



PROPOSAL

Region 2000 Regional Landfill – Livestock Road Facility Lateral Expansion

Submitted to: Campbell County Board of Supervisors

Submitted by: Region 2000 Services Authority

Virginia's Region 2000 Local Government Council
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July 29, 2024

Table of Contents

Table of Contents

Section	Page
EXECUTIVE SUMMARY	1
Landfill Expansion Approach	2
Nuisance Mitigation and Abatement Measures.....	2
Landfill Gas to energy project.....	3
Pro Forma Budget and Financial Proposal.....	4
Community Benefits.....	4
SECTION 1 – BACKGROUND INFORMATION	5
Livestock Road Facility (SWP 610)	5
Regulatory Status.....	7
Solid Waste	7
Air Quality	7
SECTION 2 – PROPOSED LANDFILL EXPANSION	8
Design Schedule	8
Expansion Footprint.....	9
Design Volume	9
Phase VI Design	10
Landfill Profiles.....	10
Design summary	10
SECTION 3 – NUISANCE MITIGATION AND ABATEMENT MEASURES	11
Odors.....	11
Noise.....	12
Dust	12
Litter	12
Traffic.....	12
SECTION 4 – LANDFILL GAS-TO-ENERGY PROJECT.....	13
Revenue Projections Based on Existing Landfill Gas-to-Energy Agreement.....	13
Revenue Projections Based on Future Landfill Gas-to-Energy Agreement.....	14
Revenue Projection Scenarios for Landfill Gas-to-Energy Project.....	15
SECTION 5 – PRO FORMA BUDGET AND FINANCIAL PROPOSAL	17
SECTION 6 – COMMUNITY BENEFITS.....	20

Exhibits

Exhibit 1.	Site Map.....	6
Exhibit 2.	Per Ton Cost of Service Disposal Rate (FY 2023 - FY 2025)	19

Tables

Table 1. Livestock Road Facility Cell Phase and Volumes 5
 Table 2. Total Capital Costs Projections..... 18
 Table 3. Key Differences Between GBB and Expansion Proposal Assumptions..... 20

Appendices

Appendix A. Conceptual Plan Sheets
 Existing Conditions
 Conceptual Landfill Expansion
 Profile 1
 Profile 2

Appendix B. Expansion Cost Estimates
 Total Construction Cost Estimate
 Average Phase (Cell) Cost Estimates
 Phase VI (Initial 2-Year Cell) Cost Estimate
 Expansion Post-Closure Care Cost Estimates

Appendix C. Proposed Landfill Gas System Information

Appendix D. Pro Forma – No LFG Revenue

Appendix E. Pro Forma – Full LFG Revenue

Appendix F. Pro Forma – 50% LFG Revenue

Attachments

Attachment 1 Preliminary Schedule
 Attachment 2 Table of Waste Quantities

EXECUTIVE SUMMARY

The Region 2000 Services Authority (Authority) has developed this Proposal for a 24-year Landfill Expansion of the Region 2000 Regional Landfill – Livestock Road Facility (Landfill or Facility), which is being submitted to the Campbell County Board of Supervisors in accordance with the Board’s directive issued on April 29, 2024 BOS Work Session. This Proposal presents relevant considerations addressing the recommended course of action for expanding the Landfill, which will enable acceptance and disposal of the solid waste generated within the region via landfilling operations for approximately an additional 24 years.

As reported previously by the Authority in various forums and documents, the waste disposal units comprising the existing Landfill, referred to as Phases III, IV, and V, are estimated to have sufficient remaining capacity (airspace volume) to manage the quantity of waste being accepted for approximately five more years, which correlates to sometime around early 2029. This proposal outlines the planning, permitting, design, construction, and financial analyses required to be accomplished to facilitate continued landfilling in an initial cell of the Expansion Area.

This Proposal presents a conceptual approach for the development of additional waste disposal units that comprise the Expansion Area, outlines strategies to mitigate and abate potential nuisances (odors, noise, dust, etc.) including continued proactive installation and operation of a landfill gas (LFG) collection system, and presents the budgetary financial analysis (pro forma) that estimates the future revenues and expenses associated with the Expansion Area, including scenarios with revenues associated with a potential LFG-to-Energy project.

Expansion of the Regional Landfill presents several benefits to Campbell County including:

- Greater control over long-term solid waste management and related costs compared to a transfer station scenario.
- As the host local government and following current financial policy the County would receive 75% of excess revenues (referred to as “Total Set Aside Funds” in the pro forma presented in this Proposal) with 25% remaining with the Authority for contribution to the closure and post-closure care reserve.
- Over the 24-year life of the expansion, Campbell County is estimated to receive approximately \$24 million in excess revenue as the County’s share of the Set Aside Funds based on current financial policy.
- There is also the likelihood of significant revenues generated from the landfill gas to energy project discussed herein.
- Low tipping fees (referred to as “Member Disposal Rate” in pro forma).
- Community Benefits for Campbell County
 - Employment opportunities
 - Support of economic development initiatives related to commercial, industrial, and residential development
 - Potential development of a park on a portion of the Authority’s property

Campbell County has three scenarios to consider once the existing Landfill reaches capacity as presented in the Technical Memorandum: Solid Waste System Assessment, prepared by GBB, dated 3/1/24 (GBB Report): 1) development of a transfer station, 2) development of a new Landfill owned and operated by Campbell County, or 3) a Landfill Expansion at Livestock Road Facility. Several considerations associated with these scenarios are as follows:

- According to the GBB Report, the existing Landfill life expectancy is estimated to be six more years whereas the Authority and its consultants understand it to be five years. Campbell County has not located a new landfill site and the siting, permitting, site development, and construction duration will likely exceed the remaining life of the existing landfill.
- Transferring waste to the Pittsylvania County Landfill may not be viable as the facility is near the permitted daily waste intake. Also, the published tipping fee at Maplewood Landfill is near \$80 per ton for disposal and nearly 150 miles roundtrip. Campbell County loses control under the uncertainties of other Facility tipping fees and fuel/haul charges if a transfer station is built.
- The Authority owned Landfill Expansion fosters the lowest disposal costs, with the most control over long-term disposal costs throughout the life of the Expansion Area with the ability to permit and construct the Expansion Area prior to the end of the existing landfill life. Table ES-1 highlights the cost-effectiveness of the Landfill Expansion by comparing the transfer station tipping fees, as presented in the GBB Report, with the cost-of-service rate outlined in this Proposal’s pro forma budget.

Table ES-1: Break-Even Tip Fee Comparison

Scenario	Option	Break-Even Tip Fee		
		FY 29-30	FY 38-39	FY 48-49
Transfer Station ¹	County Waste County-Owned	\$116	\$146	\$189
	Regional Waste Regionally - Owned	\$87	\$110	\$141
Landfill Expansion ²	Regional Waste Regionally - Owned	\$47	\$53	\$69

1. Break-even tip fees for the transfer station scenario are sourced from the GBB report.
2. The break-even tip fee for the proposed landfill expansion is equal to the cost-of-service rate calculated in the 50 percent LFG revenue pro forma budget scenario in Appendix F.

It is critical that a timely decision on this Proposal be made in order to allow an adequate period for assembling the permit application documents, designing the expansion and associated infrastructure as well as regulatory review and approval.

LANDFILL EXPANSION APPROACH

The proposed conceptual Expansion Area is located to the south of, and adjacent to, existing Phases III, IV, and V. The Expansion Area provides approximately 8 million cubic yards of additional airspace volume and covers an area of approximately 60 acres. The Authority intends to develop and fill the Expansion Area in a sequence that consists of Cells VI through X, some of which will “piggyback” over the existing southern slope of the current Landfill.

The height of the expansion area will not exceed the currently permitted height of the landfill, 1,046 ft MSL and a 500-ft minimum forested buffer zone will be maintained along the southern and northern property lines measured from the liner limits.

NUISANCE MITIGATION AND ABATEMENT MEASURES

The Authority recognizes the heightened sensitivity of surrounding communities to potential odors originating from the Facility. The Authority has shown resolve in implementing aggressive and successful odor mitigation by installing an efficient LFG collection and control system consisting of vertical extraction wells, horizontal collectors, and leachate cleanouts connected to vacuum via LFG collection piping network routed to a blower/flare station. The Facility has implemented several LFG collection system expansion events since the initial installation of the LFG collection system in 2016. The Authority will continue this commitment and level of resolve with planned LFG collection system expansion events every 2 to 3 years while active landfilling operations continue in the proposed Expansion Area. A conceptual layout drawing of the proposed Expansion Area LFG Collection System is included in Appendix C. The preliminary budgetary costs for LFG infrastructure within the Expansion Area are estimated to be \$8.8 million (2024 dollars) over the life of the Expansion Area. In addition, the LFG system operational costs are estimated to be approximately \$127,000 annually (2024 dollars). A breakdown of these ballpark costs is provided in Appendix C.

In addition, the Facility will continue to implement supplemental measures to mitigate and abate odors that have proven effective at the site as needed. The Facility has previously employed a perimeter odor neutralizing system, a mobile Odor-Boss odor cannon to neutralize odor downwind of the active workface, and an enhanced Posi-Shell temporary intermediate cover system on the side slope to better seal the landfill surface to mitigate fugitive emissions and odors.

The Facility's hours of operation are from 7:00 AM through 4:00 PM Monday through Friday, and 7:00 AM through 12:00 PM Saturday. The Facility will manage dust according to permit requirements. The Facility has managed other nuisances and site improvements historically by installing a sound barrier wall to mitigate noise, litter pick up, and grounds maintenance to enhance the appearance of the facility to visitors.

LANDFILL GAS TO ENERGY PROJECT

In 2021, the Facility secured a Landfill Gas-to-Energy contract with a third-party energy developer with a minimum annual payment of \$100,000 over a 20-year term with potential for substantially greater revenue depending on market pricing. The potential payment when factoring in other commodities such as sales of LFG, renewable energy credits (RECs), greenhouse gas (GHG) emission reduction credits, capacity payments, etc. was expected to be valued at \$1/MMBTU. This payment would have been the equivalent of approximately \$6.8 million over the 20-year period of the contract.

However, future LFG-to-energy valuations for renewable natural gas (RNG) from LFG, which is referred to as the D3 Renewable Identification Number (RINs), are exceptionally lucrative compared to the non-renewable natural gas pricing. The revenue associated with sale of the environmental attribute (D3 RIN) is in addition to the revenue associated with sale of the actual RNG quantity (current Henry Hub Natural Gas index pricing is slightly above \$2/MMBTU). Based on these estimates, when considering a potential future LFG-to-energy agreement including the Expansion Area, the Authority estimates total payments could be approximately \$19 to 24 million through the anticipated closure period of 2053. However, there is a possibility that an LFG-to-energy agreement

may come to terms or become extended beyond the anticipated closure period of 2053, which would yield the Authority lucrative returns beyond the anticipated closure period.

PRO FORMA BUDGET AND FINANCIAL PROPOSAL

The pro forma budget for the Expansion Proposal is a forward-looking tool that adapts to new information for precise financial forecasting and strategy alignment. Three pro forma budget scenarios were evaluated based on draft cost projections provided by the Authority's consultants (TRC and SCS):

1. Baseline expansion with no LFG to RNG revenue (Appendix D).
2. Baseline expansion with LFG to RNG revenue, projecting an annual revenue of \$810,000 for 2031 through 2052, and increasing to \$1.21 million in 2053 (Appendix E).
3. A conservative estimate assuming a 50 percent reduction in revenues from LFG to RNG (Appendix F).

The cost-of-service disposal rate is projected to equal \$47.06 per ton in FY 2030, the first full year of expansion, with an average annual growth of four to five percent from FY 2024 through FY 2053 for the three scenarios. Assuming 50 percent LFG revenue (Scenario 3), the average member tipping fee is \$63.74 per ton over the 24-year expansion period (FY 2030 – FY 2054). Current financial policy mandates a 75 percent share of excess revenue from the contribution of airspace reserve be distributed to Campbell County. For all three pro forma scenarios, Campbell County is estimated to receive approximately \$24 million in excess revenue. However, Campbell County does benefit from the LFG to RNG revenues (Scenarios 2 and 3) which is being used to subsidize a lower Member Disposal Rate, thus reducing the County's tipping fee expenses. These revenue figures are subject to change based on any future financial policy decisions made by the Authority.

It is recommended to avoid a direct comparison of the per ton net present value landfill disposal rates presented in the GBB Report and Expansion Proposal pro forma budgets due to differences in assumptions in scale, timeframe, and financial variables. The pro forma will be updated as figures are refined and finalized to reflect the most accurate and current data. The estimates and projections prepared in this Proposal are based on the Authority's consultant team's experience, qualifications, and judgment as a design and consulting professional. Actual rates, costs, performance, schedules, and related items may vary from cost estimates and projections prepared by the Authority's consultant's Project Team.

COMMUNITY BENEFITS

Expansion of the Landfill will allow the region to continue to manage its solid waste for an additional 24 years maintaining control over its waste management strategies in an efficient and cost-effective manner. The expansion will continue to provide employment opportunities and support economic development initiatives in the region in support of additional commercial, industrial, and residential development.

The Campbell County community benefits from having an active landfill from the job creation aspect to fostering the business development in the surrounding area along Calohan Road and U.S. Route 29. In addition, the proposed Expansion Area at the Facility offers control and security over tipping and waste hauling fees under the presence of a municipally owned and operated local landfill. The

community also benefits from the environmental stewardship from the reduced greenhouse gas emissions (i.e., carbon footprint) by hauling to a local landfill as opposed to an alternate, which would be more than an hour haul each direction. Other community benefits may include sponsoring events or hosting an event, such as litter picking, or contributing benches or equipment to a local park.

SECTION 1 – BACKGROUND INFORMATION

LIVESTOCK ROAD FACILITY (SWP 610)

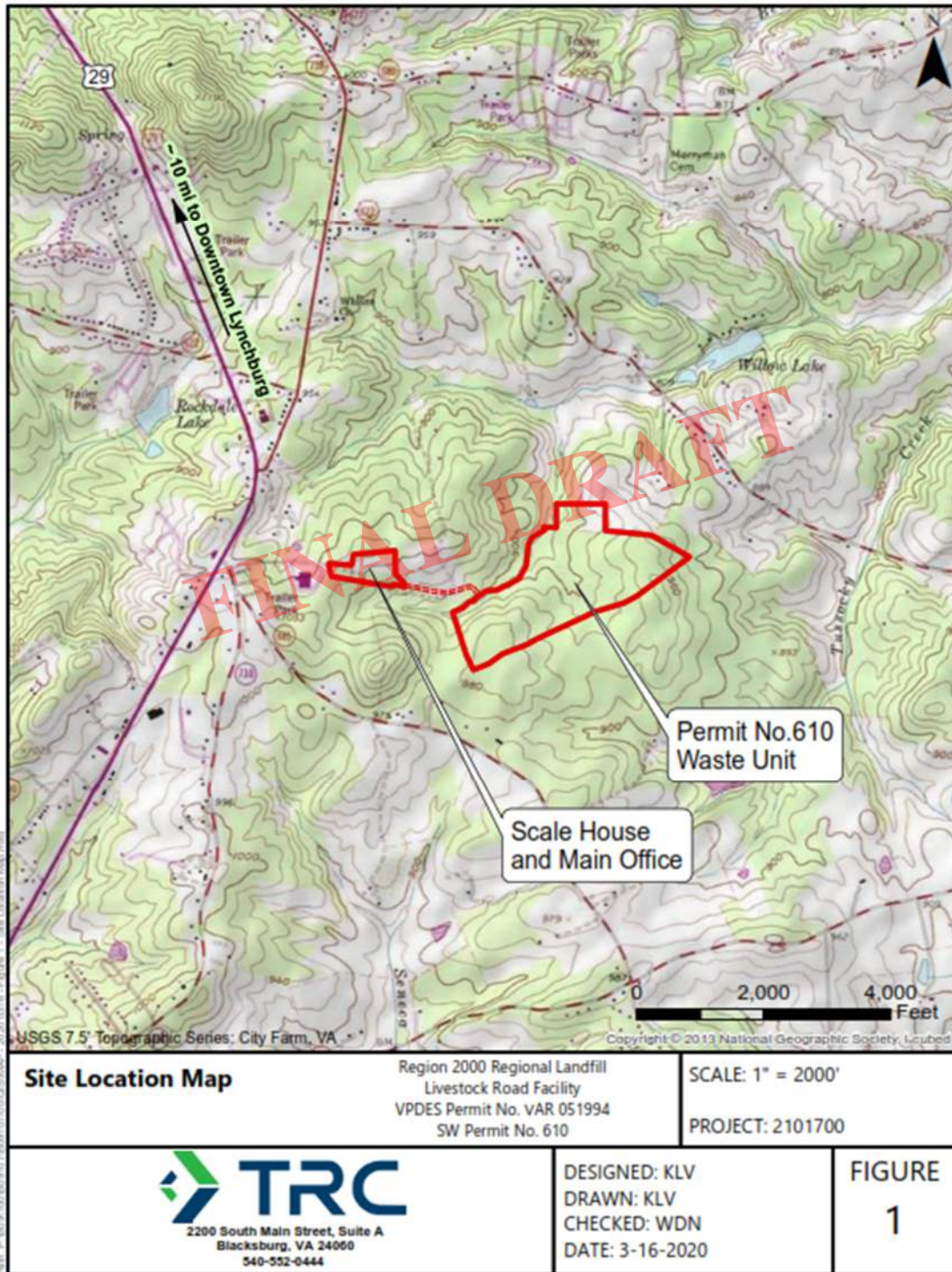
The Region 2000 Regional Landfill - Livestock Road Facility (LRF) is a municipal solid waste (MSW) management facility located east of U.S Route 29, at the end of State Route 674, approximately five miles south of Lynchburg, in Campbell County, Virginia. The LRF is owned and operated by the Region 2000 Services Authority (Authority). The LRF is comprised of three permitted waste disposal units Phases III, IV and V, of which Phase IV and V are the current active units. Refer to the Site Map in Exhibit 1. The Authority was issued a Solid Waste Permit (No. 610) in March 15, 2012 for operations of the Phase III landfill, which is currently filled and partially capped. The Authority began landfilling operations in Phase IV, on April 18, 2017 and commenced landfilling operations in Phase V in Summer 2023.

Upon completion of all currently permitted phases, the LRF is anticipated to have a total footprint of 55 acres and a maximum design capacity of approximately 5.98 million cubic yards of solid waste as shown in Table 1. Approximately 1.89 million tons of waste has been disposed in Phases IV and V to date. During 2023, the LRF disposed of over 204,000 tons of waste and is expected to receive over 200,000 tons during 2024. Based on the anticipated waste acceptance rates, the LRF is expected to achieve full design capacity in early 2029. The LRF accepts municipal solid waste (MSW) consisting primarily of household and commercial wastes from the City of Lynchburg and the counties of Appomattox, Campbell and Nelson. The LRF does not accept significant quantities of construction and demolition (C&D) or industrial wastes. Table 1 describes the anticipated Phase, Current Condition, Life Span and Waste Volume in Million Cubic Yards (MCY) for the LRF.

Table 1. Livestock Road Facility Cell Phase and Volumes

Filling Phase	Current Fill Condition	Total Life Span (years)	Estimated Remaining Life Span (years)	Design Waste Volume (Million CY)	Design Waste Mass (Million Tons)
Phase III	Completed	19	NA	2.69	1.9
Phase IV	Active	7.4	2	1.84	1.3
Phase V	Active	5.9	3	1.45	1.0
Totals		32.3	5	5.98	4.2

Exhibit 1. Site Map



REGULATORY STATUS

Solid Waste

The facility operates as outline above and is in compliance with SWP 610.

Air Quality

Currently, the LRF is equipped with an active landfill gas (LFG) collection and control system within the Phase III and Phase IV areas. A combustion unit (i.e., flare station) is located on the north side between Phase III and Phase IV.

The LRF is subject to the New Source Performance Standards (NSPS) for municipal solid waste landfills under 40 CFR 60 Subpart XXX, and other provisions of the Clean Air Act, and the LRF has been issued a Stationary Source Air Permit and a Title V Air Operating Permit (No. 21547). However, based on the most recent Tier II Sampling event, conducted in October 2021, the LRF has demonstrated that the projected annual emissions rate of non-methane organic compounds (NMOCs) through 2026 is less than the regulatory applicability threshold of 34 Mg/yr that requires installation and operation of a mandatory LFG collection and control system. Thus, the existing active LFG system is considered voluntary with respect to the Clean Air Act provisions.

However, based on current fill rates and NMOC generation rates, it is likely that the Landfill will trigger the regulatory applicability threshold within the next 10 years and therefore, will become subject to the LFG collection and control system requirement and operating provisions outlined in 40 CFR 60 Subpart XXX. In advance of these regulatory requirements, The Authority plans to continue conducting design and installation of the expansion of the active LFG collection and control system to achieve various objectives, such as odor mitigation and abatement, as well as to allow for the sale and beneficial use of the LFG for energy recovery purposes. The Authority continues to coordinate with the Virginia Department of Environmental Quality (VDEQ) regarding regulatory permitting and compliance requirements.

The Authority's primary goals are to operate the LFG collection and control system in a manner that prioritizes odor mitigation, abatement, and control, as well as to accomplish compliance with the applicable Clean Air Act and Solid Waste regulations.

SECTION 2 – PROPOSED LANDFILL EXPANSION

A conceptual 24-year expansion design for the Region 2000 Regional Landfill, DEQ SWP 610, is presented herein to increase the landfill's air space capacity and to extend the landfill life. The purpose of the conceptual design is to piggyback onto the existing Phase III/IV/V areas to provide approximately 24 years of additional service life to the existing landfill without interrupting disposal operations for the Authority since the existing Landfill air space is anticipated to be exhausted in 2029. The expansion contains several key design considerations including:

- Address mitigation of areas of concern including traffic and the control of odor, noise, vector, and litter.
- Expansion onto the Authority's property (formerly known as the Bennett property) showing an approximate 24-year expansion footprint and landfill final grade topographic contours.
- Provide a 500-foot minimum buffer zone on the southern property line from the liner limits.
- Maximize northern buffer zone along the northern property line.
- Keeping the expansion area's peak elevation under the existing landfill's peak elevation of 1,046 feet mean sea level (MSL).
- Provide for a 2-year cell (Phase VI) that can be constructed in a short period.
- Enable a partial closure of the northern slopes of Phases IV and V soon after expansion construction.
- Design volume to allow for a 0.5% annual increase for tonnage projection.

DESIGN SCHEDULE

The existing Landfill is anticipated to reach capacity early 2029, so an expansion is being proposed to extend the life by about 24 years and maintain the current landfilling operations without an increase in waste acceptance (other than the anticipated annual increase due to a growing population). The anticipated landfill expansion design and permitting preliminary schedule is shown in Attachment 1. As shown in the schedule, the first cell, Phase VI, should be operational by the time the existing landfill is filled to capacity.

The existing landfill's end of life is based on the most recent capacity reported to DEQ, dated 5/17/2024, as surveyed by Geologic on 1/30/2024 and analysis by TRC. The first step towards constructing the next cell (Phase VI), local land use permitting (Step 1) requires rezoning and Special Use Permit similar to the work completed in 2014 for the current landfill area. The next step, local land use permitting (Step 2,) is local government certification in accordance with the Notice of Intent (NOI) and this part requires Step 1 to be completed prior to starting.

The Part A design can also be started after the first local land use planning step is complete. The preliminary schedule is anticipated to have the notice of intent, required drilling, and application submitted by the end of Calendar Year (CY) 2025. The review process largely depends on the regulator's review speed and is anticipated to take about one year due to more than one comment response period being anticipated.

After the Part A application has been submitted, the major amendment to the stormwater management plan (SWMP), the Part B landfill design, and the site plan application can start. The SWMP major amendment is expected to be complete within the year. The Part B design is anticipated to take about one year before the Part B application is submitted. This will be about the

same time as the Part A application is completed and approved. The Part B will need to reflect any changes made during the Part A application process. It should be noted that Part A and B permitting (Landfill permitting) will be reviewed by DEQ in accordance with 9VAC20-81 regulations and Submission Instructions 1 and that some overlap in permitting is allowed; however, DEQ may not review any Part B submittal until the Part A application is approved. After the Part B application is submitted, the air permitting and stormwater permitting phases can commence and will likely take about one year.

If the Part B design application is submitted by the end of CY 2026, then the site plan application process, including the construction plans, will also start following the Part B design application. It is anticipated that construction can start on Phase VI during calendar year 2028, which is anticipated to be in time to be completed prior to the current landfill capacity running out. Temporary authorization to construct may be required if the Part B design is not approved or the final permit issued prior to the existing landfill volume being exhausted.

EXPANSION FOOTPRINT

The expansion area lined footprint required for this 24-year conceptual design is approximately 60.2 acres. This area includes the proposed approximate limits of liner extents and ties into the existing limits of liner. The entire expansion liner area will depend on the perimeter road, perimeter stormwater management devices, and other items to be installed which are appropriate for landfill operations requirements. The proposed limits of liner expansion footprint provide more than 500-foot minimum buffer zone along the southern and northern property lines. The landfill footprint will be expanded over one of the existing borrow areas and land which has previously been cleared as a result of previous landfill construction projects, so a large portion of the land being expanded over is already clear of vegetation. Furthermore, no known streams or wetlands are impacted as part of this expansion footprint which will simplify the Part A permitting process.

DESIGN VOLUME

The design volume of the expansion area is based on maintaining the existing south slope of Phases III, IV, and V and grading up at 2% from the liner limit for approximately 110 feet before sloping down to a base grade elevation of 910 feet MSL at a 3 to 1 slope. The expansion area base grade elevation is based on the average elevation in Phases IV and V and was used to get an approximate landfill footprint needed to provide about 24 years of additional service life. Actual base grade elevations and expansion design volume will differ following base grade slope and sump design because the conceptual base grade is flat at elevation 910 without any slope to allow for future sump, berm, and slope design as required. The proposed landfill footprint and volume includes about 13% additional volume over the 24-year design period requirement to prevent minor footprint expansions that may be needed later on in the design phase due to differences in base grade and sump elevation, existing overfill in the piggybacked portion of the landfill, or any deviation in waste tonnage increases during the design and permitting phase periods.

The existing topographic conditions and surrounding areas of the landfill and proposed expansion area are shown in Appendix A Sheet 1 - Existing Conditions. The landfill expansion will piggyback onto the southern side of the existing landfill and will continue southeast as shown in Appendix A Sheet 2 - Proposed Final Grade. The final grade topographic contours for the expansion area were designed using a minimum 5% slope down from the expansion peak of elevation 1,038 feet MSL. This leads to a narrow transition zone which is between 5% and 33.3% before the landfill grades down to the perimeter existing grades at a 3:1 slope. The expansion peak elevation is located between the two existing permitted peaks and will be lower than the existing landfill permitted peak

elevation of 1,046 feet MSL by about 8 feet. The peak is also small in surface area and is the smallest required to maintain positive drainage from the landfill. The 5% slope at the top of the landfill will allow significant settlement to occur over the top area without effecting the landfill's ability to drain to proposed stormwater management systems.

The annual landfill tonnage projection that was used to estimate the volume required to provide at least 24 years of service life is provided in Attachment 2. The tonnage projection starts with the most recent annualized data reported in 2024 and continues until the summer of 2028. This 2028 estimated tonnage value is then used as the basis for the 20-year service life and annual increase in tonnage landfilled because early 2029 is the anticipated end of the current landfill's life. The table assumes a 0.5% annual increase in tonnage landfilled. The Landfill Utilization Factor (LUF) of 1,258 pounds per cubic yard that was assumed in this calculation is based on the 2024 calendar year capacity report dated May 17, 2024 and as such, a volume landfilled value is provided in the table instead of tonnage because the volume is required for landfill size estimating purposes. The projection assumes that landfill compaction and waste characteristics remain constant and that the same or better LUF can be achieved during the entire 24 years. Additional volume was calculated for the cap system (approximately 3 feet between the top of final grade and the top of required six-inch daily cover) over the expansion area. Note that the expansion area cap system includes part of the existing landfill and so its area is greater than the expansion area liner footprint.

PHASE VI DESIGN

The 110-foot length base grade sloping towards the existing cells from the existing liner limits effectively continues the existing liner slope where the new liner will drain leachate into the existing landfill cells. This sloped section constitutes the entire cell area of Phase VI and is made so the cell can be constructed quickly because the leachate drains into the existing leachate system and requires very little grading to construct. As such, a new sump and additional leachate infrastructure may not be needed for this cell (pending additional leachate design calculations). The cell will piggyback onto the existing landfill at a 3:1 slope. The piggyback will stop near the existing peak and will not extend over to the northern side of Phases IV and V so they can be capped when those areas are completely built out.

LANDFILL PROFILES

As presented in the Appendix A Sheets 3 and 4 – Conceptual Landfill Expansion Profiles 1 and 2, the proposed landfill expansion will largely not be visible from nearby housing areas due the existing landfill and heavy surrounding forests which will remain within the 500-foot buffer zone.

DESIGN SUMMARY

Based on the proposed landfill expansion requirements, the 24-year landfill expansion footprint will require approximately 60.2 acres directly abutting the southeast side of the existing landfill and will leave over 500 feet of forested buffer zone to the south and north of the expansion area. The expansion area peak will be lower than the existing landfill peak and a smaller cell, Phase VI, can be quickly constructed to provide the two years of immediate life required to maintain current operations while allowing the northern slopes to be capped when they are filled out.

SECTION 3 – NUISANCE MITIGATION AND ABATEMENT MEASURES

ODORS

The Facility has implemented an Odor Management Plan and is required to operate in a manner that controls odors in accordance with the Facility's air quality permits, solid waste permit, and applicable regulatory requirements.

LFG Collection and Control System

Beginning in 2016, the Authority has aggressively installed, expanded, and operated a voluntary LFG collection and control system in the existing Landfill to reduce potential odors at the Facility. The Facility's phased approach features frequent LFG collection system expansions, including connection of leachate cleanouts to vacuum, and installation of horizontal collectors early in the life of a new cell to mitigate potential odors attributed to fugitive LFG emissions. The Authority is currently implementing this approach in Phases IV and V of the existing permitted Landfill and has completed four system expansions since the initial LFG Collection System installation in 2016.

The Authority plans to implement frequent LFG collection system expansions into Phases VI through X of the proposed Expansion Area in conjunction with the sequential waste placement operations. This will be accomplished on an accelerated schedule beginning with connection of the leachate cleanouts to the LFG system to apply vacuum, and then installation of horizontal collectors in the early waste lifts, followed by LFG vertical extraction wells, LFG piping, and dewatering infrastructure. Similar to the existing system, the LFG collection system infrastructure proposed for the Expansion Area will also have a dedicated dewatering system of airline and force main piping in a common trench with the LFG collection header, dewatering pumps in the LFG vertical wells, and a condensate sump.

The Authority intends to implement these frequent LFG Collection System expansions utilizing approximately 56 vertical extraction wells, 9 horizontal collectors, 20 leachate cleanouts, LFG Collection System piping, and dewatering piping. A conceptual layout drawing of the proposed Expansion Area LFG Collection System is included in Appendix C. The actual number, location, alignment, configuration, and function of proposed features depicted in this conceptual layout drawing may need to be modified to accommodate field conditions, filling sequence, regulatory requirements, or other relevant considerations.

The Authority estimates that the total cost of engineering and construction for the proposed LFG collection system expansion events will be approximately \$8.8 million (in 2024 dollars) over the life of the Expansion Area. The existing LFG control system is planned to be upgraded to a new 3,000 scfm blower/flare station as LFG flow quantities increase (estimated to occur around 2040 or so). In addition, the Authority expects LFG system operational costs of approximately \$127,000 (2024 dollars). A breakdown of these preliminary budgetary costs is provided in Appendix C.

Supplemental Odor Mitigation Measures

The Authority has historically used alternative methods as well to mitigate and/or prevent odors from forming. In 2016, the Authority implemented a Byers-Scientific Ambient Air Odor Mitigation System to deploy an odor neutralizing agent under positive pressure via suspended 6-inch HDPE perforated pipe along the outside access road of the existing Phase III Landfill. This system is currently deployed on an "as-needed" basis. The Authority also deployed an enhanced Posi-Shell intermediate cover

system on nearly 7 acres of the northern and western slope of Phase III as a temporary cover system to reduce fugitive emissions and odors, as well as leachate seeps and erosion control prior to Partial Capping activities in Phase III. The Authority also has an Odor-Boss odor cannon, which is a mobile odor neutralizing sprayer that can be setup along the access road strategically downwind of the landfill to target site-specific areas.

The Authority will implement a similar approach to odor mitigation and abatement in the proposed Expansion Area. The Authority will implement frequent LFG Collection System expansions, as well as supplemental methods to mitigate and abate working face odors, landfill gas odors and emissions, leachate seeps, and will proactively address erosion in order to maintain suitable cover material. The Landfill has achieved greater than 99 percent reduction in odor complaints since 2015. Refer to Historical Odor Complaint Graph included in Appendix C.

NOISE

The Authority operates the Facility in a manner that limits and reduces noise pollution as much as possible. The Authority has constructed an earthen berm and sound barrier walls from the landfill entrance near the administration building beyond the scales. The Authority also maintains forested areas which behave as a natural sound barrier. The Authority has posted signs requesting customer trucks refrain from using engine brakes when approaching the scale. The Facility only operates within the hours of operation, 7:00 AM through 4:00 PM Monday through Friday, and 7:00 AM through 12:00 PM Saturday, to minimize noise disturbances. Additional noise control measures are not anticipated to be required as no increase in activity is to occur.

DUST

The Landfill controls particulate emissions in accordance with the Facility's air quality permits and applicable regulatory requirements. The facility operates a water truck that sprays water on haul roads and the fill face area throughout the operating day.

LITTER

The Authority controls litter by patrolling the perimeter access roads and collecting litter, which may have fallen from a waste collections vehicle, in trash bags on a near daily basis. This practice will continue with respect to the proposed Expansion Area. The current daily Posi-Shell and weekend six-inch soil cover helps to reduce the amount of litter that is created from the working face at the end of each day.

TRAFFIC

The Facility's hours of operation are from 7:00 AM through 4:00 PM Monday through Friday, and 7:00 AM through 12:00 PM Saturday. The Facility has staff and a water truck to maintain dust within the haul roads on site. Equipment operators direct haul traffic at the working face to maintain safety of the waste haulers and Facility staff.

SECTION 4 – LANDFILL GAS-TO-ENERGY PROJECT

REVENUE PROJECTIONS BASED ON EXISTING LANDFILL GAS-TO-ENERGY AGREEMENT

In November 2019, the Authority issued a Request for Proposal for a Landfill Gas-to-Energy (LFGE) Development Project for the LRF. Proposals were received from two firms, INGENCO and Renewable Natural Gas Company. Upon review and evaluation of the two Proposals, the Authority entered into contract negotiations with INGENCO and executed the Landfill Gas Purchase Agreement (LFGE Agreement), dated March 30, 2021.

The 2021 LFGE Agreement was structured as a “revenue sharing” arrangement, such that the Authority was to receive ten percent (10%) of the gross revenues generated by the proposed LFGE Facility, which included all manners in which the LFGE Project achieves economic or financial activity, including but not limited to, generation of various forms of energy (electricity, gas, heat, steam, etc.), electrical generation capacity, monetization of environmental attributes, and other related endeavors. This payment was to include all contracts for the sales of landfill gas, steam, electricity, and/or other forms of energy, renewable energy credits (RECs), capacity, and any and all emissions credits, but excluded greenhouse gas (GHG) emissions reduction credits, because the Authority was to receive fifty percent (50%) of the net revenues from the sale of GHG emission reduction credits.

The LFGE Agreement established a minimum monthly payment to the Authority of \$8,333.33 per month (equivalent to annual payments of \$100,000). However, the Authority and INGENCO expected actual payments to be significantly greater, although the exact amount of future payments could not be predicted because payments were to be based on market pricing for the various commodities (electricity, other energy sales, renewable energy credits, capacity payments, GHG emission reduction credits, etc.) over the initial 20-year term of the LFGE Agreement. Considering the estimated LFG recovery potential in 2022, as cited in Table 3 of the RFP, was 268,587 MMBTU/year, using a generalized approximate unit valuation for the LFG beneficial use of \$1.00/MMBTU, it seems reasonable for the Authority to have expected the LFGE Project to yield an annual revenue of approximately \$269,000 in 2022. This would have necessitated that INGENCO’s gross revenues for the sale of electricity, RECs, capacity payments, etc. yielded at least \$2.69 million per year, which seems reasonable for the 3-megawatt (MW) output that would have been achieved in 2022.

The maximum LFG recovery potential for LRF through Phase 5, expected to occur in 2032 as cited in Table 3 of the RFP, was 466,704 MMBTU/year. Assuming the same generalized approximate unit valuation for the LFG beneficial use of \$1.00/MMBTU, it seems reasonable for the Authority to have expected the LFGE Project to yield an annual revenue of approximately \$467,000 in 2032. Again, this would have necessitated that INGENCO’s gross revenues for the sale of electricity, RECs, capacity payments, etc. yielded at least \$4.67 million that year, which seems reasonable for the 6-MW output that would have been achieved in 2032.

Assuming the Authority only received the guaranteed minimum payment each year over the 20-year initial term would have yielded total payments in the amount of \$2.0 million. Using the generalized approximate unit valuation of \$1.00/MMBTU and the LFG recovery potential cited in Table 3 of the RFP over the 20-year initial term of the LFGE Agreement, the Authority’s total payments would have been approximately \$6.8 million. The actual payments could have been greater if market pricing for

electrical energy, RECs, capacity payments, and GHG credits were more favorable during this time period.

INGENCO was prohibited from proceeding with development of the LFGE Facility because, on January 4, 2022, the Campbell County Board of Supervisors denied INGENCO's Special Use Permit Request (#PL-21-174).

REVENUE PROJECTIONS BASED ON FUTURE LANDFILL GAS-TO-ENERGY AGREEMENT

The LRF is proposing to increase the Facility's design capacity by approximately 8 million cubic yards, which will enable continued landfilling operations for an additional 24 years or so beyond the anticipated closure timeframe for the Facility as currently permitted. Note that the actual life expectancy of the proposed expansion is dependent on various factors, such as waste acceptance rate, compaction ratio and in-place density, etc.

As part of this Expansion Proposal, the Authority has estimated the LFG recovery potential from the Facility (including the waste disposal units comprising the increased design capacity) through 2060 based on reasonable assumptions for certain factors that impact LFG generation and collection. These factors include waste composition, annual waste acceptance quantities, methane recovery potential, decay rate constant, and LFG system coverage. Refer to the LFG recovery projections presented in Appendix C.

The extended life expectancy for landfilling operations at the site, along with the increase in the Facility's design capacity and the corresponding increase in LFG recovery potential, enhances the probability that a LFGE development project involving renewable natural gas (RNG) could be implemented at the LRF. The economics associated with LFGE projects that produce RNG are especially attractive because the current pricing for the environmental attribute associated with producing RNG from LFG, which is referred to as the D3 Renewable Identification Number (RINs), are exceptionally lucrative compared to the non-renewable natural gas pricing. At this time, the D3 RIN trades are typically around \$3 per gallon of ethanol equivalent, which correlates to around \$35/MMBTU for landfill gas. The revenue associated with sale of the environmental attribute (D3 RIN) is in addition to the revenue associated with sale of the actual RNG quantity (current Henry Hub Natural Gas index pricing is slightly above \$2/MMBTU).

Considering the estimated LFG recovery potential in 2030, as cited in Appendix C, is 387,279 MMBTU/year, using a generalized approximate unit valuation of \$2.00/MMBTU for beneficial use of LFG to produce RNG, it seems reasonable for the Authority to expect a future LFGE Project involving RNG to yield an annual revenue of approximately \$775,000 in 2030. This future revenue payment is a budgetary estimation based on a hypothetical future LFGE agreement in which the Authority would receive a payment corresponding to between 5 and 6 percent of the gross revenues generated by the RNG Facility (which at current pricing would be \$2/MMBTU for the gas plus \$35/MMBTU for the D3 RIN).

The maximum LFG recovery potential for LRF through Phase 10, expected to occur upon closure (sometime around 2053) as cited in Appendix C, is 591,843 MMBTU/year. Assuming the same generalized approximate unit valuation of \$2.00/MMBTU for utilizing LFG to produce RNG, it seems reasonable for the Authority to expect the LFGE Project to yield an annual revenue of approximately

\$1,180,000 in 2053. Again, this is highly dependent on the terms and conditions of any future LFGE agreement and future regulatory policies and framework as well as future market pricing.

Using the generalized approximate unit valuation of \$2.00/MMBTU and the LFG recovery potential cited in Appendix C over a 25-year term of a hypothetical future LFGE agreement, the Authority's total payments are estimated to be approximately \$24 million. However, realization of any payments under a future LFGE agreement are dependent on multiple issues, many of which are beyond the Authority's direct control. Therefore, in a conservative estimate, the Authority's consultants averaged \$810,000 per year in projected revenue over this 25-year period based on 2024 market conditions.

REVENUE PROJECTION SCENARIOS FOR LANDFILL GAS-TO-ENERGY PROJECT

There are numerous considerations affecting the feasibility of a potential LFGE project at the LRF and, as evidenced by Campbell County's denial of the Special Use Permit Request in 2022, and there are no guarantees that the Authority will realize any revenues from beneficial utilization of LFG collected at the LRF. However, according to the EPA LMOP database, as of March 2024, 482 MSW landfills provide LFG to one or more LFG energy projects currently in operation, for a total of 536 projects. Thus, it is reasonable for the Authority to consider payments from LFG sales for energy recovery in development of the pro forma governing the financial model for LRF future operations.

The Authority has considered three potential hypothetical scenarios pertaining to revenue projections associated with a potential LFGE project during the 24-year period from 2030 through 2053, during which landfilling operations in the proposed expansion would be occurring, as follows:

- **Scenario A** assumes that the Authority receives \$100,000 per year, which is based on the guaranteed minimum payment according to the terms in the existing LFGE Agreement executed with INGENCO. This is likely an overly conservative assumption considering the royalty payments being made to landfill owners under current LFGE industry conditions.
- **Scenario B** assumes that the Authority receives \$250,000 per year in 2030, which increases uniformly up to \$500,000 per year in 2053. This range generally correlates with the estimated payments anticipated by the Authority that were expected to be received between 2022 and 2032 under the existing LFGE Agreement executed with INGENCO, based on certain assumptions of gross revenues that would have materialized with certain electrical production output and market pricing for environmental attributes. This appears to be a reasonably conservative assumption considering the royalty payments being made to landfill owners under current LFGE industry conditions.
- **Scenario C** assumes that the Authority receives \$775,000 per year in 2030, which increases uniformly up to \$1,180,000 per year in 2053. This range generally correlates with the estimated payments anticipated by the Authority under a hypothetical future LFGE agreement involving production of RNG. Such payment amounts are dependent upon a revenue sharing arrangement of at least 6 percent of gross revenues and monetization of D3 RINs at a price of at least \$35/MMBTU and should be considered for conceptual budgetary purposes only. However, this range of hypothetical future payments is believed to represent reasonable estimates based on the royalty payments being offered to landfill owners for LFG-to-RNG projects involving LFG flowrates of 2,500 scfm or greater.

Although the three scenarios covered revenue projections over the 24-year period of active filling operations in the proposed expansion area, it is not uncommon that a LFG Agreement become extended or continue beyond the year of closure. This would yield lucrative returns for an undetermined number of years past closure. Therefore, to be conservative in the estimated revenue projections in this proposal, the 24-year period of active filling operations was used.

FINAL DRAFT

SECTION 5 – PRO FORMA BUDGET AND FINANCIAL PROPOSAL

The annual development of the pro forma budget is a forward-looking process that involves collaboration with many key stakeholders, including the Authority, TRC, SCS, Davenport, and Burns & McDonnell. This process provides the Authority with the resources necessary to understand the cost of service and corresponding pricing recommendations for disposal at the Livestock Road Landfill. The pro forma has remained a dynamic tool that adapts to new information, allowing for a more precise financial forecast and strategy alignment.

To evaluate the near and long-term financial impact of the Expansion Proposal, TRC and SCS provided Burns & McDonnell with working draft cost projections to incorporate into the Fiscal Year (FY) 2023 iteration of the pro forma budget. Capital costs expected to be financed with debt were shared with Davenport to develop a preliminary debt service planning schedule. It is important to note that as these figures are refined and finalized, the pro forma will also need to be updated to reflect the most accurate and current data. A description of the three pro forma scenarios follows.

The initial scenario includes the baseline expansion with no LFG to RNG revenue (Appendix D). A second scenario includes the baseline expansion and LFG to RNG revenue consistent with Option C, presented in Section 4 (Appendix E). Under this scenario the Authority is projected to receive \$810,000 annually in revenue beginning in 2031 and continuing through 2052, increasing to \$1.21 million in 2053. Although there is a sound basis for these revenue figures, market conditions and political environments create uncertainty about the amount of revenue the Authority may receive in the future. To provide a conservative estimate, the third scenario assumes a 50 percent reduction in revenues from LFG to RNG (Appendix F).

The following addresses key assumptions in the pro forma budget:

- **Operating Expenditures:** The inflation rate for personnel, operating and maintenance, and capital costs is assumed to be 2.8 percent. In line 18, additional Landfill Gas O&M costs are separated from Landfill O&M (line 17) to distinctively show additional costs from the proposed expansion, leading to a marginal increase in overall landfill O&M costs of approximately \$150,000 in 2031. These costs are anticipated even if no revenue from LFG to RNG is generated and will persist throughout the useful life of the expansion. The pro forma currently assumes an annualized Equipment Replacement Reserve Contributions, as indicated in line 19, based on an equipment replacement schedule through the duration of the expansion. Equipment costs are projected to increase at an inflation rate of 3 percent annually.

Line 32, Landfill Gas Royalties, has been introduced to display revenues based on assumptions provided by SCS. The revenues from royalty payments are currently shown as a revenue offset against the cost of service, thereby reducing the Member Disposal Rate if there is LFG to RNG revenue, which correlates to cost savings to Campbell County and other Authority members.

- **Debt Service:** The debt service assumptions for cell development are structured around FY Level Annual Debt Service payments to the lender, which are converted to “Monthly Deposits” required cash flows by the Authority to the Trustee, with 1/6 interest and 1/12 principal. A 5.5 percent interest rate is used on all financings. Each financing has a nine-year

term from the Date of Issuance. The costs of issuance are assumed to be \$150,000 for each series. There is no capital interest, but a one-year principal deferral is included.

The timing is based on the “Average Cell (Phase) Cost Estimate” document developed by TRC (refer to Appendix B), which outlines the timing for each Phase VI through X to be completed and put into service. At least one year of lead time is assumed for the related financings to ensure they have the funding in place for at least one year or more of construction. For example, Phase VI is expected to be issued in January 2027, with construction lasting 12 to 18 months, and the project completed by Summer 2028. Similar timelines are assumed for the subsequent phases, with the consideration that prior cells could fill up faster than expected. All LFG capital costs are assumed to be financed with debt in the pro forma and follow a similar structure compared to the cell development with varying term lengths. The assumptions of capital costs based on a 2.8 percent annual inflation factor are provided in Table .

Table 2: Total Capital Cost Projections

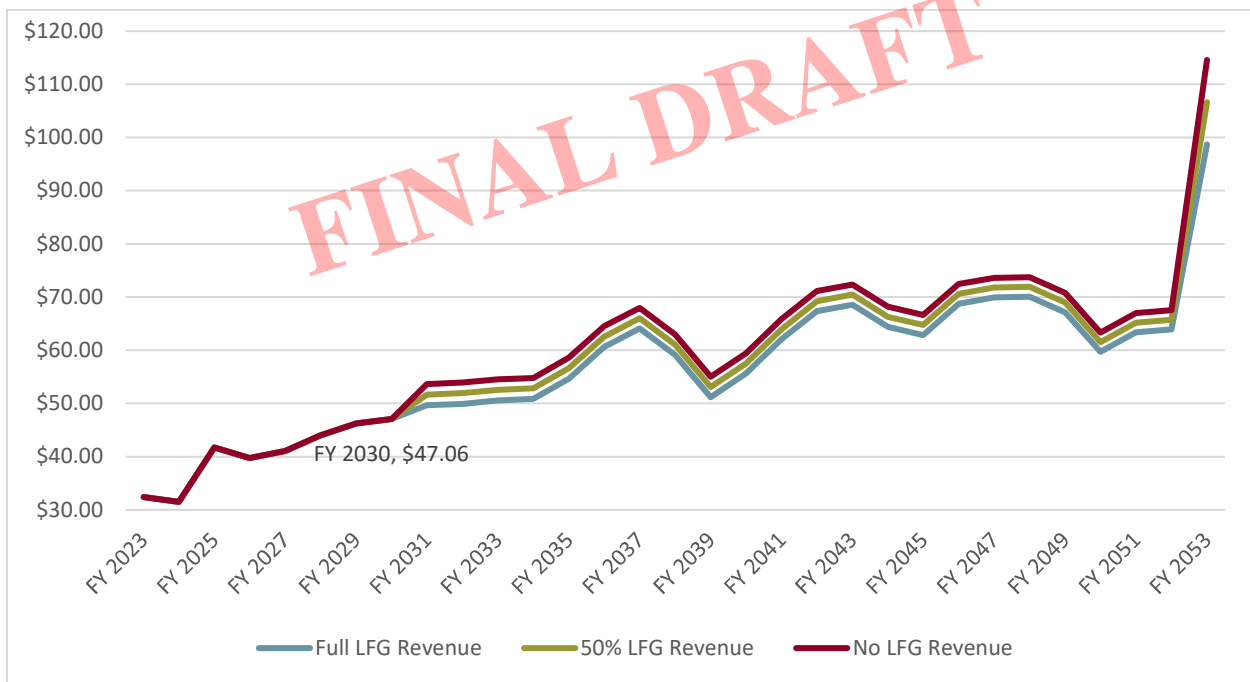
Capital Project	Project Year	Total Capital Cost
Phase VI cell development	FY 2028	\$7,346,398
Phase VII cell development	FY 2030	\$18,751,972
Phase VIII cell development	FY 2036	\$22,695,088
Phase IX cell development	FY 2041	\$17,639,979
Phase X cell development	FY 2045	\$19,880,931
Leachate Cleanouts, horizontal collectors, LFG piping	FY 2033	\$641,074
Vertical Wells and LFG piping	FY 2035	\$1,219,458
Vertical Wells and LFG piping	FY 2038	\$1,324,787
Leachate Cleanouts, horizontal collectors, LFG piping; new LFG Blower/Flare Station	FY 2040	\$3,733,370
Vertical Wells and LFG piping	FY 2043	\$1,520,939
Vertical Wells and LFG piping	FY 2045	\$1,607,304
Leachate Cleanouts, horizontal collectors, LFG piping	FY 2047	\$943,652
Vertical Wells and LFG piping	FY 2049	\$1,795,024
Final Vertical Wells and LFG piping	FY 2051	\$1,896,953

- Distribution of Airspace Reserve:** Tonnage is assumed to increase at a rate of 0.5 percent per year through the life of the landfill. Line 59, Services Authority Distribution of Airspace Reserves, assumes that the Authority will continue to receive 25 percent of excess revenue. Over the period of FY 2024 – FY 2053, the Authority is projected to set aside approximately \$10 million. These savings have been redistributed into the pro forma budget as contributions to the closure/post-closure reserve (shown in lines 22 and 30). Additionally, as a result of the additional volume contributed from the expansion, Campbell County is projected to receive \$23,737,592 in excess revenue over the period of FY 2030 to FY 2054 from the 75 percent revenue sharing agreement with the Authority. The 75 percent revenue sharing agreement and revenue figures are subject to change based on any future financial policy decisions made by the Authority.

- Closure/Post-Closure Reserve:** The Closure and Post-Closure Contribution Estimate assumes closure costs for Phases III – V are realized in FY 2029 with annual withdrawals against the fund balance for post-closure care. The internal loan repayment for land purchase is still assumed to occur over FY 2025 – FY 2029.

Exhibit 2 presents the cost-of-service disposal rate, highlighting differences across the three pro forma scenarios. In FY 2030, which marks the first full year of expansion, the cost-of-service rate is projected to equal \$47.06 per ton. The rate increases at an average annual growth rate of four to five percent from FY 2024 through FY 2053 for the three scenarios. Notably, there is a significant spike in the cost-of-service rate in FY 2053. This increase results from remaining debt service payments totaling \$3,942,368, despite only a partial year of tonnage to generate revenue. Over the period of FY 2037 and FY 2039, the cost-of-service rate experiences an 80 percent reduction, creating an opportunity to generate excess revenue and offset future expenditures.

Exhibit 2: Per Ton Cost of Service Disposal Rate (FY 2023 – FY 2053)



On March 4, 2024, GBB submitted a technical report to Campbell County in which per ton disposal rates were evaluated for various ownership scenarios of a transfer station, landfill expansion, and new landfill. The evaluated disposal rates are based on a net present value (NPV) calculation with a baseline year of 2030. The development of the Expansion Proposal pro forma budgets was based on consistent inflation factors and agreed-upon assumptions that differ from the assumptions identified in the GBB Report. Key differences are identified in Table 3. Given the difference in assumptions in scale, timeframe, and financial variables, it is recommended that a direct comparison of the per ton disposal rates between the GBB Report and Expansion Proposal pro forma be avoided.

Table 3: Key Differences Between GBB and Expansion Proposal Assumptions

Key Difference	GBB Assumptions	Expansion Proposal Assumptions
Annual Inflation Factors	4.15% for general O&M 6% for capital costs	2.8% for O&M and capital costs 3% for equipment replacement
Expansion Size	98 acres	60 acres
Useful Life	30 years	24 years
Timing	Project begins in FY 2030	Expansion related costs incurred prior to FY 2029 to maintain a relatively consistent cost of service rate
Financing	Not specified	All capital projects are financed at 5.5% interest
Revenue Offsets	Not specified	Revenue from landfill gas and distribution of airspace reserves included

Estimates and projections prepared in this Proposal relating to construction costs and schedules, operation and maintenance costs, inflation, equipment characteristics and performance, and operating results are based on the Authority’s consultants’ experience, qualifications, and judgment as design and consulting professionals. Since the Authority’s consultant’s Project Team has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractors’ procedures and methods, unavoidable delays, construction contractors’ methods of determining prices, economic conditions, competitive bidding or market conditions, and other factors affecting such cost opinions or projections, the Project Team does not guarantee that actual rates, costs, performance, schedules, and related items will not vary from cost estimates and projections prepared by the Project Team.

SECTION 6 - COMMUNITY BENEFITS

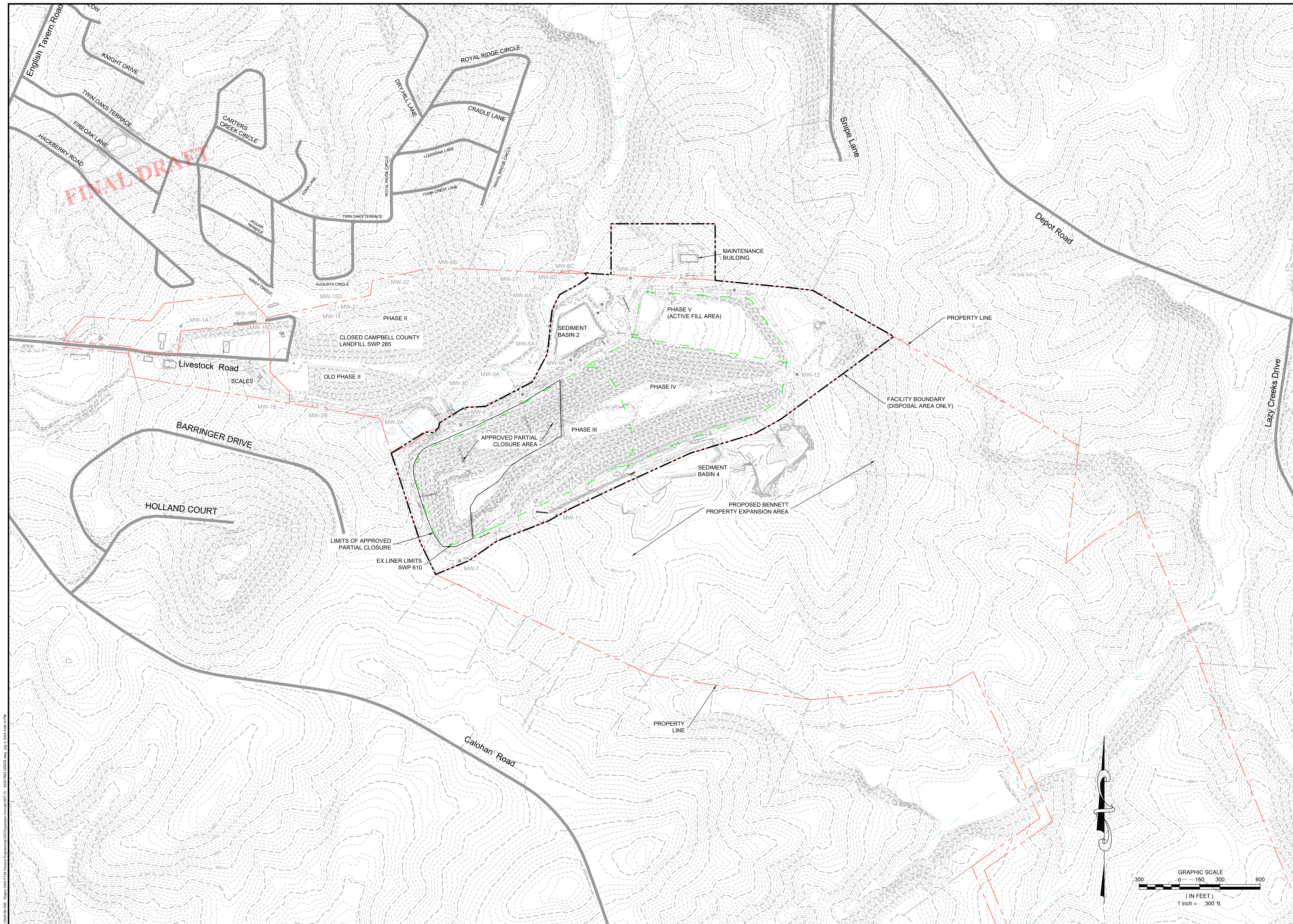
Expansion of the landfill will allow the region to continue to manage its solid waste for an additional 24 years maintaining control over its waste management strategies in an efficient and cost-effective manner. The expansion will continue to provide employment opportunities and support economic development initiatives in the region in support of additional commercial, industrial, and residential development in the surrounding area along Calohan Road and U.S. Route 29.

The proposed Expansion Area at the Facility offers control and security over tipping and waste hauling fees under the presence of a municipally owned and operated local landfill. The community also benefits from the environmental stewardship from the reduced carbon footprint by hauling to a local landfill as opposed to an alternate, which would be more than an hour haul each direction. Other community benefits may include sponsoring events or hosting an event, such as litter picking, or contributing benches or equipment to a local park.

It is critical that a timely decision on this proposal be made in order to allow an adequate period for assembling the permit application documents, designing the expansion and associated infrastructure as well as regulatory review and approval.

Appendix A
Conceptual Plan Sheets

FINAL DRAFT



FINAL DRAFT

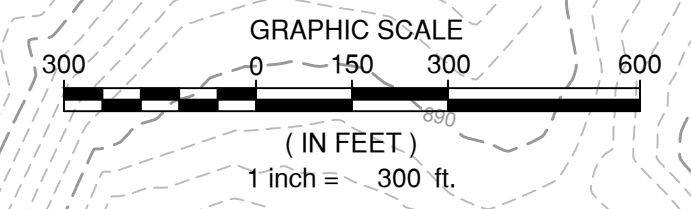


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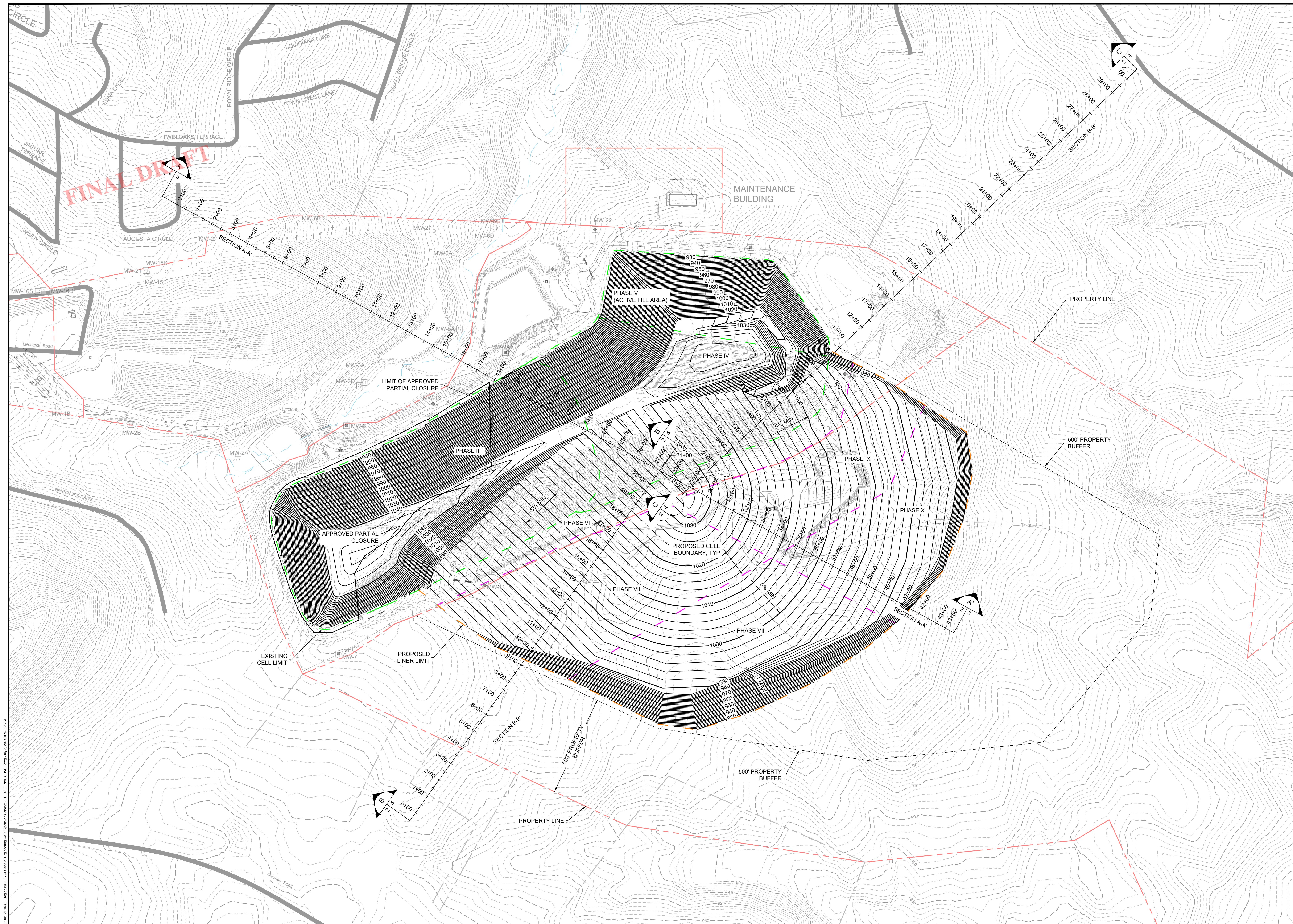
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- Charlottesville, VA
- Northern Virginia

EXISTING CONDITIONS
CONCEPTUAL LANDFILL EXPANSION
REGION 2000 REGIONAL LANDFILL
 LIVESTOCK ROAD FACILITY, CAMPBELL COUNTY, VIRGINIA

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DRAWN BY:	FJR
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SCALE:	1" = 300'
DATE:	JUNE 2024
PROJECT NUMBER:	561599
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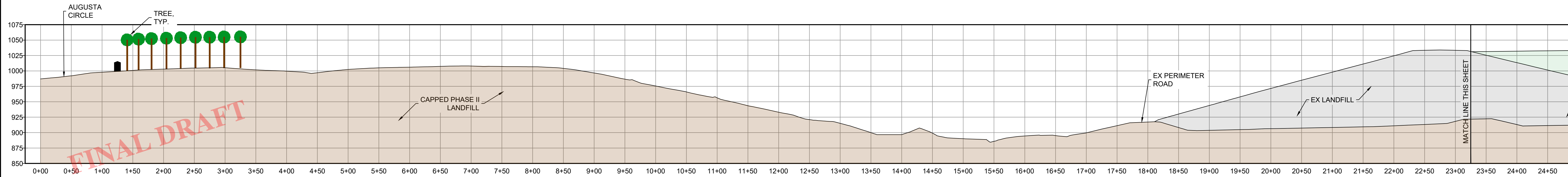
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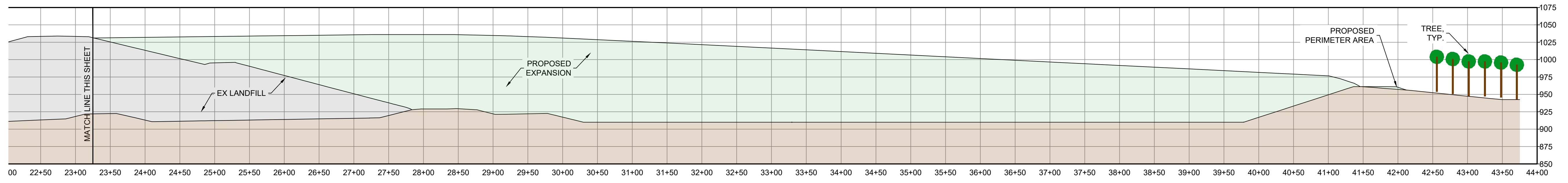
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PROPOSED FINAL GRADE
CONCEPTUAL LANDFILL EXPANSION
REGION 2000 REGIONAL LANDFILL
 LIVESTOCK ROAD FACILITY, CAMPBELL COUNTY, VIRGINIA

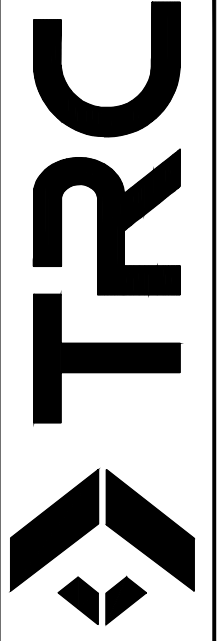
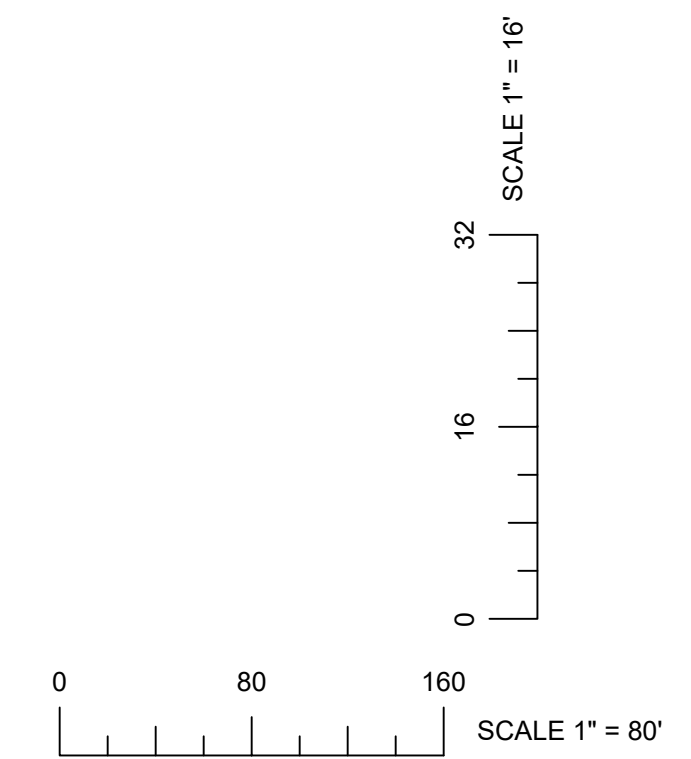
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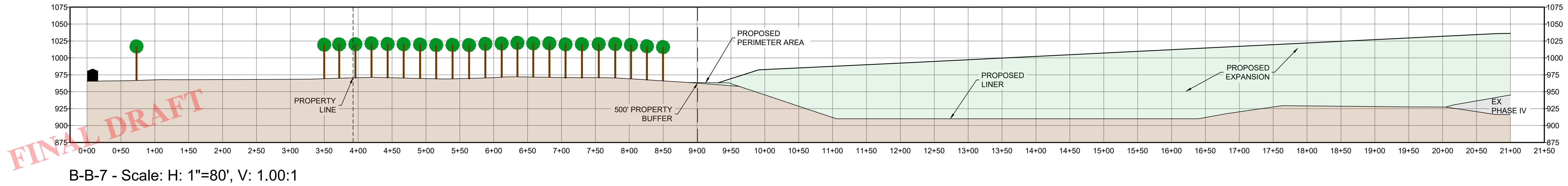
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CONCEPTUAL LANDFILL EXPANSION PROFILE - 1
CONCEPTUAL LANDFILL EXPANSION
REGION 2000 REGIONAL LANDFILL
 LIVESTOCK ROAD FACILITY, CAMPBELL COUNTY, VIRGINIA

REVISIONS

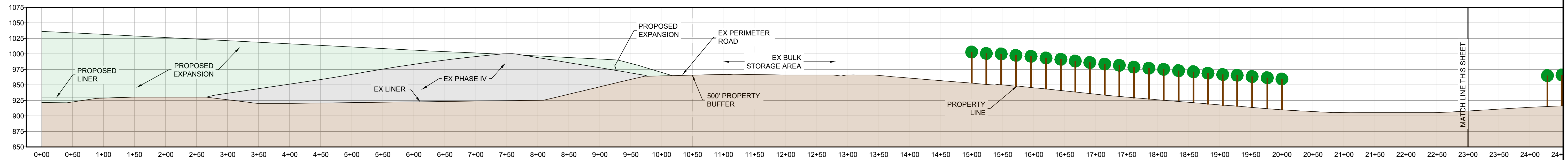
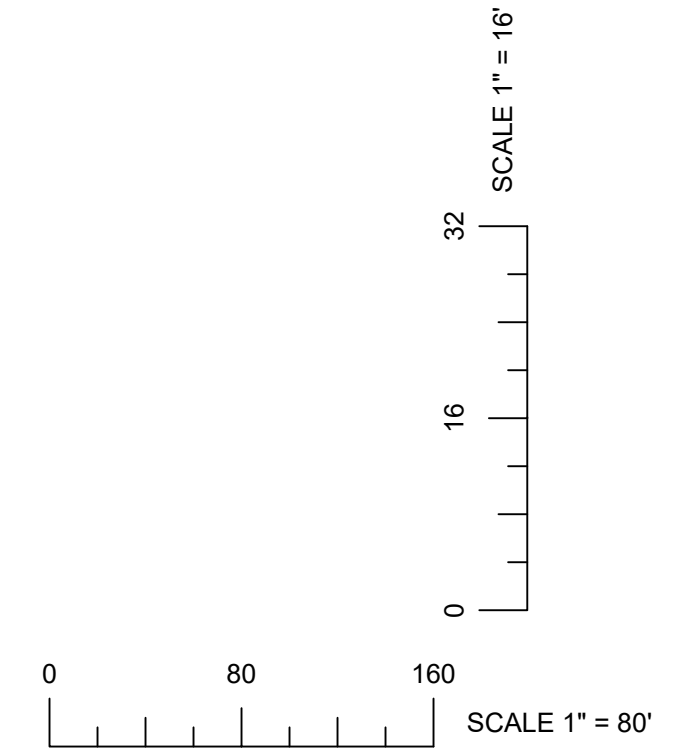
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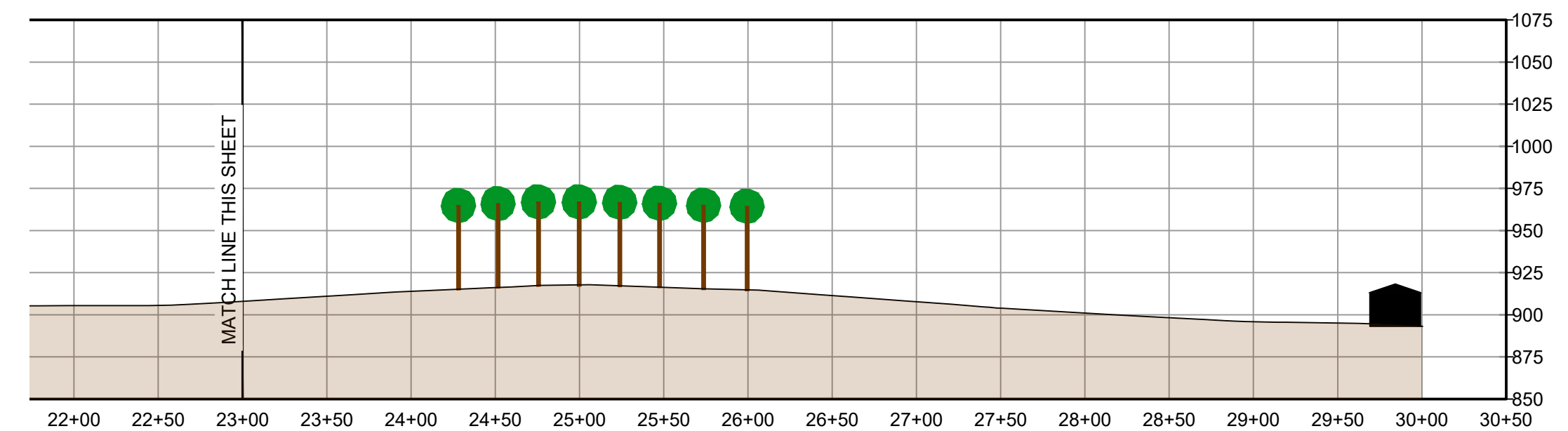
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SECTION C-C'



CONCEPTUAL LANDFILL EXPANSION PROFILE - 2
CONCEPTUAL LANDFILL EXPANSION
REGION 2000 REGIONAL LANDFILL
 LIVESTOCK ROAD FACILITY, CAMPBELL COUNTY, VIRGINIA

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PROJECT NUMBER:	561599

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Appendix B

Expansion Cost Estimates

FINAL DRAFT

Region 2000 Solid Waste Authority
Livestock Road 2050 Expansion Construction Cost Estimate
6/13/2024

ITEM	SOURCE	UNIT COST	QUANTITY	EST. COST
Entire Expansion Area Liner	TRC		60.2 AC	
Entire Expansion Area Cap	TRC		73.6 AC	
Cut required within liner footprint	TRC		2,690,000 CY	
Total fill required	TRC		2,690,000 CY	
LINER AND SITE LAYOUT ITEMS				
Clearing				
Site Clearing	RS Means	\$ 9,300	50 AC	\$465,000
Liner Earthwork				
Liner Stakeout	Engineer Estimate	\$ 403,340	1 LS	\$403,340
Ramp	Engineer Estimate	\$ 20,000	2 LS	\$40,000
Liner Anchor Trench	Cell 2 +20%	\$ 27	4,530 LF	\$122,310
Tie-in to Phase III-V Liner	Cell 2 +20%	\$ 65	2,500 LF	\$162,500
Clay Liner Placement and Compaction	Spotsylvania	\$ 6.79	194,245 CY	\$1,318,926
Move and Stockpile Excavated Soil	R-Board G1/G3 Bid	\$ 4.00	2,690,000 CY	\$10,760,000
Excavation to Base Grade	RS Means	\$ 4.50	2,690,000 CY	\$12,105,000
Controlled Subgrade Preparation				
12" Excavation to Subgrade in Cell	RS Means	\$ 4.50	97,200 CY	\$437,400
12" Controlled Fill to Base Grade	Spotsylvania	\$ 6.79	97,200 CY	\$659,988
Perimeter Road				
Perimeter Road (25' wide - 4,530' long)	R-Board G1/G3 Bid	\$ 1.50	113,250 SF	\$169,875
Sediment Basins				
Sediment Basins	Engineer Estimate	\$ 250,000	5 EA	\$1,250,000
Liner Seeding				
Temporary Liner Seeding	RS Means	\$ 5,050	2 AC	\$10,100
Permanent Liner Seeding	RS Means	\$ 5,050	20 AC	\$101,000
Liner Geomembrane				
Liner Geomembrane	Manufacturer Quote	\$ 8	291,368 SY	\$2,330,944
Liner Geotextile				
Filter Geotextile	RS MEANS	\$ 3	291,368 SY	\$874,104
Leachate Collection and Sump				
Leachate Collection and Sump	Engineer Estimate	\$ 4,000,000	1 EA	\$4,000,000
Leachate Storage Tank	Engineer Estimate	\$ 3,500,000	1 LS	\$3,500,000
Leachate Collection System Stone				
18" Drainage Layer Gravel	R-Board G1/G3 Bid	\$ 27	291,368 SY	\$7,866,936
Rain Cover				
Rain Cover	R-Board G1/G3 Bid	\$ 4.65	291,368 SY	\$1,354,861
Groundwater				
Groundwater Monitoring Wells	Engineer Estimate	\$ 3,000.00	24 EA	\$72,000
Landfill Gas Monitoring				
Landfill Gas Probes	Engineer Estimate	\$ 3,000.00	24 EA	\$72,000
SUBTOTAL - NO ESC OR SWM				\$48,076,284
Liner Erosion Sediment Control (ESC)				
ESC Practices	Engineer Estimate	1.5% Sub.	1 LS	\$721,144
General Stormwater Management				
General Stormwater Management	Engineer Estimate	3% Sub.	1 LS	\$1,442,289
SUBTOTAL FOR LINER				\$50,239,717
Mobilization (\$42,500 + 1% over \$1.5M)	Specifications			\$529,897
CONSTRUCTION COST ESTIMATE				\$50,769,614
Contingency		20%		\$10,153,923
TOTAL LINER COST				\$60,923,537

LINER COST PER ACRE				\$1,012,019
CAP ITEMS				
Cap Earthwork				
Cap Stakeout	Engineer Estimate	\$ 493,120	1 LS	\$493,120
Cap Anchor Trench	Cell 2 +20%	\$ 27	4,530 LF	\$122,310
Cap Fill and Compact	R-Board G1/G3 Bid	\$4	356,224 CY	\$1,424,896
Cap Perimeter Stone Column (With Geotextile)	R-Board G1/G3 Bid/RS Means	\$ 60	4,530 SY	\$271,800
Cap GCL				
Cap GCL	R-Board G1/G3 Bid	\$ 8.50	356,224 SY	\$3,027,904
Cap Geomembrane				
Cap Geomembrane	Manufacturer Quote	\$ 8	356,224 SY	\$2,849,792
Cap Geocomposite Drainage Net				
Geocomposite Drainage Net (GDN)	R-Board G1/G3 Bid	\$ 2	356,224 SY	\$712,448
Cap Seeding				
Temporary Cap Seeding	RS Means	\$ 5,050	7.36 AC	\$37,168
Permanent Cap Seeding	RS Means	\$ 5,050	73.6 AC	\$371,680
Stormwater Changes and Maintenance				
Stormwater Changes and Maintenance	Engineer Estimate	\$ 1,000,000	1 LS	\$1,000,000
Soil Stockpiles				
Soil Stockpile Closure and Seeding (LFG by others)	Engineer Estimate	\$ 50,000	1 LS	\$50,000
SUBTOTAL - NO ESC OR CAP SWM				\$10,361,118
Cap Erosion Sediment Control (ESC)				
ESC Practices	Engineer Estimate	5% Sub.	1 LS	\$518,056
Cap Stormwater Management System				
Cap Stormwater Management System	Engineer Estimate	15% Sub.	1 LS	\$1,554,168
SUBTOTAL FOR CAP				\$12,433,342
Mobilization (\$42,500 + 1% over \$1.5M)	Specifications			\$151,833
CONSTRUCTION COST ESTIMATE				\$12,585,175
Contingency		20%		\$2,517,035
TOTAL CAP COST				\$15,102,210
CAP COST PER ACRE				\$205,193

Region 2000 Solid Waste Authority
Livestock Road 2050 Expansion Construction Cost Estimate - Average Cell (Phase) Costs
6/13/2024

Cell Name	Approximate Construction Completion	Cell Capacity (CY)	Cell Area (ac)	Estimated Construction Cost
Phase VI	Summer 2028	1,463,254	6.5	\$6,578,123
Phase VII	Summer 2030	2,122,577	15.7	\$15,888,696
Phase VIII	Summer 2036	1,853,032	16.1	\$16,293,504
Phase IX	Winter 2041	1,454,012	10.9	\$11,031,006
Phase X	Winter 2045	1,103,101	11	\$11,132,208

Assumptions:

1. Average per acre cost (\$1,012,019/acre) from total construction cost estimate for liner portion used to estimate cell cost.

FINAL DRAFT

Region 2000 Solid Waste Authority
Livestock Road 2050 Expansion Construction Cost Estimate - Phase VI
6/13/2024

ITEM	SOURCE	UNIT COST	QUANTITY	EST. COST
Phase VI Cell	TRC		6.5 AC	
Estimated Cut required	TRC		7,000 CY	
Estimated Fill required	TRC		28,000 CY	
Clearing				
Site Clearing	RS Means	\$ 9,300	10 AC	\$93,000
Liner Earthwork				
Liner Stakeout	Engineer Estimate	\$ 43,550	1 LS	\$43,550
Ramp	Engineer Estimate	\$ 20,000	1 LS	\$20,000
Liner Anchor Trench	Cell 2 +20%	\$ 27	2,900 LF	\$78,300
Tie-in to Phase III-V liner	Cell 2 +20%	\$ 65	2,500 LF	\$162,500
Clay Liner placement and compaction	Spotsylvania	\$ 6.79	20,973 CY	\$142,409
Excavation to Base Grade	RS Means	\$ 4.50	7,000 CY	\$31,500
Move and stockpile excavated soil	R-Board G1/G3 Bid	\$ 4.00	28,000 CY	\$112,000
Controlled Subgrade Preparation				
12" Excavation to Subgrade in Cell	RS Means	\$ 4.50	10,500 CY	\$47,250
12" Controlled Fill to Base Grade	Spotsylvania	\$ 6.79	10,500 CY	\$71,295
Perimeter Road				
Perimeter Road (assume 25' wide - 2900' long)	R-Board G1/G3 Bid	\$ 1.50	72,500 SF	\$108,750
Stormwater Management				
Stormwater Management	Engineer Estimate	\$ 500,000	1 LS	\$500,000
Sediment Basins	Engineer Estimate	\$ 250,000	2 EA	\$500,000
Seeding				
Temporary Seeding	RS Means	\$ 5,050	0.4 AC	\$2,020
Permanent Seeding	RS Means	\$ 5,050	4 AC	\$20,200
Liner Geomembrane				
Liner Geomembrane	Manufacturer Quote	\$ 8	31,460 SY	\$251,680
Liner Geotextile				
Liner Geotextile	RS MEANS	\$ 3	31,460 SY	\$94,380
Leachate Collection				
Leachate Collection	Engineer Estimate	\$ 350,000	1 EA	\$350,000
Leachate Collection System Stone				
18" Drainage Layer Gravel	R-Board G1/G3 Bid	\$ 27	31,460 SY	\$849,420
Rain Cover				
Rain Cover	R-Board G1/G3 Bid	\$ 4.65	31,460 SY	\$146,289
Groundwater Monitoring Wells				
Groundwater Monitoring Wells	Engineer Estimate	\$ 3,000.00	24 EA	\$72,000
Landfill Gas Monitoring				
Landfill Gas Monitoring Probes	Engineer Estimate	\$ 3,000.00	24 EA	\$72,000
Erosion Sediment Control				
Erosion Sediment Control	Engineer Estimate	\$ 250,000	1 LS	\$250,000
SUBTOTAL				\$4,018,543
Mobilization (\$42,500 + 1% over \$1.5M)	Specifications			\$67,685
CONSTRUCTION COST ESTIMATE				\$4,086,228
Contingency		20%		\$817,246
TOTAL COST				\$4,903,474
COST PER ACRE				\$754,381

Assumptions:

1. Leachate collection system can be expanded without additional infrastructure needed.

REGION 2000 EXPANSION - POST-CLOSURE ESTIMATE
 PERMIT 610 - LIVESTOCK ROAD LANDFILL
 REGION 2000 SERVICES AUTHORITY
 Revised June 26, 2024

Revised to include Bennett Expansion Concept

Worksheet CEW-02: FORMAT FOR THE ESTIMATION OF POST-CLOSURE COSTS

FILL IN THE BOXES. THE REST WILL BE CALCULATED FOR YOU

I. Groundwater and Underdrain Monitoring

Calculation or Conversion

a. Total number of monitoring wells	38	wells and underdrains		
b. Total number of sampling events/year	4	events/yr	a x b	152 samples/yr
c. Quantity of additional samples (e.g. QA/QC)	2	samples/event	a x c	76 samples/yr
d. Total samples per year			b + c	228 samples/yr
e. Analysis unit cost (Table 3.1 constituents)	\$653.00	/sample		
f. <i>Total Analysis cost</i>			d x e	\$148,884 /yr
g. GW Monitoring unit cost	\$4,438.00	/event	b x g	\$17,752
i. <i>Total sampling cost</i>			f + g	\$166,636 /yr
j. Engineering fees & reports	\$8,875	/yr		
Yearly Groundwater Monitoring Cost			i + j	\$175,511 /yr

II. Landfill Gas Monitoring, Maintenance, and Control

a. Frequency of LFG compliance monitoring	4	events/yr		
b. LFG Monitoring unit cost	\$2,200.00	/event		
c. <i>Total perimeter LFG monitoring cost</i>			a x b	\$8,800 /yr
d. Frequency of surface monitoring (air permit)	4	events/yr		
e. Surface monitoring unit cost	\$7,000.00	/event		
f. <i>Total surface monitoring cost</i>			d x e	\$28,000 /yr
g. Control system operating unit cost	\$30,000	/yr		
h. Frequency of LFG control system inspections	24	events/yr		
i. Control system inspection cost	\$2,500.00	/event		
j. <i>Total control system cost</i>			g + (h x i)	\$90,000 /yr
Yearly Landfill Gas Monitoring, Maintenance, & Control Cost			c + f + j	\$126,800 /yr

LFG costs provided by SCS on 6/25/2024.

III. Leachate Management

a. Quantity of leachate generated	1,054,798	gal/yr		
<i>On-site Leachate Management or Pre-Treatment</i>				
b. On-site treatment operating unit cost	\$0.00	/gal		
c. <i>Total on-site management cost</i>			a x b	\$0 /yr
<i>Leachate Disposal</i>				
d. Private disposal unit cost	\$0.00	/gal		
e. POTW disposal unit cost		/gal		
f. Direct discharge to POTW unit cost	\$0.0086	/gal		
g. Pump & Haul unit cost	\$0.00	/gal		
h. Subtotal leachate disposal unit cost			d + e + f + g	\$0.0086
i. <i>Total leachate disposal cost</i>			a x h	\$9,093 /yr
j. Leachate sampling & analysis unit cost	\$653.00	/sample		
k. Frequency of leachate sampling & analysis	4	sample/yr		
l. <i>Total leachate sampling & analysis cost</i>			j x k	\$2,612 /yr
Yearly Leachate Management Cost			c + i + l	\$11,705 /yr

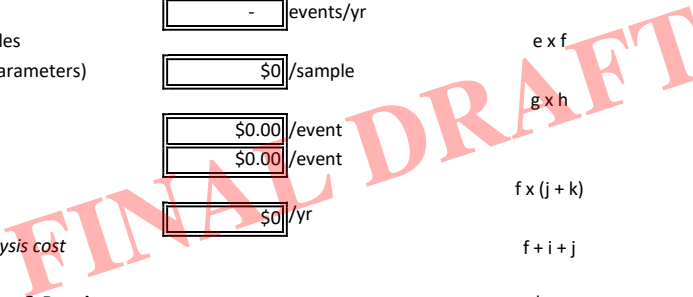
IV. Cap Maintenance & Repair

a. Closed Landfill Area	115.6	acres		
<i>60.2 ac expansion area + 55.4 ac Phase III-V.</i>				
<i>Mowing & Fertilization</i>				
b. Mowing frequency	2	visits/yr		
c. Mowing unit cost	\$113.00	/acre/visit		
d. <i>Total mowing cost</i>			a x b x c	\$26,126 /yr
e. Fertilizer frequency	-	visits/yr		
f. Fertilizer unit cost	\$0.00	/acre/visit		
g. <i>Total fertilizer cost</i>			a x e x f	\$0 /yr

REGION 2000 EXPANSION - POST-CLOSURE ESTIMATE
 PERMIT 610 - LIVESTOCK ROAD LANDFILL
 REGION 2000 SERVICES AUTHORITY
 Revised June 26, 2024

Revised to include Bennett Expansion Concept

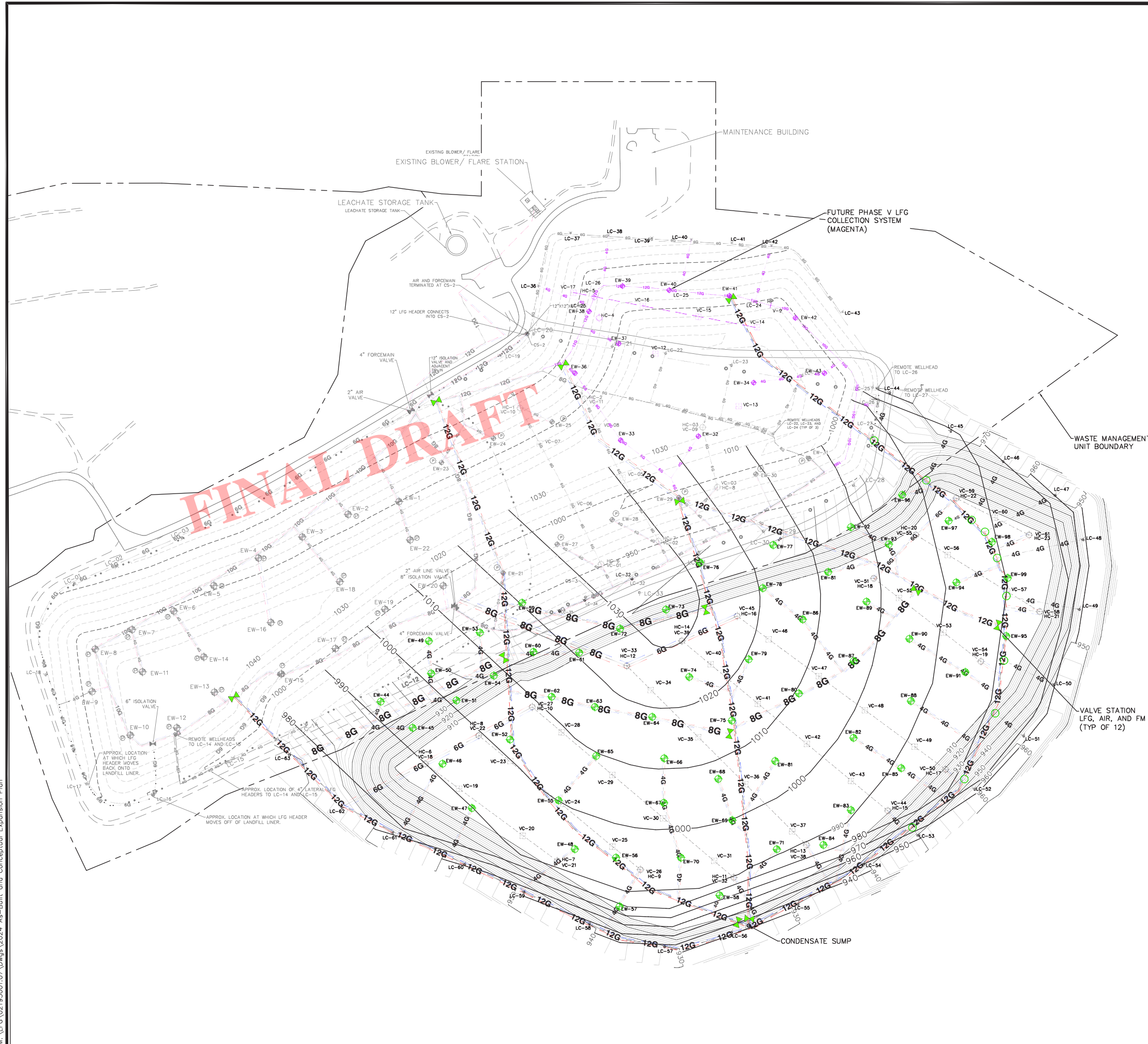
<i>Cap Erosion & Repair</i>			
h. Area to reseed/year		33% x a	38.5 acres
i. Reseeding unit cost	\$1,962.00	/acre	
j. <i>Total reseeding cost</i>		h x i	\$75,602.40 /yr
k. Area of cap erosion/year		10% x a	11.6 acres
l. Cap erosion repair unit cost	\$392.00	/acre	
m Mobilization/Demobilization	\$655.00	/yr	
n. <i>Total cap erosion repair cost</i>		(k x l) + m	\$5,187 /yr
Yearly Cap Maintenance & Repair cost		d + g + j + n	\$106,915 /yr
V. Sediment Basin Maintenance & Repair			
a. Sediment basin cleanout frequency, 6 basins	3	years	1 / a
b. Sediment basin cleanout unit cost	\$13,073	/event	0.33 event/yr
c. Mobilization/Demobilization	\$0	/event	
d. <i>Total sediment basin maintenance cost</i>		a x (b + c) x 6 basins	\$26,147 /yr
e. Total number of stormwater sampling locations	-	locations	
f. Stormwater sampling frequency	-	events/yr	
g. Total number of stormwater samples		e x f	0 samples/yr
h. Analysis unit cost (VPDES permit parameters)	\$0	/sample	
i. <i>Total Analysis cost</i>		g x h	\$0 /yr
j. Mobilization unit cost	\$0.00	/event	
k. Technician field unit cost	\$0.00	/event	
l. <i>Total sampling cost</i>		f x (j + k)	\$0.00 /yr
m Engineering fees & reports	\$0	/yr	
n. <i>Total Stormwater Sampling & Analysis cost</i>		f + i + j	\$0 /yr
Yearly Sediment Basin Maintenance & Repair		d + n	\$26,147 /yr
VI. Vector & Rodent Control			
a. Vector and rodent control unit cost	\$1,365	/yr	
Yearly Vector and Rodent Control Cost		a	\$1,365 /yr
VII. Post-Closure Care General Inspections			
a. General Inspection unit cost	\$1,902	/inspection	
b. Number of inspections per year	1		
Yearly Post-Closure Care General Inspection Cost		a x b	\$1,902 /yr
<hr/>			
Annual Post-Closure Care Cost (APCC)		I + ... + VII	\$450,344 /yr
Length of post-closure care (LPCC)	30	years	
Post-Closure Care Cost		APCC x LPCC	\$13,510,322
Engineering & Documentation			
Post-Closure Care Evaluation	\$6,537		
Post-Closure Care Certification	\$3,268		
Cost for survey and deed notation (if not completed at time of landfill closure)			
FA Mechanism Maintenance Cost	\$0	/yr	
Region 2000 and Member Jurisdictions use Local Government Financial Tests. There is no maintenance cost.		FA maintenance x LPCC	\$0
Total Post-Closure Care Cost (2024 Dollars)		Post-Closure Cost + Engineering + FA Maintenance	\$13,520,127



Appendix C
Proposed Landfill Gas System Information

FINAL DRAFT

M:\FC\02195001.07\Drawings and Conceptual Expansion Plan



LEGEND

CONCEPTUAL EXPANSION AREA

- HORIZONTAL COLLECTOR
- VERTICAL CASSION
- LFG EXTRACTION WELLHEAD
- REMOTE WELLHEAD
- VALVE STATION
- LEACHATE CLEANOUT
- 4" LFG HEADER
- 6" LFG HEADER
- 8" LFG HEADER
- 12" LFG HEADER
- 2" AIRLINE
- 4" FORCEMAIN
- HORIZONTAL COLLECTOR

EXISTING LANDFILL AREA

- EXISTING HORIZONTAL COLLECTOR
- EXISTING VERTICAL CASSION
- EXISTING LFG EXTRACTION WELLHEAD
- EXISTING VALVE STATION
- EXISTING LEACHATE CLEAN OUT
- EXISTING 4" LFG HEADER
- EXISTING 6" LFG HEADER
- EXISTING 8" LFG HEADER
- EXISTING 10" LFG HEADER
- EXISTING 12" LFG HEADER
- EXISTING AIRLINE
- EXISTING FORCEMAIN

NOTES:

1. PROPOSED FEATURES ARE SHOWN IN FULL TONE, AND EXISTING FEATURES ARE GENERALLY SHOWN IN HALF-TONE.
2. MAGENTA COLORING REPRESENTS THE PROPOSED PHASE V MASTER PLAN FUTURE LFG SYSTEM.
3. THE PROPOSED LEACHATE CLEANOUTS 44-53 UTILIZE A REMOTE WELLHEAD TO TIE INTO 12" HEADER
4. THIS DRAWING IS AN ATTACHMENT TO THE PROPOSAL FOR A LANDFILL EXPANSION AT THE REGION 2000 REGIONAL LANDFILL - LIVESTOCK ROAD FACILITY. THIS DRAWING DEPICTS A CONCEPTUAL LANDFILL GAS COLLECTION SYSTEM THAT THE REGION 2000 SERVICES AUTHORITY PROPOSES TO INSTALL IN PHASES OVER THE OPERATING LIFE OF THE EXPANSION AREA. THE SPECIFIC NUMBER, LOCATION, ALIGNMENT, ORIENTATION, POSITION, AND CONFIGURATION OF THE LFG SYSTEM COMPONENTS MAY BE MODIFIED BASED ON FUTURE FIELD CONDITIONS, DESIGN CRITERIA, REGULATION REQUIREMENTS, AND CONSTRUCTION CONSIDERATIONS.



NO.	REVISION	DATE

SHEET TITLE: **CONCEPTUAL LFG SYSTEM**
 PROJECT TITLE: **PRELIMINARY BENNETT PROPERTY SITE MAP - LIVESTOCK ROAD FACILITY**

CLIENT: **REGION 2000 SERVICES AUTHORITY**
 361 LIVESTOCK ROAD
 RUSTBURG, VA 24588

SCS ENGINEERS
 STEARNS, CONRAD AND SCHMIDT
 CONSULTING ENGINEERS, INC.
 15521 MIDLOTHIAN TPK - MIDLOTHIAN, VA 23113
 P.H. (804) 378-7440 FAX. (804) 378-7433

PROJ. NO.: 001.07
 DESK. BY: DBK
 DWG. BY: LLH
 CHK. BY: RED
 APP. BY: RED

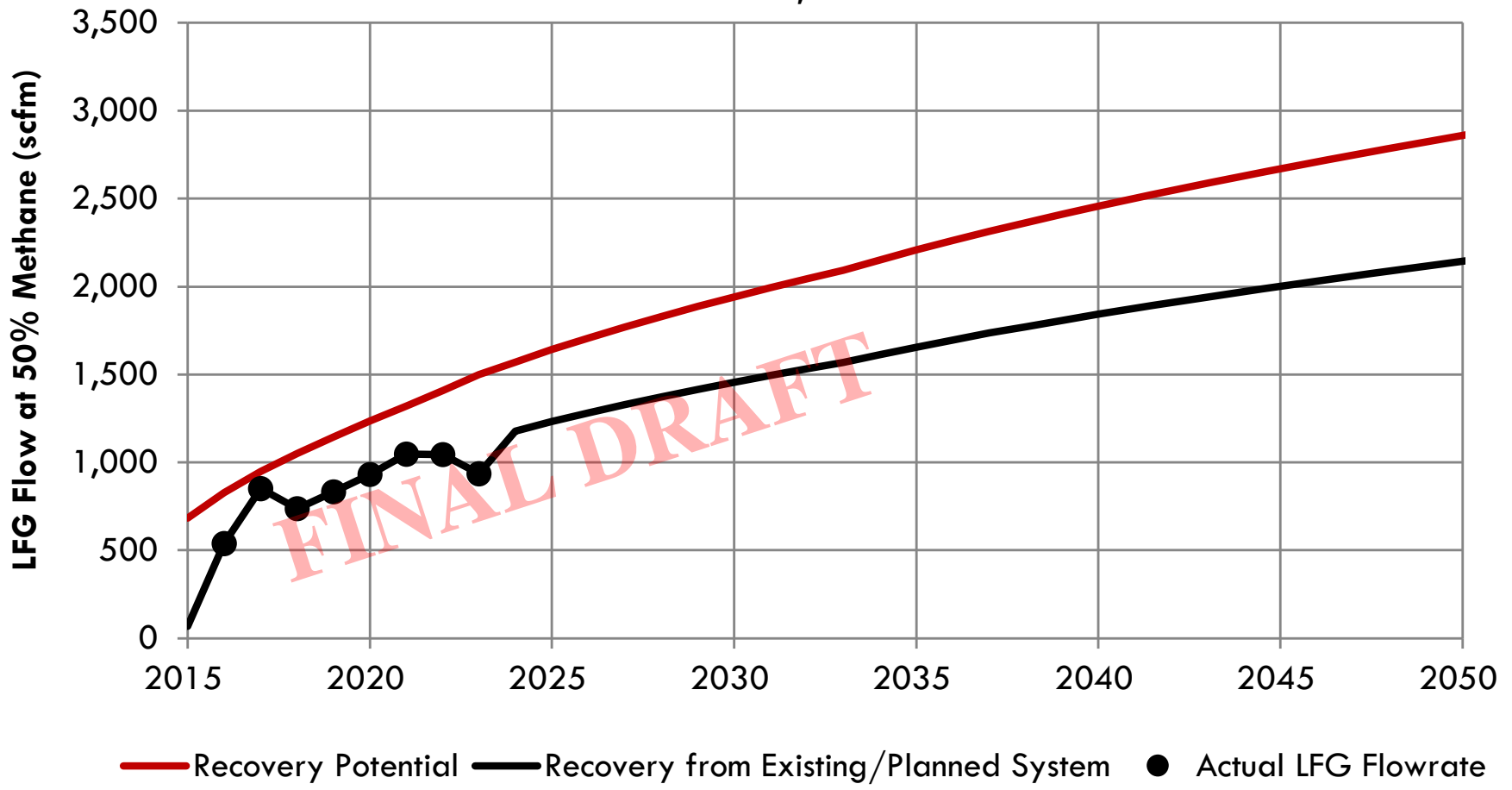
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 DATE: 6/28/24
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 DRAWING NO.

**APPENDIX C. LFG RECOVERY PROJECTION
REGION 2000 REGIONAL LANDFILL - LIVESTOCK ROAD FACILITY, RUSTBURG, VA**

Year	Annual Total Waste Disposal	Total Waste In Place	LFG Recovery Potential			LFG System Coverage	LFG Recovery From Existing/Planned System		
	(tons/yr)	(tons)	(scfm)	(mmcf/day)	(mmBtu/yr)	(%)	(scfm)	(mmcf/day)	(mmBtu/yr)
2015	205,357	1,376,609	684	0.98	181,822	10%	68	0.10	18,182
2016	197,672	1,574,281	828	1.19	220,294	65%	539	0.78	143,229
2017	187,550	1,761,831	948	1.37	252,206	90%	852	1.23	226,593
2018	197,641	1,959,472	1,052	1.52	279,854	70%	738	1.06	196,354
2019	193,111	2,152,583	1,146	1.65	304,875	73%	834	1.20	221,704
2020	194,200	2,346,783	1,237	1.78	329,023	75%	932	1.34	247,738
2021	204,228	2,551,011	1,322	1.90	351,518	79%	1,048	1.51	278,778
2022	214,228	2,765,239	1,409	2.03	374,736	74%	1,044	1.50	277,682
2023	204,424	2,969,663	1,499	2.16	398,613	62%	935	1.35	248,773
2024	206,500	3,176,163	1,572	2.26	418,130	75%	1,179	1.70	313,597
2025	208,600	3,384,763	1,642	2.36	436,617	75%	1,231	1.77	327,462
2026	210,700	3,595,463	1,708	2.46	454,163	75%	1,281	1.84	340,622
2027	212,800	3,808,263	1,770	2.55	470,844	75%	1,328	1.91	353,133
2028	214,900	4,023,163	1,830	2.64	486,731	75%	1,373	1.98	365,049
2029	217,000	4,240,163	1,887	2.72	501,888	75%	1,415	2.04	376,416
2030	219,200	4,459,363	1,942	2.80	516,372	75%	1,456	2.10	387,279
2031	221,400	4,680,763	1,994	2.87	530,265	75%	1,495	2.15	397,698
2032	223,600	4,904,363	2,044	2.94	543,612	75%	1,533	2.21	407,709
2033	225,800	5,130,163	2,092	3.01	556,459	75%	1,569	2.26	417,344
2034	228,100	5,358,263	2,151	3.10	572,170	75%	1,614	2.32	429,127
2035	230,400	5,588,663	2,208	3.18	587,175	75%	1,656	2.38	440,381
2036	232,700	5,821,363	2,262	3.26	601,532	75%	1,696	2.44	451,149
2037	235,000	6,056,363	2,314	3.33	615,297	75%	1,735	2.50	461,472
2038	237,400	6,293,763	2,363	3.40	628,517	75%	1,772	2.55	471,388
2039	239,800	6,533,563	2,411	3.47	641,265	75%	1,808	2.60	480,949
2040	242,200	6,775,763	2,458	3.54	653,581	75%	1,843	2.65	490,186
2041	244,600	7,020,363	2,502	3.60	665,501	75%	1,877	2.70	499,126
2042	247,000	7,267,363	2,546	3.67	677,058	75%	1,909	2.75	507,793
2043	249,500	7,516,863	2,588	3.73	688,282	75%	1,941	2.80	516,212
2044	252,000	7,768,863	2,629	3.79	699,229	75%	1,972	2.84	524,422
2045	254,500	8,023,363	2,669	3.84	709,922	75%	2,002	2.88	532,441
2046	257,000	8,280,363	2,709	3.90	720,381	75%	2,032	2.93	540,286
2047	259,600	8,539,963	2,747	3.96	730,629	75%	2,060	2.97	547,971
2048	262,200	8,802,163	2,785	4.01	740,707	75%	2,089	3.01	555,531
2049	264,800	9,066,963	2,822	4.06	750,633	75%	2,117	3.05	562,975
2050	267,400	9,334,363	2,859	4.12	760,418	75%	2,144	3.09	570,313
2051	270,100	9,604,463	2,896	4.17	770,074	75%	2,172	3.13	577,556
2052	272,800	9,877,263	2,931	4.22	779,641	75%	2,199	3.17	584,731
2053	275,500	10,152,763	2,967	4.27	789,125	75%	2,225	3.20	591,843
2054	0	10,152,763	3,003	4.32	798,533	75%	2,252	3.24	598,900
2055	0	10,152,763	2,760	3.97	733,999	75%	2,070	2.98	550,499
2056	0	10,152,763	2,537	3.65	674,706	75%	1,903	2.74	506,029
2057	0	10,152,763	2,332	3.36	620,227	75%	1,749	2.52	465,170
2058	0	10,152,763	2,144	3.09	570,170	75%	1,608	2.32	427,628
2059	0	10,152,763	1,971	2.84	524,177	75%	1,478	2.13	393,132
2060	0	10,152,763	1,812	2.61	481,915	75%	1,359	1.96	361,436

Methane Content of LFG Adjusted to:	MSW 50%	C&D 50%
Selected Decay Rate Constant (k):	0.085	0.034
Selected Ultimate Methane Recovery Rate (Lo):	3,200 cu ft/ton	2,400 cu ft/ton

APPENDIX C. LFG RECOVERY PROJECTIONS REGION 2000 REGIONAL LANDFILL - LIVESTOCK ROAD FACILITY, RUSTBURG, VA



APPENDIX C. BUDGETARY COST ESTIMATE FOR LFG SYSTEM DESIGN & CONSTRUCTION

BENNETT PROPERTY CONCEPTUAL LANDFILL GAS COLLECTION AND CONTROL SYSTEM EXPANSIONS
REGION 2000 REGIONAL LANDFILL - LIVESTOCK ROAD FACILITY

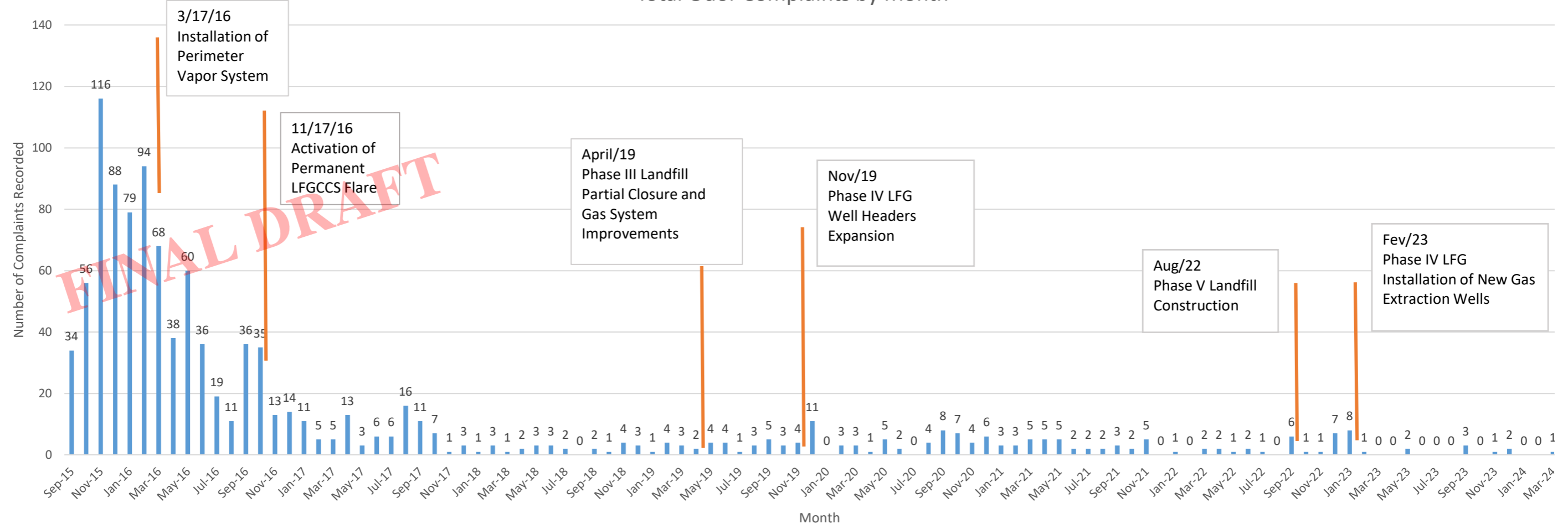
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No.	Item Description	Quantity	Unit	Unit Price	Total Cost
1	Mobilization/Demobilization	9	LS	\$95,950	\$863,550
2	Drill Rig Mobilization	6	LS	\$17,600	\$105,600
LFG EXTRACTION COMPONENTS & WELLFIELD INFRASTRUCTURE					
3	LFG Extraction Wells - 8" SCH 80 PVC	3,613	VF	\$163	\$588,919
4	Vertical Caisson/Drainage Pits	46	EA	\$3,810	\$175,260
5	LFG Extraction Wellheads - 2" Standard	56	EA	\$1,090	\$61,040
6	LFG Horizontal Collectors (6" Dia. Perforated)	4,749	LF	\$80	\$379,920
7	4" Dia. LFG Collection Piping (Below Grade)	9,463	LF	\$30	\$283,890
8	6" Dia. LFG Collection Piping (Below Grade)	1,748	LF	\$35	\$61,180
9	8" Dia. LFG Collection Piping (Below Grade)	4,961	LF	\$43	\$213,323
10	12" Dia. LFG Collection Piping (Below Grade)	11,431	LF	\$67	\$765,877
11	8" LFG Isolation Valve	4	EA	\$3,130	\$12,520
12	12" LFG Isolation Valve	8	EA	\$4,945	\$39,560
LFG WELLFIELD DEWATERING SYSTEM INFRASTRUCTURE					
13	24" HDPE Condensate Sump with Pump	1	EA	\$52,600	\$52,600
14	4" Dia. Condensate Forcemain / 2" Airline in Common Trench w/ LFG Header	24,485	LF	\$15	\$367,275
15	4" Dia. Condensate Forcemain / 2" Airline stub ups	56	EA	\$800	\$44,800
16	Pneumatic Pumps & Appurtenances QED AP-4 short	56	EA	\$9,910	\$554,960
17	4" Dia. Dewatering Forcemain Isolation Valve	12	EA	\$3,470	\$41,640
18	2" Dia. Airline Isolation Valve	12	EA	\$1,670	\$20,040
TIE-IN CONNECTIONS & TERMINATIONS					
19	Tie-In Remote Lateral Piping to Existing Leachate Cleanouts	20	EA	\$5,000	\$100,000
20	Tie-In to Existing 8" Header	10	EA	\$4,070	\$40,700
21	Tie-In to Existing 12" Header	10	EA	\$4,200	\$42,000
22	Tie-In to Existing Laterals	10	EA	\$3,000	\$30,000
23	Tie-In to Existing 2" Airline	30	EA	\$1,945	\$58,350
24	Tie-In to Existing 4" Forcemain	30	EA	\$3,470	\$104,100
MISCELLANEOUS					
25	Future 3,000 scfm Blower/Flare Station	1	EA	\$1,100,000	\$1,100,000
26	Electrical for Future 3,000 scfm Blower/Flare Station	1	EA	\$106,000	\$106,000
27	Reseeding	9	EA	\$5,860	\$52,740
28	Surveying	9	EA	\$54,000	\$486,000
29	Payment & Performance Bond	9	LS	\$21,000	\$189,000
TOTAL CONSTRUCTION COST					\$6,940,844
TOTAL ENGINEERING COST (15%)					\$1,041,127
TOTAL ENGINEERING AND CONSTRUCTION COST					\$7,981,971
TOTAL CONSTRUCTION AND ENGINEERING COST WITH CONTINGENCY 10%					\$8,780,168

Notes:

1. This estimated construction cost to install the conceptual LFG System is based on the preliminary Bennett Property LFG System Layout Drawing, prepared by SCS Engineers, dated 6/28/24. Engineering costs were assumed to be 15% of Construction Cost.
2. Construction and engineering pricing is based on current 2024 conditions in this proposal and represents 2024 dollars. A 10% contingency is assigned for the Bennett property expansion to account for uncertainties in LFG Construction.

Region 2000 Regional Landfill - Livestock Road Facility
Total Odor Complaints by Month



Appendix D
Pro-Forma – No LFG Revenue

FINAL DRAFT

Financial Pro Forma
Region 2000 Services Authority
No LFG Revenue

	Actual FY 2023	Projected FY 2024	Projected FY 2025	Projected FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
1 Disposal Rates									
2 Cost of Service Rate	\$32.43	\$31.54	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$53.64
3 Member Rate	\$30.24	\$30.25	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$53.64
4 Other Contracts	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$63.64
5 Market Rate (Private Haulers)	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$63.64
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7									
8 Operating Revenue									
9 Member Cities	\$2,264,892	\$2,145,028	\$2,975,114	\$2,848,375	\$2,953,623	\$3,185,114	\$3,361,333	\$3,438,435	\$3,938,630
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$5,070,985	\$5,007,744	\$6,470,403	\$6,254,283	\$6,445,231	\$6,857,710	\$7,173,245	\$7,314,903	\$8,198,935
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$7,335,877	\$7,152,772	\$9,445,517	\$9,102,658	\$9,398,855	\$10,042,824	\$10,534,578	\$10,753,338	\$12,137,564
14									
15 Operating Expenditures									
16 Personnel	\$1,495,898	\$1,741,647	\$1,790,413	\$1,840,545	\$1,892,080	\$1,945,058	\$1,999,520	\$2,055,506	\$2,113,061
17 Landfill O&M	\$1,799,805	\$1,582,025	\$1,626,322	\$1,671,859	\$1,718,671	\$1,766,794	\$1,816,264	\$1,867,119	\$1,919,398
18 Landfill Gas O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,841
19 Equipment Replacement Reserve Contribution	\$664,716	\$174,387	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$288,977	(\$266,854)	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,437,225	\$2,179,511	\$2,177,909
22 Excess Revenue Closure and Post-Closure Contributic	\$0	\$0	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$4,249,396	\$3,231,205	\$6,776,100	\$6,873,331	\$6,973,249	\$7,075,929	\$7,118,672	\$6,969,395	\$7,233,069
28 Interest and Other Income	(\$77,884)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg									
30 Revenue Offset from Reserves	\$0	\$0	(\$312,595)	(\$314,158)	(\$315,729)	(\$317,308)	(\$318,894)	(\$320,489)	(\$322,091)
31 Reimbursable Expenses	(\$146,500)	(\$171,373)	(\$176,171)	(\$181,104)	(\$186,175)	(\$191,388)	(\$196,747)	(\$202,256)	(\$207,919)
32 Landfill Gas Royalties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33 Total Operating Expenditures	\$4,025,012	\$3,038,832	\$6,266,333	\$6,357,069	\$6,450,345	\$6,546,233	\$6,582,031	\$6,425,651	\$6,682,059
34									
35 Revenues Available for Debt Service	\$3,310,865	\$4,113,940	\$3,179,184	\$2,745,589	\$2,948,510	\$3,496,591	\$3,952,546	\$4,327,687	\$5,455,505
36									
37 Debt Service (DS)									
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$829,016	\$829,423	\$69,122	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$310,227	\$310,227	\$310,227	\$310,227	\$310,227	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$1,112,891	\$1,112,820	\$370,913	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$542,049	\$1,178,769	\$1,178,541	\$1,178,729	\$1,178,744	\$1,178,585	\$687,420	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$196,623	\$738,548	\$1,183,583	\$1,183,609	\$1,183,498
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$495,740	\$1,862,124	\$2,983,643
45 Phase VIII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
49 Total Debt Service	\$2,483,956	\$3,121,012	\$1,928,803	\$1,488,956	\$1,685,594	\$2,227,360	\$2,676,970	\$3,045,733	\$4,167,141
50									
51 Total Expenses									
52 Subtotal Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,849,200
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,849,200
55									
56 Distribution of Airspace Reserve									
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$943,832	\$933,120	\$937,786	\$942,475	\$947,187	\$951,923	\$956,682	\$961,466	\$966,273
59 Services Authority	\$314,611	\$311,040	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
60 Total Set Aside Funds	\$1,258,443	\$1,244,160	\$1,250,381	\$1,256,633	\$1,262,916	\$1,269,230	\$1,275,577	\$1,281,954	\$1,288,364
61									
62 Net Operating Revenues	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)

Financial Pro Forma
Region 2000 Services Authority
No LFG Revenue

	Projected FY 2032	Projected FY 2033	Projected FY 2034	Projected FY 2035	Projected FY 2036	Projected FY 2037	Projected FY 2038	Projected FY 2039	Projected FY 2040	Projected FY 2041	Projected FY 2042
1 Disposal Rates											
2 Cost of Service Rate	\$53.91	\$54.51	\$54.80	\$58.60	\$64.49	\$67.97	\$62.94	\$55.00	\$59.42	\$65.83	\$71.12
3 Member Rate	\$53.91	\$54.51	\$54.80	\$58.60	\$64.49	\$67.97	\$62.94	\$55.00	\$59.42	\$65.83	\$71.12
4 Other Contracts	\$63.91	\$64.51	\$64.80	\$68.60	\$74.49	\$77.97	\$72.94	\$65.00	\$69.42	\$75.83	\$81.12
5 Market Rate (Private Haulers)	\$63.91	\$64.51	\$64.80	\$68.60	\$74.49	\$77.97	\$72.94	\$65.00	\$69.42	\$75.83	\$81.12
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7											
8 Operating Revenue											
9 Member Cities	\$3,978,578	\$4,042,683	\$4,084,924	\$4,389,896	\$4,855,058	\$5,142,477	\$4,786,216	\$4,202,784	\$4,563,234	\$5,081,204	\$5,517,049
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$8,275,467	\$8,394,418	\$8,475,040	\$9,016,670	\$9,839,398	\$10,350,297	\$9,731,851	\$8,714,855	\$9,353,991	\$10,269,540	\$11,041,028
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$12,254,045	\$12,437,101	\$12,559,964	\$13,406,566	\$14,694,455	\$15,492,773	\$14,518,067	\$12,917,638	\$13,917,226	\$15,350,745	\$16,558,076
14											
15 Operating Expenditures											
16 Personnel	\$2,172,226	\$2,233,049	\$2,295,574	\$2,359,850	\$2,425,926	\$2,493,852	\$2,563,680	\$2,635,463	\$2,709,256	\$2,785,115	\$2,863,098
17 Landfill O&M	\$1,973,142	\$2,028,390	\$2,085,185	\$2,143,570	\$2,203,590	\$2,265,290	\$2,328,718	\$2,393,922	\$2,460,952	\$2,529,859	\$2,600,695
18 Landfill Gas O&M	\$158,148	\$162,576	\$167,128	\$171,808	\$176,619	\$181,564	\$186,648	\$191,874	\$197,246	\$202,769	\$208,447
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,176,298	\$2,174,680	\$2,173,053	\$2,171,419	\$2,169,776	\$2,168,125	\$2,166,465	\$2,164,798	\$2,163,122	\$2,161,437	\$2,159,744
22 Excess Revenue Closure and Post-Closure Contributiv	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$7,350,286	\$7,470,784	\$7,594,657	\$7,721,997	\$7,852,904	\$7,987,476	\$8,125,815	\$8,268,029	\$8,414,224	\$8,564,513	\$8,719,009
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$323,702)	(\$325,320)	(\$326,947)	(\$328,581)	(\$330,224)	(\$331,875)	(\$333,535)	(\$335,202)	(\$336,878)	(\$338,563)	(\$340,256)
31 Reimbursable Expenses	(\$213,741)	(\$219,725)	(\$225,878)	(\$232,202)	(\$238,704)	(\$245,388)	(\$252,259)	(\$259,322)	(\$266,583)	(\$274,047)	(\$281,721)
32 Landfill Gas Royalties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33 Total Operating Expenditures	\$6,791,844	\$6,904,739	\$7,020,832	\$7,140,214	\$7,262,976	\$7,389,212	\$7,519,022	\$7,652,504	\$7,789,763	\$7,930,903	\$8,076,033
34											
35 Revenues Available for Debt Service	\$5,462,201	\$5,532,362	\$5,539,132	\$6,266,352	\$7,431,480	\$8,103,561	\$6,999,045	\$5,265,134	\$6,127,463	\$7,419,842	\$8,482,043
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$1,183,624	\$1,183,338	\$1,183,432	\$1,183,398	\$690,498	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$2,983,771	\$2,983,877	\$2,984,046	\$2,984,094	\$2,983,907	\$2,984,277	\$1,741,014	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$0	\$0	\$0	\$599,179	\$2,250,822	\$3,606,426	\$3,606,553	\$3,606,985	\$3,606,722	\$3,606,211	\$3,606,190
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$466,576	\$1,752,728	\$2,808,179
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$63,867	\$63,867	\$185,357	\$185,357	\$185,357	\$317,339	\$317,339	\$706,652	\$706,652	\$706,652
49 Total Debt Service	\$4,167,395	\$4,231,082	\$4,231,345	\$4,952,027	\$6,110,583	\$6,776,059	\$5,664,906	\$3,924,324	\$4,779,949	\$6,065,591	\$7,121,021
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$10,959,239	\$11,135,821	\$11,252,177	\$12,092,241	\$13,373,558	\$14,165,272	\$13,183,928	\$11,576,829	\$12,569,712	\$13,996,493	\$15,197,054
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$10,959,239	\$11,135,821	\$11,252,177	\$12,092,241	\$13,373,558	\$14,165,272	\$13,183,928	\$11,576,829	\$12,569,712	\$13,996,493	\$15,197,054
55											
56 Distribution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$971,105	\$975,960	\$980,840	\$985,744	\$990,673	\$995,626	\$1,000,604	\$1,005,607	\$1,010,635	\$1,015,689	\$1,020,767
59 Services Authority	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
60 Total Set Aside Funds	\$1,294,806	\$1,301,280	\$1,307,787	\$1,314,325	\$1,320,897	\$1,327,502	\$1,334,139	\$1,340,810	\$1,347,514	\$1,354,251	\$1,361,023
61											
62 Net Operating Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Financial Pro Forma
Region 2000 Services Authority
No LFG Revenue

	Projected FY 2043	Projected FY 2044	Projected FY 2045	Projected FY 2046	Projected FY 2047	Projected FY 2048	Projected FY 2049	Projected FY 2050	Projected FY 2051	Projected FY 2052	Projected FY 2053
1 Disposal Rates											
2 Cost of Service Rate	\$72.34	\$68.17	\$66.60	\$72.46	\$73.62	\$73.74	\$70.78	\$63.34	\$67.00	\$67.52	\$114.59
3 Member Rate	\$72.34	\$68.17	\$66.60	\$72.46	\$73.62	\$73.74	\$70.78	\$63.34	\$67.00	\$67.52	\$114.59
4 Other Contracts	\$82.34	\$78.17	\$76.60	\$82.46	\$83.62	\$83.74	\$80.78	\$73.34	\$77.00	\$77.52	\$124.59
5 Market Rate (Private Haulers)	\$82.34	\$78.17	\$76.60	\$82.46	\$83.62	\$83.74	\$80.78	\$73.34	\$77.00	\$77.52	\$124.59
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	\$2.00	\$3.00
7											
8 Operating Revenue											
9 Member Cities	\$5,639,588	\$5,340,743	\$5,243,862	\$5,734,358	\$5,855,024	\$5,893,891	\$5,685,884	\$5,113,022	\$5,435,869	\$5,505,414	\$3,169,396
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$11,262,834	\$10,745,332	\$10,582,222	\$11,449,736	\$11,668,394	\$11,743,565	\$11,385,615	\$10,387,540	\$10,961,078	\$11,090,217	\$6,046,195
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$16,902,422	\$16,086,075	\$15,826,083	\$17,184,094	\$17,523,418	\$17,637,456	\$17,071,499	\$15,500,562	\$16,396,946	\$16,595,632	\$9,215,591
14											
15 Operating Expenditures											
16 Personnel	\$2,943,265	\$3,025,676	\$3,110,395	\$3,197,486	\$3,287,016	\$3,379,052	\$3,473,666	\$3,570,928	\$3,670,914	\$3,773,700	\$1,309,398
17 Landfill O&M	\$2,673,514	\$2,748,373	\$2,825,327	\$2,904,436	\$2,985,761	\$3,069,362	\$3,155,304	\$3,243,653	\$3,334,475	\$3,427,840	\$1,189,391
18 Landfill Gas O&M	\$214,283	\$220,283	\$226,451	\$232,792	\$239,310	\$246,011	\$252,899	\$259,980	\$267,260	\$274,743	\$282,436
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,158,043	\$2,156,333	\$2,154,615	\$2,152,888	\$2,151,152	\$2,149,408	\$2,147,655	\$2,145,894	\$2,144,123	\$2,142,344	\$1,595,865
22 Excess Revenue Closure and Post-Closure Contributic	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$8,877,832	\$9,041,102	\$9,208,943	\$9,381,484	\$9,558,856	\$9,741,194	\$9,928,638	\$10,121,331	\$10,319,418	\$10,523,052	\$5,045,183
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$7,088)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$341,957)	(\$343,667)	(\$345,385)	(\$347,112)	(\$348,848)	(\$350,592)	(\$352,345)	(\$354,106)	(\$355,877)	(\$357,656)	(\$121,323)
31 Reimbursable Expenses	(\$289,609)	(\$297,718)	(\$306,054)	(\$314,623)	(\$323,433)	(\$332,489)	(\$341,799)	(\$351,369)	(\$361,207)	(\$371,321)	(\$128,841)
32 Landfill Gas Royalties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33 Total Operating Expenditures	\$8,225,266	\$8,378,717	\$8,536,504	\$8,698,749	\$8,865,576	\$9,037,114	\$9,213,495	\$9,394,855	\$9,581,334	\$9,773,075	\$4,787,931
34											
35 Revenues Available for Debt Service	\$8,677,155	\$7,707,357	\$7,289,579	\$8,485,345	\$8,657,842	\$8,600,343	\$7,858,004	\$6,105,707	\$6,815,612	\$6,822,557	\$4,427,660
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$3,606,578	\$2,104,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$2,808,154	\$2,808,635	\$2,808,534	\$2,808,551	\$2,808,502	\$2,808,273	\$1,638,239	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$525,350	\$1,973,716	\$3,162,557	\$3,162,113	\$3,161,732	\$3,162,063	\$3,162,447	\$3,162,157	\$3,161,984	\$1,844,404
48 Gas Related Projects	\$894,595	\$894,595	\$1,125,789	\$1,125,789	\$1,291,838	\$1,227,971	\$1,648,323	\$1,526,834	\$2,229,947	\$2,229,947	\$2,097,965
49 Total Debt Service	\$7,309,328	\$6,332,690	\$5,908,039	\$7,096,897	\$7,262,452	\$7,197,976	\$6,448,625	\$4,689,281	\$5,392,104	\$5,391,931	\$3,942,368
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$15,534,594	\$14,711,408	\$14,444,543	\$15,795,646	\$16,128,028	\$16,235,089	\$15,662,120	\$14,084,136	\$14,973,438	\$15,165,006	\$8,730,299
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$15,534,594	\$14,711,408	\$14,444,543	\$15,795,646	\$16,128,028	\$16,235,089	\$15,662,120	\$14,084,136	\$14,973,438	\$15,165,006	\$8,730,299
55											
56 Distribution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$1,025,871	\$1,031,000	\$1,036,155	\$1,041,336	\$1,046,543	\$1,051,775	\$1,057,034	\$1,062,319	\$1,067,631	\$1,072,969	\$363,969
59 Services Authority	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
60 Total Set Aside Funds	\$1,367,828	\$1,374,667	\$1,381,540	\$1,388,448	\$1,395,390	\$1,402,367	\$1,409,379	\$1,416,426	\$1,423,508	\$1,430,626	\$485,292
61											
62 Net Operating Revenues	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)	\$0

Appendix E
Pro Forma – Full LFG Revenue

FINAL DRAFT

Financial Pro Forma
Region 2000 Services Authority
Full LFG Revenue

	Actual FY 2023	Projected FY 2024	Projected FY 2025	Projected FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
1 Disposal Rates									
2 Cost of Service Rate	\$32.43	\$31.54	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$49.63
3 Member Rate	\$30.24	\$30.25	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$49.63
4 Other Contracts	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$59.63
5 Market Rate (Private Haulers)	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$59.63
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7									
8 Operating Revenue									
9 Member Cities	\$2,264,892	\$2,145,028	\$2,975,114	\$2,848,375	\$2,953,623	\$3,185,114	\$3,361,333	\$3,438,435	\$3,644,572
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$5,070,985	\$5,007,744	\$6,470,403	\$6,254,283	\$6,445,231	\$6,857,710	\$7,173,245	\$7,314,903	\$7,682,992
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$7,335,877	\$7,152,772	\$9,445,517	\$9,102,658	\$9,398,855	\$10,042,824	\$10,534,578	\$10,753,338	\$11,327,564
14									
15 Operating Expenditures									
16 Personnel	\$1,495,898	\$1,741,647	\$1,790,413	\$1,840,545	\$1,892,080	\$1,945,058	\$1,999,520	\$2,055,506	\$2,113,061
17 Landfill O&M	\$1,799,805	\$1,582,025	\$1,626,322	\$1,671,859	\$1,718,671	\$1,766,794	\$1,816,264	\$1,867,119	\$1,919,398
18 Landfill Gas O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,841
19 Equipment Replacement Reserve Contribution	\$664,716	\$174,387	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$288,977	(\$266,854)	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,437,225	\$2,179,511	\$2,177,909
22 Excess Revenue Closure and Post-Closure Contributic	\$0	\$0	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$4,249,396	\$3,231,205	\$6,776,100	\$6,873,331	\$6,973,249	\$7,075,929	\$7,118,672	\$6,969,395	\$7,233,069
28 Interest and Other Income	(\$77,884)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg									
30 Revenue Offset from Reserves	\$0	\$0	(\$312,595)	(\$314,158)	(\$315,729)	(\$317,308)	(\$318,894)	(\$320,489)	(\$322,091)
31 Reimbursable Expenses	(\$146,500)	(\$171,373)	(\$176,171)	(\$181,104)	(\$186,175)	(\$191,388)	(\$196,747)	(\$202,256)	(\$207,919)
32 Landfill Gas Royalties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$810,000)
33 Total Operating Expenditures	\$4,025,012	\$3,038,832	\$6,266,333	\$6,357,069	\$6,450,345	\$6,546,233	\$6,582,031	\$6,425,651	\$5,872,059
34									
35 Revenues Available for Debt Service	\$3,310,865	\$4,113,940	\$3,179,184	\$2,745,589	\$2,948,510	\$3,496,591	\$3,952,546	\$4,327,687	\$5,455,505
36									
37 Debt Service (DS)									
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$829,016	\$829,423	\$69,122	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$310,227	\$310,227	\$310,227	\$310,227	\$310,227	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$1,112,891	\$1,112,820	\$370,913	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$542,049	\$1,178,769	\$1,178,541	\$1,178,729	\$1,178,744	\$1,178,585	\$687,420	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$196,623	\$738,548	\$1,183,583	\$1,183,609	\$1,183,498
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$495,740	\$1,862,124	\$2,983,643
45 Phase VIII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
49 Total Debt Service	\$2,483,956	\$3,121,012	\$1,928,803	\$1,488,956	\$1,685,594	\$2,227,360	\$2,676,970	\$3,045,733	\$4,167,141
50									
51 Total Expenses									
52 Subtotal Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,039,200
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,039,200
55									
56 Distribution of Airspace Reserve									
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$943,832	\$933,120	\$937,786	\$942,475	\$947,187	\$951,923	\$956,682	\$961,466	\$966,273
59 Services Authority	\$314,611	\$311,040	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
60 Total Set Aside Funds	\$1,258,443	\$1,244,160	\$1,250,381	\$1,256,633	\$1,262,916	\$1,269,230	\$1,275,577	\$1,281,954	\$1,288,364
61									
62 Net Operating Revenues	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Financial Pro Forma
Region 2000 Services Authority
Full LFG Revenue

	Projected FY 2032	Projected FY 2033	Projected FY 2034	Projected FY 2035	Projected FY 2036	Projected FY 2037	Projected FY 2038	Projected FY 2039	Projected FY 2040	Projected FY 2041	Projected FY 2042
1 Disposal Rates											
2 Cost of Service Rate	\$49.93	\$50.54	\$50.86	\$54.68	\$60.58	\$64.08	\$59.08	\$51.15	\$55.59	\$62.02	\$67.33
3 Member Rate	\$49.93	\$50.54	\$50.86	\$54.68	\$60.58	\$64.08	\$59.08	\$51.15	\$55.59	\$62.02	\$67.33
4 Other Contracts	\$59.93	\$60.54	\$60.86	\$64.68	\$70.58	\$74.08	\$69.08	\$61.15	\$65.59	\$72.02	\$77.33
5 Market Rate (Private Haulers)	\$59.93	\$60.54	\$60.86	\$64.68	\$70.58	\$74.08	\$69.08	\$61.15	\$65.59	\$72.02	\$77.33
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7											
8 Operating Revenue											
9 Member Cities	\$3,684,520	\$3,748,625	\$3,790,867	\$4,095,838	\$4,561,000	\$4,848,419	\$4,492,158	\$3,908,726	\$4,269,176	\$4,787,147	\$5,222,991
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$7,759,525	\$7,878,476	\$7,959,097	\$8,500,728	\$9,323,455	\$9,834,354	\$9,215,909	\$8,198,912	\$8,838,049	\$9,753,598	\$10,525,085
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$11,444,045	\$11,627,101	\$11,749,964	\$12,596,566	\$13,884,455	\$14,682,773	\$13,708,067	\$12,107,638	\$13,107,226	\$14,540,745	\$15,748,076
14											
15 Operating Expenditures											
16 Personnel	\$2,172,226	\$2,233,049	\$2,295,574	\$2,359,850	\$2,425,926	\$2,493,852	\$2,563,680	\$2,635,463	\$2,709,256	\$2,785,115	\$2,863,098
17 Landfill O&M	\$1,973,142	\$2,028,390	\$2,085,185	\$2,143,570	\$2,203,590	\$2,265,290	\$2,328,718	\$2,393,922	\$2,460,952	\$2,529,859	\$2,600,695
18 Landfill Gas O&M	\$158,148	\$162,576	\$167,128	\$171,808	\$176,619	\$181,564	\$186,648	\$191,874	\$197,246	\$202,769	\$208,447
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,176,298	\$2,174,680	\$2,173,053	\$2,171,419	\$2,169,776	\$2,168,125	\$2,166,465	\$2,164,798	\$2,163,122	\$2,161,437	\$2,159,744
22 Excess Revenue Closure and Post-Closure Contributiv	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$7,350,286	\$7,470,784	\$7,594,657	\$7,721,997	\$7,852,904	\$7,987,476	\$8,125,815	\$8,268,029	\$8,414,224	\$8,564,513	\$8,719,009
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$323,702)	(\$325,320)	(\$326,947)	(\$328,581)	(\$330,224)	(\$331,875)	(\$333,535)	(\$335,202)	(\$336,878)	(\$338,563)	(\$340,256)
31 Reimbursable Expenses	(\$213,741)	(\$219,725)	(\$225,878)	(\$232,202)	(\$238,704)	(\$245,388)	(\$252,259)	(\$259,322)	(\$266,583)	(\$274,047)	(\$281,721)
32 Landfill Gas Royalties	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)
33 Total Operating Expenditures	\$5,981,844	\$6,094,739	\$6,210,832	\$6,330,214	\$6,452,976	\$6,579,212	\$6,709,022	\$6,842,504	\$6,979,763	\$7,120,903	\$7,266,033
34											
35 Revenues Available for Debt Service	\$5,462,201	\$5,532,362	\$5,539,132	\$6,266,352	\$7,431,480	\$8,103,561	\$6,999,045	\$5,265,134	\$6,127,463	\$7,419,842	\$8,482,043
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$1,183,624	\$1,183,338	\$1,183,432	\$1,183,398	\$690,498	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$2,983,771	\$2,983,877	\$2,984,046	\$2,984,094	\$2,983,907	\$2,984,277	\$1,741,014	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$0	\$0	\$0	\$599,179	\$2,250,822	\$3,606,426	\$3,606,553	\$3,606,985	\$3,606,722	\$3,606,211	\$3,606,190
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$466,576	\$1,752,728	\$2,808,179	\$0
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$63,867	\$63,867	\$185,357	\$185,357	\$185,357	\$317,339	\$317,339	\$706,652	\$706,652	\$706,652
49 Total Debt Service	\$4,167,395	\$4,231,082	\$4,231,345	\$4,952,027	\$6,110,583	\$6,776,059	\$5,664,906	\$3,924,324	\$4,779,949	\$6,065,591	\$7,121,021
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$10,149,239	\$10,325,821	\$10,442,177	\$11,282,241	\$12,563,558	\$13,355,272	\$12,373,928	\$10,766,829	\$11,759,712	\$13,186,493	\$14,387,054
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$10,149,239	\$10,325,821	\$10,442,177	\$11,282,241	\$12,563,558	\$13,355,272	\$12,373,928	\$10,766,829	\$11,759,712	\$13,186,493	\$14,387,054
55											
56 Distibution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$971,105	\$975,960	\$980,840	\$985,744	\$990,673	\$995,626	\$1,000,604	\$1,005,607	\$1,010,635	\$1,015,689	\$1,020,767
59 Services Authority	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
60 Total Set Aside Funds	\$1,294,806	\$1,301,280	\$1,307,787	\$1,314,325	\$1,320,897	\$1,327,502	\$1,334,139	\$1,340,810	\$1,347,514	\$1,354,251	\$1,361,023
61											
62 Net Operating Revenues	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	\$0

Financial Pro Forma
Region 2000 Services Authority
Full LFG Revenue

	Projected FY 2043	Projected FY 2044	Projected FY 2045	Projected FY 2046	Projected FY 2047	Projected FY 2048	Projected FY 2049	Projected FY 2050	Projected FY 2051	Projected FY 2052	Projected FY 2053
1 Disposal Rates											
2 Cost of Service Rate	\$68.57	\$64.41	\$62.86	\$68.75	\$69.92	\$70.06	\$67.12	\$59.69	\$63.38	\$63.91	\$98.71
3 Member Rate	\$68.57	\$64.41	\$62.86	\$68.75	\$69.92	\$70.06	\$67.12	\$59.69	\$63.38	\$63.91	\$98.71
4 Other Contracts	\$78.57	\$74.41	\$72.86	\$78.75	\$79.92	\$80.06	\$77.12	\$69.69	\$73.38	\$73.91	\$108.71
5 Market Rate (Private Haulers)	\$78.57	\$74.41	\$72.86	\$78.75	\$79.92	\$80.06	\$77.12	\$69.69	\$73.38	\$73.91	\$108.71
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	\$2.00	\$3.00
7											
8 Operating Revenue											
9 Member Cities	\$5,345,530	\$5,046,685	\$4,949,804	\$5,440,301	\$5,560,967	\$5,599,834	\$5,391,826	\$4,818,964	\$5,141,811	\$5,211,357	\$2,730,125
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$10,746,892	\$10,229,389	\$10,066,279	\$10,933,793	\$11,152,451	\$11,227,623	\$10,869,673	\$9,871,598	\$10,445,135	\$10,574,275	\$5,275,466
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$16,092,422	\$15,276,075	\$15,016,083	\$16,374,094	\$16,713,418	\$16,827,456	\$16,261,499	\$14,690,562	\$15,586,946	\$15,785,632	\$8,005,591
14											
15 Operating Expenditures											
16 Personnel	\$2,943,265	\$3,025,676	\$3,110,395	\$3,197,486	\$3,287,016	\$3,379,052	\$3,473,666	\$3,570,928	\$3,670,914	\$3,773,700	\$1,309,398
17 Landfill O&M	\$2,673,514	\$2,748,373	\$2,825,327	\$2,904,436	\$2,985,761	\$3,069,362	\$3,155,304	\$3,243,653	\$3,334,475	\$3,427,840	\$1,189,391
18 Landfill Gas O&M	\$214,283	\$220,283	\$226,451	\$232,792	\$239,310	\$246,011	\$252,899	\$259,980	\$267,260	\$274,743	\$282,436
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,158,043	\$2,156,333	\$2,154,615	\$2,152,888	\$2,151,152	\$2,149,408	\$2,147,655	\$2,145,894	\$2,144,123	\$2,142,344	\$1,595,865
22 Excess Revenue Closure and Post-Closure Contributic	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$8,877,832	\$9,041,102	\$9,208,943	\$9,381,484	\$9,558,856	\$9,741,194	\$9,928,638	\$10,121,331	\$10,319,418	\$10,523,052	\$5,045,183
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$7,088)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$341,957)	(\$343,667)	(\$345,385)	(\$347,112)	(\$348,848)	(\$350,592)	(\$352,345)	(\$354,106)	(\$355,877)	(\$357,656)	(\$121,323)
31 Reimbursable Expenses	(\$289,609)	(\$297,718)	(\$306,054)	(\$314,623)	(\$323,433)	(\$332,489)	(\$341,799)	(\$351,369)	(\$361,207)	(\$371,321)	(\$128,841)
32 Landfill Gas Royalties	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$810,000)	(\$1,210,000)
33 Total Operating Expenditures	\$7,415,266	\$7,568,717	\$7,726,504	\$7,888,749	\$8,055,576	\$8,227,114	\$8,403,495	\$8,584,855	\$8,771,334	\$8,963,075	\$3,577,931
34											
35 Revenues Available for Debt Service	\$8,677,155	\$7,707,357	\$7,289,579	\$8,485,345	\$8,657,842	\$8,600,343	\$7,858,004	\$6,105,707	\$6,815,612	\$6,822,557	\$4,427,660
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$3,606,578	\$2,104,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$2,808,154	\$2,808,635	\$2,808,534	\$2,808,551	\$2,808,502	\$2,808,273	\$1,638,239	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$525,350	\$1,973,716	\$3,162,557	\$3,162,113	\$3,161,732	\$3,162,063	\$3,162,447	\$3,162,157	\$3,161,984	\$1,844,404
48 Gas Related Projects	\$894,595	\$894,595	\$1,125,789	\$1,125,789	\$1,291,838	\$1,227,971	\$1,648,323	\$1,526,834	\$2,229,947	\$2,229,947	\$2,097,965
49 Total Debt Service	\$7,309,328	\$6,332,690	\$5,908,039	\$7,096,897	\$7,262,452	\$7,197,976	\$6,448,625	\$4,689,281	\$5,392,104	\$5,391,931	\$3,942,368
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$14,724,594	\$13,901,408	\$13,634,543	\$14,985,646	\$15,318,028	\$15,425,089	\$14,852,120	\$13,274,136	\$14,163,438	\$14,355,006	\$7,520,299
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$14,724,594	\$13,901,408	\$13,634,543	\$14,985,646	\$15,318,028	\$15,425,089	\$14,852,120	\$13,274,136	\$14,163,438	\$14,355,006	\$7,520,299
55											
56 Distribution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$1,025,871	\$1,031,000	\$1,036,155	\$1,041,336	\$1,046,543	\$1,051,775	\$1,057,034	\$1,062,319	\$1,067,631	\$1,072,969	\$363,969
59 Services Authority	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
60 Total Set Aside Funds	\$1,367,828	\$1,374,667	\$1,381,540	\$1,388,448	\$1,395,390	\$1,402,367	\$1,409,379	\$1,416,426	\$1,423,508	\$1,430,626	\$485,292
61											
62 Net Operating Revenues	\$0	\$0	\$0	\$0	\$0	(\$0)	(\$0)	\$0	\$0	\$0	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	\$0	\$0	\$0	\$0	\$0	(\$0)	(\$0)	\$0	\$0	\$0	\$0

Appendix F
Pro Forma – 50% LFG Revenue

FINAL DRAFT

Financial Pro Forma
Region 2000 Services Authority
50% LFG Revenue

	Actual FY 2023	Projected FY 2024	Projected FY 2025	Projected FY 2026	Projected FY 2027	Projected FY 2028	Projected FY 2029	Projected FY 2030	Projected FY 2031
1 Disposal Rates									
2 Cost of Service Rate	\$32.43	\$31.54	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$51.64
3 Member Rate	\$30.24	\$30.25	\$41.75	\$39.77	\$41.03	\$44.03	\$46.24	\$47.06	\$51.64
4 Other Contracts	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$61.64
5 Market Rate (Private Haulers)	\$40.30	\$40.25	\$51.75	\$49.77	\$51.03	\$54.03	\$56.24	\$57.06	\$61.64
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7									
8 Operating Revenue									
9 Member Cities	\$2,264,892	\$2,145,028	\$2,975,114	\$2,848,375	\$2,953,623	\$3,185,114	\$3,361,333	\$3,438,435	\$3,791,601
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$5,070,985	\$5,007,744	\$6,470,403	\$6,254,283	\$6,445,231	\$6,857,710	\$7,173,245	\$7,314,903	\$7,940,964
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$7,335,877	\$7,152,772	\$9,445,517	\$9,102,658	\$9,398,855	\$10,042,824	\$10,534,578	\$10,753,338	\$11,732,564
14									
15 Operating Expenditures									
16 Personnel	\$1,495,898	\$1,741,647	\$1,790,413	\$1,840,545	\$1,892,080	\$1,945,058	\$1,999,520	\$2,055,506	\$2,113,061
17 Landfill O&M	\$1,799,805	\$1,582,025	\$1,626,322	\$1,671,859	\$1,718,671	\$1,766,794	\$1,816,264	\$1,867,119	\$1,919,398
18 Landfill Gas O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,841
19 Equipment Replacement Reserve Contribution	\$664,716	\$174,387	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$288,977	(\$266,854)	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,437,225	\$2,179,511	\$2,177,909
22 Excess Revenue Closure and Post-Closure Contributic	\$0	\$0	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$4,249,396	\$3,231,205	\$6,776,100	\$6,873,331	\$6,973,249	\$7,075,929	\$7,118,672	\$6,969,395	\$7,233,069
28 Interest and Other Income	(\$77,884)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg									
30 Revenue Offset from Reserves	\$0	\$0	(\$312,595)	(\$314,158)	(\$315,729)	(\$317,308)	(\$318,894)	(\$320,489)	(\$322,091)
31 Reimbursable Expenses	(\$146,500)	(\$171,373)	(\$176,171)	(\$181,104)	(\$186,175)	(\$191,388)	(\$196,747)	(\$202,256)	(\$207,919)
32 Landfill Gas Royalties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$405,000)
33 Total Operating Expenditures	\$4,025,012	\$3,038,832	\$6,266,333	\$6,357,069	\$6,450,345	\$6,546,233	\$6,582,031	\$6,425,651	\$6,277,059
34									
35 Revenues Available for Debt Service	\$3,310,865	\$4,113,940	\$3,179,184	\$2,745,589	\$2,948,510	\$3,496,591	\$3,952,546	\$4,327,687	\$5,455,505
36									
37 Debt Service (DS)									
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$829,016	\$829,423	\$69,122	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$310,227	\$310,227	\$310,227	\$310,227	\$310,227	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$1,112,891	\$1,112,820	\$370,913	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$542,049	\$1,178,769	\$1,178,541	\$1,178,729	\$1,178,744	\$1,178,585	\$687,420	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$196,623	\$738,548	\$1,183,583	\$1,183,609	\$1,183,498
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$495,740	\$1,862,124	\$2,983,643
45 Phase VIII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
49 Total Debt Service	\$2,483,956	\$3,121,012	\$1,928,803	\$1,488,956	\$1,685,594	\$2,227,360	\$2,676,970	\$3,045,733	\$4,167,141
50									
51 Total Expenses									
52 Subtotal Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,444,200
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$6,508,968	\$6,159,844	\$8,195,136	\$7,846,025	\$8,135,939	\$8,773,594	\$9,259,001	\$9,471,384	\$10,444,200
55									
56 Distribution of Airspace Reserve									
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$943,832	\$933,120	\$937,786	\$942,475	\$947,187	\$951,923	\$956,682	\$961,466	\$966,273
59 Services Authority	\$314,611	\$311,040	\$312,595	\$314,158	\$315,729	\$317,308	\$318,894	\$320,489	\$322,091
60 Total Set Aside Funds	\$1,258,443	\$1,244,160	\$1,250,381	\$1,256,633	\$1,262,916	\$1,269,230	\$1,275,577	\$1,281,954	\$1,288,364
61									
62 Net Operating Revenues	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	(\$431,534)	(\$251,233)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)

Financial Pro Forma
Region 2000 Services Authority
50% LFG Revenue

	Projected FY 2032	Projected FY 2033	Projected FY 2034	Projected FY 2035	Projected FY 2036	Projected FY 2037	Projected FY 2038	Projected FY 2039	Projected FY 2040	Projected FY 2041	Projected FY 2042
1 Disposal Rates											
2 Cost of Service Rate	\$51.92	\$52.53	\$52.83	\$56.64	\$62.54	\$66.02	\$61.01	\$53.07	\$57.50	\$63.93	\$69.23
3 Member Rate	\$51.92	\$52.53	\$52.83	\$56.64	\$62.54	\$66.02	\$61.01	\$53.07	\$57.50	\$63.93	\$69.23
4 Other Contracts	\$61.92	\$62.53	\$62.83	\$66.64	\$72.54	\$76.02	\$71.01	\$63.07	\$67.50	\$73.93	\$79.23
5 Market Rate (Private Haulers)	\$61.92	\$62.53	\$62.83	\$66.64	\$72.54	\$76.02	\$71.01	\$63.07	\$67.50	\$73.93	\$79.23
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7											
8 Operating Revenue											
9 Member Cities	\$3,831,549	\$3,895,654	\$3,937,895	\$4,242,867	\$4,708,029	\$4,995,448	\$4,639,187	\$4,055,755	\$4,416,205	\$4,934,176	\$5,370,020
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$8,017,496	\$8,136,447	\$8,217,069	\$8,758,699	\$9,581,426	\$10,092,325	\$9,473,880	\$8,456,884	\$9,096,020	\$10,011,569	\$10,783,056
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$11,849,045	\$12,032,101	\$12,154,964	\$13,001,566	\$14,289,455	\$15,087,773	\$14,113,067	\$12,512,638	\$13,512,226	\$14,945,745	\$16,153,076
14											
15 Operating Expenditures											
16 Personnel	\$2,172,226	\$2,233,049	\$2,295,574	\$2,359,850	\$2,425,926	\$2,493,852	\$2,563,680	\$2,635,463	\$2,709,256	\$2,785,115	\$2,863,098
17 Landfill O&M	\$1,973,142	\$2,028,390	\$2,085,185	\$2,143,570	\$2,203,590	\$2,265,290	\$2,328,718	\$2,393,922	\$2,460,952	\$2,529,859	\$2,600,695
18 Landfill Gas O&M	\$158,148	\$162,576	\$167,128	\$171,808	\$176,619	\$181,564	\$186,648	\$191,874	\$197,246	\$202,769	\$208,447
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,176,298	\$2,174,680	\$2,173,053	\$2,171,419	\$2,169,776	\$2,168,125	\$2,166,465	\$2,164,798	\$2,163,122	\$2,161,437	\$2,159,744
22 Excess Revenue Closure and Post-Closure Contributiv	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$7,350,286	\$7,470,784	\$7,594,657	\$7,721,997	\$7,852,904	\$7,987,476	\$8,125,815	\$8,268,029	\$8,414,224	\$8,564,513	\$8,719,009
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$323,702)	(\$325,320)	(\$326,947)	(\$328,581)	(\$330,224)	(\$331,875)	(\$333,535)	(\$335,202)	(\$336,878)	(\$338,563)	(\$340,256)
31 Reimbursable Expenses	(\$213,741)	(\$219,725)	(\$225,878)	(\$232,202)	(\$238,704)	(\$245,388)	(\$252,259)	(\$259,322)	(\$266,583)	(\$274,047)	(\$281,721)
32 Landfill Gas Royalties	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)
33 Total Operating Expenditures	\$6,386,844	\$6,499,739	\$6,615,832	\$6,735,214	\$6,857,976	\$6,984,212	\$7,114,022	\$7,247,504	\$7,384,763	\$7,525,903	\$7,671,033
34											
35 Revenues Available for Debt Service	\$5,462,201	\$5,532,362	\$5,539,132	\$6,266,352	\$7,431,480	\$8,103,561	\$6,999,045	\$5,265,134	\$6,127,463	\$7,419,842	\$8,482,043
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$1,183,624	\$1,183,338	\$1,183,432	\$1,183,398	\$690,498	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$2,983,771	\$2,983,877	\$2,984,046	\$2,984,094	\$2,983,907	\$2,984,277	\$1,741,014	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$0	\$0	\$0	\$599,179	\$2,250,822	\$3,606,426	\$3,606,553	\$3,606,985	\$3,606,722	\$3,606,211	\$3,606,190
46 Phase IX Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$466,576	\$1,752,728	\$2,808,179
47 Phase X Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
48 Gas Related Projects	\$0	\$63,867	\$63,867	\$185,357	\$185,357	\$185,357	\$317,339	\$317,339	\$706,652	\$706,652	\$706,652
49 Total Debt Service	\$4,167,395	\$4,231,082	\$4,231,345	\$4,952,027	\$6,110,583	\$6,776,059	\$5,664,906	\$3,924,324	\$4,779,949	\$6,065,591	\$7,121,021
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$10,554,239	\$10,730,821	\$10,847,177	\$11,687,241	\$12,968,558	\$13,760,272	\$12,778,928	\$11,171,829	\$12,164,712	\$13,591,493	\$14,792,054
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$10,554,239	\$10,730,821	\$10,847,177	\$11,687,241	\$12,968,558	\$13,760,272	\$12,778,928	\$11,171,829	\$12,164,712	\$13,591,493	\$14,792,054
55											
56 Distribution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$971,105	\$975,960	\$980,840	\$985,744	\$990,673	\$995,626	\$1,000,604	\$1,005,607	\$1,010,635	\$1,015,689	\$1,020,767
59 Services Authority	\$323,702	\$325,320	\$326,947	\$328,581	\$330,224	\$331,875	\$333,535	\$335,202	\$336,878	\$338,563	\$340,256
60 Total Set Aside Funds	\$1,294,806	\$1,301,280	\$1,307,787	\$1,314,325	\$1,320,897	\$1,327,502	\$1,334,139	\$1,340,810	\$1,347,514	\$1,354,251	\$1,361,023
61											
62 Net Operating Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)

Financial Pro Forma
Region 2000 Services Authority
50% LFG Revenue

	Projected FY 2043	Projected FY 2044	Projected FY 2045	Projected FY 2046	Projected FY 2047	Projected FY 2048	Projected FY 2049	Projected FY 2050	Projected FY 2051	Projected FY 2052	Projected FY 2053
1 Disposal Rates											
2 Cost of Service Rate	\$70.46	\$66.29	\$64.73	\$70.61	\$71.77	\$71.90	\$68.95	\$61.51	\$65.19	\$65.72	\$106.65
3 Member Rate	\$70.46	\$66.29	\$64.73	\$70.61	\$71.77	\$71.90	\$68.95	\$61.51	\$65.19	\$65.72	\$106.65
4 Other Contracts	\$80.46	\$76.29	\$74.73	\$80.61	\$81.77	\$81.90	\$78.95	\$71.51	\$75.19	\$75.72	\$116.65
5 Market Rate (Private Haulers)	\$80.46	\$76.29	\$74.73	\$80.61	\$81.77	\$81.90	\$78.95	\$71.51	\$75.19	\$75.72	\$116.65
6 Inert	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.00	\$2.00	\$3.00
7											
8 Operating Revenue											
9 Member Cities	\$5,492,559	\$5,193,714	\$5,096,833	\$5,587,329	\$5,707,995	\$5,746,862	\$5,538,855	\$4,965,993	\$5,288,840	\$5,358,386	\$2,949,761
10 Lynchburg Contracts & Other Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Market Rate and Other Contract Tonnage	\$11,004,863	\$10,487,361	\$10,324,250	\$11,191,764	\$11,410,423	\$11,485,594	\$11,127,644	\$10,129,569	\$10,703,106	\$10,832,246	\$5,660,830
12 One-Time Contract Tonnage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Total Operating Revenue	\$16,497,422	\$15,681,075	\$15,421,083	\$16,779,094	\$17,118,418	\$17,232,456	\$16,666,499	\$15,095,562	\$15,991,946	\$16,190,632	\$8,610,591
14											
15 Operating Expenditures											
16 Personnel	\$2,943,265	\$3,025,676	\$3,110,395	\$3,197,486	\$3,287,016	\$3,379,052	\$3,473,666	\$3,570,928	\$3,670,914	\$3,773,700	\$1,309,398
17 Landfill O&M	\$2,673,514	\$2,748,373	\$2,825,327	\$2,904,436	\$2,985,761	\$3,069,362	\$3,155,304	\$3,243,653	\$3,334,475	\$3,427,840	\$1,189,391
18 Landfill Gas O&M	\$214,283	\$220,283	\$226,451	\$232,792	\$239,310	\$246,011	\$252,899	\$259,980	\$267,260	\$274,743	\$282,436
19 Equipment Replacement Reserve Contribution	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770	\$546,770
20 Equipment Lease Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 Authority Closure and Post-Closure Contributions	\$2,158,043	\$2,156,333	\$2,154,615	\$2,152,888	\$2,151,152	\$2,149,408	\$2,147,655	\$2,145,894	\$2,144,123	\$2,142,344	\$1,595,865
22 Excess Revenue Closure and Post-Closure Contributic	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
23 O&M Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24 Environmental Remediation Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25 Future Disposal Planning Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27 Subtotal Operating Expenses	\$8,877,832	\$9,041,102	\$9,208,943	\$9,381,484	\$9,558,856	\$9,741,194	\$9,928,638	\$10,121,331	\$10,319,418	\$10,523,052	\$5,045,183
28 Interest and Other Income	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$21,000)	(\$7,088)
29 Closure Liability Accrual from Lynchburg											
30 Revenue Offset from Reserves	(\$341,957)	(\$343,667)	(\$345,385)	(\$347,112)	(\$348,848)	(\$350,592)	(\$352,345)	(\$354,106)	(\$355,877)	(\$357,656)	(\$121,323)
31 Reimbursable Expenses	(\$289,609)	(\$297,718)	(\$306,054)	(\$314,623)	(\$323,433)	(\$332,489)	(\$341,799)	(\$351,369)	(\$361,207)	(\$371,321)	(\$128,841)
32 Landfill Gas Royalties	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$405,000)	(\$605,000)
33 Total Operating Expenditures	\$7,820,266	\$7,973,717	\$8,131,504	\$8,293,749	\$8,460,576	\$8,632,114	\$8,808,495	\$8,989,855	\$9,176,334	\$9,368,075	\$4,182,931
34											
35 Revenues Available for Debt Service	\$8,677,155	\$7,707,357	\$7,289,579	\$8,485,345	\$8,657,842	\$8,600,343	\$7,858,004	\$6,105,707	\$6,815,612	\$6,822,557	\$4,427,660
36											
37 Debt Service (DS)											
38 Series 2008 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39 Series 2011 Debt (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40 Property Acquisition (Internal Loan)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
41 Phase IV Landfill (payment to escrow account)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
42 Phase V Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
43 Phase VI Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
44 Phase VII Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
45 Phase VIII Landfill	\$3,606,578	\$2,104,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46 Phase IX Landfill	\$2,808,154	\$2,808,635	\$2,808,534	\$2,808,551	\$2,808,502	\$2,808,273	\$1,638,239	\$0	\$0	\$0	\$0
47 Phase X Landfill	\$0	\$525,350	\$1,973,716	\$3,162,557	\$3,162,113	\$3,161,732	\$3,162,063	\$3,162,447	\$3,162,157	\$3,161,984	\$1,844,404
48 Gas Related Projects	\$894,595	\$894,595	\$1,125,789	\$1,125,789	\$1,291,838	\$1,227,971	\$1,648,323	\$1,526,834	\$2,229,947	\$2,229,947	\$2,097,965
49 Total Debt Service	\$7,309,328	\$6,332,690	\$5,908,039	\$7,096,897	\$7,262,452	\$7,197,976	\$6,448,625	\$4,689,281	\$5,392,104	\$5,391,931	\$3,942,368
50											
51 Total Expenses											
52 Subtotal Operating Expenses and Debt Service	\$15,129,594	\$14,306,408	\$14,039,543	\$15,390,646	\$15,723,028	\$15,830,089	\$15,257,120	\$13,679,136	\$14,568,438	\$14,760,006	\$8,125,299
53 Offset from Prior Year Net Revenue or Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
54 Total Operating Expenses and Debt Service	\$15,129,594	\$14,306,408	\$14,039,543	\$15,390,646	\$15,723,028	\$15,830,089	\$15,257,120	\$13,679,136	\$14,568,438	\$14,760,006	\$8,125,299
55											
56 Distibution of Airspace Reserve											
57 City of Lynchburg	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
58 Campbell County	\$1,025,871	\$1,031,000	\$1,036,155	\$1,041,336	\$1,046,543	\$1,051,775	\$1,057,034	\$1,062,319	\$1,067,631	\$1,072,969	\$363,969
59 Services Authority	\$341,957	\$343,667	\$345,385	\$347,112	\$348,848	\$350,592	\$352,345	\$354,106	\$355,877	\$357,656	\$121,323
60 Total Set Aside Funds	\$1,367,828	\$1,374,667	\$1,381,540	\$1,388,448	\$1,395,390	\$1,402,367	\$1,409,379	\$1,416,426	\$1,423,508	\$1,430,626	\$485,292
61											
62 Net Operating Revenues	\$0	(\$0)	\$0	\$0	\$0	(\$0)	(\$0)	\$0	\$0	(\$0)	\$0
63 Additional Reserve Contributions (Withdrawals)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64 Net Operating Revenues after Reserve Contr.	\$0	(\$0)	\$0	\$0	\$0	(\$0)	(\$0)	\$0	\$0	(\$0)	\$0

Attachments
Preliminary Schedule
Table of Waste Quantities

FINAL DRAFT

REGION 2000 SERVICES AUTHORITY LIVESTOCK ROAD FACILITY - Permit 610 LANDFILL EXPANSION - BENNETT PROPERTY - assume initial land use planning complete 12/31/24 Estimated Fill volume = Approximately 8,000,000 cubic yards (Based on 2024 concept) Prepared: 6/14/2024 by FJR							
ACTIVITY	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029	
Life of Landfill through Phase V							
PERMITTING PHASE VI							
Local land use planning - Step 1							
Local land use planning - Step 2							
Part A - Hydro-geo evaluation		NOI/Drilling/App	Review				
Part B - Design			Survey/Design/App	Review/Hearing			
Air permitting							
Storm water							
SWMP - Major amendment							
Construction next phase (Phase VI)				Site plan app./Bid	Const./Cert.		
Operation next phase (Phase VI)							
Notes: 1. Life of existing landfill based on 5/17/24 information provided to DEQ. Survey by Geologic and analysis by TRC. Date of survey 1/30/23. 2. Life of existing landfill has been diminishing as tonnage has increased over the past several years. Compaction still good. 3. Local land use permitting (Part 1) will require rezoning and special exception permit similar to work completed in 2014. 4. Local land use permitting (Part 2) is local government certifications in accordance with Notice of Intent. Requires Part 1 to be completed. 5. Part A and Part B permitting (Landfill permit) will be reviewed by DEQ in accordance with 9VAC20-81 regulations and Submission instruction 1. 6. Some overlap in permitting is allowed but DEQ may not review any Part B submittal until Part A approved. 7. Temporary authorization to construct may be needed if Part B not approved or final permit issued.							

Attachment 2

REGION 2000 SERVICES AUTHORITY
 LIVESTOCK ROAD FACILITY - Permit 610
 LANDFILL EXPANSION - BENNETT PROPERTY
 Prepared: 6/14/2024

YEAR		Volume Landfilled		Tonnage Reported the Summer of	Notes
1	197,496	314,000	CY	2024	Filling Phase V
2	198,483	315,570	CY	2025	
3	199,476	317,148	CY	2026	
4	200,473	318,734	CY	2027	End Phase V Service life
5	201,476	320,327	CY	2028	Start Phase VI Service Life 2028 Summer
6	202,483	321,929	CY	2029	
7	203,495	323,539	CY	2030	Start Phase VII Service Life 2030 summer
8	204,513	325,156	CY	2031	
9	205,535	326,782	CY	2032	
10	206,563	328,416	CY	2033	
11	207,596	330,058	CY	2034	
12	208,634	331,708	CY	2035	
13	209,677	333,367	CY	2036	Start Phase VIII Service Life 2036 Summer
14	210,726	335,034	CY	2037	
15	211,779	336,709	CY	2038	
16	212,838	338,392	CY	2039	
17	213,902	340,084	CY	2040	
18	214,972	341,785	CY	2041	Start Phase IX Service Life 2041 Winter
19	216,047	343,494	CY	2042	
20	217,127	345,211	CY	2043	
21	218,212	346,937	CY	2044	
22	219,304	348,672	CY	2045	Start Phase X Service Life 2045 Winter
23	220,400	350,415	CY	2046	
24	221,502	352,167	CY	2047	
25	222,610	353,928	CY	2048	
26	223,723	355,698	CY	2049	End Phase X Service Life 2049 Summer
Total Estimated Landfilled Volume 2028-2047 (20-Year Duration)		6,720,183	CY		
Cap Material Depth		1	YD		
Approximate Cap Area		73.6	AC		
Cap Material Volume		356,224	YD		
Average Annual Volume Used		336,009	CY		
Total 20-YR Volume Needed		7,076,407	CY		

Notes:

1. LUF assumed is 1,248 pounds per cubic yard.