



**REGIONAL DISTRICT
of Fraser-Fort George**

**FOOTHILLS BOULEVARD REGIONAL LANDFILL
2023 ANNUAL REPORT
PRINCE GEORGE, BRITISH COLUMBIA**

Prepared by:

THE REGIONAL DISTRICT OF FRASER-FORT GEORGE
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Laura Zapotichny
General Manager of Environmental Services



December 5, 2024

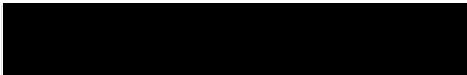
Attention: British Columbia Ministry of Environment and Parks

Subject: Qualified Professional Annual Report Review
Foothills Boulevard Regional Landfill 2023 Annual Report

The Regional District of Fraser-Fort George has retained Tetra Tech Canada Inc. (Tetra Tech) as a Qualified Professional (QP) to review the Foothills Boulevard Regional Landfill (the Site) 2023 Annual Report (Annual Report).

Relevant 3rd party information, which has been relied upon, has been used in and/or is appended to this report. Tetra Tech has reviewed the Annual Report and based on the information provided and knowledge of the Site, Tetra Tech is in general agreement with the information provided. Tetra Tech has reviewed the information presented in the Annual Report and is not responsible for the information that is included or that may have been omitted.

Respectfully submitted,
Tetra Tech Canada Inc.



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PERMIT TO PRACTICE
TETRA TECH CANADA INC.
PERMIT NUMBER: 1001972

Enclosures: Declaration of Competency
Conflict of Interest Disclosure Statement



Declaration of Competency

The Ministry of Environment and Climate Change Strategy relies on the work, advice, recommendations and in some cases decision making of qualified professionals¹, under government’s professional reliance regime. With this comes an assumption that professionals who undertake work in relation to ministry legislation, regulations and codes of practice have the knowledge, experience and objectivity necessary to fulfill this role.

1. Name of Qualified Professional Michelle Jelinski, P.Eng.

Title Project Engineer - Team Lead

2. Are you a registered member of a professional association in B.C.? Yes No

Name of Association: EGBC Registration # 223284

3. Brief description of professional services:

Qualified Professional Review of Landfill Annual Reports 2023 for the Regional District of Fraser-Fort George

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature: X [Redacted Signature]

Print Name: Michelle Jelinski

Witnessed by: X [Redacted Signature]

Print Name: Lauren Quan

Date signed: November 25, 2024

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who
a) is registered in British Columbia with a professional association, is acting under that organization’s code of ethics, and is subject to disciplinary action by that association, and
b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy (“ministry”), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

- a) an ownership interest in the regulated person’s business;
- b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);
- c) a personal or professional interest in a specific outcome;
- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
- f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

Qualified professionals who work under ministry legislation must take care in the conduct of their work that potential conflicts of interest within their control are avoided or mitigated. Precise rules in conflict of interest are not possible and professionals must rely on guidance of their professional associations, their common sense, conscience and sense of personal integrity.

Declaration

I Michelle Jelinski Print Name, as a member of EGBC Print Name of Professional Association
declare

Select one of the following:

- Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this work involving annual report reviews application/project/work/etc..

I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to Leonard Cook ry Contact Name, erring on the side of caution.



Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

This conflict of interest disclosure statement is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Signature:

X  _____

Witnessed by:

X  _____

Print name: Michelle Jelinski

Print name: Lauren Quan

Date: November 25, 2024

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b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

EXECUTIVE SUMMARY

This 2023 Annual Operations Report has been prepared for the Foothills Boulevard Regional Landfill (Site) located in the northwest portion of the City of Prince George, British Columbia at 6595 Foothills Boulevard, northwest of the intersection with West Austin Road. The landfill site has a total permitted area of approximately 87.3 hectares.

The objective of the 2023 Annual Operations Report is to summarize the development of the Site for the period of January 1, 2023 to December 31, 2023. The results of the Environmental Monitoring Program were submitted to the British Columbia Ministry of Environment and Climate Change Strategy (BC MOECCS) in the report entitled, “2023 Annual Groundwater Monitoring Report Foothills Boulevard Regional Landfill” generated by Atkins Realis.

The landfill operated by the City of Prince George commenced at the Site in 1976 and was operated until 1994, when the RDFFG took over management of the Site. It currently operates under Operational Certificate MR-01697, issued October 31, 2005 by the BC MOECCS under the provisions of the *Environmental Management Act* and in accordance with the Regional District of Fraser-Fort George Solid Waste Management Plan. The quantity of materials received which were recycled, used as landfill cover, or composted at the Site during the reporting period was approximately 26,109 tonnes. According to the RDFFG records, there were five composting cycles in 2023 which included yard and garden waste, grass, and manure. The total amount of composted material sold in 2023 was 7,596 cubic metres.

According to the weigh scale records, approximately 72,658 tonnes of waste was landfilled at the Site during the 2023 reporting period. The conservative waste projection for 2023 presented in the draft “Integrated Landfill Management Plan,” prepared by XCG (March 2010) projected the lifespan for the Site to approximately 2032. Based on the information currently available, the lifespan of Cell 1 (current fill area) will not likely extend beyond late 2028.

The remaining operations airspace for Cell 1, as of August 2009, was reported as an estimated value of 2 million cubic metres (excluding final cover).

Based on a comparison of the May 11, 2023, and May 10, 2024, topographical contours, approximately 100,110 cubic metres of airspace was consumed at the Site for the period in which the survey took place. Of which, 29,264 cubic meters were filled within the Phase 1, Stage 2 area located in the eastern section of Cell One and an additional 70,846 cubic meters of airspace was consumed in the southern area of the landfill. It is estimated that the remaining airspace for Cell 1 is approximately 365,891 cubic metres as of May 10, 2024.

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Appendix B	Permit Amendment
Appendix C	Controlled Waste Application
Appendix D	Site Brochure
Appendix E	2024 Volume and Site Life Assessment

1. INTRODUCTION

The objective of the Annual Operations Report is to summarize the development and operations of the Site for the period of January 1, 2023 to December 31, 2023 (Reporting Period). The results of the Environmental Monitoring Plan are submitted to the British Columbia Ministry of Environment and Climate Change Strategy (BC MOECCS) under separate cover.

This report fulfills the annual reporting requirements outlined in Section 8.2 of the Operational Certificate (OC) MR-01697, issued by the BC MOECCS on October 31, 2005.

2. SITE AND REGULATORY SETTING

2.1 Site Description

The Site is located in the northwest portion of the City of Prince George, British Columbia at 6595 Foothills Boulevard, northwest of the intersection with West Austin Road. The legal description of the Site is Block A of the northwest ¼ of District Lot 4053 and Block A of the northwest ¼ of District Lot 4048, Cariboo District. The location of the Site is shown on Figure 1.

The Site property (Figure 2) is bounded to the east by Foothills Boulevard and to the south by a gravel pit maintained and operated by the BC Ministry of Transportation and Infrastructure. The Site is bounded to the north and west by naturalized northern coniferous forest. A residential area, referred to as the Hart Highlands area of Prince George, is located approximately 500 metres east of the Site, and a sport and recreation facility is located approximately 250 metres east of the Site entrance. The Site is located approximately 2.5 kilometres north of the Nechako River.

The Site serves a population of approximately 96,900 people (as per Statistics Canada 2021 Census) and receives approximately 98 percent of the regional solid waste stream (Gartner Lee Ltd., 2008). The Site accepts waste from the Prince George municipal and commercial collection services, the general public, local institutions, businesses, numerous regional transfer stations, the District of Mackenzie and the villages of McBride and Valemount.

The property boundary for the Site encompasses an area of approximately 87.3 hectares. The landfill, composting, and recycling activities conducted at the Site encompass an area of approximately 25 hectares within the permitted landfill property.

2.2 Background

The presence of the gravel pit located immediately south of the Site is believed to be evidence that the original use of the Site was for gravel extraction. A landfill operated by the City of Prince George commenced at the Site in 1976 and was operated until 1994, when the RDIFFG took over management of the Site. Since that time, a number of changes have been made to the Site, including the following (AMEC, 2006):

- Installation or upgrade of site utilities including municipal water supply and a three-phase hydro service;
- Construction of a scale house/operating building and installation of two 80-tonne weigh scales commissioned in January 1995;
- Development of a composting site for green waste, and animal bedding;
- Installation of groundwater monitoring wells and continuation of the Site monitoring program;
- In 2002, final cover, landfill gas collection and flare infrastructure, and a condensate and leachate recirculation system were designed and constructed for the eastern portion of the landfill;
- The Site is 100% fenced by a chain link fence as of September 2013;

- A Leachate force main was constructed in 2015 to allow for eventual leachate discharge into the wastewater collection system of City of Prince George;
- Between 2017 and 2020 the landfill gas (LFG) main header perimeter pipe and main perimeter road were completed;
- In May 2020 the Landfill commenced offsite discharge of landfill leachate to the City of Prince George wastewater collection system and treatment facility;
- In 2021 the South Slope LFG Gas wellfield expansion consisting of 16 vertical LFG collection wells was completed; and
- The remediation of 5.2 hectares of final closed area of Cell 1 commenced in 2020, addressing infrastructure failure and providing additional air space. The project was completed in July of 2022 with the completion of the removal of final cover.

2.3 Regulatory Setting

The Site currently operates under OC MR-01697 issued October 31, 2005 by the BC MOECCS under the provisions of the *Environmental Management Act*. The following section provides an overview of the regulatory environment which governs landfill design, operations, and closure of the Site.

2.3.1 Provincial Regulations

There are currently seven documents published by the BC MOECCS, which regulate landfill design, operations, and monitoring:

- Landfill Criteria for Municipal Solid Waste, Second Edition (June 2016);
- Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills (January 1996);
- Hazardous Waste Regulation, (March 2024);
- Contaminated Sites Regulation, (March 1, 2023);
- Organic Matter Recycling Regulation, (June 30, 2023)
- Environmental Management Act (October 2003); and
- Landfill Gas Management Regulation (March 2020).

2.3.1.1 Landfill Operational Certificate

The landfill is currently approved to operate under Operational Certificate No. MR-01697 issued by the BC MOECCS on October 31, 2005. Key elements of this approval with respect to design, operation, closure and monitoring include the following:

- The Regional District is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores);
- Composting facilities shall be operated and maintained in accordance with the *Organic Matter Recycling Regulation*;
- The management of landfill gas shall be managed in accordance with Sections 4.2 and 9.3 of the *Landfill Criteria for Municipal Solid Waste*;

- Waste asbestos is authorized for disposal subject to compliance with the requirements of Section 40 of the *Hazardous Waste Regulation* and the following conditions:
 - The asbestos waste may not be mixed with any other hazardous waste.
 - The Regional District must approve the disposal before disposal takes place.
 - All other applicable requirements of the *Hazardous Waste Regulation*, including but not limited to manifesting and waste record keeping, must also be complied with.
- The *Environmental Management Act*, the *Contaminated Sites Regulation* and the *Hazardous Waste Regulation* are applicable for the disposal of impacted (contaminated) soil at the facility;
- Hazardous wastes resulting from accidental spills or abandonment of dangerous goods may be accepted at the facility only under the authority of Section 52(1) of the *Hazardous Waste Regulation*;
- A monitoring program shall be developed by a qualified professional to identify potential impacts to the environment and public health from the facility; and
- The monitoring program must address, but not be limited to, subsections 4.1 and 9.2 of the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills*.

A copy of the Operational Certificate is included as Appendix A.

2.3.2 Permit Amendment

In October of 2021 a certificate amendment (See Appendix B) was issued by the MOECCS to ensure the continued proper handling and disposal of waste asbestos was carried out at the Foothills Blvd Regional Landfill facility in accordance with Hazardous Waste Regulation.

To ensure compliance with this amendment staff carry out an inspection and reporting program regarding all asbestos received at the facility.

3. LANDFILL OPERATION AND MANAGEMENT

3.1 Site Operations

The Foothills Boulevard Regional Landfill is currently operated under Operational Certificate MR-01697 issued by the BC MOECCS, Lands and Parks, on October 31, 2005. The Site accepts municipal solid waste from the approved service area. In addition, the Site collects recyclable materials as part of the RDFFG’s waste diversion initiative.

Under the Operational Certificate, waste asbestos is accepted through an application process with prior approval and is restricted in delivery to specific times and days of the week.

3.2 Site Facilities

100% of the perimeter of the landfill is secured with a fence. Access to the Site is provided via Foothills Boulevard, northwest of the intersection with West Austin Road. Access gates control entrance and/or exit from the Site at this location. The gate is locked outside of normal operating hours to prohibit vehicle entrance and uncontrolled disposal when the Site is closed.

Existing facilities located at the Site include the following (Figure 3):

- Scale house;
- Public tipping area;
- Asphalt compost area; and
- Landfill gas utilization facility.

Signage is provided at the site entrance and throughout the Site as follows:

- Site owner;
- Traffic control and directions;
- Hours of operation; and
- Tipping fees.

Normal operating hours for the site are as follows:

Monday to Friday	7:00 AM to 5:00 PM
Saturday	9:00 AM to 5:00 PM
Sunday	9:00 AM to 5:00 PM

The facility operates on Easter Monday, Victoria Day, Labour Day and Thanksgiving Day from 9:00 a.m. to 5:00 p.m.

The facility is closed on New Year’s Day, Family Day, Good Friday, Canada Day, BC Day, National Day of Truth and Reconciliation, Remembrance Day, Christmas Day and Boxing Day.

3.3 Wildlife Observations

Wildlife tracks of medium or large carnivores were observed on Site during the reported period.

Medium carnivores (coyote) were observed 28 times over the reporting period.

Large carnivores (black bear) were observed 43 times over the reporting period, with 9 of the sightings happening outside the front entrance gates to the landfill.

Cervids (deer) were spotted 3 times over the reporting period.

On December 17, 2023, the annual bird count reported the following: ravens (220), crow (106), eagles (94) and starling (40).

3.4 Volume Reduction Statement

The RDFFG encourages the reduction of solid waste generated and subsequently landfilled by the following means:

- The transfer station provides recycling opportunities for the following materials as summarized in Table 2:
 - Scrap metal;
 - White goods including ozone depleting substances (ODS) containing appliances;
 - Automotive batteries;
 - Single use batteries and cell phones;
 - Yard and garden waste;
 - Corrugated cardboard and mixed paper;
 - Plastic cartons and containers, metal food cans;
 - Used motor oil, oil filters and containers;
 - Used antifreeze and containers; and
 - Demolition Land-Clearing and Construction (DLC) (See Section 3.6 Diverted Materials).

3.5 Waste Disposal

The quantity of waste received at the Site is weighed and recorded. A summary of the mass of waste disposed at the Site is provided in Table 1. According to RDFFG records, the total mass of waste landfilled at the Site during the reporting period was approximately 72,658 tonnes.

3.6 Diverted Materials

The quantity of on-site diverted materials which are either recycled, used as landfill cover, or composted at the Site is weighed and recorded. A summary of these materials is provided in Tables 2 and 3. According to RDFFG records, the total mass of diverted

materials (sum mass of reported materials in Tables 2 and 3) at the Site during the reporting period was approximately 26,109 tonnes.

A new waste diversion initiative for demolition, land clearing and construction waste was implemented at the Site starting on July 2, 2021. This program includes differential tipping fees for various DLC materials. Customers are encouraged to divert DLC waste to a local private recycling facility in Prince George rather than for disposal at the landfill.

3.7 Composted Materials

According to the RDFFG records, there were five composting cycles in 2023 which included yard and garden waste, grass, and manure. The total amount of compostable materials received at the Site was 6786.7 tonnes (Table 3). The total volume of composted material sold in 2023 was 7,596 cubic metres.

3.8 Per Capita Waste Disposal Rates

Based on an estimated population of 96,900 (Statistics Canada 2021 Census) in the Site service area, the average daily mass of waste landfilled per capita (not using the Ministry of Environment and Climate Change Waste Diversion Calculator) was approximately 2.3 kilograms during the reporting period.

3.9 Landfill Volume Consumed

As indicated in Section 3.5, the total amount of waste compacted and buried was approximately 72,658 tonnes during the Reporting Period (January 1, 2023 to December 31, 2023).

The apparent waste density was estimated from the calculated landfill airspace consumption and annual tonnage landfilled. The apparent waste density is not a true density but is a relationship that represents the mass of waste disposed in each cubic metre of landfill air space. Based on a comparison of the May 11, 2023, and May 10, 2024, topographical contours, approximately 100,110 cubic metres (Dillion) of airspace has been filled at the Site for the period in which the survey took place. Based upon approximately 72,382 tonnes of waste landfilled at the Site during this time period, the apparent density for the landfill was calculated to be approximately 0.72 tonnes per cubic metre. This apparent density is significantly higher than the previous year of 0.52 tonnes per cubic metre and more representative of historic waste densities at the site.

The Remediation project that has been in progress since 2020 in the eastern portion of cell one, was completed in July of 2022. This additional air space is now being utilized to develop Cell One to final grade. As of May 10, 2024, a further 29,264 cubic meters of this air space within the original project area has been utilized with an additional 70,846 cubic metres being filled in the southern area of the landfill (Figure 3).

3.10 Remaining Capacity and Site Life

The remaining operations airspace for Cell 1, as of August 2009, was reported as an estimated value of 2 million cubic metres (excluding final cover) (XCG, 2010). According to the letter “Volume Assessment, Foothills Boulevard Regional Landfill,”

(Dillon Consulting) presented to the RDIFFG on July 02, 2024, approximately 100,110 cubic metres of airspace was consumed at the Site from May 11, 2023 to May 10, 2024, based on a comparison of the May 11, 2023 to May 10, 2024, topographical contours. It is estimated that the remaining airspace for Cell 1 is approximately 365,891 cubic metres, as of May 10, 2024, (Dillon Consulting Ltd). Based on the information currently available, the lifespan of Cell 1 (current fill area) will not likely extend beyond 2028.

3.11 2024 Operation Plan

Site operations during the 2024 reporting period are anticipated to remain unchanged from those outlined in Section 3.1. Additional waste diversion programs will be implemented in accordance with the 2015 Regional Solid Waste Management Plan.

The Regional District Capital Projects for 2024 are as follows:

Cell Two Development:

Phase 1: Logging, grubbing and geotechnical investigation work for Cell 2 construction.

Intermediate cover:

Intermediate cover application to Eastern and North – Eastern slopes of Cell 1 to meet regulatory requirements.

Landfill Gas System Instrumentation and Process Upgrade:

In preparation of the 2025 beneficial use project, upgrades to the process and instrumentation sides are now required to increase the LFG systems compatibility with current technologies and seamless integration, (with both internal and external applications).

Landfill Gas Wellfield Review and Expansion:

Expansion of the existing landfill gas wellfield onto the northwest slope of the landfill to increase overall collection efficiency.

Design, Operations, and Closure Plan Update:

Update the existing DOCP to incorporate elements of Cell 2 Development.

Operational Certificate amendment:

To incorporate the development and operations of Cell 2.

4. SUMMARY AND CLOSURE

The 2023 Annual Report was prepared by the RDIFFG to summarize the development and operations of the Foothills Boulevard Regional Landfill, for the period of January 1, 2023, to December 31, 2023.

According to the weigh scale records, approximately 72,658 tonnes of waste and 26,109 tonnes of recyclable materials were received at the Site during the 2023

reporting period. Based on the information currently available, the lifespan of Cell 1 (current fill area) will not likely extend beyond 2028. It is estimated that the remaining airspace for Cell 1 is approximately 365,891 cubic metres, as of May 10, 2024.

5. REFERENCES

1. British Columbia Ministry of Environment, 1996. “Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.”
2. AMEC Earth and Environmental Ltd., December 2006. “Design and Operations Plan.”
3. British Columbia Ministry of Environment, 2006. “Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.”
4. XCG Consultants Ltd., March 2010. “Draft – Integrated Landfill Management Plan, Foothills Boulevard Regional Landfill.”
5. Maura Walker and Associates Environmental Consultants Ltd. in association with XCG Consultants Ltd., March 2016. “2015 Regional Solid Waste Management Plan.”
6. British Columbia Ministry of Environment, Second Edition (June 2016). “Landfill Criteria for Municipal Solid Waste.”
7. British Columbia Ministry of Environment, 2020. “Environmental Management Act.”
8. British Columbia Ministry of Environment, 2020. “Landfill Gas Management Regulation.”
9. Tetra Tech Inc., 2020/2021. “Volume Assessment.”
10. Dillion 2022/2023. Volume Assessment
11. Aero Geometrics Ltd., 2023. “Air Survey.”

FIGURES

FIGURE 1
SITE LOCATION MAP



Figure 1
**Foothills Boulevard Regional Landfill
 Site Location Map**






**REGIONAL DISTRICT
 of Fraser-Fort George**

FIGURE 2
SITE PLAN

FOOTHILLS BOULEVARD REGIONAL LANDFILL SITE TOPOGRAPHY

LEGEND

-  PROPERTY BOUNDARY
-  MONITORING WELL
-  WASTE FILL AREA



NOTE: EXISTING CONDITIONS AS OF MAY 2023

FIGURE 3
AERIAL SURVEY

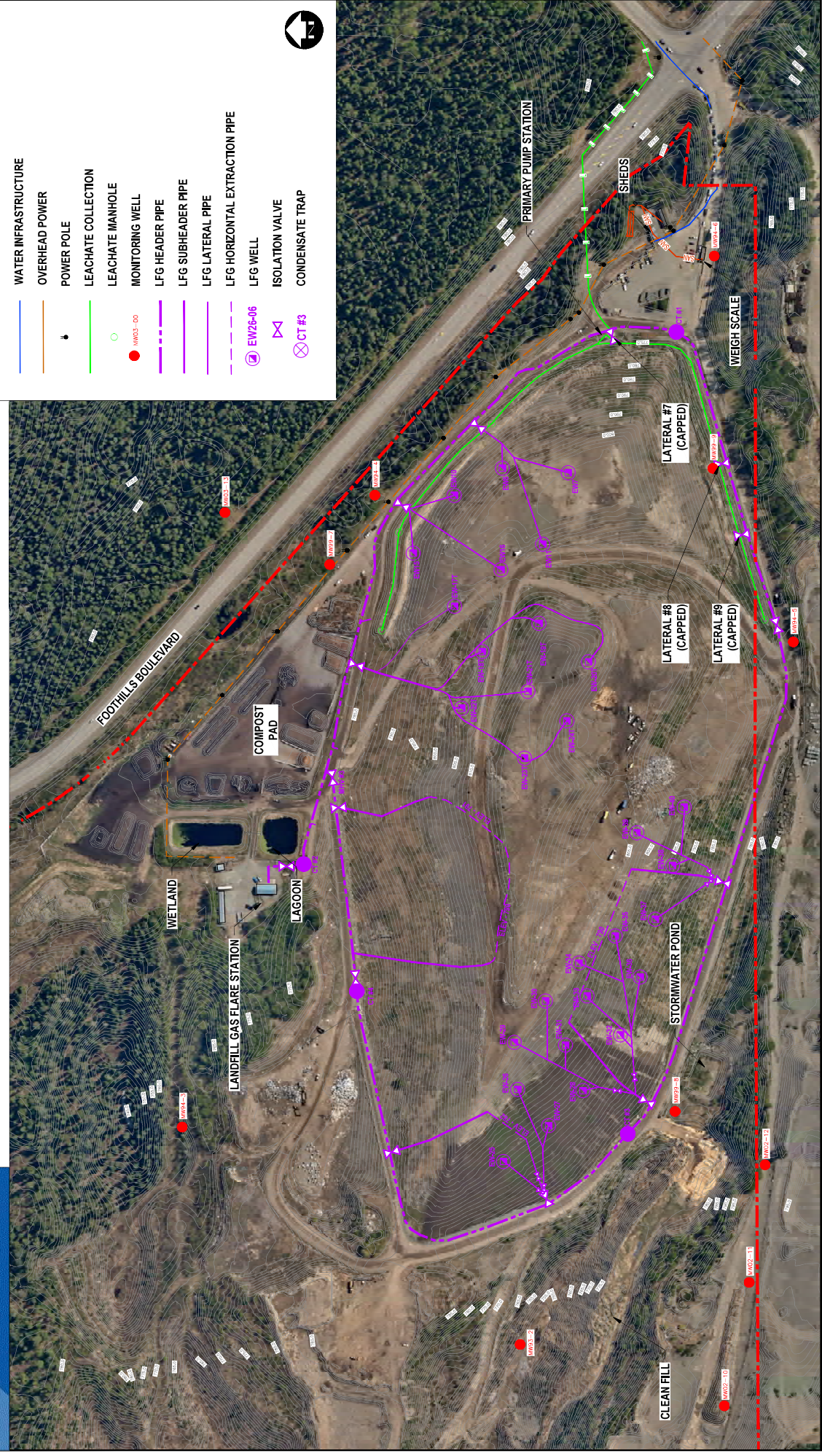
POLLUTION CONTROL INFRASTRUCTURE FOOTHILLS BOULEVARD REGIONAL LANDFILL

LEGEND

- PROPERTY BOUNDARY
- LEACHATE FORCEMAIN
- SANITARY INFRASTRUCTURE
- WATER INFRASTRUCTURE
- OVERHEAD POWER
- POWER POLE
- LEACHATE COLLECTION
- LEACHATE MANHOLE
- MONITORING WELL
- LFG HEADER PIPE
- LFG SUBHEADER PIPE
- LFG LATERAL PIPE
- LFG HORIZONTAL EXTRACTION PIPE
- LFG WELL
- ISOLATION VALVE
- CONDENSATE TRAP



REGIONAL DISTRICT
of Fraser-Fort George



NOTE: EXISTING CONDITIONS AS OF MAY 2023



TABLES

Table 1 Solid Waste Disposal Summary 2023

Solid Waste Disposal Summary						
Date	Residential (tonnes)	Industrial and Commercial (tonnes)	Construction and Demolition (tonnes)	Asbestos (tonnes)	TS Correction (-) (tonnes)	Total Landfilled (tonnes)
Jan-23	2,596.7	2,052.7	730.3	20.3	410.2	4,989.8
Feb-23	1,975.1	1,785.7	533.5	11.5	266.7	4,039.1
Mar-23	2,547.7	2,127.0	945.2	58.5	352.2	5,326.2
Apr-23	3,194.1	2,285.4	1,061.3	15.1	520.4	6,035.4
May-23	4,084.5	2,470.1	1,545.8	29.5	766.7	7,363.3
Jun-23	3,538.0	2,385.6	1,547.2	22.4	649.4	6,843.7
Jul-23	3,656.2	2,323.7	1,543.5	4.5	726.2	6,801.5
Aug-23	3,698.8	2,501.0	1,592.7	7.4	686.6	7,113.2
Sep-23	3,421.1	2,328.5	1,523.6	22.9	641.4	6,654.8
Oct-23	3,456.8	2,747.2	1,739.2	10.5	602.6	7,351.1
Nov-23	2,851.1	2,225.3	987.7	14.6	426.2	5,652.6
Dec-23	2,315.7	1,850.1	643.1	5.7	327.3	4,487.3
Total	37,335.9	27,082.2	14,393.0	222.8	6,375.8	72,658.1

Notes:

1. Data provided by the RDIFFG.
2. TS Correction adjustment for double weighted materials originating from on-site transfer station.

Table 2 Recycled and Non-Landfilled Materials 2023

Recycled and Non-Landfilled Materials

Date	Appliances (tonnes)	Scrap Metal (tonnes)	Cover and Soils (tonnes)	Transfer Station (tonnes)	Total (tonnes)
Jan-23	4.5	37.6	52.4	0.5	95.0
Feb-23	3.7	32.1	20.3	0.7	56.8
Mar-23	6.4	37.5	21.5	0.4	65.7
Apr-23	6.8	79.6	201.9	1.7	290.0
May-23	7.6	128.9	3,096.3	1.8	3,234.5
Jun-23	7.5	89.8	5,277.1	2.0	5,376.3
Jul-23	10.9	100.0	4,731.5	1.0	4,843.5
Aug-23	9.7	106.5	1,448.0	1.7	1,565.9
Sep-23	12.1	109.5	1,787.3	1.3	1,910.1
Oct-23	11.8	125.5	641.1	2.3	780.6
Nov-23	6.8	79.7	852.4	1.2	940.0
Dec-23	6.9	37.6	118.7	0.7	163.9
Total	94.6	964.3	18,248.3	15.1	19,322.3

Notes:

1. Data provided by the RDIFFG.

Table 3 Composted Materials Insert 2023

Composted Materials		Manure		Grass		Chipped Y&G		Yard and Garden		Total (tonnes)
Date	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)		
Jan-23	102.7	1.1	-	0.1	27.5	-	5.1	12.8	121.8	
Feb-23	93.4	0.3	-	-	1.0	-	1.4	3.8	98.8	
Mar-23	103.4	1.0	-	-	18.6	-	41.9	29.4	175.7	
Apr-23	123.8	0.8	1.7	7.4	27.8	-	56.6	383.5	573.8	
May-23	120.2	2.6	17.3	90.6	43.4	-	94.6	948.7	1,273.9	
Jun-23	63.5	-	6.8	41.1	70.7	-	51.4	543.7	706.4	
Jul-23	60.1	3.6	6.8	25.8	101.5	-	45.9	532.8	675.0	
Aug-23	119.5	0.6	6.0	19.8	69.0	-	45.4	434.9	626.2	
Sep-23	86.6	0.2	6.5	13.0	84.3	-	65.9	366.3	538.5	
Oct-23	100.0	24.2	7.2	46.6	109.6	-	80.2	596.2	854.4	
Nov-23	91.9	0.7	0.1	6.5	143.2	-	24.2	166.0	289.4	
Dec-23	101.3	1.1	-	0.1	18.7	-	2.5	32.8	137.7	
Total	1,166.4	36.1	52.4	250.9	715.2	-	514.9	4,050.9	6,786.7	

Notes:

1. Data provided by the RDFFG.

APPENDIX A
OPERATIONAL CERTIFICATE MR-01697

MINISTRY OF ENVIRONMENT

OPERATIONAL CERTIFICATE

MR-01697

*Under the Provisions of the Environmental Management Act
and in accordance with the
Regional District of Fraser-Fort George
Solid Waste Management Plan*

Regional District of Fraser-Fort George

155 George Street

Prince George, British Columbia

V2L 1P8

is authorised to manage recyclable material and municipal solid waste at a sanitary landfill located at **6595 Foothills Boulevard**, Prince George, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may result in prosecution.

1. LOCATION OF AUTHORISED FACILITY

The location of the facility for the management of recyclable material and municipal solid wastes to which this Operational Certificate is applicable is the Foothills Landfill, Block A of the Northeast $\frac{1}{4}$ of District Lot 4053 and Block A of the Northwest $\frac{1}{4}$ of District Lot 4048, Cariboo District as shown in the attached plan and containing 87 hectares more or less.

2. ENTRANCE FACILITIES

The authorised facility includes recyclable material and municipal solid waste drop-off facilities, weigh scales and related appurtenances approximately as shown on the attached Site Plan.

3. MANAGEMENT OF MUNICIPAL SOLID WASTE

3.1. Sanitary Landfill

3.1.1. The authorised facilities are a sanitary landfill area, composting area, landfill gas management, recyclable material storage areas and related appurtenances approximately as shown on the attached Site Plan. The site reference number for the discharge is E211018.

- 3.1.2. The characteristics of the discharge must be municipal solid waste as defined under the *Environmental Management Act* and other wastes as approved in writing by the Director.
- 3.1.3. Waste may be discharged to the areas specified in the Regional District's Design and Operation Plan, approximately located as shown on the attached Site Plan.

4. GENERAL REQUIREMENTS

4.1. Qualified Professionals

All facilities and information, including works, plans, assessments, investigations, surveys, programs and reports, must be certified by qualified professionals.

4.2. Plans

4.2.1. The Regional District shall prepare a Design and Operation Plan that will include considerations for site operation and development, leachate and landfill gas management, composting operations, monitoring programs and environmental impact mitigation management.

The Design and Operation Plan must be submitted to the Director by November 30, 2005.

4.2.2. The Design and Operation Plan must address, but not be limited to, each of the subsections in the *Landfill Criteria for Municipal Solid Waste* including performance, siting, design, operational and closure and post-closure criteria.


4.2.3. The facilities must be developed and operated in accordance with the Design and Operation Plan.

4.2.4. Any updates to the plan shall be immediately submitted to the Director.

4.3. Additional Facilities or Works

The Director may require investigations, surveys, and the construction of additional facilities or works. The Director may also amend information requirements of this Operational Certificate including plans, programs, assessments and reports.

Date Issued: **OCT 31 2005**


Del Reinheimer, P.Eng.
for Director, Environmental Management Act

5. **OPERATIONAL REQUIREMENTS**

5.1. Operator Training and Development

At a minimum, the Regional District will ensure that operating personnel are trained to industry standards and at least one member of the on-site personnel are trained and current in a SWANA recognized landfill operator course or equivalent.

5.2. Wildlife Management and Control

At the time of issuance of this certificate the Regional District is not required to install electric fencing for the purpose of preventing access to the site by bears.

The Regional District is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores).

The Director may request the Regional District to develop a Wildlife Management Plan that presents solutions for preventing wildlife access to the facility.

5.3. Compost

Composting facilities shall be operated and maintained in accordance with the *Organic Matter Recycling Regulation*.

5.3. Management of Landfill Gas

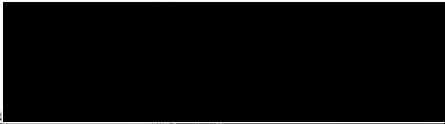
The management of landfill gas shall be managed in accordance with sections 4.2 and 6.4 of the *Landfill Criteria for Municipal Solid Waste*. In addition, the Regional District will have a qualified professional prepare an Operations and Maintenance Manual for the landfill gas management system.

6. **HAZARDOUS WASTE MANAGEMENT**

6.1. Hazardous Waste

“Hazardous Wastes” as defined by the *Hazardous Waste Regulation* pursuant to the *Environmental Management Act* are prohibited from disposal unless expressly authorised by the *Hazardous Waste Regulation*, approved by the Director or as specified in the Operational Certificate.

Date Issued: **OCT 31 2005**


Del Reinheimer, P.Eng.
for Director, Environmental Management Act

6.2. Waste Asbestos

Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the *Hazardous Waste Regulation* **and** the following conditions:

- 6.2.1. The asbestos waste may not be mixed with any other hazardous waste.
- 6.2.2. The Regional District must approve the disposal before disposal takes place.
- 6.2.3. All other applicable requirements of the *Hazardous Waste Regulation*, including but limited to manifesting and waste record keeping, must also be complied with.

6.3. Handling of Impacted Soil

The *Environmental Management Act*, the *Contaminated Sites Regulation* and the *Hazardous Waste Regulation* are applicable for the disposal of impacted (contaminated) soil at the facility.

6.4. Hazardous Wastes from Accidental Spills or Abandonment

Hazardous wastes resulting from accidental spills or abandonment of dangerous goods may be accepted at the facility only under the authority of Section 52(1) of the *Hazardous Waste Regulation*.

7. **MONITORING**

7.1. Monitoring Program

- 7.1.1. A monitoring program shall be developed by a qualified professional to identify potential impacts to the environment and public health from the facility.
- 7.1.2. The monitoring program shall be submitted as part of the Design and Operation Plan.
- 7.1.3. The monitoring program must address, but not be limited to, subsections 4.1, 4.2 and 7.15 of the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills*.
- 7.1.4. Monitoring must be conducted in accordance with the monitoring program.

8. REPORTING

All reports and drawings shall be submitted in electronic format unless otherwise requested by the Director.

8.1. Drawings

All drawings shall be certified correct and sealed by a qualified professional. Drawings shall be submitted to the Director within 30 days of completion or as otherwise specified by the Director.

8.2. Annual Report

The Regional District shall submit an Annual Report to the Director on or before June 30 each year for the previous calendar year. The report shall contain, but not be limited to the following information:

- i.) an executive summary;
- ii.) the type and tonnage of waste received, recycled and landfilled for the year;
- iii.) a current topographic map detailing airspace consumption, on-site borrow pit changes and future developments;
- iv.) updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint;
- v.) any new information or proposed changes relating to the facilities and Design and Operation Plan;
- vi.) composting operation activity including amount of material received for composting, material composted, material sold and number of composting cycles;
- vii.) occurrences or observations of wildlife (medium and large carnivores) at the facility;
- viii.) a statement regarding the facility's progress in reducing the regional solid waste stream, in accordance with the hierarchy of reduce, reuse and recycle principles; and,
- ix.) the results of all monitoring programs as specified in this Operational Certificate. Data interpretation and comparison to the performance criteria in the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring and Municipal Solid Waste*

Landfills. Trend analysis, as well as an evaluation of the impacts of the discharges on the receiving environment in the previous year shall be carried out by a qualified professional.

9. CLOSURE PLAN

At least one year in advance of decommissioning the landfill, or as otherwise specified by the Director, a Closure Plan shall be submitted which includes at least the following information:


- i) a topographic plan showing the final elevations contours of the landfill and surface water diversion and drainage controls;
- ii) specifications for the final cap and proposed end use of the site; and,
- iii) provisions for a minimum 25 year post-closure care period at the facility which, at a minimum, considers the following: groundwater monitoring, surface water monitoring, landfill gas management, erosion and settlement monitoring and management.

10. CLOSURE AND POST-CLOSURE FUND

The Regional District will conform to the Public Sector Accounting and Auditing Board's requirements (PS 3270) to recognize solid waste landfill closure and post-closure liability. The Regional District will develop a plan to ensure that sufficient funds are available for closure and post-closure care work.

SITE PLAN

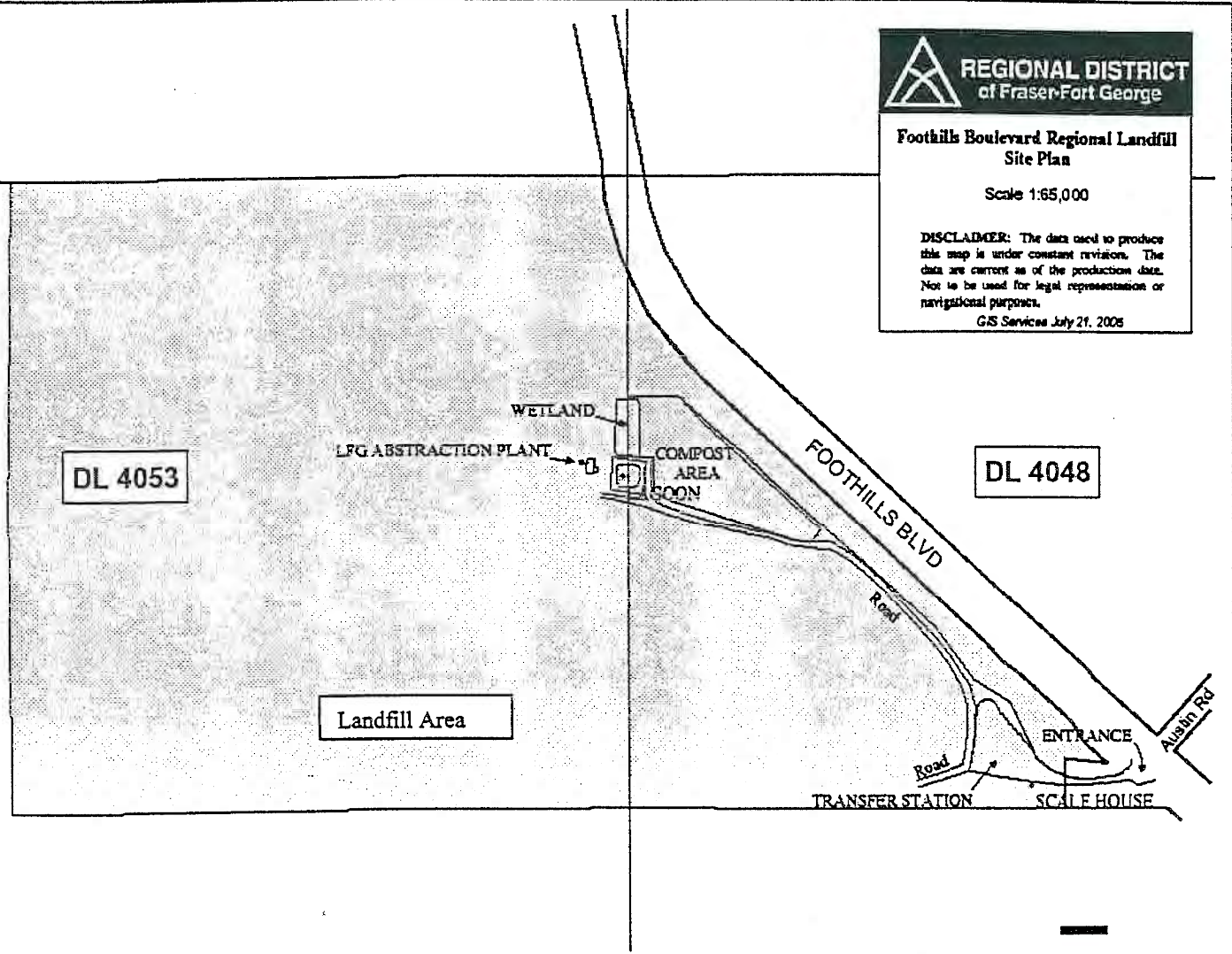


 **REGIONAL DISTRICT
of Fraser-Fort George**

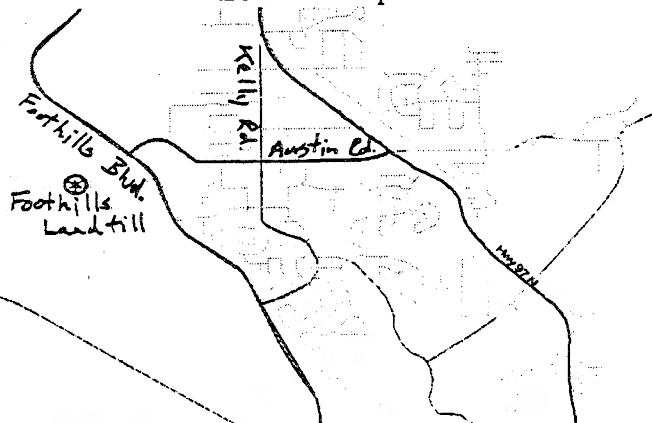
**Foothills Boulevard Regional Landfill
Site Plan**

Scale 1:65,000

DISCLAIMER: The data used to produce
this map is under constant revision. The
data are current as of the production date.
Not to be used for legal representation or
navigational purposes.
GIS Services July 21, 2005



Location Map



Scale: Not to Scale

OCT 31 2005

Operational Certificate No. MR-01697



Del Reinheimer, P.Eng.
for Director, Environmental Management Act
Omineca and Peace Regions

APPENDIX B
PERMIT AMENDMENT



July 14, 2021

File: 1697

Regional District of
Fraser-Fort George
155 George St.
Prince George, BC V2L 1P8
pwildauer@rdffg.bc.ca

Dear Petra Wildauer,

This letter is to follow up from the Ministry of Environment site visit on July 14, 2021 at the Foothills Landfill where asbestos material was seen exposed from broken bags therefore, posing a potential risk to human health and the environment and in non-compliance with section 6.2 of the Operational Certificate and the *Hazardous Waste Regulation*.

It is my intent as Director to amend the language in Section 6.2 of Operational Certificate 1697 to provide clarity around the requirements regarding disposal of asbestos waste and asbestos-containing material and to remove the blanket authorization for accept of this waste given the insufficient handling, at this time. This means that you must request written authorizations from the Director for accepting asbestos materials for each occurrence and report. I also intend to restrict public access to the open face of the landfill until such time that an assessment of asbestos exposure risk has been completed.

This letter serves as notification under the Public Notification Regulation Section 4.6. Please refer to the attached draft Amendment for details. It is my intent to decide at 14 business days from the date of this letter.

If you have any questions or concerns, please contact Leonard Cook, Environmental Protection Officer at 250-645-9403 or the undersigned.

Yours truly,



Karen Moores, P. Ag.
Section Head – North Authorizations, Environmental Protection Division
Ministry of Environment & Climate Change Strategy

APPENDIX C
CONTROLLED WASTE APPLICATION

INSTRUCTIONS TO APPLICANTS - Processing of Controlled Wastes

1. Please complete Sections A, B & C of Part I. Submit complete application form to Environmental Services of the Regional District of Fraser-Fort George with supporting documentation. Incomplete applications will be returned to the applicant for completion prior to processing.
2. Following consideration of the application, Regional District staff will contact the applicant's contact person to discuss the results.
3. Charges applicable to the Controlled Waste to be disposed at the landfill will be determined by weight on the scales at the landfill facility. Where scales are not available, Regional District staff will determine charges on a volume to weight standard.
4. Minimum notice of 48 hours will be required prior to delivery. Regional District staff will confirm delivery arrangement with the applicant.
5. If controlled waste material requires manifestation from provincial or federal authorities, the manifest must accompany the load and applicable copies of completed manifests must be provided to landfill staff.

*****Effective November 16, 2021*****

Asbestos disposals will be limited to Tuesday, Wednesday, and Thursday. Disposals will be accepted no later than 1pm. Weather conditions may result in cancellation of scheduled deliveries and rescheduling will be required.

*******BLADDER BAG BIN LINERS ARE NO LONGER ACCEPTED*******

*******BIN CAPACITY MUST NOT EXCEED 20 YARDS*******

Applicants will ensure that bagged asbestos will be hand unloaded by workers wearing the PPE required as per WorkSafeBC regulations. Employees and contractors of the Regional District of Fraser-Fort George are not responsible for any part of the unloading process and will escort and inspect all loads to ensure compliance.

Asbestos Disposal: fax completed applications to 250-962-8920

Controlled Waste Disposal (other than asbestos): fax completed applications to 250-562-8676

Regional District of Fraser-Fort George
Environmental Services

OFFICE LOCATION

155 George Street
Prince George, BC V2L 1P8
Phone: 250-960-4400 Fax: 250-562-8676

8:00 am - 5:00 pm
Monday to Friday excluding statutory holidays

MAILING ADDRESS

155 George Street
Prince George, BC
V2L 1P8

REGIONAL DISTRICT OF FRASER-FORT GEORGE
Application for Acceptance of Controlled Wastes

Part I

(to be completed by Applicant wishing to dispose of a Controlled Waste at a Regional Landfill)

A. SOURCE SITE INFORMATION

1. Source Site Address

Street Address: _____

City: _____ Postal Code: _____

Legal Description: _____ PID: _____

2. Site Owner Name

Last: _____ First: _____ Middle Initial(s): _____ *(and/or, if applicable)*

Company: _____

Mailing Address: _____

City: _____ Province: _____ Postal Code: _____

Telephone: (_____) _____ Fax: (_____) _____

3. Source Site Contact Person

Last: _____ First: _____ Middle Initial(s): _____ *(and/or, if applicable)*

Company: _____

Mailing Address: _____

City: _____ Province: _____ Postal Code: _____

Telephone: (_____) _____ Fax: (_____) _____

REGIONAL DISTRICT OF FRASER-FORT GEORGE
Application for Acceptance of Controlled Wastes

Part II
(To be completed by Regional District)

Reviewed By: _____

Date: _____

Applicant: _____

Application No. _____

Analytical Assessment:

Laboratory Analysis Required	YES	NO
Laboratory Analysis Received	YES	NO
Further Testing Required	YES	NO
MSDS Information Received	YES	NO

Waste Material Type: _____

Waste Source: _____

Disposal Authorization: _____

Project Period: _____

Disposal Directions: _____

Comments: _____

Receiving Facility: _____

Reviewer's Signature: _____ Date: _____

Approved: _____

Not Approved: _____

APPENDIX D
SITE BROCHURE

CENTRALIZED COMPOSTING

Large quantities of source separated yard and garden waste can be dropped off at the Foothills Boulevard Regional Landfill at no charge for inclusion into the centralized compost operation. NorGrow compost is sold at the Foothills Boulevard Regional Landfill. Please call for pricing and loading times.

RECYCLING BINS

Foothills Boulevard Regional Landfill provides recycling bins for corrugated cardboard and multi-material recycling. Multi-material recycling bins are divided into two compartments:

- **Containers and Cartons**
Plastic containers, steel packaging, aluminum containers and paper packaging containing liquids when sold. Empty and rinse containers - labels are okay, remove caps, pumps & lids, place loose in the bin. Put metal lids inside cans and flatten.
- **Mixed Paper**
Flattened cardboard, catalogues, glossy flyers, cereal boxes, office paper, kraft grocery bags, envelopes, magazines, newspaper and cardboard egg cartons. NO paper that has any plastic, foil, wax or food residue attached to it.

For a detailed list of accepted materials, please refer to the Regional District Recycling Brochure or visit our website.

APPLIANCES CONTAINING REFRIGERANT

Fridges, freezers, air conditioners, and dehumidifiers under the Major Appliance Recycling Roundtable (MARR) Stewardship program are accepted **free of charge** for recycling. (<https://www.marrbc.ca>)

USED OIL AND ANTIFREEZE

Used oil, oil filters and containers, and used antifreeze and containers under the BC Used Oil Management Association (BCUOMA) Stewardship program are accepted **free of charge** for recycling. (<https://www.bcusedoil.com>)

SCRAP METAL RECYCLING

Metal materials accepted at the Foothills Boulevard Regional Landfill for recycling include:

- Appliances and parts such as stoves, dishwashers, hot water tanks, washers, dryers and any other **non-refrigeration** type appliance, many of which are part of MARR.
- Bicycle frames and barbeque hulks;
- Metal roofing and siding;
- Lawnmower bodies, snowmobile and motor bike frames (fuel, lubricants and tires must be removed);
- Steel containers (drums and tanks) must be crushed or perforated to ensure that they contain no liquid or hazardous material. Pressurized containers cannot be recycled.

TIRES

As of March 31, 2022, tires are no longer accepted at Regional District transfer stations or landfills.

When buying new tires, leave your old ones with the tire retailer and they will ensure that they are recycled. Otherwise, please visit Tire Stewardship BC (TSBC) (www.tsbc.ca) or call Toll-free 1-866-759-0488 to find your nearest drop-off location.

BATTERIES

Automotive lead acid batteries over 5 kg and household batteries accepted for recycling under the Call2Recycle Stewardship program are accepted **free of charge** for recycling. (<https://www.call2recycle.ca>)

PROPANE TANKS

One empty propane tank 20 lbs and under is accepted free of charge per visit.

FURTHER INFORMATION

For recycling and disposal information on materials not accepted at the Foothills Boulevard Regional Landfill, please ask the on-site attendant. For information concerning Regional District waste management facilities and programs, contact the Regional District Service Centre at 250-960-4400 or visit the Regional District website at www.rdffg.bc.ca.

HOURS OF OPERATION

Foothills Boulevard Regional Landfill Hours of Operation	
Operating Hours:	
Monday to Friday	7 am – 5 pm
Saturday & Sunday	9 am – 5 pm
Holiday Operating Hours are from 9 am to 5 pm. (Easter Monday, Victoria Day, Labour Day and Thanksgiving Day ONLY).	
This facility is CLOSED on all other Holidays:	
New Years' Day	National Day of Truth and Reconciliation
Family Day	Remembrance Day
Good Friday	Christmas Day
Canada Day	Boxing Day
BC Day	

PAYMENT

Payment may be made by cash, cheque, Mastercard, VISA, AMEX, Discovery, or debit card. Commercial customer's may apply to the Regional District for credit accounts. Application forms are available from the Foothills Boulevard Regional Landfill during operating hours or Financial Services at 155 George Street, Prince George, BC, between 8:45 am – 12:00 pm and 1:00 pm – 5:00 pm, Monday to Friday (excluding holidays).

When delivering waste to Regional District facilities, ensure that loads are covered and secured so that material does not blow out onto the roads. Any unsecured loads will be subject to a double charge.



155 George Street, Prince George, BC V2L 1P8
Tel: 250-960-4400 • Toll Free: 1-800-667-1959
Fax: 250-563-7520 • Email: environment@rdffg.bc.ca

www.rdffg.bc.ca



REGIONAL DISTRICT
of Fraser-Fort George

Environmental
Services

Foothills
Boulevard
Regional Landfill

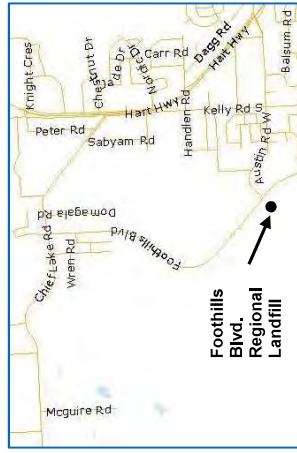
LANDFILL SERVICES

The site provides opportunities for recycling, centralized composting of yard and garden trimmings, residential waste disposal by way of an on-site transfer station and commercial waste disposal.

SITE OPERATION

The Foothills Boulevard Regional Landfill is operated by the Regional District of Fraser-Fort George. As the largest landfill in the Regional District, the Foothills Boulevard Regional Landfill plays a central role in the Regional Solid Waste Management Program.

LOCATION MAP



TIPPING FEES AND SITE REGULATIONS

A tipping fee is a charge levied for disposal of waste and is based on weight and type of material. Tipping fees apply to all municipal solid waste, including "controlled waste", refuse and demolition, land clearing and construction waste (DLC). Tipping Fees and Site Regulations are established as per Regional District of Fraser-Fort George Bylaw No. 3166, 2020, Amendment Bylaw No. 3283, 2023.

FEES – WASTE DISPOSAL

The fee to dispose of refuse in other than a 'small load' is \$96 per tonne (subject to change) or a \$6 minimum charge per load. Load weights are measured on scales provided at the landfill.

SALVAGING

Salvaging of materials deposited into the disposal bins, recycling bins or from the Marshalling Area is not permitted.

PROHIBITED MATERIALS

The following materials are not accepted for disposal at the Foothills Boulevard Regional Landfill. For disposal options, please consult with the attendant.

- Automotive Batteries (recycling only)
- Cattle Carcasses
- Explosives
- Fencing Wire (scrap metal recycling only)
- Fuels
- Hazardous Waste
- Household Batteries (recycling only)
- Ignitable Waste
- Industrial Chemical Waste
- Lithium Ion Batteries (over 5 kg)
- Liquids
- Lubricants
- Paints/Solvents
- Radioactive Waste
- Reactive Waste
- Refuse (on fire or smoldering)
- Restaurant grease
- Slurry/Sewage Sludge
- Steel/Plastic Drums (if not cut, crushed, or perforated)
- Tires on Rims

DLC WASTE

Demolition, land clearing and construction waste can have value when source separated and removed from the waste stream for recycling. Below are the accepted DLC waste tipping fees for source separated versus mixed loads.

DEMOLITION, LAND CLEARING AND CONSTRUCTION WASTE	SEPARATED MATERIAL		MIXED WITH OTHER MATERIALS	
	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE
Asphalt	\$192.00	\$12.00	\$192.00	\$12.00
Asphalt Shingles	\$96.00	\$6.00	\$192.00	\$12.00
Clean Soil	\$0	\$0	\$192.00	\$12.00
Clean Wood	\$48.00	\$3.00	\$192.00	\$12.00
Concrete	\$223.00	\$12.00	\$223.00	\$12.00
Gypsum Board or Wallboard	\$96.00	\$6.00	\$192.00	\$12.00
Masonry or Rubble	\$192.00	\$12.00	\$192.00	\$12.00
Painted or Treated Wood	\$48.00	\$3.00	\$192.00	\$12.00
Scrap Metal	\$48.00	\$3.00	\$192.00	\$12.00
Stumps or Large Branches	\$48.00	\$3.00	\$192.00	\$12.00

SMALL LOAD

A small load user fee of \$6.00 per visit, for loads up to 100 kg, will apply to all loads of household waste delivered to the Foothills Boulevard Regional Landfill.

Loads weighing more than 100 kg will be charged based on the current tipping fee rate (\$96 per tonne as of January 1, 2023).

If your load contains recycling or yard and garden waste only, no fee will apply.

If you have both waste and recyclables, you are encouraged to separate your load so that the recycling and waste portions can be weighed separately. If your load is mixed and not separated, you will be charged based on the entire weight of the load.

PERMITS FOR DISPOSAL OF CONTROLLED WASTE

A permit issued by the Regional District is required to deposit a controlled waste at the Foothills Boulevard Regional Landfill. Permit application forms are available from the Foothills Boulevard Regional Landfill during regular operating hours, or on the Regional District website.

SEPARATED MATERIAL

When sorted separately, DLC waste can be recycled locally for cheaper than landfill tipping fees. For more information visit www.SortSmart.ca

CONTROLLED WASTE

Controlled wastes are materials that require special handling and disposal techniques to avoid creating health hazards, nuisances or environmental pollution. Controlled wastes require pre-approval and a Regional District permit prior to delivery. Check with landfill staff concerning permits and delivery times.

CONTROLLED WASTE	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE
Appliances containing ozone depleting substances		\$0
Asbestos	\$350.50	\$6.00
Bulky Waste	\$114.00	\$6.00
Camp Waste	\$96.00	\$6.00
Concrete	See DLC Waste fees	
Condemned Foods	\$175.00	\$6.00
Contaminated Soil	\$114.00	\$6.00
Creosote treated wood	\$175.00	\$6.00
Dead Animals	\$175.00	\$6.00
Food Processing Waste	\$96.00	\$6.00
Gypsum Board or Wallboard	See DLC Waste fees	
International Waste	\$350.50	\$6.00
Pumpings from commercial laundry lint traps	\$96.00	\$6.00
Pumpings from parking lot drainage sumps	\$96.00	\$6.00
Pumpings from sumps which collect run-off from vehicle washing facilities	\$96.00	\$6.00
Screening from municipal sewage treatment plants and pumping stations	\$96.00	\$6.00
Sterilized Biomedical Waste received from certified sterilization facilities	\$96.00	\$6.00
Sterilized Sharps received from certified sterilization facilities	\$175.00	\$6.00
Tires - Medium Truck (inside diameter > 16.5 inches and < 25.5 inches) off rims		As of March 31, 2022 tires are no longer accepted
Tires - Off Road		\$175.00 per unit
Vehicle Hulks		\$0
Waste sludge from municipal sewage treatment plants and screening stations		\$0
Wood ash from industrial operations	\$96.00	\$6.00

*In all cases Bylaw No. 3166, 2020, Amendment Bylaw No. 3283, 2023 should be consulted for conditions and definitions of terms.

APPENDIX E
2024 Foothills Volume Assessment



July 2, 2024

Regional District of Fraser-Fort George
155 George Street
Prince George, British Columbia
V2L 1P8

Attention: Mr. Darwin Paton
Environmental Services Technician

2024 Volume and Site Life Assessment – Foothills Boulevard Regional Landfill

Dillon Consulting Limited (Dillon) is pleased to provide the 2024 volume and site life assessment for the Foothills Boulevard Regional Landfill (Site) located in the Regional District of Fraser-Fort George (RDFFG).

Aerial photographic mapping was completed over the Site on May 10, 2024, by Aero Geometrics Ltd. Information obtained from the aerial photographic mapping was used to generate the 2024 elevation contours which were then compared against the May 11, 2023 elevation contours to determine the approximate airspace consumed at the Site between the two time periods. Based on a comparison of the May 11, 2023 and May 10, 2024 elevation contours, approximately 100,110 cubic meters of airspace was consumed (70,846 cubic meters in the top deck area and 29,264 cubic meters in the Phase 1 / Stage 2 area). **Figure 1**, attached, presents the May 10, 2024 contours and areas which were infilled.

Weigh scale records indicate that 72,382 tonnes of waste were landfilled at the Site between May 11, 2023 and May 10, 2024, as provided by the RDFFG. Using the total tonnage of waste landfill at the Site and the calculated airspace consumed the apparent density for the landfill was calculated to be approximately 0.72 tonnes per cubic metre (72,382 tonnes / 100,110 cubic meters). The apparent density is not a true density but is a relationship that represents the mass of waste disposed in each cubic metre of landfill airspace, excluding soils used as cover. This apparent density is higher than last year's reported value of 0.52 tonnes per cubic metre in 2023 and is consistent with the expected values for the facility.

As per the 2023 Landfill Airspace Volume Assessment (Dillon, 2023), the remaining airspace at the Site as of May 11, 2023 was 466,001 cubic meters. The remaining airspace as of May 10, 2024 is therefore estimated to be approximately 365,891 cubic meters (466,001 cubic meters minus 100,110 cubic meters) based on the current landfill footprint. Based on a historic average density of about 0.75 and 70,000 tonnes per year of waste, the remaining life of Cell 1 is approximately 3.92 years (May 2028). However, using current values for apparent density and received tonnages, the remaining life of Cell 1 would decrease to approximately 3.64 years (Jan 2028).

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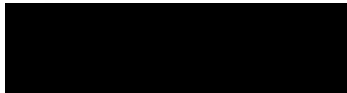


Given the limited airspace remaining in Cell 1, it is important to maximize the airspace consumption to ensure construction of Cell 2 is completed before Cell 1 is depleted. It is recommended that semi-annual airspace surveys be undertaken to track the airspace consumption rate and apparent density to maximum the remaining cell life. This will allow the RDFFG to identify lower apparent density rates earlier and have the contractor make operational adjustments sooner.

Dillon appreciates the opportunity to support the RDFFG with this volume and site life assessment. Should you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

DILLON CONSULTING LIMITED



Elise Duma, P.Eng.
Project Manager

Phillip Auclair, P.Eng.
Senior Waste Engineer

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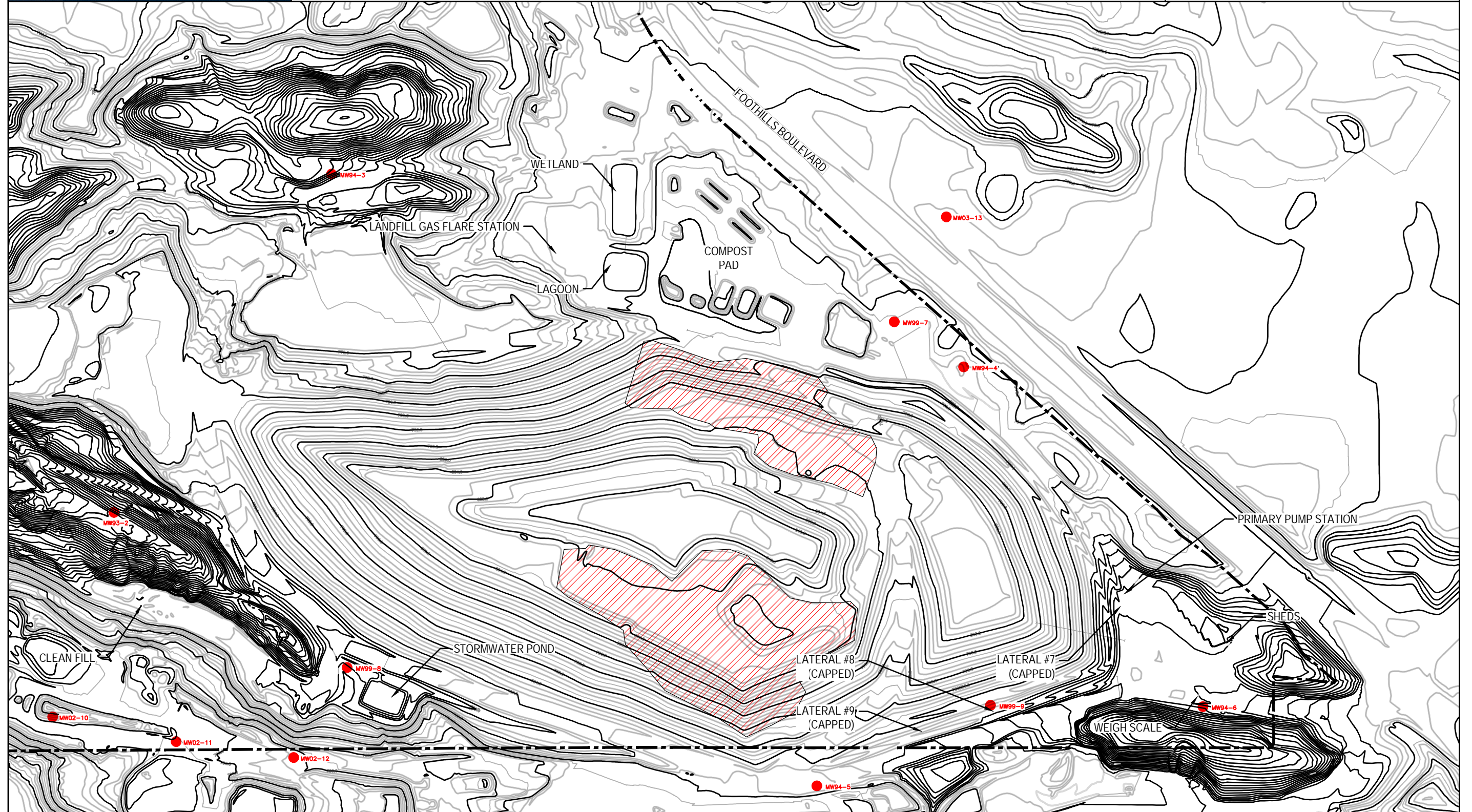


REGIONAL DISTRICT
of Fraser-Fort George

FOOTHILLS BOULEVARD REGIONAL LANDFILL SITE TOPOGRAPHY

LEGEND

-  PROPERTY BOUNDARY
-  MW03-00 MONITORING WELL
-  WASTE FILL AREA



NOTE: EXISTING CONDITIONS AS OF MAY 2024

