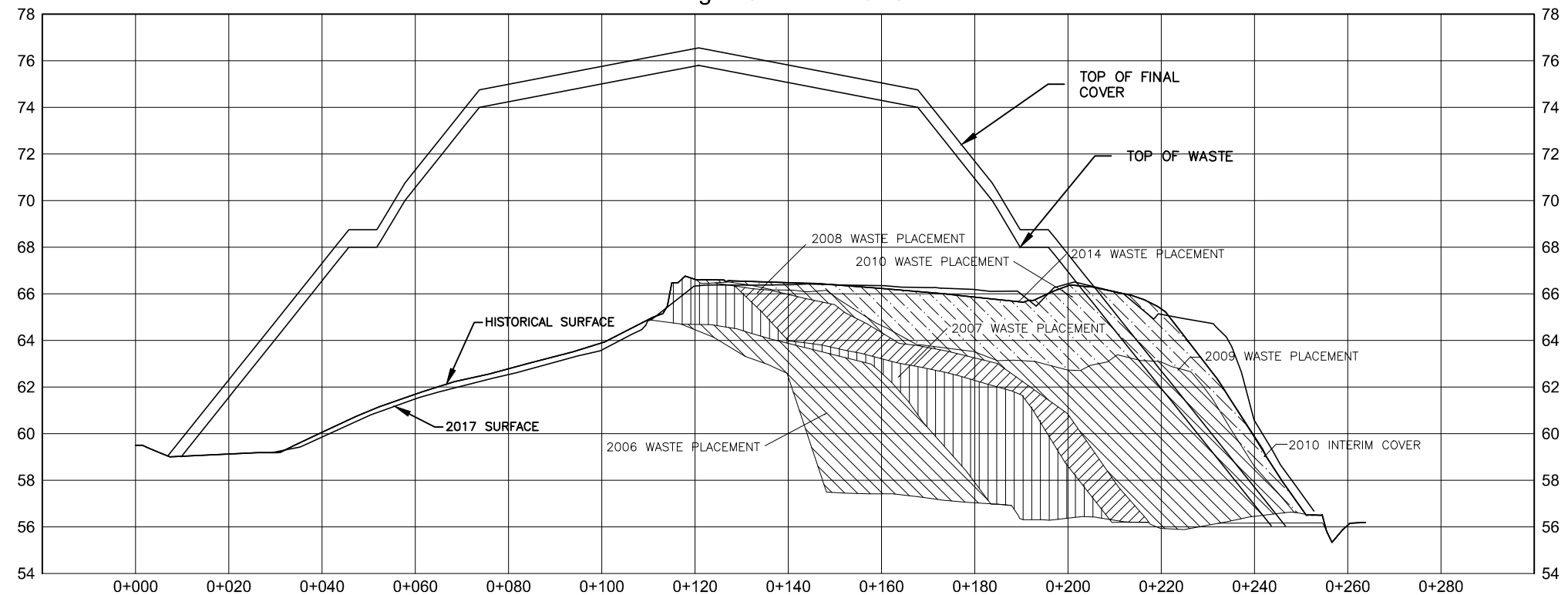
NOTES

- 1) BASE PLAN AND EXISTING INFORMATION COURTESY OF STANTEC INC.
- 2) 2017 SURVEY COMPLETED BY JP2G CONSULTANTS INC. ON NOVEMBER 29, 2017.

Alignment E-E' Profile



Alignment F-F' Profile



No.	DATE	BY		REVISIONS



DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	AS SHOWN

CLARENCE-ROCKLAND WASTE DISPOSAL SITE

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

CROSS SECTIONS E-E' AND F-F'

PROJECT 17-6021C

PLOTTED 06-MAR-2019

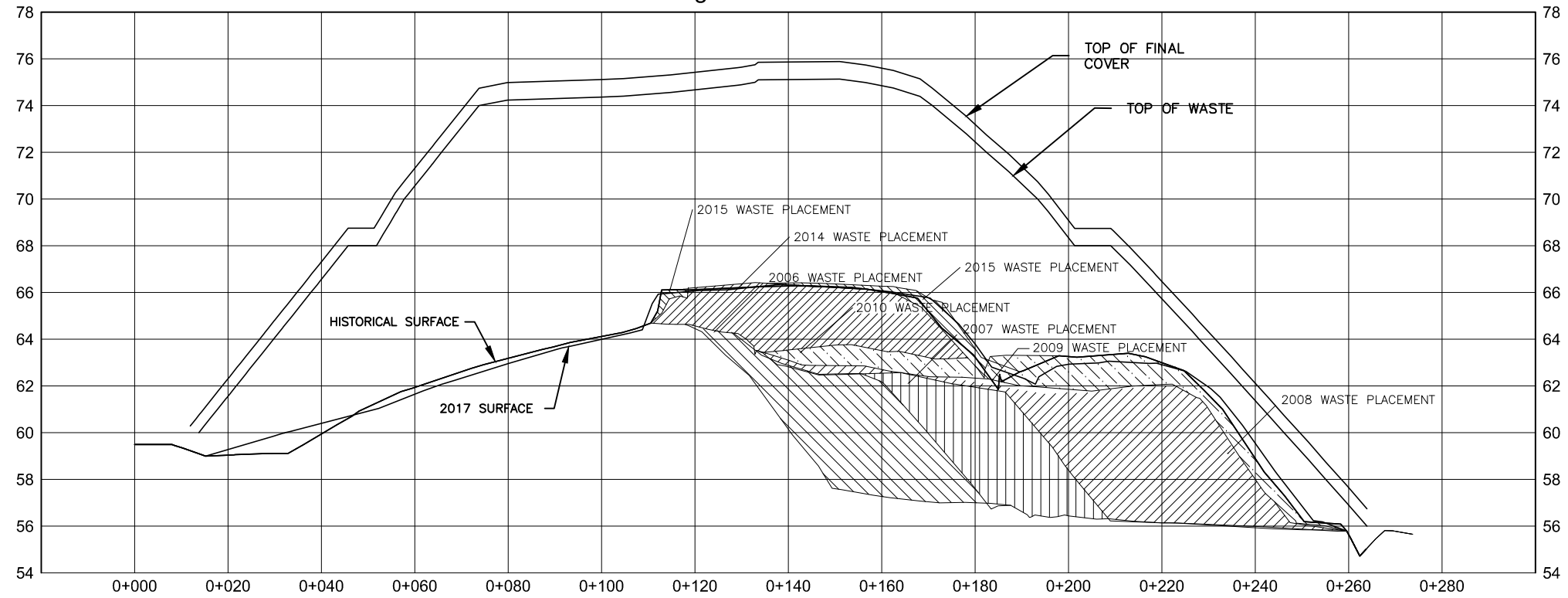
FIGURE

6

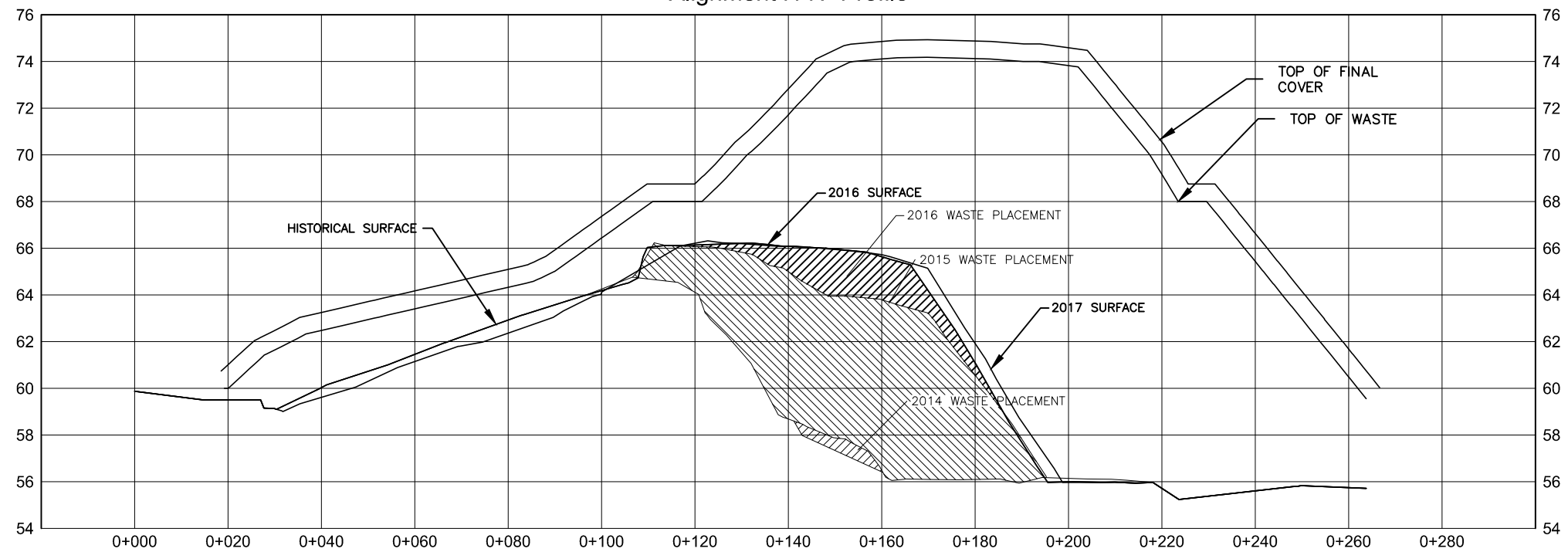
NOTES

- 1) BASE PLAN AND EXISTING INFORMATION COURTESY OF STANTEC INC.
- 2) 2017 SURVEY COMPLETED BY JP2G CONSULTANTS INC. ON NOVEMBER 29, 2017.

Alignment G-G¹ Profile



Alignment H-H¹ Profile



No.	DATE	BY	REVISIONS



DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	AS SHOWN

CLARENCE-ROCKLAND WASTE DISPOSAL SITE

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

CROSS SECTIONS G-G¹ AND H-H¹

PROJECT 17-6021C

PLOTTED 06-MAR-2019

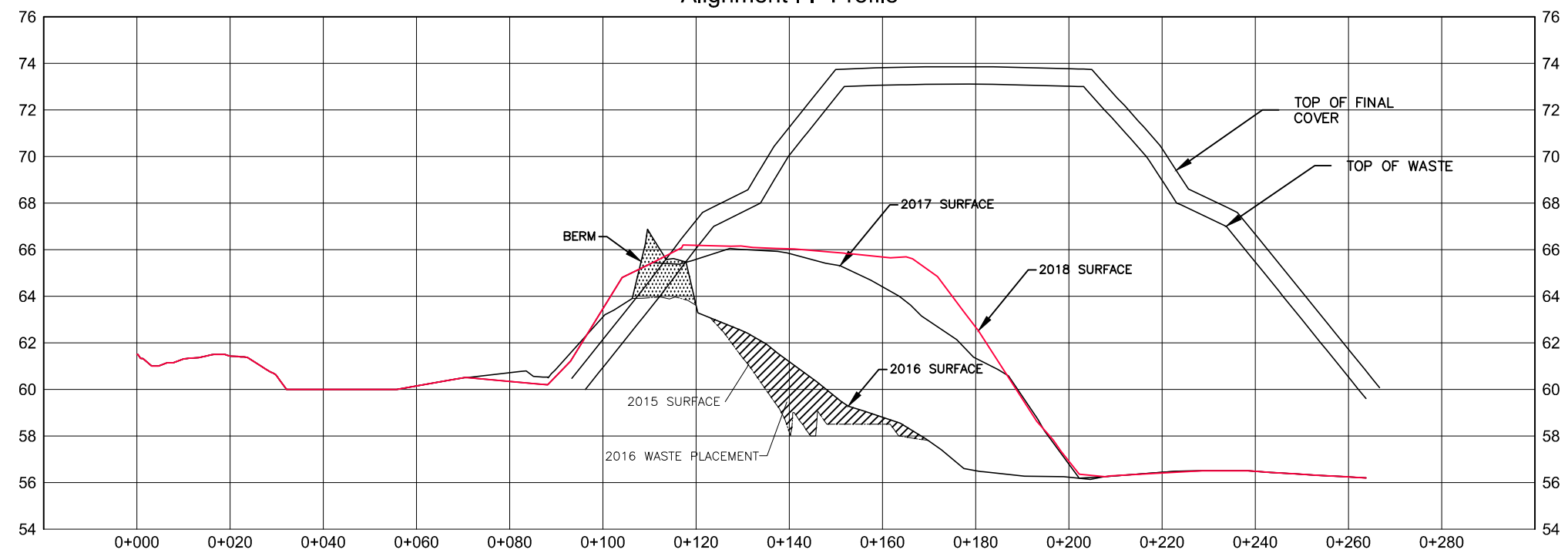
FIGURE

7

NOTES

- 1) BASE PLAN AND EXISTING INFORMATION COURTESY OF STANTEC INC.
- 2) 2019 SURVEY COMPLETED BY JP2G CONSULTANTS INC. ON JANUARY 16, 2019.

Alignment I-I' Profile



No.	DATE	BY		REVISIONS



DESIGNED	RM
DRAWN	RM/BWS
CHECKED	AB
APPROVED	AB
SCALE	
AS SHOWN	

CLARENCE—ROCKLAND WASTE DISPOSAL SITE

LOT 15, CONCESSION IV, FORMER TOWNSHIP OF CLARENCE,
UNITED COUNTIES OF PRESCOTT-RUSSELL

CROSS SECTION I-I'

PROJECT	17-6021C
PLOTTED	06-MAR-2019
FIGURE	8

APPENDIX A

ENVIRONMENTAL COMPLIANCE APPROVAL



Ministry
of the
Environment

Ministère
de
l'Environnement

CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 3362-6D7PL4

The Corporation of the City of Clarence-Rockland
1560 rue Laurier
Rockland, Ontario
K4K 1P7

Site Location: City of Clarence Rockland Waste Disposal Site
Lot 15, Concession 4
City of Clarence-Rockland, United Counties of Prescott and Russell

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

a stormwater and leachate impacted groundwater management facility servicing the Clarence-Rockland Waste Disposal Site, located on Lot 15, Concession 4, United Counties of Prescott and Russell, consisting of:

- one (1) existing dug-out borrow pit (pond) serving as a natural attenuation facility for stormwater runoff and leachate impacted groundwater, which is approximately 450 m long and 50 m to 100 m wide with a maximum depth of 2.5 m and a total surface area of 3.3 ha, receiving stormwater runoff from a 19.3 ha drainage area, providing a total storage capacity of 40,000 m³ at the current discharge elevation of 49.5 m, located at the northeast side of the landfill site footprint, discharging to Cobbs Lake Creek which eventually discharges to Ottawa River;
- upgrades to the east bank of the pond to raise the bank elevation to 51.0 m and the pond outlet elevation to 50.5 m increasing the maximum storage capacity of the pond to 63,175 m³;
- plugging the pond's east bank drainage outlets and infilling of an approximately 80 m long ditch immediately downstream of the pond outlet to promote infiltration of pond contents to groundwater;
- including all associated controls and appurtenances.

all in accordance with Application for Approval of Municipal and Private Sewage Works submitted by The Corporation of the City of Clarence-Rockland dated April 13, 2005, and drawings and design brief prepared by Stantec Consulting Ltd., Ottawa, Ontario.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"Act" means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"Certificate" means this entire certificate of approval document, issued in accordance with Section 53 of the *Act*, and includes any schedules;

"Director" means any *Ministry* employee appointed by the Minister pursuant to section 5 of the *Act*;

"District Manager" means the District Manager of the Kingston District Office of the Ministry;

"Ministry" means the Ontario Ministry of the Environment;

"Owner" means The Corporation of the City of Clarence-Rockland and includes its successors and assignees;

"Previous Works" means those portions of the sewage works previously constructed and approved under a certificate of approval;

"Proposed Works" means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting

documentation referred to herein, to the extent approved by this *Certificate*;

"*Regional Director*" means the Regional Director of the Eastern Region of the Ministry;

"*Works*" means the sewage works described in the *Owner's* application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* and includes both *Previous Works* and *Proposed Works*.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Certificate* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.

(3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The requirements of this *Certificate* are severable. If any requirement of this *Certificate*, or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the issuance date of this *Certificate*.

3. CHANGE OF OWNER

(1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within 30 days of the change occurring:

(a) change of *Owner*;

(b) change of address of the *Owner*;

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager*;

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C 39 shall be included in the notification to the *District Manager*;

(2) In the event of any change in ownership of the *Works*, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate*, and a copy of such notice shall be forwarded to the *District Manager* and the *Director*.

4. SURFACE WATER MONITORING

(1) The *Owner* shall carry out the following surface water monitoring program. Surface water grab samples shall be collected during spring (April/May), Summer (August), and Fall (November) from the designated sampling locations and shall be analyzed for the parameters listed in Table 1.

Table 1 - Surface Water Monitoring Sampling Locations: GS11, GS12, GS14		
Parameter		Field Monitoring Parameter
Calcium	Silver	Conductivity (Field)
Magnesium	Strontium	pH (Field)
Sodium	Sulphur	Temperature
Potassium	Thallium	Dissolved Oxygen
Aluminum	Titanium	Water Levels***
Barium	Vanadium	
Beryllium	Zinc	
Boron	Alkalinity	
Cadmium	BOD5	
Chromium	TDS	
Cobalt	Chloride	
Copper	Nitrate	
Iron	Nitrite	
Lead	Sulphate	
Manganese	TKN	
Mercury	Ammonia	
Molybdenum	COD	
Nickel	DOC	
Total Phosphorus	Phenols	
Silicon	Hardness*	
	Un-ionized Ammonia**	

Note: * Hardness - calculated from laboratory analyses results of calcium and manganese

** Un-ionized Ammonia - calculated from laboratory analyses results for ammonia and field measurements for pH and temperature.

*** Water levels shall be measured at staff gauges installed for the designated sampling points.

(2) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the surface water monitoring activities required by subsection (1)

5. GROUNDWATER MONITORING

(1) The *Owner* shall undertake groundwater monitoring in accordance with Conditions 46 (a) and 46 (c) of the Provisional Certificate of Approval Waste Disposal Site Number A471203 Notice No. 1 issued on October 18, 2001 as amended from time to time.

(2) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the groundwater monitoring activities required by subsection (1)

6. OPERATIONS AND MAINTENANCE

(1) The *Owner* shall undertake an inspection of the condition of the stormwater management facility, at least once a year, and undertake any necessary cleaning and maintenance to prevent the excessive build-up of sediment and/or decaying vegetation.

(2) The *Owner* shall maintain a logbook to record the results of the stormwater management facility inspections and any cleaning and maintenance operations undertaken and shall keep the logbook at the site or operational office of the *Owner* for inspection by the Ministry.

(3) The *Owner* shall compare surface water monitoring results obtained from sampling point **GS12** under Condition 4 (1) with the concentrations of the trigger parameters listed in Table 2 to identify any potential leachate impact to surface water discharged from the site to the receiving stream.

Table 2 - Surface Water Trigger Parameters	
Parameter	Concentration (mg/L)
Ammonia (un-ionized)	0.02
Boron	0.20
Iron	0.30
Total Phosphorus	0.05

(4) In the event that a monitoring result for any of the parameters listed in Table 2 exceeds its corresponding trigger concentration, the *Owner* shall immediately initiate the implementation of Condition 53 of the Provisional Certificate of Approval Waste Disposal Site Number A471203 Notice No. 1 issued on October 18, 2001 as amended from time to time.

(5) Surface water trigger parameters and concentrations outlined in Table 2 under subsection (3) shall be modified from time to time **only** after receiving a written concurrence from the *District Manager* or an approval from the Director designated for the purpose of Section 37 of the *Environmental Protection Act*.

7. REPORTING

(1) The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.

(2) The *Owner* shall prepare, and submit to the *District Manager*, an annual performance report as a separate section of the annual report required under Condition 63 of the Provisional Certificate of Approval Waste Disposal Site Number A471203 Notice No. 1 issued on October 18, 2001 as amended from time to time. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all surface water monitoring data and comparison of results to the trigger concentrations outlined in Table 2 under Condition 6(3), including an overview of the success and adequacy of the

Works.

- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works*;
- (d) any other information the *District Manager* requires from time to time.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the owners their responsibility to notify any person they authorized to carry out work pursuant to this *Certificate* the existence of this *Certificate*.
2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Certificate* and continue to operate the *Works* in compliance with it.
4. Condition 4 and 5 are included to enable the *Owner* to evaluate and demonstrate the performance of the *Works*, on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives specified in the *Certificate* and that the *Works* does not cause any impairment to the receiving watercourse.
5. Condition 6 is included to require that the *Works* be properly operated, maintained, and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
6. Condition 7 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 24th day of June, 2005

Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

SH/
c: District Manager, MOE Cornwall
Gerry Lalonde, Stantec Consulting Limited



Ministry of the Environment and
Climate Change
Ministère de l'Environnement et
de l'Action en matière de
changement climatique

**AMENDMENT TO ENVIRONMENTAL COMPLIANCE
APPROVAL**

NUMBER A471203

Notice No. 2

Issue Date: August 19, 2016

The Corporation of the City of Clarence-Rockland
1560 Laurier St
Clarence-Rockland, Ontario
K4K 1P7

Location: City of Clarence-Rockland Waste Disposal Site
Lot 15, Concession 4
Clarence-Rockland City, United Counties of Prescott
and Russell

*You are hereby notified that I have amended Approval No. A471203
issued on October 21, 2009 and amended on 9th day of September, 2015
for the use and operation of a 12 hectare landfilling area within a total site
area of 50 hectares, as follows:*

**Amendment to the Existing Approval of Sewage Works No. 3362-
6D7PL4**

2(17) The *Owner* shall submit an Application for amendment of the ECA No. 3362-6D7PL4, in order to amend this ECA and include the stormwater management works on the *Site* required due to the currently proposed *HHW* depot, new site entrance, weigh scales and other related works. This Application shall be submitted to the *Ministry* by December 31, 2016, as required under Section 20.2 of the EPA.

The reason for this amendment to the Approval is to extend the date to submit the application to amend the ECA No. 3362-6D7PL4.

**This Notice shall constitute part of the approval issued under
Approval No. A471203 dated October 21, 2009 as amended.**

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection
Act
Ministry of the Environment and Climate
Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the

Environmental Protection Act.

DATED AT TORONTO this 19th day of August, 2016

Dale Gable, P.Eng.

Director

appointed for the purposes of Part

II.1 of the *Environmental*

Protection Act

RM/

c: Area Manager, MOECC Cornwall

c: District Manager, MOECC Ottawa

Jocelyn Chabot, The Corporation of the City of Clarence-Rockland

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A471203

Notice No. 1

Issue Date: September 9, 2015

The Corporation of the City of Clarence-Rockland
1560 Laurier Street
Clarence-Rockland, Ontario
K4K 1P7

Site Location: City of Clarence-Rockland Waste Disposal Site
Lot 15, Concession 4
City of Clarence-Rockland, United Counties of Prescott and Russell

You are hereby notified that I have amended Approval No. A471203 issued on October 21, 2009 for the use and operation of a 12 hectare landfilling area within a total site area of 50 hectares , as follows:

I. The following definitions are hereby added to the Environmental Compliance Approval No. A471203;

"Certificate " or "Approval " or "Environmental Compliance Approval " means this entire provisional Approval document, issued in accordance with section 39 of the *EPA*, and includes any schedules to it, the application and the supporting documentation listed in Schedule "A".

II. Condition 2(1) of the *Environmental Compliance Approval* No. A471203 is hereby amended by revising the *Site* Configuration such that the revised Condition 2(1) reads as follows;

Operation

- 2(1) The *Site* shall be operated and maintained at all times including management and disposal of all waste in accordance with the *EPA*, *Regulation 347*, the conditions of this *Approval*, and the Report listed as item No. 26 of the Schedule A (including the Site Entrance and Facilities Reconfiguration as shown on the Plan listed as item No. 27). At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.

III. The following Condition 2(17) is added to the *Environmental Compliance Approval* No. A471203;

Amendment to the Existing Approval of Sewage Works No. 3362-6D7PL4

- 2(17) The *Owner* shall submit an Application for amendment of the ECA No. 3362-6D7PL4, in order to amend this ECA and include the stormwater management works on the *Site* required due to the currently proposed *HHW* depot, new site entrance, weigh scales and other related works. This Application shall be submitted to the Ministry by June 30, 2016, as required under Section 20.2 of the EPA.

- IV. Condition 8(1) of the *Environmental Compliance Approval* No. A471203 is hereby amended by including the gas monitoring for Weigh Scale House, such that the revised Condition 8(1) reads as follows;

Landfill Gas

- 8(1) Routine monitoring for explosive methane gas levels shall be conducted in all buildings or structures at the *Site* and outside of the Weigh Scale House (as identified in the Figure 2 revised on August 28, 2015, and listed as item No. 32 of the Schedule A), especially enclosed structures which at times are occupied by people. If required, the *Owner* shall ensure that any buildings or structures at the *Site* contain adequate preventive measures to relieve any possible landfill gas accumulation.

- V. Conditions 11(1) and 11(2) of the *Environmental Compliance Approval* No. A471203 are hereby amended such that the revised Conditions 11(1) and 11(2) read as follows;

Household Hazardous Waste (HHW) Depot

- 11(1) The *HHW* depot shall only accept household hazardous wastes and it shall be operated in accordance with the application for a Waste Disposal Site (Transfer) submitted on June 1, 1995 and supporting information, and as modified in the Design Operation and Maintenance Report, dated August 2000, and as amended by Report listed as item No. 26 of the Schedule A.

- 11(2) No household hazardous waste will be stored in *HHW* Depot for more than 90 days on the *Site*.

- VI. The following Items are hereby added to Schedule "A" and form part of the *Environmental Compliance Approval* No. A471203;

25. Application for Amendment to the ECA #A471203 for Clarence-Rockland Landfill Entrance and Facilities Reconfiguration, dated June 1, 2015 and received on June 15, 2015, including supporting documentation.
26. Report entitled "City of Clarence-Rockland Amendment to Landfill *Environmental Compliance Approval*, Landfill Site Entrance and Facilities Reconfiguration, prepared by Stantec Consulting Ltd", dated March 6, 2015.
27. Figure 4 included in the Report listed as item No. 26, and entitled as "Site Layout - Landfill Site Entrance And Facilities Reconfiguration", signed/stamped by Gerry Lalonde Stantec Consulting Inc. on January 21, 2015.

28. Email from Gerry Lalonde Stantec Consulting Inc., dated August 12, 2015, addressed to Khalid Hussain, Ministry of the Environment and Climate Change, providing additional information regarding the amendment of the Sewage Works ECA No. 3362-6D7PL4.
29. Email from Gerry Lalonde Stantec Consulting Inc., dated August 14, 2015, addressed to Khalid Hussain, Ministry of the Environment and Climate Change, providing additional information supplementing the Report listed in item No. 25 of Schedule A.
30. Email from Denis Longpré, Manager of Environment and Water, Infrastructure and Engineering, City of Clarence-Rockland City, dated August 28, 2015, addressed to Khalid Hussain, Ministry of the Environment and Climate Change, providing additional information supplementing the Report listed in item No. 26 of Schedule A.
31. Email from Gerry Lalonde Stantec Consulting Inc., dated August 28, 2015, addressed to Khalid Hussain, Ministry of the Environment and Climate Change, regarding landfill gas monitoring adjacent to the Weigh Scale House, and regarding the approval application for Stormwater management works.
32. Revised Figure 2 included in the Email listed as item No. 31, and entitled as "Weigh Scale House Floor Plan - Landfill Site Entrance And Facilities Reconfiguration", submitted by Gerry Lalonde Stantec Consulting Inc. on August 28, 2015.

The reason(s) for this amendment to the Approval is (are) as follows:

1. The reason for amending Condition 2(1), 11(1) and 11(2) of the *Approval* is as follows: all in accordance with the application for approval dated June 1, 2015 and received on June 15, 2015, and including supporting documentation.
2. The reasons for Condition 8(1) is to ensure that off site migration of landfill gas is monitored and all buildings at the *Site* are free of any landfill gas accumulation, which due to a methane gas component may be explosive and thus create a danger to any persons at the *Site*
3. The reason for adding Condition No. 2(17) is to ensure that the Approval for the site stormwater management works is updated to include the stormwater from the proposed new infrastructure and that the site sewage works are constructed and operated in accordance with the Approval from the Ministry as required under the Environmental Protection Act.

This Notice shall constitute part of the approval issued under Approval No. A471203 dated October 21, 2009.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in

- respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

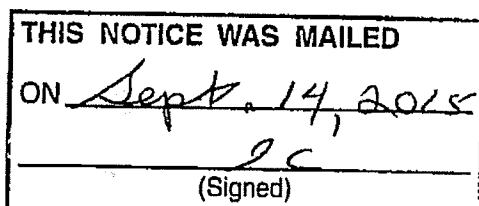
AND

The Director appointed for the purposes of Part II.1 of
the Environmental Protection Act
Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 9th day of September, 2015



Dale Gable, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

KH/

- c: Area Manager, MOECC Cornwall Area Office.
- c: District Manager, MOECC Ottawa District.
Gerry Lalonde, P.Eng., Stantec Consulting Ltd. ✓



REÇU

3^U OCT. 2009

Ministry of the Environment
Ministère de l'Environnement

~~CITÉ CLARENCE ROCKLAND~~

**AMENDED PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE**

NUMBER A471203

Issue Date: October 21, 2009

The Corporation of the City of Clarence Rockland
1560 Laurier St Rockland, Ontario
The City of Clarence Rockland, Ontario
K4K 1P7

Site Location: Lot 15, Concession 4
The City of Clarence Rockland, United Counties of Prescott and Russell

You have applied in accordance with Section 27 of the Environmental Protection Act for approval of:

the use and operation of a 12 hectare landfilling area within a total site area of 50 hectares, as follows:

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"*Certificate*" means this entire provisional Certificate of Approval document, issued in accordance with section 39 of the *EPA*, and includes any schedules to it, the application and the supporting documentation listed in Schedule "A";

"*Director*" means any *Ministry* employee appointed in writing by the Minister pursuant to section 5 of the *EPA* as a Director for the purposes of Part V of the *EPA*;

"*District Manager*" means the District Manager of the local district office of the *Ministry* in which the *Site* is geographically located;

"*EPA*" means *Environmental Protection Act*, R.S.O. 1990, c. E. 19, as amended;

"*HHW*" means household hazardous waste;

"*Ministry*" means the Ontario Ministry of the Environment;

"*NMA*" means *Nutrient Management Act*, 2002, S.O. 2002, c. 4, as amended from time to time;

"*Operator*" means any person, other than the Owner's employees, authorized by the *Owner* as having the charge, management or control of any aspect of the *Site* and includes its successors or assigns;

"*Owner*" means any person that is responsible for the establishment or operation of the *Site* being approved by this *Certificate*, and includes the Corporation of the City of Clarence Rockland and assigns;

"*OWRA* " means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;

"*PA* " means the *Pesticides Act* , R.S.O. 1990, c. P-11, as amended from time to time;

"*Provincial Officer*" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the *OWRA* or Section 5 of the *EPA* or Section 17 of *PA* or Section 4 of *NMA* or Section 8 of *SDWA* .

"*Regional Director* " means the Regional Director of the local Regional Office of the *Ministry* in which the *Site* is located.

"*Regulation 347* " or "*Reg. 347* " means Regulation 347, R.R.O. 1990, made under the *EPA*, as amended from time to time;

"*SDWA*" means *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, as amended;

"*Site* " means the entire waste disposal site, including the buffer lands, contaminant attenuation zone, hazardous waste depot/transfer station and associated buildings and facilities at Lot 15, Concession 4, The City of Clarence Rockland, United Counties of Prescott and Russell; and

"*Trained personnel*" means knowledgeable in the following through instruction and/or practice:

- a. relevant waste management legislation, regulations and guidelines;
- b. major environmental concerns pertaining to the waste to be handled;
- c. occupational health and safety concerns pertaining to the processes and wastes to be handled;
- d. management procedures including the use and operation of equipment for the processes and wastes to be handled;
- e. emergency response procedures;
- f. specific written procedures for the control of nuisance conditions;
- g. specific written procedures for refusal of unacceptable waste loads; and
- h. the requirements of this *Certificate*.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL

Compliance

- (1) The *Owner* and *Operator* shall ensure compliance with all the conditions of this

Certificate and shall ensure that any person authorized to carry out work on or operate any aspect of the *Site* is notified of this *Certificate* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

- (2) Any person authorized to carry out work on or operate any aspect of the *Site* shall comply with the conditions of this *Certificate* .

In Accordance

- (3) Except as otherwise provided by this *Certificate*, the *Site* shall be designed, developed, built, operated and maintained in accordance with the documentation listed in the attached Schedule "A".

Interpretation

- (4) Where there is a conflict between a provision of any documents listed in Schedule "A" in this *Certificate*, and the conditions of this *Certificate*, the conditions in this *Certificate* shall take precedence.
- (5) Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the *Ministry* approved the amendment.
- (6) Where there is a conflict between any two documents listed in Schedule "A", the document bearing the most recent date shall take precedence.
- (7) The conditions of this *Certificate* are severable. If any condition of this *Certificate*, or the application of any condition of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this *Certificate* shall not be affected thereby.

Other Legal Obligations

- (8) The issuance of, and compliance with, this *Certificate* does not:
 - (a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
 - (b) limit in any way the authority of the *Ministry* to require certain steps be taken or to require the *Owner* and *Operator* to furnish any further information related to compliance with this *Certificate* .

Adverse Effect

- (9) The *Owner* and *Operator* shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the *Site*,

including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

- (10) Despite an *Owner*, *Operator* or any other person fulfilling any obligations imposed by this *Certificate*, the *Owner*, *Operator* or any other person remains responsible for any contravention of any other condition of this *Certificate* or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.

Change of Ownership

- (11) The *Owner* shall notify the *Director*, in writing, and forward a copy of the notification to the *District Manager*, within 30 days of the occurrence of any changes in the following information:
- (a) the ownership of the *Site*;
 - (b) the *Operator* of the *Site*;
 - (c) the address of the *Owner* or *Operator*; and
 - (d) the partners, where the *Owner* or *Operator* is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act*, R. S. O. 1990, c. B.17, shall be included in the notification.
- (12) No portion of this *Site* shall be transferred or encumbered prior to or after closing of the *Site* unless the *Director* is notified in advance and sufficient financial assurance is deposited with the *Ministry* to ensure that these conditions will be carried out.
- (13) In the event of any change in *Ownership* of the works, other than change to a successor Owner, the *Owner* shall notify the successor of and provide the successor with a copy of this *Certificate*, and the *Owner* shall provide a copy of the notification to the *District Manager* and the *Director*.

Certificate of Requirement/Registration on Title

- (14) The Owner shall:
- (a) Within 60 days of the date of the issuance of this *Certificate*, submit to the *Director* for review, two copies of a completed Certificate of Requirement with a registerable description of the *Site*; and
 - (b) Within 10 calendar days of receiving the Certificate of Requirement authorized by the *Director*, register the Certificate of Requirement in the appropriate Land Registry Office on title to the *Site* and submit to the *Director* the duplicate registered copy immediately following registration.
- (15) Pursuant to Section 197 of the Environmental Protection Act, neither the *Owner* nor any person having an interest in the *Site* shall deal with the *Site* in any way without first

giving a copy of this *Certificate* to each person acquiring an interest in the *Site* as a result of the dealing.

Inspections by the Ministry

- (16) No person shall hinder or obstruct a *Provincial Officer* from carrying out any and all inspections authorized by the *OWRA*, the *EPA*, the *PA*, the *SDWA* or the *NMA*, of any place to which this *Certificate* relates, and without limiting the foregoing:
- (a) to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this *Certificate* are kept;
 - (b) to have access to, inspect, and copy any records required to be kept by the conditions of this *Certificate*;
 - (c) to inspect the *Site*, related equipment and appurtenances;
 - (d) to inspect the practices, procedures, or operations required by the conditions of this *Certificate*; and
 - (e) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this *Certificate* or the *EPA*, the *OWRA*, the *PA*, the *SDWA* or the *NMA*.

Information and Record Retention

- (17) Any information requested, by the *Ministry*, concerning the *Site* and its operation under this *Certificate*, including but not limited to any records required to be kept by this *Certificate* shall be provided to the *Ministry*, upon request, in a timely manner.
- (18) The receipt of any information by the *Ministry* or the failure of the *Ministry* to prosecute any person or to require any person to take any action, under this *Certificate* or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
- (a) an approval, waiver, or justification by the *Ministry* of any act or omission of any person that contravenes any term or condition of this *Certificate* or any statute, regulation or other legal requirement; or
 - (b) acceptance by the *Ministry* of the information's completeness or accuracy.
- (19) The *Owner* shall ensure that a copy of this *Certificate*, in its entirety and including all its Notices of Amendment, and the most current approved Design and Operation Plan for the *Site*, are retained at the *Site* at all times.

2. SITE OPERATION

Operation

- (1) The *Site* shall be operated and maintained at all time including management and disposal of all waste in accordance with the *EPA*, *Regulation 347*, and the conditions of this *Certificate*. At no time shall the discharge of a contaminant that causes or is likely to

cause an adverse effect be permitted

Signs

- (2) A sign shall be installed and maintained at the main entrance/exit to the *Site* on which is legibly displayed the following information:
 - (a) the name of the *Site* and *Owner*;
 - (b) the number of the *Certificate*;
 - (c) the name of the *Operator*;
 - (d) the normal hours of operation;
 - (e) the allowable and prohibited waste types;
 - (f) the telephone number to which complaints may be directed;
 - (g) a warning against unauthorized access;
 - (h) a twenty-four (24) hour emergency telephone number (if different from above);
and
 - (i) a warning against dumping outside the *Site*.
- (3) The *Owner* shall install and maintain signs to direct vehicles to working face, recycling areas, *HHW* depot and composting area.
- (4) The *Owner* shall provide signs at recycling depot, *HHW* depot and composting area informing users what materials are acceptable and directing users to appropriate storage area.

Vermin, Vectors, Dust, Litter, Odour, Noise and Traffic

- (5) The *Site* shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.

Burning Waste Prohibited

- (6) The *Owner* shall ensure that no burning of wastes and wood products is taking place at the *Site*.

Scavenging

- (7) Except as authorized by a by-law, the *Owner* shall ensure that no scavenging is taking place at the *Site*.

Site Access

- (8) Waste shall only be accepted at the *Site* from the City of Clarence Rockland and Wards 2 and 4 of the Township of Alfred Plantagenet.
- (9) Waste shall only be accepted from 8:00 a.m. to 5:00 p.m. The *Site* shall be closed on

Sundays and Holidays. The *Owner* may provide alternative hours of operation within the above hours provided that they are correctly posted at the *Site*, that suitable public notification is given of any change.

- (10) On-site equipment used for daily site preparation and closing activities may be operated one (1) hour before and two (2) hours after the hours of operation approved by this *Certificate*.
- (11) With the prior written approval from the *District Manager*, the time periods may be extended to accommodate seasonal or unusual quantities of waste.

Site Security

- (12) No waste shall be received, landfilled or removed from the *Site* unless the operator or attendant is present and supervises the operations during operating hours. The *Site* shall be closed when a site operator is not present to supervise landfilling operations.
- (13) The *Site* shall be operated and maintained in a safe and secure manner. During non-operating hours, the *Site* entrance and exit gates shall be locked.

Visual Screening

- (14) The *Owner* shall maintain the screening berm constructed along Lalonde Road as per Drawing No. I-3-3 entitled "Waste Contours" and Drawing No. I-3-9 entitled "Road and Berm Sections" of Item 18(a) of Schedule "A" attached to this *Certificate*.
- (15) The *Owner* shall maintain the trees providing the screening of the *Site* operations from Lalonde Road in the area east of the entrance.

3. EMPLOYEE TRAINING

- (1) A training plan for all employees that operate any aspect of the *Site* shall be developed and implemented by the *Operator*. Only *Trained Personnel* shall operate any aspect of the *Site* or carry out any activity required under this *Certificate*.
- (2) All *Trained Personnel* operating the *HHW* depot shall be trained in the following areas:
 - (a) waste paint identification, analysis information and separating procedures for the wastes being handled at the *HHW* depot;
 - (b) proper storage, handling, sorting and shipping procedures of the wastes being handled at the *HHW* depot; and
 - (c) occupational health and safety concerns pertaining to the wastes to be handled at the *HHW* depot.

4. COMPLAINTS RESPONSE PROCEDURE

- (1) If at any time the *Owner* receives complaints regarding the operation of the *Site*, the *Owner* shall respond to these complaints according to the following procedure:
 - (a) The *Owner* shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information and the time and date of the complaint;
 - (b) The *Owner*, upon notification of the complaint, shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
 - (c) The *Owner* shall complete and retain on-site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.

5. EMERGENCY RESPONSE

- (1) Any spills, fires or other emergency situations shall be forthwith reported directly to the *Ministry's* Spills Action Centre (1-800-268-6060) and shall be cleaned up immediately.
- (2) In addition, the *Owner* shall submit, to the *District Manager* a written report within five (5) business days of the emergency situation, outlining the nature of the incident, remedial measures taken, handling of waste generated as a result of the emergency situation and the measures taken to prevent future occurrences at the *Site*.
- (3) All wastes resulting from an emergency situation shall be managed and disposed of in accordance with *O.Reg. 347*.
- (4) All equipment and materials required to handle the emergency situations shall be:
 - (a) kept on hand at all times that waste landfilling and/or handling is undertaken at the *Site*; and
 - (b) adequately maintained and kept in good repair.
- (5) The *Owner* shall ensure that the emergency response personnel are familiar with the use of such equipment and its location(s).

6. RECORD KEEPING AND REPORTING

Daily Log Book

- (1) A daily log shall be maintained in written format and shall include the following information:
 - (a) the type, date and time of arrival, hauler (commercial waste), and quantity (tonnes or volume) of all waste and cover material received at the *Site*;
 - (b) documentation of types, quantities and source of generation of waste received at the *HHW* depot;
 - (c) type, amount and source of waste refused at the *HHW* depot;
 - (d) the area of the *Site* in which waste disposal operations are taking place;
 - (e) a record of litter collection activities and the application of any dust suppressants;
 - (f) a record of the daily inspections; and
 - (g) a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore and maintain service.
- (2) Any information requested, by the *Director* or a *Provincial Officer*, concerning the *Site* and its operation under this *Certificate*, including but not limited to any records required to be kept by this *Certificate* shall be provided to the *Ministry*, upon request.

Daily Inspections and Log Book

- (3) An inspection of the entire *Site* and all equipment on the *Site* shall be conducted weekly the *Site* is in operation to ensure that: the *Site* is secure; that the operation of the *Site* is not causing any nuisances; that the operation of the *Site* is not causing any adverse effects on the environment and that the *Site* is being operated in compliance with this *Certificate*. Any deficiencies discovered as a result of the inspection shall be remedied within a reasonable time, including temporarily ceasing operations at the *Site* if needed.
- (4) A record of the inspections shall be kept in a daily log book that includes:
 - (a) the name and signature of person that conducted the inspection;
 - (b) the date and time of the inspection;
 - (c) the list of any deficiencies discovered;
 - (d) the recommendations for remedial action; and
 - (e) the date, time and description of actions taken.
- (5) A record shall be kept in the daily log book of all refusals of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.

Annual Report

- (6) A written report on the development, operation and monitoring of the *Site*, shall be

completed annually (the "Annual Report"). The Annual Report shall be submitted to the *District Manager*, by March 30 of the year following the period being reported upon.

- (7) The Annual Report shall include the following:
- (a) calculations of the volume of waste landfilled, the daily and intermediate covers, the final cover and the overall volume of the site capacity used during the reporting period;
 - (b) a comparison of the actual capacity used to the estimates of the capacity estimated;
 - (c) an estimate of the remaining site life;
 - (d) any changes in operations, equipment, or procedures used at the *Site*, any operating problems encountered and corrective actions taken;
 - (e) details on the monitoring program undertaken, outlining monitor locations, analytical parameters sampled, and frequency of sampling;
 - (f) an analysis and interpretation of the surface water and groundwater monitoring data, a review of the adequacy of the monitoring program, conclusions of the monitoring data, and recommendations for any changes that may be necessary;
 - (g) summary of inspections undertaken at the *Site*;
 - (h) summary of any public complaints received and the responses made;
 - (i) summary of activities undertaken at the *HHW* depot;
 - (j) a discussion of cover stockpile activities including use, timing, locations and erosion protection;
 - (k) status update on the final cover placement, and seeding activities undertaken in the closed sections of the Landfill;
 - (l) a discussion of the waste diversion performance achieved by the *Owner* reported on a per capita basis;
 - (m) a statement as to compliance with all conditions of this *Certificate* and the other relevant Ministry's groundwater and surface water requirements;
 - (n) recommendations respecting any proposed changes in the operation of the *Site*; and

- (o) any other information that the *Regional Director* or the *District Manager* may require.

7. LANDFILL DESIGN AND DEVELOPMENT

Approved Waste Types

- (1) Only solid non-hazardous municipal waste including asbestos, dewatered sewage sludge and contaminated soil as defined under *Reg. 347* shall be accepted at the *Site* for landfilling.
- (2) No liquid industrial waste or hazardous wastes as defined under *O. Reg. 347* and *O.Reg. 558* shall be disposed at the *Site*.
- (3) The *Owner* may continue to accept liquid and solid household hazardous wastes and products requiring special handling or disposal practices, at the *HHW* depot.
- (4) The *Owner* shall develop and implement a program to inspect waste to ensure that the waste received at the *Site* is of a type approved for acceptance under this *Certificate*.
- (5) The *Owner* shall ensure that all loads of waste are properly inspected by *Trained personnel* prior to acceptance at the *Site* and that the waste vehicles are directed to the appropriate areas for disposal or transfer of the waste. The *Owner* shall notify the *District Manager*, in writing, of load rejections at the *Site* within five (5) business days from their occurrence.

Capacity

- (6)
 - (a) As approved by the Environmental Assessment dated October 21, 1999, the total additional waste disposal capacity of the expanded *Site* is 740,000 cubic metres of waste, daily cover and intermediate cover, but excluding the final cover.
 - (b) The total approved waste disposal capacity for the *Site* is 974,000 cubic metres of waste, daily cover and intermediate cover, but excluding the final cover. This total waste disposal capacity includes the additional disposal capacity from Condition (6)(a), above, and the waste disposed of prior to the above Environmental Assessment approval.

Waste Placement

- (7) No waste shall be placed below existing ground within the fill area to maintain a vertical separation between the groundwater table and the waste.
- (8) Disposal of waste shall only occur within the areas as delineated on Drawing - Fig. No. I-3-3 of Item 18(a) of Schedule "A" attached to this *Certificate*.

- (9) No waste shall be placed above the final contours shown on Drawing - Fig. No. I-3-4 of Item 18(a) of Schedule "A" attached to this *Certificate*.

Service Area

- (10) Only waste that is generated within the boundaries of the City of Clarence Rockland and Wards 2 and 4 of the Township of Alfred Plantagenet may be accepted at the *Site*.

Cover

- (11) Daily and interim cover material shall be applied in accordance with Section 3.3 of Item 14(a) of Schedule "A" attached to this *Certificate* and as follows:

Daily cover

- (a) By the end of each working day, the entire working face shall be covered with a minimum thickness of 100 mm of daily cover.

Interim cover

- (b) In areas where landfilling has been temporarily discontinued for twelve (12) months or more, a minimum thickness of 300 mm of intermediate cover shall be placed.

Final Cover

- (c) Final Cover - In areas where landfilling has been completed to final contours, a minimum 600 millimetre thick layer of soil of medium permeability and 150 millimetres of top soil (final cover) shall be placed. Fill areas shall be progressively completed and rehabilitated as landfill development reaches final contours.
- (12) (a) Contaminated soil that is not a hazardous waste as defined by O.Reg. 347, either mixed with clean soil or own its own, and biosolids from the City of Clarence Rockland's Water Pollution Control Plant mixed with soil, compost and/or wood chips, may be used as daily cover provided that its use does not cause any adverse effects;
- (b) Subject to Condition 12 (a), if the application of the contaminated soil as a daily cover causes operational problems, odours or other environmental adverse effects as verified by a *Provincial Officer*, the use of the contaminated soil shall be immediately discontinued and only clean soil or biosolids mixed with soil, compost and/or wood chips shall be used as daily cover;
- (c) Subject to Condition 12 (a), if the application of the biosolids as a daily cover causes operational problems, odours or other environmental adverse

effects as verified by a *Provincial Officer*, the use of the biosolids shall be immediately discontinued;

- (d) Compost mixed with clean soil and wood chips mixed with clean soil may also be used as alternative material for daily cover; and
 - (e) The *Owner* may mix de-watered sludge with the topsoil. The sludge shall be accounted for in the total volume of waste that was approved for landfilling at the *Site*. If the use of de-watered sludge causes an adverse effect, as verified by a *Provincial Officer*, its use shall be discontinued and only clean soil shall be used.
- (13) Except for the types already approved by Condition 7(12), any alternative materials to soil may be used as weekly and interim cover material, based on an application with supporting information and applicable fee for a trial use or permanent use, submitted by the *Owner* to the *Director*, copied to the *District Manager* and as approved by the *Director* via an amendment to this *Certificate*. The alternative material shall be non-hazardous according to *Reg. 347* and will be expected to perform at least as well as soil in relation to the following functions:
- (a) Control of blowing litter, odours, dust, landfill gas, gulls, vectors, vermin and fires;
 - (b) Provision for an aesthetic condition of the landfill during the active life of the *Site*;
 - (c) Provision for vehicle access to the active tipping face; and
 - (d) Compatibility with the design of the *Site* for groundwater protection, leachate management and landfill gas management.

8. LANDFILL MONITORING

Landfill Gas

- (1) Routine monitoring for explosive methane gas levels shall be conducted in all buildings or structures at the *Site*, especially enclosed structures which at times are occupied by people. If required, the *Owner* shall ensure that any buildings or structures at the *Site* contain adequate preventive measures to relieve any possible landfill gas accumulation.
- (2) Landfill gas monitoring shall be undertaken according to the program described in Section 5.4 of Item 18(a) of Schedule "A" attached to this *Certificate*.
- (3) Any changes to the landfill gas monitoring program shall be submitted to the *Director* for approval, prior to their implementation.

Compliance Limits

- (4) The *Site* shall be operated in such a way as to ensure compliance with the following:

- (a) Reasonable Use Guideline B-7 for the protection of the groundwater at the *Site*; and
- (b) Provincial Water Quality Objectives included in the July 1994 publication entitled *Water Management Policies, Guidelines, Provincial Water Quality Objectives*, as amended from time to time or limits set by the *Regional Director*, for the protection of the surface water.

Surface Water and Ground Water

- (5) The *Owner* shall monitor groundwater as per Appendix G, Item 24 of Schedule "A".
- (6) The Owner shall monitor surface water as per Appendix G, Item 24 of Schedule "A".
- (7) A certified Professional Geoscientist or Engineer possessing appropriate hydrogeologic training and experience shall execute or directly supervise the execution of the groundwater monitoring and reporting program.
- (8) The *Owner* shall abide by the Certificate of Approval for Sewage Works under Section 53 of *Ontario Water Resources Act*, R.S.O. 1990 issued to construct, operate, maintain and monitor the proposed wetland and its discharge to the surface water regime, designed to control and treat storm water run-off and leachate-impacted groundwater at the *Site*.
- (9) Temporary berms and ditches shall be constructed around the active waste disposal area, as necessary, to prevent extraneous surface water from contacting the active working face.

Groundwater Wells and Monitors

- (10) The *Owner* shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly capped, locked and protected from damage.
- (11) Where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and the wells shall be properly re-secured.
- (12) Any groundwater monitoring well included in the on-going monitoring program that are damaged shall be assessed, repaired, replaced or decommissioned by the *Owner*, as required.
 - (a) Unless a well is being abandoned, the *Owner* shall repair or replace any monitoring well which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed.
 - (b) All monitoring wells which are no longer required as part of the groundwater

monitoring program, and have been approved by the *District Manager* for abandonment, shall be decommissioned by the *Owner*, as required, in accordance with *O.Reg. 903*, that will prevent contamination through the abandoned well. A report on the decommissioning of the well shall be included in the Annual Report for the period during which the well was decommissioned.

Trigger Mechanisms and Contingency Plans

- (13) (a) The *Owner* shall follow the site-specific trigger mechanism program for groundwater contingency measures outlined in Appendix A, Item 20 of Schedule "A" and as revised by MOE correspondence in Appendix "A", Item 23 of Schedule "A".
- (b) The *Owner* shall follow the site-specific trigger mechanism program for surface water contingency measures outlined in Appendix A of Item 20 of Schedule "A" and as revised by MOE correspondence in Appendix "A", Item 23 of Schedule "A".
- (14) No changes to the site-specific trigger mechanism shall be implemented prior to receiving approval from the *Director*.
- (15) In the event of a confirmed exceedence of a site-specific trigger level relating to leachate mounding or groundwater or surface water impacts due to leachate, the *Owner* shall immediately notify the *District Manager*, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the *Owner* in accordance with the approved trigger mechanisms and associated contingency plans.
- (16) If monitoring results, investigative activities and/or trigger mechanisms indicate the need to implement contingency measures, the *Owner* shall ensure that the following steps are taken:
 - (a) The *Owner* shall notify the *District Manager*, in writing of the need to implement contingency measures, no later than 30 days after confirmation of the exceedences;
 - (b) Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the *Owner* to the *District Manager* for approval; and
 - (c) The contingency measures shall be implemented by the *Owner* upon approval by the *District Manager*.
- (17) The *Owner* shall ensure that any proposed changes to the site-specific trigger levels for leachate impacts to the surface water or groundwater, are approved in advance by the *Director* via an amendment to this *Certificate*.

Changes to the Monitoring Plan

- (18) The *Owner* may request to make changes to the monitoring program(s) to the *District Manager* in accordance with the recommendations of the annual report. The *Owner* shall make clear reference to the proposed changes in separate letter that shall accompany the annual report.
- (19) Within sixty (60) days of receiving the written correspondence from the *District Manager* confirming that the *District Manager* is in agreement with the proposed changes to the environmental monitoring program, the *Owner* shall forward a letter identifying the proposed changes and a copy of the correspondences from the *District Manager* and all other correspondences and responses related to the changes to the monitoring program, to the *Director* requesting the *Certificate* be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.
- (20) In the event any other changes to the environmental monitoring program are proposed outside of the recommendation of the annual report, the *Owner* shall follow current ministry procedures for seeking approval for amending the *Certificate*.

9. CLOSURE PLAN

- (1) At least two (2) years prior to the anticipated date of closure of this *Site*, the *Owner* shall submit to the *Director* for approval, with copies to the *District Manager*, a detailed *Site* closure plan pertaining to the termination of landfilling operations at this *Site*, post-closure inspection, maintenance and monitoring, and end use. The plan shall include the following:
 - (a) a plan showing *Site* appearance after closure;
 - (b) a description of the proposed end use of the *Site*;
 - (c) a descriptions of the procedures for closure of the *Site*, including:
 - (i) advance notification of the public of the landfill closure;
 - (ii) posting of a sign at the *Site* entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
 - (iii) completion, inspection and maintenance of the final cover and landscaping;
 - (iv) *Site* security;
 - (v) removal of unnecessary landfill-related structures, buildings and facilities;
 - (vi) final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas; and
 - (vii) a schedule indicating the time-period for implementing sub-conditions (i) to (vi) above;
 - (d) descriptions of the procedures for post-closure care of the *Site*, including:
 - (i) operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - (ii) record keeping and reporting; and

- (iii) complaint contact and response procedures;
 - (e) an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas; and
 - (f) an updated estimate of the contaminating life span of the *Site*, based on the results of the monitoring programs to date.
- (2) Unless amended by the closure plan, closure of the Landfill will be done in accordance with the final contours shown on Figure I-3-4 of Item 18(a) of Schedule "A" attached to this *Certificate*.
 - (3) The *Site* shall be closed in accordance with the closure plan as approved by the *Director*.

10. WASTE DIVERSION

- (1) The *Owner* shall direct as much waste from landfilling as is practical and affordable with a view to meeting the Provincial Waste Diversion Objectives, developed by the *Ministry* and as changed from time to time.
- (2) The *Owner* shall submit an annual Waste Diversion Statement as part of its Annual Report described in Condition No. 6 (6), and include the following:
 - (a) updating summary of per capita waste diversion activities and quantities of waste diverted from disposal; and
 - (b) proposed waste diversion program for the next year that describes estimates of waste to be diverted.

11. HOUSEHOLD HAZARDOUS WASTE DEPOT

- (1) The *HHW* depot shall only accept household hazardous wastes and it shall be operated in accordance with the application for a Waste Disposal Site (Transfer) submitted June 1, 1995 and supporting information and as modified in the Design Operation and Maintenance Report, dated August 2000.
- (2) No wastes shall be received at the *HHW* depot prior to April 1, or after October 31 and no waste shall be stored at the *HHW* depot from December 31 to March 31.
- (3)
 - (a) No PCB's shall be accepted at this *HHW* depot. Oil and oil-based paints which have been manufactured prior to 1972, or whose manufacturing date cannot be determined may contain PCB's and shall be handled in the manner prescribed:
 - (i) The oil and oil-based paints shall not be mixed (bulked) with other paints prior to testing. Paints which are lab-packed are not considered to be mixed under this *Certificate*.

- (ii) The oil and oil-based paints shall be tested for PCB's content and shall be handled in the manner outlined in sub condition (a)(iii) if found to contain PCB's.
 - (iii) If the oil and oil-based paints are found to have PCB's at or above levels identified in sub condition (a) (iv) , it shall be forthwith reported to the *District Manager* and shall be managed in accordance with Ontario Regulation 362/92 and stored or removed from the *HHW* depot to an approved PCB's storage site, in accordance with written instructions from the *District Manager*.
 - (iv) The oil and oil-based paints shall not be distributed for reuse if they have any measurable PCB's content. The oil and oil-based paint is considered to be a PCB's waste, if measured levels are equal to or greater than 50 parts per million.
- (b) Except as specified in sub condition (a) (iv) , paints collected at the *HHW* depot may be returned or sold to the general public for reuse provided all transactions are recorded by invoice. Information on the type and volume of paint returned to the public through this *HHW* depot shall be recorded in the report specified in Condition No. 6 (6).

Storage

- (4) (a) The *Owner* shall ensure that the wastes are stored in a safe and secure manner, that the operation of the *HHW* depot does not interfere with any other activities undertaken at the *Site* and that the wastes are properly handled, packaged or contained so as not to pose any threat to the general public, Site personnel and the environment.
- (b) No storage facilities other than those approved under this *Certificate* shall be used and fixed storage facilities shall not be moved, replaced or altered.
- (c) All storage buildings and tanks shall be clearly marked indicating the type and nature of the hazardous waste stored. All points of access to the storage facilities shall be posted to warn that the area contains hazardous materials. Smoking restrictions shall be adhered to and non-smoking signs shall be posted as required by Regulation.
- (d) All storage buildings shall be properly ventilated and shall be constructed in compliance with fire regulations, municipal by-laws and approvals and in accordance with Ministry of Labour guidelines.
- (e) All household hazardous waste storage tanks and buildings shall be maintained

under lock and key and access to these facilities shall be limited to trained Site personnel.

- (5) Wastes that are collected and stored shall be in amounts which can be safely handled at the *HHW* depot. In the event that larger amounts are received than anticipated, the *Owner* shall have extra drums and lab-packed containers available on the premises for the storage of the additional waste collected. When the *HHW* depot capacity is reached, the *Owner* shall make arrangements for the removal of waste from the *HHW* depot as soon as possible, but in any event, within five (5) working days.
- (6) Except as specified under Conditions 11(3)(a)(iii) and (b), all waste collected shall be transported from the *Site* by an approved waste management system and disposed of at waste landfill, transfer and processing sites certified to accept these types of wastes.

12. COMPOSTING

- (1) Composting operations at the *Site* shall be carried out in a manner as not to interfere with normal waste disposal operations as approved in this *Certificate*.
- (2) Should the ensuing compost be destined for use by the general public, composting operations at the *Site* shall be carried out in accordance with the Ministry's *Interim Guidelines for the Production and Use of Aerobic Compost in Ontario*, dated November 1991, and revised from time to time.
- (3) Should the ensuing compost be destined for use as alternative cover material at the *Site*, composting operations at the *Site* must be carried out in a manner that does not cause groundwater or surface water contamination, offensive odours or encourage the presence of vermin or any other adverse effect.

13. LIAISON COMMITTEE

- (1) The *Owner* shall take all reasonable steps to establish, maintain and participate in a Site Liaison Committee, which is to function within the Terms of Reference, as proposed in Appendix C of Item 18(a) of Schedule "A" attached to this Certificate. The public shall be given an opportunity to comment and provide input before the Terms of Reference are finalized and ready for implementation. The Terms of Reference shall be amended from time to time according to an appropriate procedures included in the Terms of Reference.
- (2) A copy of the Terms of Reference shall be provided to the *District Manager*.
- (3) The Site Liaison Committee shall serve as a focal point for dissemination, consultation, review and exchange of information regarding the operation of the *Site*, results of the environmental monitoring, maintenance, complaint resolution and any new approvals or amendments to the existing approvals related to the operation of this *Site*.

SCHEDULE "A"

1. Application for a Certificate of Approval for a Waste Disposal Site, signed by Marco Lalonde , Township of Clarence, and dated July 22, 1992, for an interim expansion of the landfill with the following supporting documentation prepared by McNeely Engineering Consultants Limited and Golder Associates Limited:
 - (a) Volume I - Request for Exemption Environmental Assessment Act, dated September 1992
 - (b) Volume II - Site Hydrogeology, dated July 1992
 - (c) Volume III - Site operations, Development and Closure Plans, dated July 1992
 - (d) Volume IV - Natural Environmental Evaluation, dated July 1992
 - (e) resolution #5259
2. Report entitled "Hydrogeological Activities, September 1992 to November 1992, Landfill Site Lot 15, Concession IV, Township of Clarence, Ontario" prepared by Golder Associates Limited and dated January 1993.
3. Reply to MOEE Comments on Interim Expansion Township of Clarence Landfill Site, prepared by the Township of Clarence and dated May 4, 1993.
4. Application for a Certificate of Approval for a Waste Disposal Site, signed by Marco Lalonde, Township of Clarence, and dated October 6, 1993, for an interim expansion of the landfill.
5. Letter from Gerry Lalonde, McNeely Engineering Consultants Limited to E. Zaltsberg Ministry of the Environment, dated October 15, 1993, to further clarify the changes in the landfill size and in the total site size.
6. Report entitled "1993 Site Operations and Hydrogeological Monitoring Program, Landfill Site Lot 15, Concession IV, Township of Clarence, Ontario", dated January 1994 and prepared by Golder Associates Ltd.
7. Report entitled "Addendum Report on Waste Management and Hydrogeological Issues and Comments on Draft Certificate of Approval Application for interim Expansion Landfill Site, Lot 15, Concession IV, Township of Clarence, Ontario", dated March 1994 and prepared by Golder Associates Limited and McNeely Engineering Consultants Limited and revised Figure 2: "Site Plan and Study Area", dated March 22, 1994.
8. Report entitled "Addendum Report", dated April 1994 and prepared by Golder Associates Limited and McNeely Engineering Consultants Limited as an addendum to March 1994 Addendum Report on Waste Management and Hydrogeological Issues.
9. Application for a Certificate of Approval for a Waste Disposal Site, signed by Jean-Denis Hurtubise, Township of Clarence, and dated June 1, 1995, to establish a Household Hazardous Waste Transfer Depot to service the Township of Clarence.

10. Letter to Kim Lendvay, MOEE Eastern Region, from Gerry Lalonde, McNeely Engineering Consultants Ltd., dated July 7, 1995 re: Response to MOEE letter dated June 26, 1995.
11. Letter to Michel Dostaler, Township of Clarence from Kim Lendvay, MOEE Eastern Region, dated June 26, 1995 re: Request for additional information.
12. A report entitled "Township of Clarence Household Hazardous Waste Transfer Station Engineering Report, Building Plan and operation and Management Plan"; prepared by McNeely Engineering consultants Ltd, and dated October 1995.
13. A three page document entitled "*Supporting Information to Application for Amendment to Certificate of Approval No. A 471203, Owner of Clarence-Rockland, February 16, 1998*" signed by Gerry Lalonde, P.Eng of Stanley Consulting Group Ltd.
14. A three page document entitled, Supporting Information to Application for Amendment to Certificate of Approval No. A 471203, City of Clarence Rockland, February 16, 1998 signed by Gerry Lalonde, P.Eng. of Stanley Consulting Group Ltd.
15. Application for Approval of a Waste Disposal Site dated February 17, 1998, and signed by R. Sarazin of the Corporation of the City of Clarence Rockland.
16. Letter dated March 12, 1998, from R. Sarazin of the Corporation of the City of Clarence Rockland to Director Approvals, Ministry of the Environment.
17. Application for Approval of a Waste Disposal Site, dated April 30, 1999 and the attached supporting documents.
18. Application for a Certificate of Approval of a Waste Disposal Site dated September 11, 2000 and signed by R. Sarazin, The Corporation of the City of Clarence Rockland, for expansion to the existing landfill site, with the following supporting documentation:
 - (a) Volume I - Report entitled "City of Clarence Rockland, EPA Landfill Expansion, Design, Operation and Maintenance Report", dated August 2000, prepared by Stantec Consulting Ltd.
 - (b) Volume II - Report entitled "Hydrogeological and Geotechnical Design Considerations, The City of Clarence Rockland, Landfill Expansion, Application under the Environmental Protection Act, The City of Clarence Rockland, Ontario", dated September 2000, prepared by Golder Associates Ltd.
 - (c) Volume III - Report entitled "Design and Operation , Geotechnical Memorandums, The City of Clarence Rockland, Landfill Expansion, Application under the Environmental Protection Act, The City of Clarence Rockland, Ontario", dated September 2000, prepared by Golder Associates Ltd.

- (d) Volume IV - Report entitled "The City of Clarence Rockland, EPA Landfill Expansion - Year 2000, Appendix IV", dated August 2000, prepared by Stantec Consulting Ltd.
19. Facsimile transmission from Gerry Lalonde, Stantec Consulting Ltd. to Roman Krawczyniuk, Ontario Ministry of the Environment, dated November 20, 2000, containing additional information related to review of the potential noise impacts.
 20. Report entitled "2001 Annual Report on Groundwater and Surface Water Monitoring Program, Clarence-Rockland Landfill Site, City of Clarence-Rockland, Ontario", dated March 2002 and prepared by Golder Associates Ltd.
 21. Application for a waste disposal site amendment dated August 26, 2003, signed by Richard Sarazin, Director of Physical Services, from the City of Clarence Rockland. re: using biosolids as alternative daily cover.
 22. Letter dated February 11, 2004, signed by Gerry Lalonde, Stantec Consulting Ltd. to A. Mobberley, MOE. re: additional biosolids handling procedures and mixing locations.
 23. Report entitled "City of Clarence-Rockland 2008 Annual Operations Monitoring Report", dated March 2009 and prepared by Stantec Consulting Ltd.
 24. Report entitled "2008 Annual Report on Groundwater and Surface Water Monitoring Program, Clarence-Rockland Landfill Site, City of Clarence-Rockland, Ontario", dated March 2009 and prepared by Golder Associates Ltd.

The reasons for the imposition of these terms and conditions are as follows:

GENERAL

1. The reason for Conditions 1(1), (2), (4), (5), (6), (7), (8), (9), (10), (17), (18) and (19) is to clarify the legal rights and responsibilities of the *Owner* and *Operator* under this Certificate of Approval.
2. The reasons for Condition 1(3) is to ensure that the *Site* is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the *Owner*, and not in a manner which the *Director* has not been asked to consider.
3. The reasons for Condition 1(11) are to ensure that the *Site* is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the *Director* is informed of any changes.
4. The reasons for Condition 1(12) are to restrict potential transfer or encumbrance of the *Site* without the approval of the *Director* and to ensure that any transfer of encumbrance can be made

only on the basis that it will not endanger compliance with this Certificate of Approval.

5. The reason for Condition 1(13) is to ensure that the successor is aware of its legal responsibilities.
6. Conditions 1 (14) and (15) are included, pursuant to subsection 197(1) of the *EPA* , to provide that any persons having an interest in the *Site* are aware that the land has been approved and used for the purposes of waste disposal.
7. The reason for Condition 1(16) is to ensure that appropriate Ministry staff has ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this Certificate of Approval. This Condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the *Act* , the *OWRA* , the *PA* , the *NMA* and the *SDWA* .

SITE OPERATION

8. The reasons for Conditions 2(1), 2(5) and 6(3) are to ensure that the *Site* is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.
9. The reason for Conditions 2 (2), 2(3) and 2(4) is to ensure that users of the *Site* are fully aware of important information and restrictions related to *Site* operations and access under this *Certificate*.
10. The reason for Condition 2(6) is that open burning of municipal waste is unacceptable because of concerns with air emissions, smoke and other nuisance affects, and the potential fire hazard.
11. Condition No. 2 (7) is included to ensure protection of public health and safety, and minimization of potential damage to environmental controls, monitoring and other works at the Site due to uncontrolled removal of materials from waste at the Site.
12. The reasons for Condition 2(8), 2(9) and 2(10) are to specify the hours of operation for the landfill site and a mechanism for amendment of the hours of operation, as required.
13. The reasons for Condition 2(11) and 2(12) are to ensure that the *Site* is supervised by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person and to ensure the controlled access and integrity of the *Site* by preventing unauthorized access when the Site is closed and no site attendant is on duty.
14. Conditions Nos. 2 (13), 2(14) and 2(15) are included to ensure that the Site is designed and operated in a way that does not result in a hazard or nuisance to the natural environment or any persons.

EMPLOYEE TRAINING

15. The reason for Conditions 3(1) and 3(2) is to ensure that the *Site* is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.

COMPLAINTS RESPONSE PROCEDURE

16. The reason for Condition 4(1) is to ensure that any complaints regarding landfill operations at this *Site* are responded to in a timely and efficient manner.

EMERGENCY RESPONSE

17. Conditions 5(1) and 5(2) are included to ensure that emergency situations are reported to the Ministry to ensure public health and safety and environmental protection.
18. Conditions 5(3), 5(4) and 5(5) are included to ensure that emergency situations are handled in a manner to minimize the likelihood of an adverse effect and to ensure public health and safety and environmental protection.

RECORD KEEPING AND REPORTING

19. The reason for Conditions 6(1) and 6(2) is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this Certificate of Approval (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the *EPA* and its regulations.
20. The reason for Conditions 6(4) and 6(5) is to ensure that detailed records of *Site* inspections are recorded and maintained for inspection and information purposes.
21. The reasons for Conditions 6(6) and 6(7) are to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.

LANDFILL DESIGN AND DEVELOPMENT

22. The reason for Conditions 7(1) to 7(6) inclusive and 7(10) is to specify the approved areas from which waste may be accepted at the *Site* and the types and amounts of waste that may be accepted for disposal at the *Site*, based on the *Owner*'s application and supporting documentation.
23. Conditions Nos. 7(7), 7(8) and 7(9) are included to specify restrictions on the extent of landfilling at this *Site* based on the *Owner*'s application and supporting documentation.

24. The reasons for Condition 7(11) are to ensure that daily/weekly and intermediate cover are used to control potential nuisance effects, to facilitate vehicle access on the *Site*, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the *Site*.
25. The reasons for Condition 7 (12) and 7(13) is to specify the approved alternative cover material and to specify requirements for use of alternative cover material at the *Site*.

LANDFILL MONITORING

26. Reasons for Condition 8(1), 8(2) and 8(3) are to ensure that off site migration of landfill gas is monitored and all buildings at the *Site* are free of any landfill gas accumulation, which due to a methane gas component may be explosive and thus create a danger to any persons at the *Site*.
27. Condition 8(4) is included to provide the groundwater and surface water limits to prevent water pollution at the *Site*.
28. Conditions 8(5) to 8(9) inclusive are included to require the Owner to demonstrate that the *Site* is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken.
29. Conditions 8(10), 8(11) and 8(12) are included to ensure the integrity of the groundwater monitoring network so that accurate monitoring results are achieved and the natural environment is protected.
30. Conditions 8(13) to 8(17) inclusive are added to ensure the *Owner* has a plan with an organized set of procedures for identifying and responding to potential issues relating to groundwater and surface water contamination at the *Site's* compliance point.
31. Reason for conditions 8(18), 8(19) and 8(20) is to streamline the approval of the changes to the monitoring plan.

CLOSURE PLAN

32. The reasons for Condition 9 are to ensure that final closure of the *Site* is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure the long-term protection of the health and safety of the public and the environment.

WASTE DIVERSION

33. Condition 10 is included because they were proposed by the Environmental Assessment Board's report entitled "Township of Clarence - Clarence Landfill Site, Reasons for Decisions and

Decisions ", dated May 18, 1994, prepared for the hearing that was required for the Provisional Certificate of Approval for a Waste Disposal Site No. A471203 dated June 20, 1994.

HOUSEHOLD HAZARDOUS WASTE DEPOT

34. Conditions Nos. 11(1) and 11(2) are included to ensure that the HHW depot is operated in accordance with the application and supporting documentation and not in a manner which the Director has not been asked to consider.
35. Conditions Nos. 11(3), 11(4) and 11(5) are included to ensure that the HHW depot is used only to collect and handle approved wastes from approved HHW depot users and that the waste is stored in a secure and safe manner.
36. Condition No. 11(6) is included to insure that all waste is transported and disposed of in an environmentally acceptable manner in accordance with legislation governing the handling of the waste material.

COMPOSTING

37. Condition No. 12 is included to ensure that the Owner undertakes the composting activities in accordance with Ministry's requirements and in a manner that would not result in a hazard or nuisance to the natural environment or any persons.

LIAISON COMMITTEE

38. Condition No. 13 is included to ensure that the Owner takes all reasonable steps to establish a forum for the exchange of information and public dialogue on activities carried out at the Site, so that this open communication with the public and local authorities helps in maintaining high standards for Site operations and provides environmental protection.

This Provisional Certificate of Approval revokes and replaces Certificate(s) of Approval No. A471203 issued on December 13, 1991 and June 20, 1994 and associated notices.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;

8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5


AND

The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

- * Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 21st day of October, 2009



Tesfaye Gebrezghi, P.Eng.
Director
Section 39, *Environmental Protection Act*

RM/
c: District Manager, MOE Cornwall
Gerry Lalonde, Stantec Consulting Ltd.



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A471203
Notice No. 4

RECEIVED

APR 02 2004

TIME: _____
STANTEC

The Corporation of the City of Clarence-Rockland
1560 rue Laurier
Rockland, Ontario
K4K 1P7

Site Location: City of Clarence-Rockland Municipal Waste Disposal Site
Lot 15, Concession 4
Clarence-Rockland City, United Counties of Prescott and Russell

You are hereby notified that I have amended Provisional Certificate of Approval No. A471203 issued on December 13, 1991 for a 12 hectare landfilling area within a total site area of 50 hectares, as follows:

Condition 20 is hereby amended to read as follows:

20. a) Contaminated soil that is not a hazardous waste as defined by O.Reg. 347 and O. Reg. 558, either mixed with clean soil or on its own, and biosolids from the City of Clarence-Rockland's Water Pollution Control Plant mixed with soil, compost and/or wood chips, may be used as daily cover provided that its use does not cause any adverse effects;
- b) Subject to Condition 20 (a), if the application of the contaminated soil as a daily cover causes operational problems, odours or other environmental adverse effects as verified by a Provincial Officer, the use of the contaminated soil shall be immediately discontinued and only clean soil or biosolids mixed with soil, compost and/or wood chips shall be used as daily cover;
- c) Subject to Condition 20 (a), if the application of the biosolids as a daily cover causes operational problems, odours or other environmental adverse effects as verified by a Provincial Officer, the use of the biosolids shall be immediately discontinued and only clean soil contaminated shall be used as daily cover; and
- d) Compost mixed with clean soil, and wood chips mixed with clean soil may also be used as alternative material for daily cover.

The following items are hereby added to schedule "A".

16. Application for a waste disposal site amendment dated August 26, 2003, signed by Richard Sarazin, Director of Physical Services, from the City of Clarence Rockland. re: using biosolids as alternative

daily cover.

17. Letter dated February 11, 2004, signed by Gerry Lalonde, Stantec Consulting Ltd. to A. Mobberley, MOE. re: additional biosolids handling procedures and mixing locations.

The reason for this amendment to the Certificate of Approval is as follows:

37. The reason for this amendment is to allow the use of biosolids from the City's Water Pollution Control Plant to be used as alternative daily cover at the City of Clarence-Rockland Municipal Waste Disposal Site, Certificate of Approval No. A471203.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A471203 dated December 13, 1991

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the waste disposal site is located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

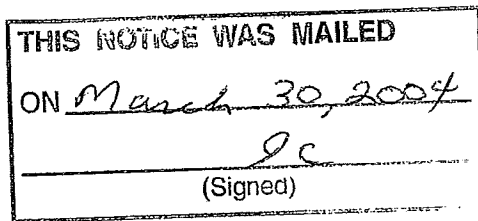
AND

The Director
Section 39, *Environmental Protection Act*
Ministry of Environment and Energy
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of March, 2004



Ian Parrott, P.Eng.
Director
Section 39, *Environmental Protection Act*

AM/

c: District Manager, MOE Cornwall
Gerry Lalonde, Stantec Consulting Ltd. ✓



Content Copy Of Original

Ministry of the Environment, Conservation and Parks
Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A471203

Notice No. 3

Issue Date: December 20, 2018

The Corporation of the City of Clarence-Rockland
1560 Laurier St P.O. Box 909
Clarence-Rockland, Ontario
K4K 1P7

Site Location: City of Bourget Landfill
2335 Lalonde Rd
Clarence-Rockland City, United Counties of Prescott and Russell
K0A 2E0

You are hereby notified that I have amended Approval No. A471203 issued on October 21, 2009 and amended September 9, 2015 and August 19, 2016 for the use and operation of a 12 hectare landfilling area within a total site area of 50 hectares , , as follows:

The proposed amendment is approved to reflect the revised configuration of site facilities as described in Item 33 of Schedule "A".

The following item is added to Schedule "A" of this Approval:

33. Report titled "City of Clarence-Rockland Amendment to Landfill Environmental Compliance Approval A471203 , Landfill Site Entrance and Facilities Reconfiguration" and supporting documentation. Prepared by Stantec Consulting Ltd, August 24, 2018.

The reason for this amendment to the Approval is as follows:

The reason for this amendment is to reflect the updated site entrance and facilities reconfiguration.

This Notice shall constitute part of the approval issued under Approval No. A471203 dated October 21, 2009

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the

environmental compliance approval in respect of which the hearing is required, and;

b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1
of the Environmental Protection Act
Ministry of the Environment, Conservation and
Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 20th day of December,
2018

Mohsen Keyvani, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental
Protection Act*

CF/

c: District Manager, MECP Ottawa

Phillipe Cormier, The Corporation of the City of Clarence-Rockland

APPENDIX B

COMPLIANCE SUMMARY TABLE ECA No. A471203

COMPLIANCE SUMMARY

THE CITY OF CLARENCE ROCKLAND, UNITED COUNTIES OF PRESCOTT AND RUSSELL
MOE CERTIFICATE NO. A471203 – October 21, 2009
NOTICE NO. 1 – September 9, 2015

For the use and operation of a 12 hectare landfilling area within a total site area of 50 hectares.

	Condition	Statement of Compliance
	<p>For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:</p> <p>DEFINITIONS:</p> <p><i>"Certificate"</i> or <i>"Approval"</i> or <i>"Environmental Compliance Approval"</i> means this entire provisional Approval document, issued in accordance with Section 39 of the EPA, and includes any schedules to it, the application and the supporting documentation listed in Schedule "A".</p> <p><i>"Director"</i> means any Ministry employee appointed in writing by the Minister pursuant to Section 5 of the EPA as a Director for the purposes of Part V of the EPA;</p> <p><i>"District Manager"</i> means the District Manager of the local district office of the <i>Ministry</i> in which the <i>Site</i> is geographically located;</p> <p><i>"EPA "</i> means <i>Environmental Protection Act</i> , R.S.O. 1990, c. E. 19, as amended;</p> <p><i>"HW"</i> means household hazardous waste;</p> <p><i>"Ministry"</i> means the Ontario Ministry of the Environment;</p> <p><i>"NMA "</i> means <i>Nutrient Management Act</i> , 2002, S.O. 2002, c. 4, as amended from time to time;</p> <p><i>"Operator"</i> means any person, other than the Owner's employees, authorized by the <i>Owner</i> as having the charge, management or control of any aspect of the <i>Site</i></p>	<p>No Municipality input required.</p>

	Condition	Statement of Compliance
	<p>"Owner" means any person that is responsible for the establishment or operation of the <i>Site</i> being approved by this <i>Certificate</i>, and includes the Corporation of the City of Clarence Rockland and assigns;</p> <p>"QWRA " means the <i>Ontario Water Resources Act</i>, R.S.O. 1990, c. 0.40, as amended; "PA</p> <p>" means the <i>Pesticides Act</i> , R.S.O. 1990, c. P-1 1, as amended from time to time;</p> <p>"<i>Provincial Officer</i>" means any person designated in writing by the Minister as a provincial officer pursuant to Sections of the <i>O WRA</i> or Section 5 of the <i>EPA</i> or Section 17 of <i>PA</i> or Section 4 of <i>NMA</i> or Section 8 of <i>SDWA</i> .</p> <p>"<i>Regional Director</i>" means the Regional Director of the local Regional Office of the <i>Ministry</i> in which the <i>Site</i> is located.</p> <p>"<i>Regulation 347</i>" or "<i>Reg. 347</i>" means Regulation 347, R.R.O. 1990, made under the <i>EPA</i>, as amended from time to time;</p> <p>"<i>SDWA</i>" means <i>Safe Drinking Water Act</i>, 2002, S.O. 2002, c. 32, as amended;</p> <p>"<i>Site</i> " means the entire waste disposal site, including the buffer lands, contaminant attenuation zone, hazardous waste depot/transfer station and associated buildings and facilities at Lot 15, Concession 4, The City of Clarence Rockland, United Counties of Prescott and Russell; and</p> <p>"<i>Trained personnel</i>" means knowledgeable in the following through instruction and/or practice: a. relevant waste management legislation, regulations and guidelines; b. major environmental concerns pertaining to the waste to be handled; c. occupational health and safety</p>	

	Condition	Statement of Compliance
	<p>concerns pertaining and wastes to be banded;</p> <p>d. management procedures including the use and operation of equipment for the processes and wastes to be handled; e. emergency response procedures;</p> <p>f. specific written procedures for the control of nuisance conditions; g. specific written procedures for refusal of unacceptable waste loads; and</p> <p>h. the requirements of this <i>Certificate</i>.</p>	
1.	TERMS AND CONDITIONS:	
11.	<p>Change of Ownership</p> <p>The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:</p> <p>a) the ownership of the Site;</p> <p>b) the Operator of the Site;</p> <p>c) the address of the Owner or Operator; and</p> <p>d) the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act , R. S. O. 1990, c. B.17, shall be included in the notification.</p>	<p>During 2018, there were no changes to the Owner, Operator or address of the Owner/Operator.</p>
12.	<p>No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out.</p>	
13.	<p>In the event of any change in Ownership of the works, other than change to a successor Owner, the Owner shall notify the successor of and provide the successor with a copy of this Certificate, and the Owner shall provide a copy of the notification to the District Manager and the Director.</p>	

	Condition	Statement of Compliance
14.	Certificate of Requirement The Owner shall: <ul style="list-style-type: none"> • Within 60 days of the date of the issuance of this Certificate, submit to the Director for review, two copies of a completed Certificate of Requirement with a registerable description of the Site; and • Within 10 calendar days of receiving the Certificate of Requirement authorized by the Director, register the Certificate of Requirement in the appropriate Land Registry Office on title to the Site and submit to the Director the duplicate registered copy immediately following registration. 	A Certificate of Requirement for the registration of the October 18/09 Environmental Compliance Approval (Certificate of Approval) was prepared during 2010 and was submitted to the Ministry of the Environment for signature during 2011. It was registered on title to the property.
15.	Pursuant to Section 197 of the Environmental Protection Act, neither the Owner nor any person having an interest in the Site shall deal with the Site in any way without first giving a copy of this Certificate to each person acquiring an interest in the Site as a result of the dealing.	During 2018, no persons acquired an interest in the Site.
	Inspection by the Ministry	
16.	No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA, of any place to which this Certificate relates, and without limiting the foregoing: <ol style="list-style-type: none"> a) to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this Certificate are kept; b) to have access to, inspect, and copy any records required to be kept by the conditions of this Certificate; 	Summary of inspections undertaken at the site There were no Ministry Site Inspection Reports or Technical Support Section Reviews provided in 2018. Vehicle Scale examination was done November 08 2018 and was found compliant.

	Condition	Statement of Compliance
	<p>c) to inspect the Site, related equipment and appurtenances;</p> <p>d) to inspect the practices, procedures, or operations required by the conditions of this Certificate; and</p> <p>e) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Certificate or the EPA, the OWRA, the PA, the SDWA or the NMA.</p>	
	Information and Record Retention	
17.	Any information requested, by the Ministry, concerning the Site and its operation under this Certificate, including but not limited to any records required to be kept by this Certificate shall be provided to the Ministry, upon request, in a timely manner.	Understood, all relevant materials are scanned and can be made available to Ministry staff on request.
18.	<p>The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Certificate or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:</p> <p>a) an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Certificate or any statute, regulation or other legal requirement; or</p> <p>b) acceptance by the Ministry of the information's completeness or accuracy.</p>	Understood, no action required
19.	The Owner shall ensure that a copy of this Certificate, in its entirety and including all its Notices of Amendment, and the most current approved Design and Operation Plan for the Site, are retained at the Site at all times.	A copy of the most recent ECA (Environmental Compliance Approval) and Notices are reproduced in Appendix A of this 2018 Annual Report and a copy of the current report is maintained at the Site Office.

	Condition	Statement of Compliance
2.	SITE OPERATION	
	Operation	
1.	The Site shall be operated and maintained at all times, including management and disposal of all waste in accordance with the EPA, Regulation 347, the conditions of this <i>Approval</i> , and the Report listed as item No. 26 of the Schedule A (including the Site Entrance and Facilities Reconfiguration as shown on the Plan listed as item No. 27). At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.	Understood.
	Signs	
2.	<p>A sign shall be installed and maintained at the main entrance/exit to the Site on which is legibly displayed the following information:</p> <ul style="list-style-type: none"> a) the name of the Site and Owner; b) the number of the Certificate; c) the name of the Operator; d) the normal hours of operation; e) the allowable and prohibited waste types; f) the telephone number to which complaints may be directed; g) a warning against unauthorized access; h) a twenty-four (24) hour emergency telephone number (if different from above); and i) a warning against dumping outside the Site. 	The entrance sign contains all of the required information.
3.	The Owner shall install and maintain signs to direct vehicles to working face, recycling areas, HHW depot and composting area.	The City has signs directing traffic along access roads and at segregated material storage areas. The entrance sign, HHW depot sign contain information on waste types. Site custodian duties include ensuring that signs directing vehicles are properly maintained and signs directing vehicles to the working face are moved as landfilling operations progress.
4.	The Owner shall provide signs at recycling depot, HHW depot and composting area informing users what materials are acceptable and directing users to appropriate storage area.	

	Condition	Statement of Compliance
	Vermin, Vectors, Dust, Litter, Odour, Noise and Traffic	
5.	The Site shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.	All season access roads are maintained to provide access the active face. Segregated material areas are located near the site entrance and can be accessed from a paved road. The site is inspected on a regular basis by Orkin PCO Services Inc. for rodent problems. During 2002, the City seeded the berms along Lalonde Road and seeded the interim expansion area as part of the closure activities to reduce dust. The City applies dust suppression materials to on-site roads when necessary.
	Burning Waste Prohibited	
6.	The Owner shall ensure that no burning of wastes and wood products is taking place at the Site.	Understood
	Scavenging	
7.	Except as authorized by a by-law, the Owner shall ensure that no scavenging is taking place at the Site.	The landfill site is fenced, and the site custodian is responsible for ensuring that the entrance gate is locked during non-operating hours to prevent access and scavenging. A sign at the site entrance is erected to notify visitors that scavenging is prohibited. Council resolution no 2015-167 dated December 7th, 2015 permits one person, Mr. L. Lalonde to scavenge Saturdays during hours of operation except during spring and fall free days.
	Site Access	
8.	Waste shall only be accepted at the Site from the City of Clarence Rockland and Wards 2 and 4 of the Township of Alfred Plantagenet.	During 2018, all waste originated from within the City of Clarence Rockland.
9.	Waste shall only be accepted from 8:00 a.m. to 5:00 p.m. The Site shall be closed on Sundays and Holidays. The Owner may provide alternative hours of operation within the above hours provided that they are correctly posted at the Site and that suitable public notification is given of any change.	<p><i>New By-Law number 2018-48 was adopted, to regulate the management of the City of Bourget Landfill Site.</i></p> <p><i>New operating hours as per By-Law 2018-48</i></p> <p><u>From April 1st to November 30th:From December 1st to March 31st:</u></p> <p>-Tuesday: 8:30AM to 12:30PM -Tuesday: 8:30AM to 12:30PM</p> <p>-Thursday: 8:30AM to 12:30PM -Friday: 8:30AM to 5PM</p> <p>-Friday: 8:30AM to 5PM -Saturday: 8:30AM to 12:30PM</p> <p>-Saturday: 8:30AM to 4PM</p>

	Condition	Statement of Compliance
		<p>-New user fees were amended under By-Law 2018-33 to schedule "Q" By-Law 2015-176. Here is a short version of the commonly used fees. Rates are calculated by weight (ton).</p> <p>-Minimum fee: \$20.00</p> <p>-Items with refrigerant: \$20.00</p> <p>-Alternative cover and cement: \$45.00 / ton</p> <p>-Construction wood: \$45.00 / ton</p> <p>-Residential, commercial and construction waste: \$90.00 / ton</p> <p>-*Mixed loads: \$135.00 / ton</p> <p>-*Asbestos: \$300/ton**</p> <p>-Surcharge for prohibited materials: \$10.00 to \$30.00 per item**</p> <p>*Surcharges and/or mixed load fee if applicable</p> <p>**Conditional to approval by Director of Infrastructure and Planning. Contact department prior to planned work.</p>
10.	On-site equipment used for daily site preparation and closing activities may be operated one (1) hour before and two (2) hours after the hours of operation approved by this Certificate.	Site operations are done in accordance with this condition.
11.	With the prior written approval from the District Manager, the time periods may be extended to accommodate seasonal or unusual quantities of waste.	During 2018, time periods were in accordance with condition 10.
	Site Security	
12.	No waste shall be received, landfilled or removed from the Site unless the operator or attendant is present and supervises the operations during operating hours. The Site shall be closed when a site operator is not present to supervise landfilling operations.	In accordance with conditions 12 and 13, the site custodian is responsible for ensuring that the site is locked during non-operating hours. A locked gate and fence prevent access when the gate is closed.
13.	The Site shall be operated and maintained in a safe and secure manner. During non- operating hours, the Site entrance and exit gates shall be locked.	
	Visual Screening	

	Condition	Statement of Compliance
14.	The Owner shall maintain the screening berm constructed along Lalonde Road as per Drawing No. I-3-3 entitled "Waste Contours" and Drawing No. I-3-9 entitled "Road and Berm Sections" of Item 18(a) of Schedule "A" attached to this Certificate.	In accordance with conditions 14 and 15, a screening berm along Lalonde Road was constructed during 2001 and seeded during the 2002 site works. The berm and trees along Lalonde Road to the east of the site entrance continue to provide an effective visual screen to site operations.
15.	The Owner shall maintain the trees providing the screening of the Site operations from Lalonde Road in the area east of the entrance.	
3.	EMPLOYEE TRAINING	
1.	A training plan for all employees that operate any aspect of the Site shall be developed and implemented by the Operator. Only Trained Personnel shall operate any aspect of the Site or carry out any activity required under this Certificate.	In accordance with conditions 1 and 2, in May 2003, Stantec provided training to the landfill staff regarding relevant legislation, the conditions of the ECA and site operations. In 2009 and in 2013, all landfill site employees, MHSW employees and Transfer Station employees received WHMIS and TDG training and certification. Training is recommended to be done for each new employee and refresher courses provided to existing employees on a predetermined schedule (typically every 3 years). Refresher courses should be considered once the landfill entrance improvements have been completed.
2.	All Trained Personnel operating the HHW depot shall be trained in the following areas: waste paint identification, analysis information and separating procedures for the wastes being handled at the HHW depot; proper storage, handling, sorting and shipping procedures of the wastes being handled at the HHW depot; and occupational health and safety concerns pertaining to the wastes to be handled at the HHW depot.	
4.	COMPLAINTS RESPONSE PROCEDURE	
1.	If at any time the Owner receives complaints regarding the operation of the Site, the Owner shall respond to these	The City established a complaint procedure as part of its EPA approval that it continues to follow. Complaints can be made in

	Condition	Statement of Compliance
	<p>complaints according to the following procedure:</p> <ol style="list-style-type: none"> The Owner shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information and the time and date of the complaint; The Owner, upon notification of the complaint, shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and The Owner shall complete and retain on-site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents. 	<p>writing at the municipal office or at the landfill site or made verbally over the telephone to Township staff. Information on the complaint is entered into a relational database program residing on the City's computer network. Follow up action is recorded on the form and copies of the complaint are provided to Municipal Council on a monthly basis.</p> <p>In 2018 no complaints were received.</p>
5.	EMERGENCY RESPONSE	
1.	Any spills, fires or other emergency situations shall be forthwith reported directly to the Ministry's Spills Action Centre (1-800-268-6060) and shall be cleaned up immediately.	In 2018 no spills were recorded.
2.	In addition, the Owner shall submit, to the District Manager a written report within five (5) business days of the emergency situation, outlining the nature of the incident, remedial measures taken, handling of waste generated as a result of the emergency situation and the measures taken to prevent future occurrences at the Site.	

	Condition	Statement of Compliance
3.	All wastes resulting from an emergency situation shall be managed and disposed of in accordance with O .Reg. 347.	Understood
4.	All equipment and materials required to handle the emergency situations shall be: a) kept on hand at all times that waste landfilling and/or handling is undertaken at the Site; and b) adequately maintained and kept in good repair.	In accordance with conditions 4 and 5, emergency equipment is contained in the site custodian building. Equipment includes fire extinguisher, shovel, eyewash station, first aid kit, absorbent pads, emergency response contact list and telephone.
5.	The Owner shall ensure that the emergency response personnel are familiar with the use of such equipment and its location(s).	
6.	RECORD KEEPING AND REPORTING	
	Daily Log Book	
1.	A daily log shall be maintained in written format and shall include the following information: a) the type, date and time of arrival, hauler (commercial waste), and quantity (tonnes or volume) of all waste and cover material received at the Site; b) documentation of types, quantities and source of generation of waste received at the HHW depot; c) type, amount and source of waste refused at the HHW depot; d) the area of the Site in which waste disposal operations are taking place; e) a record of litter collection activities and the application of any dust suppressants; f) a record of the daily inspections; and g) a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore and maintain service.	During 2018 activities were recorded for the landfill site and information can be made available to the MECP on request.
2.	Any information requested, by the Director or a Provincial Officer, concerning the Site and its operation under this Certificate, including but not limited to any records required to	Agreed, all field forms, manifests, tickets and other documentation can be provided to Ministry staff on request.

	Condition	Statement of Compliance
	be kept by this Certificate shall be provided to the Ministry, upon request.	
	Daily Inspections and Log Book	
3.	An inspection of the entire Site and all equipment on the Site shall be conducted weekly when the Site is in operation to ensure that: the Site is secure; that the operation of the Site is not causing any nuisances; that the operation of the Site is not causing any adverse effects on the environment and that the Site is being operated in compliance with this Certificate. Any deficiencies discovered as a result of the inspection shall be remedied within a reasonable time, including temporarily ceasing operations at the Site if needed.	In accordance with conditions 3 and 4, the site custodian maintains a daily log in a personal diary of his site inspections. The site custodian also completes a daily inspection form that includes the appropriate information.
4.	A record of the inspections shall be kept in a daily log book that includes: a) the name and signature of person that conducted the inspection; b) the date and time of the inspection; c) the list of any deficiencies discovered; d) the recommendations for remedial action; and e) the date, time and description of actions taken.	
5.	A record shall be kept in the daily log book of all refusals of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.	Understood. There were no records of refused loads in 2018.
	Annual Report	
6.	A written report on the development, operation and monitoring of the Site, shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the District Manager, by March 30 of the year following the period being reported upon.	This 2018 Annual Monitoring Report was submitted prior to March 30, 2019. This report and the environmental monitoring report satisfies the condition 6(6) and 6(7). The Annual Environmental Monitoring Report is prepared and submitted under a separate cover.

	Condition	Statement of Compliance
7.	<p>The Annual Report shall include the following:</p> <ul style="list-style-type: none"> a) calculations of the volume of waste landfilled, the daily and intermediate covers, the final cover and the overall volume of the site capacity used during the reporting period; b) a comparison of the actual capacity used to the estimates of the capacity estimated; c) an estimate of the remaining site life; d) any changes in operations, equipment, or procedures used at the Site, any operating problems encountered and corrective actions taken; e) details on the monitoring program undertaken, outlining monitor locations, analytical parameters sampled, and frequency of sampling; f) an analysis and interpretation of the surface water and groundwater monitoring data, a review of the adequacy of the monitoring program, conclusions of the monitoring data, and recommendations for any changes that may be necessary, g) summary of inspections undertaken at the Site; h) summary of any public complaints received and the responses made; i) summary of activities undertaken at the HHW depot; j) a discussion of cover stockpile activities including use, timing, locations and erosion protection; k) status update on the final cover placement, and seeding activities undertaken in the closed sections of the Landfill; l) a discussion of the waste diversion performance achieved by the Owner reported on a per capita basis; m) a statement as to compliance with all conditions of this Certificate and the other relevant Ministry's groundwater and surface water requirements; n) recommendations respecting any proposed changes in the 	

	Condition	Statement of Compliance
	operation of the Site; and o) any other information that the Regional Director or the District Manager may require.	
7.	LANDFILL DESIGN AND DEVELOPMENT	
	Approved Waste Types	
1.	Only solid non-hazardous municipal waste including asbestos, dewatered sewage sludge and contaminated soil as defined under Reg. 347 shall be accepted at the Site for landfilling.	One of the site custodians' duties is to ensure that only waste types permitted in condition 1 to 5 are accepted.
2.	No liquid industrial waste or hazardous wastes as defined under O. Reg. 347 and O. Reg. 558 shall be disposed at the Site.	
3.	The Owner may continue to accept liquid and solid household hazardous wastes and products requiring special handling or disposal practices, at the HHW depot.	
4.	The Owner shall develop and implement a program to inspect waste to ensure that the waste received at the Site is of a type approved for acceptance under this Certificate.	
5.	The Owner shall ensure that all loads of waste are properly inspected by trained personnel prior to acceptance at the Site and that the waste vehicles are directed to the appropriate areas for disposal or transfer of the waste. The Owner shall notify the District Manager, in writing, of load rejections at the Site within five (5) business days from their occurrence.	
	Capacity	
6.	a) As approved by the Environmental Assessment dated October 21, 1999, the total additional waste disposal capacity of the expanded Site is 740,000 cubic metres of waste, daily cover and intermediate cover, but excluding the final cover. b) The total approved waste disposal capacity for the Site is	Understood. A discussion on the yearly waste deposition and remaining site capacity is provided in this report.

	Condition	Statement of Compliance
	974,000 cubic metres of waste, daily cover and intermediate cover, but excluding the final cover. This total waste disposal capacity includes the additional disposal capacity from Condition (6)(a) above, and the waste disposed of prior to the above Environmental Assessment approval.	
	WASTE PLACEMENT	
7.	No waste shall be placed below existing ground within the fill area to maintain a vertical separation between the groundwater table and the waste.	In accordance with the conditions 7, 8 and 9, landfilling operations are conducted following the procedures described in the City of Clarence Rockland, EPA Landfill Expansion, Design, Operation and Maintenance Report dated August 2000 prepared by Stantec Consulting Ltd. Waste placement was done according to the above conditions. A small amount of waste was placed outside of final contours on the east slope in previous years. In 2018 Jp2g Consultants surveyed and outlined the limits of fill at the northern end of the site.
8.	Disposal of waste shall only occur within the areas as delineated on Drawing - Fig. No. I-3- 3 of Item 18(a) of Schedule "A" attached to this Certificate.	
9.	No waste shall be placed above the final contours shown on Drawing - Fig. No. I-3-4 of Item 18(a) of Schedule "A" attached to this Certificate.	
	Service Area	
10.	Only waste that is generated within the boundaries of the City of Clarence Rockland and Wards 2 and 4 of the Township of Alfred Plantagenet may be accepted at the Site.	During 2018, the landfill serviced the residents of the City of Clarence Rockland only.
	Cover	
11.	Daily and interim cover material shall be applied in accordance with Section 3.3 of Item 14(a) of Schedule "A" attached to this Certificate and as follows: Daily cover a) By the end of each working day, the entire working face shall be covered with a minimum thickness of 100 mm of daily cover.	The site custodian is present when the site is open and one of his duties is to ensure that the waste is covered on a daily basis.

	Condition	Statement of Compliance
	<p><u>Interim cover</u></p> <p>b) In areas where landfilling has been temporarily discontinued for twelve (12) months or more, a minimum thickness of 300 mm of intermediate cover shall be placed.</p> <p><u>Final Cover</u></p> <p>c) Final Cover - In areas where landfilling has been completed to final contours, a minimum 600 millimetres thick layer of soil of medium permeability and 150 millimetres of top soil (final cover) shall be placed. Fill areas shall be progressively completed and rehabilitated as landfill development reaches final contours.</p>	<p>The City of Clarence Rockland completed Cell 1 in the fall of 2005 and applied 600 mm of soil cover over Cell 1 side slopes and 300mm soil interim cover over the top of Cell 1 during 2006. During 2014, interim cover was applied to the north east quadrant of Cell 2.</p> <p>No final cover was completed in 2018. The final capping is anticipated for the fall of 2019 along the northern toe of the waste area.</p> <p>On site cover material is more than sufficient of the anticipated capping.</p>
12.	<p>a) Contaminated soil that is not a hazardous waste as defined by O. Reg. 347, either mixed with clean soil or on its own, and biosolids from the City of Clarence Rockland's Water Pollution Control Plant mixed with soil, compost and/or wood chips, may be used as daily cover provided that its use does not cause any adverse effects;</p> <p>b) Subject to Condition 12 (a), if the application of the contaminated soil as a daily cover causes operational problems, odours or other environmental adverse effects as verified by a Provincial Officer, the use of the contaminated soil shall be immediately discontinued and only clean soil or biosolids mixed with soil, compost and/or wood chips shall be used as daily cover;</p> <p>c) Subject to Condition 12 (a), if the application of the biosolids as a daily cover causes operational problems, odours or other environmental adverse effects as verified</p>	<p>The City typically uses a combination of sand, woodchips mixed with sand and any contaminated soil that they may have at any one time. In 2018 there was no record of using contaminated fill as alternative daily cover.</p> <p>Understood</p> <p>Understood</p>

	Condition	Statement of Compliance
	<p>by a Provincial Officer, the use of the biosolids shall be immediately discontinued;</p> <p>d) Compost mixed with clean soil and wood chips mixed with clean soil may also be used as alternative material for daily cover; and</p> <p>e) The Owner may mix de-watered sludge with the topsoil. The sludge shall be accounted for in the total volume of waste that was approved for landfilling at the Site. If the use of de-watered sludge causes an adverse effect, as verified by a Provincial Officer, its use shall be discontinued and only clean soil shall be used.</p>	<p>Understood</p> <p>Understood</p>
13.	<p>Except for the types already approved by Condition 7(12). any alternative materials to soil may be used as weekly and interim cover material, based on an application with supporting information and applicable fee for a trial use or permanent use, submitted by the Owner to the Director, copied to the District Manager and as approved by the Director via an amendment to this Certificate. The alternative material shall be non-hazardous according to Reg. 347 and will be expected to perform at least as well as soil in relation to the following functions:</p> <p>a) Control of blowing litter, odours, dust, landfill gas, gulls, vectors, vermin and fires;</p> <p>b) Provision for an aesthetic condition of the landfill during the active life of the Site;</p> <p>c) Provision for vehicle access to the active tipping face; and</p> <p>d) Compatibility with the design of the Site for groundwater protection, leachate management and landfill gas management.</p>	<p>No other materials were used for cover.</p>

	Condition	Statement of Compliance
8.	LANDFILLING MONITORING	
	Landfill Gas	
1.	Routine monitoring for explosive methane gas levels shall be conducted in all buildings or structures at the Site and outside of the Weigh Scale House (as identified in the Figure 2 revised on August 28, 2015, and listed as item No. 32 of the Schedule A), especially enclosed structures which at times are occupied by people. If required, the Owner shall ensure that any buildings or structures at the Site contain adequate preventive measures to relieve any possible landfill gas accumulation.	On-site buildings have been protected with a geomembrane liner beneath the floor to prevent gas accumulation and the City has installed a permanent gas monitor in the custodian shelter. A portable monitor may be required if additional enclosed structures are added to the site.
2.	Landfill gas monitoring shall be undertaken according to the program described in Section 5.4 of Item 18(a) of Schedule "A" attached to this Certificate.	
3.	Any changes to the landfill gas monitoring program shall be submitted to the Director for approval, prior to their implementation.	
	Compliance Limits	
4.	The Site shall be operated in such a way as to ensure compliance with the following: a) Reasonable Use Guideline B-7 for the protection of the groundwater at the Site; and b) Provincial Water Quality Objectives included in the July 1994 publication entitled Water Management Policies, Guidelines, Provincial Water Quality Objectives, as amended from time to time or limits set by the Regional Director, for the protection of the surface water.	Groundwater monitoring is discussed in the environmental monitoring report.
	Surface Water and Groundwater	
5.	The Owner shall monitor groundwater as per Appendix G, Item 24 of Schedule "A".	Surface water monitoring is discussed in the environmental monitoring report.
6.	The Owner shall monitor surface water - as per Appendix G, Item 24 of Schedule "A".	

	Condition	Statement of Compliance
7.	A certified Professional Geoscientist or Engineer possessing appropriate hydrogeologic training and experience shall execute or directly supervise the execution of the groundwater monitoring and reporting program.	
8.	The Owner shall abide by the Certificate of Approval for Sewage Works under Section 53 of Ontario Water Resources Act, R.S.O. 1990 issued to construct, operate, maintain and monitor the proposed wetland and its discharge to the surface water regime, designed to control and treat storm water "run-off and leachate-impacted groundwater at the Site.	Environmental Compliance Approval 3362- 6D7PL4 for Municipal and Private Sewage Works was issued on June 24, 2005 under Section 53 of OWRA. Surface water monitoring station GS11 is directly east of the wetland and the water quality result at this location would incorporate the discharge from the wetland. The interpretation of the sampling is discussed in the environmental monitoring report.
9.	Temporary berms and ditches shall be constructed around the active waste disposal area, as necessary, to prevent extraneous surface water from contacting the active working face.	The natural ground slopes away from the waste so there is no extraneous water near the active face. Observations during the 2018 survey did not reveal any ponding on top or along the edge of the waste pile.
	Groundwater Wells and Monitors	
10.	The Owner shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly capped, locked and protected from damage.	Understood. These conditions are addressed in the Annual Environmental Monitoring Report.
11.	Where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and the wells shall be properly re-secured.	

	Condition	Statement of Compliance
12.	<p>Any groundwater monitoring well included in the on-going monitoring program that are damaged shall be assessed, repaired, replaced or decommissioned by the Owner, as required.</p> <p>a) Unless a well is being abandoned, the Owner shall repair or replace any monitoring well which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed.</p> <p>b) All monitoring wells which are no longer required as part of the groundwater monitoring program, and have been approved by the District Manager for abandonment, shall be decommissioned by the Owner, as required, in accordance with O. Reg. 903, that will prevent contamination through the abandoned well. A report on the decommissioning of the well shall be included in the Annual Report for the period during which the well was decommissioned.</p>	
	Trigger Mechanisms and Contingency Plans	
13.	<p>a) The Owner shall follow the site-specific mechanism program for groundwater contingency measures outlined in Appendix A, Item 20 of Schedule "A" and as revised by MOE correspondence in Appendix "A", Item 23 of Schedule "A".</p> <p>b) The Owner shall follow the site-specific trigger mechanism program for surface water contingency measures outlined in Appendix "A" of Item 20 of Schedule "A" and as revised by MOE correspondence in Appendix "A", Item 23 of Schedule "A".</p>	Conditions 13 through 17 are addressed in the environmental monitoring report.
14.	No changes to the site-specific trigger mechanism shall be implemented prior to receiving approval from the Director.	

	Condition	Statement of Compliance
15.	In the event of a confirmed exceedance of a site-specific trigger level relating to leachate mounding or groundwater or surface water impacts due to leachate, the Owner shall immediately notify the District Manager, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the Owner in accordance with the approved trigger mechanisms and associated contingency plans.	
16.	<p>If monitoring results, investigative activities and/or trigger mechanisms indicate the need to implement contingency measures, the Owner shall ensure that the following steps are taken:</p> <ul style="list-style-type: none"> a) The Owner shall notify the District Manager, in writing of the need to implement contingency measures, no later than 30 days after confirmation of the exceedances; b) Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the Owner to the District Manager for approval; and c) d) The contingency measures shall be implemented by the Owner upon approval by the District Manager. 	
17.	The Owner shall ensure that any proposed changes to the site-specific trigger levels for leachate impacts to the surface water or groundwater, are approved in advance by the Director via an amendment to this Certificate	

	Condition	Statement of Compliance
	Changes to the Monitoring Plan	
18.	The Owner may request to make changes to the monitoring program(s) to the District Manager in accordance with the recommendations of the annual report. The Owner shall make clear reference to the proposed changes in separate letter that shall accompany the annual report.	The City will abide with the process described in conditions 18, 19 and 20 when making changes to the environmental monitoring program.
19.	Within sixty (60) days of receiving the written correspondence from the District Manager confirming that the District Manager is in agreement with the proposed changes to the environmental monitoring program, the Owner shall forward a letter identifying the proposed changes and a copy of the correspondences from the District Manager and all other correspondences and responses related to the changes to the monitoring program, to the Director requesting the Certificate be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.	
20.	In the event any other changes to the environmental monitoring program are proposed outside of the recommendation of the annual report, the Owner shall follow current ministry procedures for seeking approval for amending the Certificate.	
9.	CLOSURE PLAN	
1.	At least two (2) years prior to the anticipated date of closure of this Site, the Owner shall submit to the Director for approval, with copies to the District Manager, a detailed Site closure plan pertaining to the termination of landfilling operations at this Site, post-closure inspection, maintenance and monitoring, and end use. The plan shall include the following: a) a plan showing Site appearance after closure; b) a description of the proposed end use of the Site; c) a descriptions of the procedures for closure of the Site, including:	The landfill has greater than 25 years of remaining service life, thus conditions 1, 2 and 3 did not apply during 2018.

	Condition	Statement of Compliance
	<ul style="list-style-type: none"> i) advance, notification of the public of the landfill closure; ii) posting of a sign at the Site entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements; iii) completion, inspection and maintenance of the final cover and landscaping; iv) Site security; v) removal of unnecessary landfill-related structures, buildings and facilities; vi) final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas; and vii) a schedule indicating the time-period for implementing sub-conditions (i) to (vi) above; <p>d) descriptions of the procedures for post-closure care of the Site, including:</p> <ul style="list-style-type: none"> i) operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas; ii) record keeping and reporting; and iii) complaint contact and response procedures; <p>e) an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas; and</p> <p>f) an updated estimate of the contaminating life span of the Site, based on the results of the monitoring programs to date.</p>	
2.	Unless amended by the closure plan, closure of the Landfill will be done in accordance with the final contours shown on Figure I-3-4 of Item 18(a) of Schedule "A" attached to this Certificate.	
3.	The Site shall be closed in accordance with the closure plan as approved by the Director.	

	Condition	Statement of Compliance
10.	WASTE DIVERSION	
1.	The Owner shall direct as much waste from landfilling as is practical and affordable with a view to meeting the Provincial Waste Diversion Objectives, developed by the Ministry and as changed from time to time.	Understood.
2.	The Owner shall submit an annual Waste Diversion Statement as part of its Annual Report described in Condition No. 6 (6), and include the following: a) updating summary of per capita waste diversion activities and quantities of waste diverted from disposal; and b) proposed waste diversion program for the next year that describes estimates of waste to be diverted.	Conditions 1 and 2 are addressed in Section 4.9 and Appendix E of this report.
11.	HOUSEHOLD HAZARDOUS WASTE DEPOT	
1.	The HHW depot shall only accept household hazardous wastes and it shall be operated in accordance with the application for a Waste Disposal Site (Transfer) submitted June 1, 1995 and supporting information and as modified in the Design Operation and Maintenance Report, dated August 2000, and as amended by Report listed as item No. 26 of the Schedule "A".	The HHW depot is operated in accordance with the Design, Operations and Maintenance Report.
2.	No household waste hazardous waste will be stored in HHW Depot for more than 90 days on the Site.	During 2018, wastes were accepted at the Household Hazardous Waste Depot between April 29 and October 31.
3.	a) No PCB's shall be accepted at this HHW depot. Oil and oil-based paints which have been manufactured prior to 1972, or whose manufacturing date cannot be determined may contain PCB's and shall be handled in the manner prescribed: i) The oil and oil-based paints shall not be mixed (bulked) with other paints prior to testing. Paints which are lab-packed are not considered to be mixed under this Certificate.	The Household Hazardous Waste depot operations are addressed in Section 4.6 and Appendix C of this report.

	Condition	Statement of Compliance
	<p>ii) The oil and oil-based paints shall be tested for PCB's content and shall be handled in the manner outlined in sub condition (a)(iii) if found to contain PCB's.</p> <p>iii) If the oil and oil-based paints are found to have PCB's at or above levels identified in sub condition (a) (iv), it shall be forthwith reported to the District Manager and shall be managed in accordance with Ontario Regulation 362/92 and stored or removed from the HHW depot to an approved PCB's storage site, in accordance with written instructions from the District Manager.</p> <p>iv) The oil and oil-based paints shall not be distributed for reuse if they have any measurable PCB 's content. The oil and oil-based paint is considered to be a PCB's waste, if measured levels are equal to or greater than 50 parts per million.</p> <p>b) Except as specified in sub condition (a) (iv), paints collected at the HHW depot may be returned or sold to the general public for reuse provided all transactions are recorded by invoice. Information on the type and volume of paint returned to the public through for HHW depot shall be recorded in the report specified in Condition No. 6 (6).</p>	

	Condition	Statement of Compliance
	Storage	
4.	<p>a) The Owner shall ensure that the wastes are stored in a safe and secure manner, that the operation of the HHW depot does not interfere with any other activities undertaken at the Site and that the wastes are properly handled, packaged or contained so as not to pose any threat to the general public, Site personnel and the environment.</p> <p>b) No storage facilities other than those approved under this Certificate shall be used and fixed storage facilities shall not be moved, replaced or altered.</p> <p>c) All storage buildings and tanks shall be clearly marked indicating the type and nature of the hazardous waste stored. All points of access to the storage facilities shall be posted to warn that the area contains hazardous materials. Smoking restrictions shall be adhered to and non-smoking signs shall be posted as required by Regulation.</p> <p>d) All storage buildings shall be properly ventilated and shall be constructed in compliance with fire regulations, municipal by-laws and approvals and in accordance with Ministry of Labour guidelines.</p> <p>e) All household hazardous waste storage tanks and buildings shall be maintained under lock and key and access to these facilities shall be limited to trained Site personnel.</p>	<p>The site custodian is responsible for the maintenance and operation of the HHW depot and must ensure that the wastes are properly handled, packaged and contained.</p> <p>Understood</p> <p>Signs are posted at the HHW depot warning that the area contains household hazardous waste materials.</p> <p>Understood</p> <p>It is the site custodians' responsibility to ensure the household hazardous waste depot is maintained under lock and key and only accessed by the site custodian.</p>
5.	Wastes that are collected and stored shall be in amounts which can be safely handled at the HHW depot. In the event that larger amounts are received than anticipated, the Owner shall have extra drums and lab-packed containers available on the premises for the storage of the additional waste collected. When the HHW depot capacity is reached, the Owner shall make arrangements for the removal of waste from the HHW depot as soon as possible, but in any event, within five (5) working days.	Wastes were removed from the Household Hazardous Waste Depot by Drain All. Manifests are maintained by the owner.

	Condition	Statement of Compliance
6.	Except as specified under Conditions 11(3)(a)(iii) and (b), all waste collected shall be transported from the Site by an approved waste management system and disposed of at waste landfill, transfer and processing sites certified to accept these types of wastes.	Wastes were removed from the Household Hazardous Waste Depot by Drain All.
12.	COMPOSTING	
1.	Composting operations at the Site shall be carried out in a manner as not to interfere with normal waste disposal operations as approved in this Certificate.	Windrow composting of leaf and yard material has been implemented in 2018 at the site, within the limits and requirements of the ECA. Although no compost is currently cured and ready for use, this practice has permitted a significant reduction in volume of material in a short lapse of time compared to the static pile method used in the past.
2.	Should the ensuing compost be destined for use by the general public, composting operations at the Site shall be carried out in accordance with the Ministry's <u>Interim Guidelines for the Production and Use of Aerobic Compost in Ontario</u> , dated November 1991, and revised from time to time.	
3.	Should the ensuing compost be destined for use as alternative cover material at the Site, composting operations at the Site must be carried out in a manner that does not cause groundwater or surface water contamination, offensive odours or encourage the presence of vermin or any other adverse effect.	

	Condition	Statement of Compliance
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13.	LIAISON COMMITTEE	
1.	The Owner shall take all reasonable steps to establish, maintain and participate in a Site Liaison Committee, which is to function within the Terms of Reference, as proposed in Appendix C of Item 18(a) of Schedule "A" attached to this Certificate. The public shall be given an opportunity to comment and provide input before the Terms of Reference are finalized and ready for implementation. The Terms of Reference shall be amended from time to time according to an appropriate procedures included in the Terms of Reference.	The City typically publishes an ad in the local paper on an annual basis requesting applications from residents to participate in the Site Liaison Committee (S.L.C.). The City has historically published notifications in the local paper for several years and has only had interest from one member of the public to participate on the committee. The City has an Environment Committee that spearheads many of the City's waste diversion initiatives and performs the same function as the SLC.
2.	A copy of the Terms of Reference shall be provided to the District Manager.	
3.	The Site Liaison Committee shall serve as a focal point for dissemination, consultation, review and exchange of information regarding the operation of the Site, results of the environmental monitoring, maintenance, complaint resolution and any new approvals or amendments to the existing approvals related to the operation of this Site.	

This table should be read in conjunction with the entire Certificate as amended for details. The table has been prepared for the 2018 Annual Report and represents the best available information at the time of writing.

APPENDIX C

HHW ACTIVITIES 2018

Appendix C - Household Hazardous Waste Depot Report

In 2018, the household hazardous waste depot was open to the public from April 28th to December 5th during regular landfill site opening hours.

Below is a list that outlines the total weight of incoming materials for 2018

Type of Hazardous Waste	Total (kg)
Acid LP (kg)	600
Aerosol (kg)	657
Antifreeze (kg)	1025
Automotive Batteries (kg)	4198
Base LP (kg)	800
Batteries, primary (kg)	1454
Compressed Gas(kg)	739
Fertilizer LP (kg)	0
Fire Extinguishers (kg)	181
Flammable (kg)	5620
Gasoline Drum (L)	3075
Light Bulbs (kg)	231
Light Tubes(kg)	429
Oil (L)	23398
Oil Filters (kg)	332
Oxidizer LP (kg)	821
Paint (kg)	27073
Pesticide LP (kg)	651
Pharmaceutical LP (kg)	28
Rechargeable Batteries, secondary (kg)	106
Recycled Plastics (kg)	1845
Sharps (kg)	0
Total (Tonne)	73.263

A total of 73.263 tonnes of household hazardous waste has been diverted for 2018. This is compared to 73.5 tonnes in 2017.

In addition, refrigerant was removed from 249 appliances by a licensed refrigeration technician.

APPENDIX D

COVER MATERIAL REPORT

Appendix D - Landfill Site Cover Report

No appreciable final or interim cover was applied or completed in 2018. Final capping in the northern area is anticipated to be undertaken in 2019. Stockpiled cover material at the site is anticipated to be more than sufficient for the upcoming final cover application that is potentially scheduled for next year.

Hybrid poplars were planted along the south and east areas where final cover has been applied. The tree planting initiative was undertaken to assist in erosion prevention and to reduce impact from rainfall by retention of water in plant canopy. Hybrid poplars are also known for their phytoremediation qualities to assist in limiting the dispersal of contaminants in the environment through absorption in their pulp.

Coniferous trees will be planted along the rebuilt area of the berm to prevent erosion, eventually provide shade to the pond to limit eutrophication and serve as a visual barrier to the site from the east.

The table below provides an estimate of cover material based on 2016 and 2017.

Date	Volume of incoming/remaining sand (m ³)	Weight equivalent (tonnes)	Volume of chipped wood associated m ³	Weight equivalent (tonnes)	Total weight of cover	Adjusted cover weight (used in 2017)
2018	3578	3578	5964	1777	5355	5355
					Total	5355

APPENDIX E

WASTE DIVERSION REPORT

Appendix E – Waste Diversion Landfill Site Annual Report 2018

Waste diversion initiative	2018 (tonnes)	2017 (tonnes)	2016 (tonnes)	2015 (tonnes)	2014 (tonnes)	2013 (tonnes)	2012 (tonnes)
Residential blue box	1730	1681	1630	1556	1590	1670	1725
Scrap Metal	224	232	260	252	162	154	197
Tires	63	46	33	50	48	54	42
Mixed Fibers (Roll-off)	35.5	40	41	45	26	28	19
Leaf and Yard Waste	484	511	877	777	832	795	850
Chipped Wood	1368	1281	691	244	312	512	511
Electronic Waste	31.66	40	44	41	39	57	54
Household Hazardous Waste	73	74	69	79	66	58	71
OCC FEL Bins	188	164	102	n/a	n/a	n/a	n/a
Other materials	0	8	4	5	0	0	4
Sub-Total	4197.16	4077	3751	3049	3075	3328	3473

The amount of material diverted from the landfill site in 2018 increased marginally when compared to 2017. The increase is more significant from 2016 and earlier. Increased diversion continues to be a result of:

- Adjustments to the calculation for chipped wood where branches from the transfer station are accounted for in chipped wood and not leaf and yard waste.
- A stable ratio of chipped wood (60%) and sand (40%), however an increased use of sand due to the difficulty to manipulate sandbags as cover material.
- Increase blue box tonnage as a result of the growing communities.
- A small increase in the number of OCC bins distributed to commercial properties within the municipality.
- A steady volume of material from the other diversion initiatives, such as electronics, household hazardous waste and metals.
- A consistent increase in the diversion of tires since 2016.

APPENDIX F

LEAF AND YARD WASTE COMPLIANCE SUMMARY TABLE

COMPLIANCE SUMMARY

THE CITY OF CLARENCE ROCKLAND, UNITED COUNTIES OF PRESCOTT AND RUSSELL
MOE CERTIFICATE NO. 1998-6QQI3K – June 26, 2006
Waste Transfer Station

	Condition	Statement of Compliance
	Conditions 1 through 16 are general conditions dealing with definitions, compliance, interpretation, legal obligations, adverse effects, change of owner, inspections, and information and record retention. Conditions 17 through 46 address the operations and maintenance of the transfer station and are summarized below.	No Municipality input required.
17.	Operation The Site shall be operated and maintained at all times including management and disposal of all waste in accordance with the EPA, Regulation 347 and the conditions of this Certificate. At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.	Understood
18.	Vermin etc. The Site shall be operated and maintained such that vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.	Understood

	Condition	Statement of Compliance
19.	Waste Type Only the following types of waste shall be accepted at the Site: <ul style="list-style-type: none"> a) Leaf and Yard waste limited to grass clippings, garden refuse, leaves, hedge clipping, wood products, branches and natural Christmas trees b) No domestic waste may be accepted at the site 	The site supervisor conducts daily inspections to confirm that only acceptable items are delivered to the site.
20.	Waste Limits No more than 100 tonnes of waste per day shall be accepted at the Site.	The City records the number of loads received at the landfill site. The City maintains information on the number of loads received from the transfer station at the landfill site. Since the transfer station does not have a weigh scale, the daily quantity of waste accepted cannot be verified. A perforated drain pipe was installed along the east limit to remove any ponded water. The drain pipe is connected to the storm sewer on the street.
21.	No more than 100 tonnes of waste shall be stored or be present on-site at any time. If for any reason waste cannot be transferred from the site, the Site must cease accepting waste.	
22.	No more than 100 tonnes of waste shall be sent for final disposal per day	
23.	No waste shall remain on site for longer than 3 days.	
24.	A perforated plastic drain shall be installed to help maintain a dry base for the storage pad, as described in Section 3.3 of the Design and Operation Plan (April 2006).	
25.	Service Area Only waste that is generated in Ontario shall be accepted at the Site.	Site attendant inspects all vehicles that bring waste to the transfer station and only residents from the City of Clarence Rockland use the site.
26.	Hours of Operation Waste may be received at the Site from 8:00 am to 8pm on Wednesday, Saturday and Sunday.	During 2018, the hours of operation were 12 hours per week.

	Condition	Statement of Compliance
27.	Site Security The Site shall be operated and maintained in a secure manner, such that unauthorized persons cannot enter the Site. Perimeter fencing and lockable gate shall be installed prior to this Site receiving waste.	The gate is locked when the site attendant is not on duty. A review of the site inspection forms showed that the site attendant reviews the gate and fencing and padlock daily.
28.	Waste Inspection All waste shall be inspected by Trained personnel prior to being accepted at the Site to ensure that the waste is of a type approved for acceptance under this Certificate.	The site attendant maintains a record of the number of users of the transfer station. Site attendant redirects users to the landfill site if the waste brought cannot be accepted at the site.
29.	In the event that a load of waste is refused, a record shall be made in the daily log book of the reason the waste was refused and the origin of the waste, if unknown.	
30.	Site Inspection An inspection of the entire Site and all equipment on the Site shall be conducted each day the Site in operation to ensure that: the Site is secure; that the operation of the Site is not causing any nuisances; that the operation of the Site is not causing any adverse effects on the environment and that the Site is being operated in compliance with this Certificate. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the Site if needed.	Site attendant conducts daily inspections of the site and records the information on a daily site inspection form.
31.	A record of the inspections shall be kept in the daily log book that includes the following information: a) the name and signature of person that conducted the inspection; b) the date and time of the inspection; c) a list of any deficiencies discovered; d) any recommendations for remedial action; and e) the date, time and description of actions taken.	

	Condition	Statement of Compliance
32.	Training Plan A training plan shall be developed and maintained for all employees that operate the Site. Only Trained personnel may operate the Site or carry out any activity required under this Certificate.	All personnel including replacement staff for vacation and sick days must be provided with training prior to working at the site. Training for WHMIS and TDG was provided to staff in 2013. Training should be updated once the landfill entrance improvements are completed.
33.	The Owner shall ensure that Trained personnel as per Condition 32 are available at all times during the hours of operation of this Site. Trained personnel shall supervise all transfer of waste material at the Site.	
34.	Complaint Response a) If at any time, the Owner receives complaints regarding the operation of the Site, the Owner shall record and number each complaint, either electronically or in a separate log book, and shall include the following information: <ul style="list-style-type: none"> i) the nature of the complaint; ii) if complaint is odour or nuisance related, the weather conditions and wind direction at the time of the complaint; iii) the name, address and the telephone number of the complainant (if provided); and iv) the time and date of the complaint. b) The Owner, upon notification of the complaint, shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant (if known) and District Manager. c) The Owner shall complete and retain on-site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.	The City follows a similar procedure to the compliant response plan implemented for the landfill site. Complaints are called in and logged in a database system by the City.

	Condition	Statement of Compliance
35.	<p>Emergency Response Plan</p> <p>Within 3 months of the date of this Certificate, an Emergency Response Plan shall be developed and implemented for the Site. The plan shall include, but is not necessarily limited to:</p> <ul style="list-style-type: none"> a) emergency response procedures to be undertaken in the event of a spill or process upset, including specific clean up methods for each different type of waste the site is approved to accept; b) a list of equipment and spill clean-up materials available in case of an emergency; and c) notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the site, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response. 	<p>The Emergency Response Plan developed for the landfill site also applies to the transfer station. The plan is reviewed annually and kept up to date.</p>
36.	<p>The Emergency Response Plan shall be kept up to date, and a copy shall be retained in a central location on the Site and shall be accessible to all staff at all times. Changes to the Emergency Response Plan shall be submitted to the District Manager.</p>	
37.	<p>The equipment, materials and personnel requirements outlined in the Emergency Response Plan shall be immediately available on the Site at all times. The equipment shall be kept in a good state of repair and in a fully operational condition.</p>	
38.	<p>All staff that operate the site shall be fully trained in the use of the contingency and emergency response plan, and in the procedures to be employed in the event of an emergency.</p>	
39.	<p>The Owner shall immediately take all measures necessary to contain and clean up any spill or leak which may result from the</p>	

	Condition	Statement of Compliance
	operation of this Site and immediately implement the emergency response plan if required.	
40.	Closure Plan A Closure Plan shall be submitted to the Director for approval at least four (4) months prior to the closure of the Site. The Closure Plan must include, at a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work.	The site opened in 2006. As per resolution 2016-59 the transfer station was to close at the end of 2016. This resolution was not passed by council and the transfer station does in fact remain open.
41.	The Site shall be closed in accordance with the approved Closure Plan.	
42.	Within 10 days after closure of the Site, the Owner shall notify the Director, in writing, that the Site is closed and that the approved Closure Plan has been implemented.	
43.	Design and Operations Report The Design and Operations Report shall be retained at the Site; kept up to date through periodic revisions; and be available for inspection by Ministry staff. Changes to the Design and Operations Report shall be submitted to the Director for approval.	A copy of the Design and Operation report is maintained at the municipal office.
44.	Signs A sign shall be posted and maintained at the main entrance/exit to the site displaying in a manner that is clear and legible and contains the following information: <ol style="list-style-type: none"> 1. the name of the Site and Owner; 2. the number of this Certificate; 3. the name of the operator (if different than Owner); 4. the normal hours of operation; 	The sign at the transfer station has all the information required by this condition. In 2008, The City installed new signs warning against unauthorized access and dumping outside of the site.

	Condition	Statement of Compliance
	5. the allowable and prohibited waste types; 6. a telephone number to which complaints may be directed; 7. a twenty-four (24) hour emergency telephone number (if different from above); and 8. a warning against dumping outside the Site.	
45.	Daily Log Book A daily log shall be maintained in written format and shall include the following: a) date; b) types, quantities and source of waste received; c) quantity of unprocessed, processed and residual waste on the Site; d) quantities and destination of each type of waste shipped from the Site; e) a record of daily inspections required by this Certificate; f) a record of any spills or process upsets at the site, the nature of the spill or process upset and the action taken for the clean-up or correction of the spill, the time and date of the spill or process upset, and for spills, the time that the Ministry and other persons were notified of the spill in fulfilment of the reporting requirements in the EPA; g) a record of any waste refusals which shall include; amounts, reasons for refusal and actions taken; and h) the signature of the Trained personnel conducting the inspection and completing the report,	The inspection report lists the type of products typically removed from the site.
46.	Annual Report By March 31, 2007, and on an annual basis thereafter, the City shall prepare and retain on-site an annual report covering the previous calendar year. Each report shall include, as a minimum, the following information: a) a detailed monthly summary of the type and quantity of all	A copy of the previous year's annual report is maintained at the landfill and the municipal office until the next monitoring report is prepared.

	Condition	Statement of Compliance
	<p>wastes received and transferred from the Site, including the destination of the waste;</p> <p>b) any environmental and operations problems, that could negatively impact the environment, encountered during the operation of the Site and during the facility inspections and any mitigative actions taken;</p> <p>c) a statement as to compliance with all Conditions of the Provisional Certificate of Approval and with the inspection and reporting requirements of the Conditions herein;</p> <p>d) a summary of any complaints that were received as a result of the operation of this Site, and a summary of mitigative action taken to resolve the complaint; and</p> <p>e) any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard.</p>	