VOLUSIA COUNTY SOLID WASTE SYSTEM

FINANCIAL RESPONSIBILITY CLOSURE & LONG-TERM CARE COST ESTIMATES FY 2022

Prepared for:



VOLUSIA COUNTY – SOLID WASTE DIVISION

1990 Tomoka Farms Road Port Orange FL 32128

Prepared by:



HDR ENGINEERING, INC.

76 S. Laura St, Suite 1600 Jacksonville, FL 32202 Telephone: (904) 598-8900

August 2022

SECTION 1.0

Executive Summary

The following report provides an estimate of closing and long-term care costs for the various portions of the Volusia County (County) Solid Waste Management System for use by the County in providing assurance of Financial Responsibility as required by the Florida Administrative Code, (FAC) Section 62-701.630.

This report provides the County with an updated estimate of closing and long-term care costs for the active North Cell Class I and Class III landfills at the Tomoka Farms Road Solid Waste Management Facility (TFR Facility), and the long-term care costs for the closed South Cell at the TFR Facility and the closed Plymouth Avenue Landfill. The stormwater improvements associated with Class III landfill permit modification submitted in August 2019 by Neel-Schaffer and approved by FDEP in January 2020 with permit #0078767-042-SO-T3 was constructed in 2022. Accordingly, the closure limits of the Class III landfill were adjusted based on an as-built survey of the Class III landfill stormwater improvements dated June 30, 2022 by J.J. Matejaka & Associates, Inc. The inside limit of the GCL lined perimeter channel is used for the footprint of the Class III landfill to be closed.

The following definitions for the words closing and closure as stated in FAC 62-701 are used in this report.

"Closing": means the time at which a solid waste management facility ceases to

accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the facility for any necessary monitoring and

maintenance after closing.

"Closure": means the cessation of operation of a solid waste management facility and

the act of securing such a facility so that it will pose no significant threat to human health or the environment. This includes closing, long term

monitoring, maintenance, and financial responsibility.

This report was prepared assuming that financial responsibility for FY 2022 would be met by the Escrow Accounting Method, as defined in FAC 62-701.630(5). The 2021 closing and long-term care cost estimates, approved by FDEP, were adjusted for TFR Class III landfill area using the current year annual inflation factor published by the FDEP solid waste website (https://floridadep.gov/waste/permitting-compliance-assistance/content/solid-waste-cost-estimates). The financial assurance for TFR Class I landfill was recalculated during the Operations Permit Modification Application submitted by SCS Engineers on November 19, 2021. The FDEP issued the modified permit #0078767-044-SO-IM on January 24, 2022. Accordingly, inflation factor adjustment for TFR Class I landfill was not used for year 2022.

The long-term care cost estimates for the Plymouth Avenue Landfill and TFR Facility's South Cell were updated by adjusting the 2021 approved costs based on the current year annual inflation factor provided by the FDEP. The current year inflation factor is 1.041 for estimates due September 1, 2022.

The FDEP Form 62-701.900(28) was completed for each facility to comply with the filing

requirements of FAC 62-701.630. The estimated escrow funding obligations are separately presented for each disposal area.

Since last year's report:

- The County continued disposal operations in the Class I North Cell and Class III landfills at the TFR Facility.
- The County continued long-term care activities at Plymouth Avenue Landfill.
- The County completed construction of stormwater improvements associated with the Class III landfill.
- The County modified the TFR Class I North Cell operations permit.

This report includes:

- Updated closing and long-term care cost estimates for the Class I and Class III solid waste disposal areas at the TFR Facility are based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the TFR South Cell and Plymouth Avenue Landfill based on current permit requirements and previously approved cost estimates adjusted for inflation.
- Closure cost estimate for the waste tire temporary storage area at the TFR Facility.

Based on the updated cost estimates for closure and long-term care for the noted facilities and detailed in this report, the County's escrow fund must provide for financial responsibility for FY 2022 in the amount of \$22,684,363.62 per Table 7.

The FY 2022 Volusia County Landfill Escrow Fund consisting of account GMS 3064C00071 for TFR Facility and account GMS 3064C00070 for Plymouth Avenue Landfill showed a combined balance of \$16,276,524.00 as of September 30, 2021. The calculated increase to the Volusia County escrow fund for FY2022 financial responsibility equals \$6,407,839.62.

In accordance with FDEP requirements, the fund balances reported should indicate balance information for closing and long term care costs separately for each disposal facility. The updated closure cost for each facility and required escrow fund balance for FY 2022 is summarized as follows. The financial assurance forms must be submitted by September 1, 2022 to comply with the regulatory deadline specified in FAC 62-701.630(4)(a).



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval:

I. GENERAL I	NFORMATION:						
Facility Name:	Tomoka Farm	s Road La	ndfill-North Ce	ell, Class I	\	WACS ID: 27540	
Permit Applica	ition or Consent C	order No.:	0078767-03	0-SO-01	Expira	ition Date: <u>05/1</u>	3/2033
Facility Address	ss: <u>1990 Tomo</u>	ka Farms F	Road, Port Ora	nge, Florida 32128	1		
Permittee or O	wner/Operator:	Volusia (County Solid V	Vaste Division			
Mailing Addres	ss: <u>1990 Tomol</u>	ka Farms F	Road, Port Ora	nge, Florida 32128	1		
Latitude:	29 °	07'	50 "	Longitude:	81°	06'	02 "
Coordinate Me	thod: AutoCAI	D/GPS	D	atum: <u>NAD 1983/9</u>	0 (east)		
Collected by:	J.E. Zapert		C	ompany/Affiliation	Sliger & Assoc	ciates, Inc.	
Solid Waste D	isposal Units Incl	uded in Es	timate:				_
			Date Unit	Active Life of		If closed:	If closed:
			Began	Unit From Date	If active:	Date last	Official
Phas	se / Cell	Acres	Accepting Waste	of Initial Receipt of Waste	Remaining life of unit	waste received	date of closing
	ncluding Area 4	90.68	June 1999	23 years	5 years	NA	NA
		00.00	0.000	20 7000	0 y 0 0.1 0		
Total disposal	unit acreage inclu	ıded in this	s estimate:	Closure: 90.6	8 Lor	ng-Term Care:	90 68
				<u> </u>		.9	
Facili	ty type: 🙇	Class I	□ C	lass III 🗆	C&D Debris	Disposal	
(Check all	that apply)	Other:					
II. TYPE OF F	INANCIAL ASSU	JRANCE D	OCUMENT (C	Check type)			
□ Le	etter of Credit*		□ Insuran	ce Certificate	≛ Esc	row Account	
□ Pe	erformance Bond	k	□ Financia	al Test	□ For	m 29 (FA Defe	erral)
□ G	uarantee Bond*		□ Trust Fu	und Agreement			
* -	Indicates mechanisms	that require t	he use of a Standb	y Trust Fund Agreemen	t		
N 4 - 18:11:		D	0 1 15:1:1	0 " 15:1:1	0 " " "		II I D'. I '. I

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate ajustment below.

□ (a) Inflation Factor Adjustment

(b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflatory by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on th	e Department approved clos	ing cost estimate dated	:	1/24/2022
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	on		Inflation Adjusted Closing Cost Estimate:
\$18,652,868.25	x <u>1</u>		=	\$18,652,868.25
This adjustment is based on th	e Department approved long	-term care cost estimat	e dated:	1/24/2022
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	on		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$364,648.96	× <u>1</u>		=	\$364,648.96
Number of Years o	f Long Term Care Remaining	j:	×	30
Inflation Adjusted	Long-Term Care Cost Esti	mate:	=	\$10,939,468.80
	NO. 67647			
Signature by:	Owner/Operator	i Engineer	(check what ap	
Cian	aturovi ONAL MIN		ira Street, Ste 1	ddress
Digiti	aturé virialimini			uuless
Kanishka Perera PE	, Project Manager	Jacksonv	ille, FL 32202	
Name	& Title		City, Sta	ate, Zip Code
8/31/2	2022	Kanishka	.Perera@hdrinc	.com
Da	ate			il Address
	598-8900	_		
I elephon	e Number			



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval:

I. GENERAL INFORMA	TION:						
Facility Name: Tomo	ka Farm	s Road La	ndfill- Class III	Landfill		NACS ID: 27540	
Permit Application or Co	onsent C	rder No.:	0078767-03	4-SO-T3	Expira	tion Date: 1/2/	2030
Facility Address: 199	0 Tomol	ka Farms F	Road, Port Ora	inge, Florida 32128	3		
Permittee or Owner/Ope	erator:	Volusia (County Solid V	Vaste Division			
Mailing Address: 199	0 Tomol	ka Farms F	Road, Port Ora	inge, Florida 32128	}		
Latitude: 2	29°	07'	53 "	Longitude:	81°	05'	31 "
Coordinate Method:	AutoCAI	D/GPS	D	atum: <u>NAD 1983/9</u>	0 (east)		
Collected by: J.E. Zap	ert		C	company/Affiliation	Sliger & Asso	ciates, Inc.	
Solid Waste Disposal U	nits Inclu	uded in Est	timate:				
			Date Unit	Active Life of		If closed:	If closed:
			Began	Unit From Date	If active:	Date last	Official
Phase / Cell		Acres	Accepting Waste	of Initial Receipt of Waste	Remaining life of unit	waste received	date of closing
Class III LF		96.46	June 1998	24 years	8 years	NA	NA
<u> </u>		00110			<u> </u>		
Total diamonal unit corre	المما مما	dadia thia	. actimata:	Classina, OC 4	0	a Tarm Cara	00.40
Total disposal unit acrea	age inclu	idea in this	s estimate:	Closure: <u>96.4</u>	<u>6</u> LOI	ng-Term Care:	96.46
Facility type:		Class I	č C	:lass III □	C&D Debris	Disnosal	
(Check all that appl		Other:		1033 III	OGD DCDI13	- Dізрозаі	
(,,						
II. TYPE OF FINANCIA	L ASSI	JRANCE D	OCUMENT (Check type)			
□ Letter of Cr			·	ce Certificate	ĭ Esc	row Account	
□ Performano			□ Financi			m 29 (FA Defe	erral)
□ Guarantee				und Agreement		,	,
		that require t		by Trust Fund Agreemen	t		
		-					

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate ajustment below.

(a) Inflation Factor Adjustment

□ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflatory by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the	e Department approved closi	ng cost estima	te dated:	8/27/2021
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	า		Inflation Adjusted Closing Cost Estimate:
\$9,412,943.42	× <u>1.041</u>		=	\$9,798,874.10
This adjustment is based on the	e Department approved long-	term care cost	t estimate dated:	8/27/2021
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	า		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$63,032.40	× <u>1.041</u>		=	\$65,616.73
Number of Years of	Long Term Care Remaining:		×	30
Inflation Adjusted	Long-Term Care Cost Estin	nate:	=	\$1,968,501.85
Signature by:	E Dwner/Operator *	Ճ Enginee	,	,
Signa	STATE OF CORTO		76 S. Laura Str	reet, Ste 1600 Address
Signa	ALUIEN, ONAL ESTIN		,	nuul 655
	a PE, Project Manager			le, FL, 32202
Name	& Title		City, S	tate, Zip Code
8/31/20	22		Kanishka.Pe	erera@hdrinc.com
Da	te		E-Ma	ail Address
(904) 598 Telephone		_		



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

	Date of DEP Approval:						
I. GENERAL INFORMATION	ON:						
Facility Name: Tomoka	Farms Road La	ndfill- South C	Cell	\	NACS ID: 27540		
Permit Application or Cons	ent Order No.:	0078767-03	0-SO-01	Expira	Expiration Date: 05/13/2033		
Facility Address: 1990 T	omoka Farms F	Road, Port Ora	ange, Florida 32128				
Permittee or Owner/Opera	tor: <u>Volusia</u>	County Solid V	Vaste Division				
Mailing Address: 1990 T	omoka Farms F	Road, Port Ora	ange, Florida 32128				
Latitude: 29 °	07'	50 "	Longitude:	81°	06'	02 "	
	oCAD/GPS)atum: <u>NAD 1983/9</u>	,	<u> </u>		
Collected by: J.E. Zaper	<u> </u>		Company/Affiliation:	Sliger & Assoc	iates, Inc.		
Solid Waste Disposal Units	Included in Es		1				
		Date Unit	Active Life of Unit From Date	If active:	If closed: Date last	If closed: Official	
		Began Accepting	of Initial Receipt	Remaining	waste	date of	
Phase / Cell	Acres	Waste	of Waste	life of unit	received	closing	
South Cell	114	June 1978	Approx. 23 years	NA	2001	2001	
Total disposal unit acreage	included in this	s estimate:	Closure: NA	Lor	ng-Term Care:	114	
Total diopodal difficaciong	moradod m timo	o commuto.	0100010.1471		ig roim care.	117	
Facility type:		ř (Class III 🛚 🛎	C&D Debris	Disposal		
(Check all that apply)	□ Other:				•		
	_						
II. TYPE OF FINANCIAL	ASSURANCE [OCUMENT (Check type)				
□ Letter of Credi	t*	□ Insuran	ce Certificate	∑ Esc	row Account		
□ Performance B	Bond*	□ Financi	al Test	□ For	m 29 (FA Defe	erral)	
☐ Guarantee Bo	nd*	□ Trust F	und Agreement				
* - Indicates mecha	anisms that require t	he use of a Standl	by Trust Fund Agreemen	t			

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate ajustment below.

□ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflatory by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the	Department approved closin	g cost estima	te dated:	
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	ı	=	Inflation Adjusted Closing Cost Estimate:
This adjustment is based on the	Department approved long-t	erm care cos	t estimate dated:	8/27/2021
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	1		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$119,955.27	x <u>1.041</u>		=	\$124,873.44
Number of Years of	Long Term Care Remaining:		×	30
Inflation Adjusted I	ong-Term Care Cost Estim	nate:	=	\$3,746,203.08
Signature by:	Qwner/Operator NO. 67647	Ճ Enginee	`	pplies) a Street, Ste 1600
Signa				Address
Kanishka Perera	LORIDA CILI			ville, FL 32202
Name 8	Title	_	City, S	tate, Zip Code
8/31/202	2			erera@hdrinc.com
Dat	e		E-Ma	ail Address
(904) 598 Telephone		_		



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CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval:

I. GENERA	L INFORMATION	ON:						
Facility Nan	ne: <u>Plymouth</u>	n Avenue	e Landf	ill			WACS ID: 27539	
Permit Appl	lication or Cons	ent Orde	er No.:	0127461-00	4-SF	Expira	ation Date: 12/2	22/2026
Facility Address: Northeast of the intersection of Plymouth Ave and Grand Ave, West of DeLand, Florida					ida			
Permittee o	r Owner/Operat	tor: <u>v</u>	/olusia	County Solid V	Vaste Division			
Mailing Add	lress: <u>1990 T</u>	omoka I	Farms F	Road, Port Ora	nge, Florida 32128	}		
Latitude:	29 °	1	02'	35 "	Longitude:	81°	20'	50 "
Coordinate	Method: Aut	oCAD/G	SPS		atum: NAD 1983/90	0 (east)		
Collected by	y: J.E. Zapert			C	company/Affiliation	Sliger & Asso	ciates, Inc.	
Solid Waste	e Disposal Units	Include	d in Es	timate:				
				Date Unit	Active Life of		If closed:	If closed:
				Began	Unit From Date	If active:	Date last	Official
DI	hase / Cell		N oron	Accepting Waste	of Initial Receipt of Waste	Remaining life of unit	waste received	date of
			Acres		OI Waste	ille of utilit	received	closing
PI	ymouth LF		129.4	1940s				2/7/2000
							<u> </u>	<u> </u>
Total dispos	sal unit acreage	include	d in this	s estimate:	Closure: NA	Lo	ng-Term Care:	39
Fa	cility type:	Ď Cla	ass I	ř C	class III 🛚 💆	C&D Debris	s Disposal	
(Check	all that apply)	□ Ot	her:					
II. TYPE O	F FINANCIAL	ASSURA	ANCE [OCUMENT (C	Check type)			
	Letter of Credi	t*		□ Insuran	ce Certificate	Ď Esc	crow Account	
	Performance E	Bond*		□ Financi	al Test	□ For	m 29 (FA Defe	erral)
	Guarantee Bor	nd*		□ Trust F	und Agreement			
	* - Indicates mecha	anisms tha	t require t	he use of a Standb	by Trust Fund Agreemen	t		

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This adjustment is based on the	e Departme	nt approved closin	g cost estima	te dated:		
Latest Department Approved Closing Cost Estimate:		rrent Year Inflation Factor, e.g. 1.02	ı			Inflation Adjusted Closing Cost Estimate:
	×				=	
This adjustment is based on the	e Departme	ent approved long-t	erm care cos	t estimate dated	d:	8/26/2021
Latest Department Approved Annual Long-Term Care Cost Estimate:		rrent Year Inflation Factor, e.g. 1.02				Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$120,383.53	×	1.041			=	\$125,319.25
Number of Years of	Long Term	Care Remaining:			×	8
Inflation Adjusted	Long-Term	n Care Cost Estim	nate:		=	\$1,002,554.04
		11111111111111111111111111111111111111				
Signature by:	□ Owner/	Operator	Ճ Enginee	•	ck what a	applies) a Street, Ste 1600
Signa	atura 3	STATE OF				Address
Signa		LORIDA				Address
Kanishka Perera	PE. Project	ONAL ENIV tiManadèr			Jacksoı	nville, FL 32202
Name		<u> </u>				State, Zip Code
					, , -	,
8/31	/2022			ŀ	Kanishk	a.Perera@hdrinc.com
Da	te				E-N	lail Address
(904) 59	8-8900		_			
Telephone	e Number					

SECTION 2.0

Regulatory Requirements

FAC 62-701.630 addresses financial responsibility requirements for landfills and other solid waste management facilities. Government-owned landfills can demonstrate financial responsibility in several ways. Mechanisms available include establishment of an escrow account, use of the corporate guarantee (financial test), surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, and closure insurance.

Volusia County uses the escrow accounting mechanism to provide for financial responsibility. FAC 62-701.630 allows government-owned landfills to demonstrate financial responsibility for the annual cost of long-term care one-year prior to the actual final closure. The disposal areas at the TFR Facility and the Plymouth Avenue Landfill are required to have long-term care for 30 years after the landfill has been certified closed by the FDEP.

In March 1996, the U.S. Environmental Protection Agency (EPA) promulgated *Standards of Performance, Emission Guidelines and Compliance Times, and New Source Performance Standards* for municipal solid waste (MSW) landfills. These regulations brought MSW landfills under the direct control of the Clean Air Act (CAA) and require the installation of landfill gas (LFG) emissions controls for the Volusia County Tomoka Farms Road Landfill. Costs for implementation of the LFG control systems for the TFR Facility has been included in the closure cost estimates. The current FDEP closure permit for the Plymouth Avenue Landfill does not require a landfill gas collection system and costs for such system is not allocated in the updated long-term care cost estimates.

The FDEP establishes the method for estimating closing and long-term care costs for financial responsibility in FAC 62-701.630 and referencing and adopting 40 CFR, Part 264, Subpart H. These federal regulations specify that closing and long-term care cost estimates may be made by:

- Recalculating the maximum costs of closing and long-term care in current dollars; or,
- Using an inflation factor derived from the most recent Implicit Price Deflator for Gross Domestic Product published by the U.S. Department of Commerce in its *Economic Report of the President* to inflate cost estimates from the prior year.

The FDEP requirements for financial responsibility annual adjustments were met for the TFR's South Cell landfill, Class III landfill and, Plymouth Avenue landfill by updating the 2021 FDEP-approved cost estimates with the annual inflation factor. An inflation rate of 1.041 was used for this year's financial responsibility report as provided by the FDEP. This value was obtained from the FDEP Solid Waste Financial Responsibility webpage. Since TFR North Cell financial assurance was recalculated and approved in January 2022 by FDEP, no inflation factor adjustment was used to the currently approved financial assurance cost estimates. The 2021 cost estimates for the closed Plymouth Avenue Landfill was approved by the FDEP via an email dated August 26, 2021. The cost estimate for Class I South Cell landfill and Class III landfill at TFR was approved via an email dated August 27, 2021. The recalculated cost estimate for TFR Class I North Cell was approved with permit # 0078767-044-SO-IM dated January 24, 2022.

SECTION 3.0

Methodology

The long-term care costs for the Class I South Cell at TFR Facility and the Plymouth Avenue Landfill were adjusted for inflation based on the FY2021. The financial responsibility for closure and long-term care costs at Class III landfill at TFR Facility were adjusted for inflation based on the FY2021. No modifications to the TFR South Cell, TFR Class III landfill or Plymouth Avenue landfill permits have occurred since the previous year's financial assurance submittal that would necessitate a recalculation of their financial assurance responsibility. The financial assurance for TFR Class I North Cell landfill was recalculated during Operations Permit Modification Application submitted by SCS Engineers on November 19, 2021. The FDEP approved financial assurance cost estimates with the modified permit #0078767-044-SO-IM dated January 24, 2022.

The stormwater improvements associated with the Class III landfill permit modification submitted in August 2019 by Neel-Schaffer and approved by FDEP in January 2020 with permit #0078767-042-SO-T3 was constructed in year 2022. Accordingly, the closure limits of the Class III landfill were adjusted based on an as-built survey of the Class III landfill stormwater improvements dated June 30, 2022 by J.J. Matejaka & Associates, Inc. The inside limit of the GCL lined perimeter channel is used for the footprint of the Class III landfill to be closed. The construction certification report associated with stormwater improvements has been submitted to FDEP for approval. Once the certification is approved, the County will revise the August 2019 financial assurance based on the certified limits of the Class III area to be closed. Until then financial assurance requirements per the January 2020 Operations Permit renewal are not incorporated into this report.

FDEP Form 62-701.900(28) was submitted for each facility individually with the updated estimated cost estimates for closure and long-term care. Additional data including population data, airspace depletion rate, and life expectancy of the current permitted landfills are presented in Section 4.0.

Population projections and a seven-year-averaged per capita landfill capacity utilization rate for Class I and Class III solid waste is used to project future landfill airspace utilization rates. The amount of permitted airspace utilized since the previous financial assurance report was determined by comparing new aerial topographic mapping flown in June 2022 with last year's aerial topographic survey flown in May 2021. This method takes into account the landfill volume used for the required daily and intermediate cover material and the landfill volume gained due to waste decomposition and compaction, as well as other factors which may impact permitted disposal capacity and the projection of remaining life.

Table 1 provides updated population projections for the Class I and Class III solid waste service areas. The contributing population for Class I solid waste is assumed to be the population of Volusia County only as waste from Flagler County to the Volusia County TFR Facility discontinued at the end of 2013. The contributing population for Class III solid waste was also assumed to be Volusia County. The population projections are based on the data supplied by the Office of Economic and Demographic Research (EDR) (CountyPopulation_2022.pdf (state.fl.us)).

Table 2 presents the per capita permitted disposal capacity depletion rate. Tables 3 and 4 provide the permitted airspace depletion analysis for the Class I North Cell and Class III landfills. Table 5 provides a summary of the calculated closure dates and long-term care periods of the landfills. Tables 6 and 7 summarize the costs and required funding for closure and long-term care of each facility and provide an analysis of annual contributions to fund closure. Table 8 has been developed for Volusia County and presents estimates on the accrued liability.

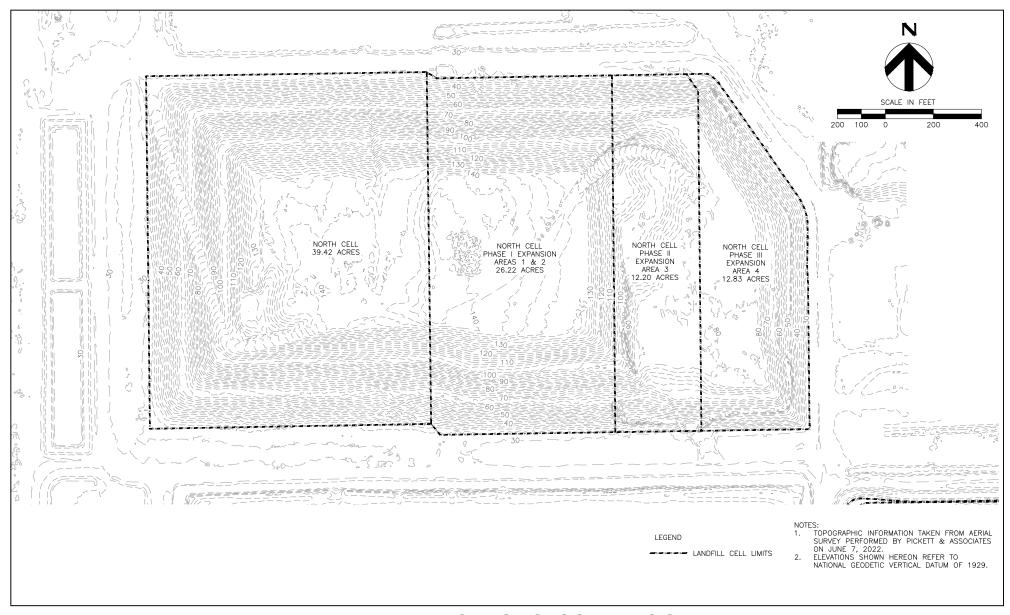
The TFR Facility waste tire storage area is a stand-alone waste tire drop-off facility where tires are loaded into containers for transportation to a permitted off-site processing facility. This operation is anticipated to remain as long as the other solid waste activities take place on the property. Since this length of time is not now defined, it is assumed that the closing date will be the same as the closing date for the TFR Solid Waste Management Facility. The cost estimate for closing the TFR Facility waste tire storage area was assumed to be the cost of disposing the quantity of tires stored at the facility. This cost was calculated by multiplying 905 tons of tires by the cost of hauling and disposal of tires by a third-party contractor currently \$167/ton for regular tires (approx. 97% of total tires) and \$288/ton for oversized tires (approx. 3% of total tires). The quantity of waste tires (approx. 905 tons of quarterly ending inventory) was calculated by averaging quarterly waste tire quantities reported since 2021 report submittal (*Quarterly Waste Tire Report & Inventory Update* reports submitted to the department: 2nd quarter 2021, 3rd quarter 2021; 4th quarter 2021; and 1st quarter 2022).

SECTION 4.0

Figures, Tables and Appendices

The figures and tables are organized as follows:

Figure <u>Number</u>	<u>Title</u>
1	Existing Topographic Survey (June 2022) - Class I North Cell – Tomoka Farms Road Landfill
2	Final Grading Plan – Class I North Cell– Tomoka Farms Road Landfill
3	Existing Topographic Survey (June 2022) - Class III Landfill-Tomoka Farms Road Landfill
4	Final Grading Plan - Class III Landfill – Tomoka Farms Road Landfill
5	Aerial Site Plan (June 2022) – Tomoka Farms Road Landfill
Table	
Number	<u>Title</u>
	<u>Title</u> Population Projections of Wasteshed Service Areas
Number	
Number 1	Population Projections of Wasteshed Service Areas
Number 1 2	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization
<u>Number</u> 1 2 3	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization
Number 1 2 3 4	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization Class III Landfill - Projected Capacity Utilization
Number 1 2 3 4 5	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization Class III Landfill - Projected Capacity Utilization Summary of Closing & Final Closure of Landfills





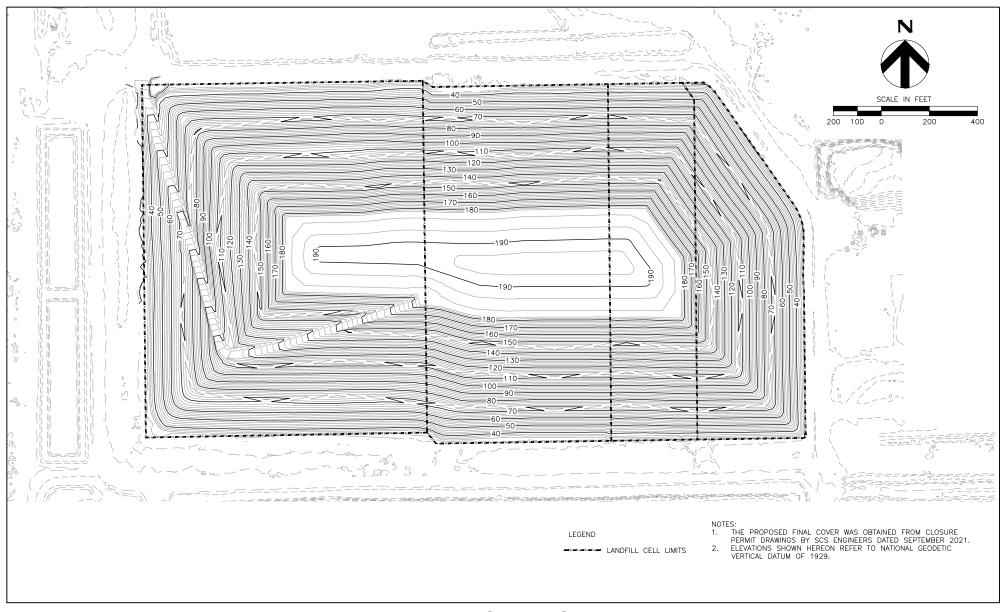
EXISTING TOPOGRAPHIC SURVEY (JUNE 2022) CLASS I NORTH CELL

VOLUSIA COUNTY, FLORIDA

DATE

07/2022

FIGURE





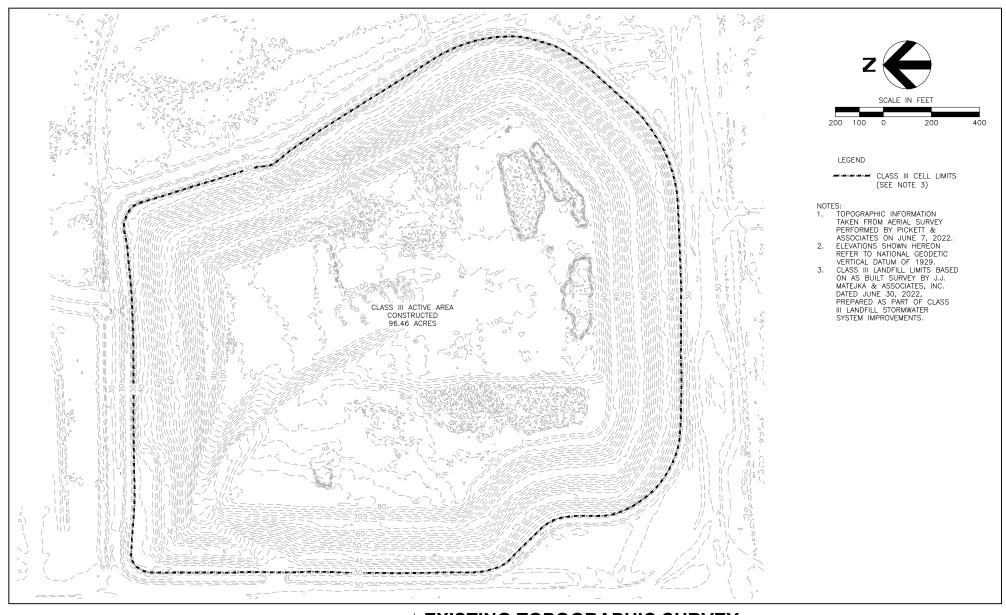
FINAL GRADING PLAN CLASS I NORTH CELL

VOLUSIA COUNTY, FLORIDA

DATE

07/2022

FIGURE





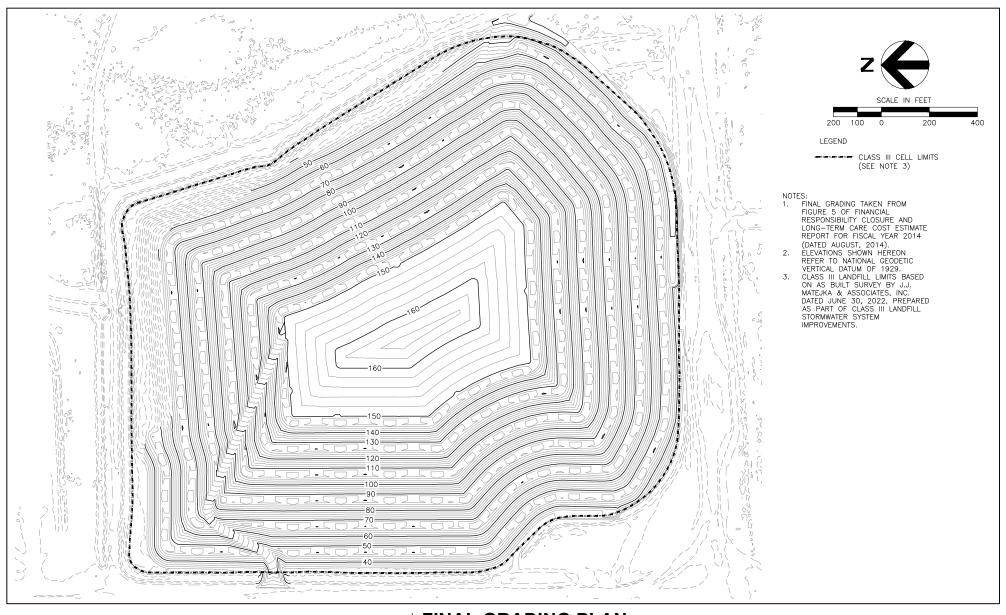
EXISTING TOPOGRAPHIC SURVEY (JUNE 2022) CLASS III LANDFILL

VOLUSIA COUNTY, FLORIDA

DATE

07/2022

FIGURE





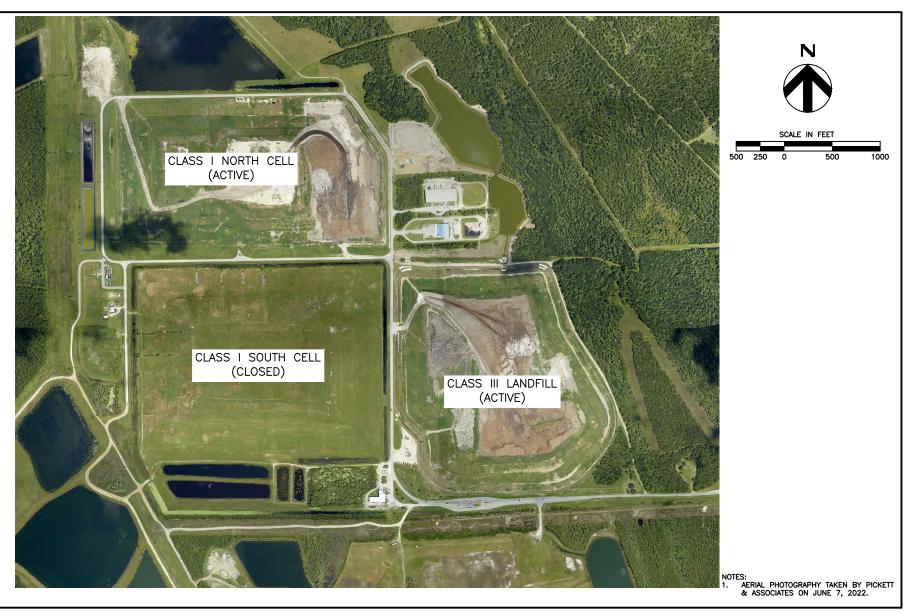
FINAL GRADING PLAN CLASS III LANDFILL

VOLUSIA COUNTY, FLORIDA

DATE

07/2022

FIGURE





AERIAL SITE PLAN (JUNE 2022)

VOLUSIA COUNTY, FLORIDA

DATE

07/2022

FIGURE

Table 1: Population Projections of Wasteshed Service Areas 2022 Financial Assurance Report Volusia County, Florida

Year	Service Area Populations ¹ Volusia County	Class I Wasteshed	Class III Wasteshed
2015	514,710	514,710	514,710
2016	521,882	521,882	521,882
2017	528,438	528,438	528,438
2018	534,961	534,961	534,961
2019	543,369	543,369	543,369
2020	553,543	553,543	553,543
2021	563,358	563,358	563,358
2022	571,952	571,952	571,952
2023	597,212	597,212	597,212
2024	585,867	585,867	585,867
2025	592,117	592,117	592,117
2026	598,183	598,183	598,183
2027	604,032	604,032	604,032
2028	609,643	609,643	609,643
2029	614,992	614,992	614,992
2030	620,057	620,057	620,057
2031	624,827	624,827	624,827
2032	629,324	629,324	629,324
2033	633,569	633,569	633,569
2034	637,629	637,629	637,629
2035	641,542	641,542	641,542
2036	645,324	645,324	645,324
2037	648,940	648,940	648,940
2038	652,424	652,424	652,424
2039	655,802	655,802	655,802
2040	659,082	659,082	659,082

^{1.} The Office of Economic and Demographic Research (EDR) is the source for Volusia County population estimates from 2015 through 2040 (Vol. 55, Bulletin 192, February 2022).

Table 2: Annual Rate of Landfill Capacity Utilization 2022 Financial Assurance Report Volusia County, Florida

A. Class I Landfill-North Cell

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class I Landfill Space Utilization Per Capita (CY/Yr) ⁽⁴⁾
2015	348,715	514,710	0.677
2016	393,627	521,882	0.754
2017	402,248	528,438	0.761
2018	405,267	534,961	0.758
2019	412,814	543,369	0.760
2020	540,425	553,543	0.976
2021	480,989	563,358	0.854
ected Rate of Cla	ass I Landfill Space Utilization Per Ca	0.791	

B. Class III Landfill

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class III Landfill Space Utilization Per Capita (CY/Yr) ⁽³⁾
2015	144,195	514,710	0.280
2016	242,864	521,882	0.465
2017	223,982	528,438	0.424
2018	279,649	534,961	0.523
2019	198,838	543,369	0.366
2020	280,669	553,543	0.507
2021	334,106	563,358	0.593
Projected Rate of Class	ss III Landfill Space Utilization Per C	Capita (CY/Yr)	0.451

- 1) The year shown refers to the period in between the annual aerial topographic surveys (i.e. year 2021 refers to May 18, 2021 to June 7, 2022). For the year 2021, the annual utilized airspace, 507,345 cubic yards for the Class II North Cell and 352,413 cubic yards for the Class III Landfill, was divided by 1.0548 to normalize for the 385 days in between aerial photograph dates (May 18, 2021 to June 7, 2022).
- 2) Annual utilization for the years 2015 through 2020 is provided by HDR Engineering's 2021 Financial Assurance Report dated August, 2021. The Class I 2021 annual utilization was calculated by Autodesk AutoCAD Civil 3D by comparing the May 18, 2021 and June 7, 2022 aerial topographic surveys by Pickett and Associates, Inc. The extent of the area used in the volume calculation was limited to North Cell, Phase I Areas 1 & 2, Phase II Area 3 and Phase III Area 4. The boundary was truncated at the 29' contour on the northern boundary of the original North Cell. The boundary used for the Class III landfill volume calculation was "the limits of GCL" (inner) line shown on the J.J. Matejka & Associates, Inc. dated June 30, 2022 record survey prepared as part of Class III Landfill Primary Stormwater Improvements Project.
- 3) The projected rate of landfill space utilization is assumed to be the average rate of per capita utilization for the past seven years.
- 4) The estimated annual landfill space utilization includes landfill space lost due to the use of intermediate/daily cover material and the space gained due to settlement and decomposition of waste.

Table 3: North Cell Class I Landfill - Projected Capacity Utilization 2022 Financial Assurance Report Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining (CY)	Percent of Permitted Disposal Capacity Used				
2020 ⁽²⁾	5/18/21			3,139,112	76%				
2021 ⁽³⁾	5/18/21 to 6/7/22	507,345	10,109,576	2,847,309	78%				
2021	6/7/22 to 9/30/22	140,400	10,249,976	2,706,910	79%				
2022	10/1/22 to 9/30/23	452,414	10,702,390 2,254,496		83%				
2023	10/1/23 to 9/30/24	472,395	11,174,784	1,782,101	86%				
2024	10/1/24 to 9/30/25	463,421	11,638,205	1,318,680	90%				
2025	10/1/25 to 9/30/26	468,365	12,106,570	850,315	93%				
2026	10/1/26 to 9/30/27	473,163	12,579,732	377,153	97%				
2027	10/1/27 to 7/15/28	377,153	12,956,885	0	100%				
	Calculated Closure Date								

- 1) Year generally represents October 1 to September 30 (i.e. Year 2022 is from October 1, 2022 to September 30, 2023).
- 2) Source is 2021 Financial Responsibility Report, HDR Engineering dated August 2021.
- 3) The net volume capacity remaining as of the June 7, 2022 topo survey was calculated to be approximately 3,154,533 cubic yards. This volume was calculated by comparing the final cap grade contours dated November 19, 2021 by SCS Engineers and the June 7, 2022 aerial topographic survey. The final cover volume was estimated to be 307,224 cubic yards which assumes a permitted 2-foot thick soil cover for the closure footprint with 1.05 slope factor adjustment. The remaining capacity, 2,847,309 cubic yards, was assumed to be utilized for waste disposal and dailv/intermediate cover.
- 4) The total design capacity is assumed same as the total capacity used in May 2018 Permit Modification Application Submitted by HDR Engineering.

Table 4: Class III Landfill - Projected Capacity Utilization 2022 Financial Assurance Report Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining (CY)	Percent of Permitted Disposal Capacity Used
2020 ⁽²⁾	5/18/21			2,621,730	63%
2021 ⁽³⁾	5/18/21 to 6/7/22	352,413	4,740,319	2,213,849	68%
2021	6/7/22 to 9/30/22	80,051	4,820,370	2,133,798	69%
2022	10/1/22 to 9/30/23	257,950	5,078,320	1,875,848	73%
2023	10/1/23 to 9/30/24	269,343	5,347,663	1,606,505	77%
2024	10/1/24 to 9/30/25	264,226	5,611,889	1,342,279	81%
2025	10/1/25 to 9/30/26	267,045	5,878,934	1,075,234	85%
2026	10/1/26 to 9/30/27	269,781	6,148,714	805,454	88%
2027	10/1/27 to 9/30/28	272,418	6,421,133	533,035	92%
2028	10/1/28 to 9/30/29	274,949	6,696,082	258,086	96%
2029	10/1/29 to 8/18/30	258,086	6,954,168	0	100%
				Calculated Closure Date	September 2030

- 1) Year generally represents October 1 to September 30 (i.e. Year 2022 is from October 1, 2022 to September 30, 2023).
- 2) Source is 2021 Financial Responsibility Report, HDR Engineering dated September 2021.
- 3) The total air space remaining as of the June 7, 2022 aerial survey was calculated to be 2,704,059 cubic yards. The estimated volume of final cover is adjusted based on finalized closure limits of the Class III landfill per record survey by J.J. Matejka & Associates, Inc. dated June 30, 2022 prepared as part of Class III Landfill Primary Stormwater Improvements Project. According to this survey, 2-D area of Class III landfill to be closed is 96.46 acres. Total final cover soil volume of 490,210 cy was estimated based on 3-ft cover thickness and 5% adjustment for slopes. Accordingly, a remaining capacity of 2,213,849 cubic yards was assumed to be utilized for waste disposal and intermediate cover.
- 4) The total design capacity is assumed same as the total capacity used in 2021 Financial Responsibility Report prepared by HDR Engineering and dated August 2021.

Table 5: Summary of Closing & Final Closure of Landfills 2022 Financial Assurance Report Volusia County, Florida

	Calculated Time of Closure ⁽¹⁾	Acreage Remaining to be Closed	Acreage Closed	Approximate Time of Post-closure LTC ⁽¹⁾	Remaining Years of Operations left in Current Footprint ⁽¹⁾	Remaining Years of LTC under Current Status				
Tomoka Farms Road Landfill										
South Cell ⁽²⁾		0	114		0	30				
North Cell Class I	July 2028	91	0	2028-2058	6	30				
Class III Landfill	September 2030	96	0	2032-2062	8	30				
2. Plymouth Ave. Landfill										
Final Closure (LTC Period) ⁽³⁾		0	39		0	8				

¹⁾ As calculated in Tables 3 and 4 of this report. Reference date is 9/1/2022.

²⁾ Under the current FDEP permit, the thirty-year long term care period for the South Cell landfill will begin once the North Cell Class I Landfill is certified closed by the FDEP.

³⁾ Plymouth Avenue Landfill's Remaining Years of LTC was acquired from the December 23, 2016 issued permit and subtracting six years.

TABLE 6: Summary of Estimated Costs 2022 Financial Assurance Report Volusia County, Florida

Facility	Updated Closing Cost Estimate	Ŭ '		Total Updated Cost Estimate	
1. Tomoka Farms Road Landfill					
South Cell-Previously Closed (LTC Period) ¹		\$ 124,873.44	\$ 3,746,203.08	\$ 3,746,203.08	
North Cell (in Operation) ¹	\$ 18,652,868.25	\$ 364,648.96	\$ 10,939,468.80	\$ 29,592,337.05	
Class III Landfill (In Operation) ¹	\$ 9,798,874.10	\$ 65,616.73	\$ 1,968,501.85	\$ 11,767,375.95	
2. Plymouth Ave. Landfill					
Previously Closed (LTC Period) ¹		\$ 125,319.25	\$ 1,002,554.04	\$ 1,002,554.04	
3. Used Tire Area (in Operation) ²	\$ 154,420.00			\$ 154,420.00	
Total Estimated Cost				\$ 46,262,890.12	

¹⁾ Refer to the FDEP Forms 62-701.900(28), F.A.C. provided in this Report.

²⁾ The cost for closing the waste tire area was calculated by multiplying 905 tons of tires at average expense of disposing regular tires (\$167/ton and approx. 97% of total tires) and over-sized tires (\$288/ton and approx. 3% of total tires). Quantity of waste tires (905 tons, approx. ending inventory) is calculated by averaging quarterly waste tire quantities reported since 2021 report submittal (Quarterly Waste Tire Report & Inventory Update reports submitted to the department: 2nd quarter 2021; 3rd quarter 2021; 4th quarter 2021; and 1st quarter 2022).

TABLE 7: Summary of Escrow Analysis 2022 Financial Assurance Report Volusia County, Florida

Facility	Sout	th Cell Landfill	North	n Cell Class I Landfill		Class III Landfill	Plymouth Ave. Landfill		Used Tire Area	Total Cost
Estimated Updated Closing Cost (CE)	\$	-	\$	18,652,868.25	\$	9,798,874.10	\$ -	\$	154,420.00	\$ 28,606,162.35
Months of Exhausted Design Life (DE) ^(1,2)				279		291				
Months of Total Design Life (DL) ⁽²⁾				349		387			-	
Documented Closure Expenses (E)	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -
Remaining Years of Long-term Care		30		30		30	8		0	
Estimated Updated Post-Closure LTC Cost	\$	3,746,203.08	\$	-	\$	-	\$ 1,002,554.04	9	-	\$ 4,748,757.12
Escrow Account Balance (3)	\$	119,986.00	\$	9,468,128.00	\$	6,518,055.00	\$ 120,415.00	\$	49,940.00	\$ 16,276,524.00
Total Escrow Funding Required ⁽⁴⁾	\$	124,873.44	\$	14,911,605.28	\$	7,368,145.64	\$ 125,319.25	\$	154,420.00	\$ 22,684,363.61
Total Estimated Increase/(Decrease) for FY-21 Requirement	\$	4,887.44	\$	5,443,477.28	\$	850,090.64	\$ 4,904.25	\$	104,480.00	\$ 6,407,839.61
Financial Responsibility Escrow Account Balance for 2022 FDEP Requirement \$									\$ 22,684,363.61	

- 1) Exhausted design life as of September 1, 2022.
- 2) North Cell Landfill: opening date is June 1999 and closure date of July 2028 as calculated in Table 3. Class III landfill opening date is June 1998 and closure date of September 2030 as calculated in Table 4.
- 3) See attached documentation from James & Moore for Escrow balance dated 9/30/2021 (Attachment B).
- 4) With the exception of the used tire facility, the escrow account funding required for closure of active sites was calculated using the formula [CE x DE/DL] E. Funding requirements for sites in post-closure care are required to provide funding for one year. Keeping with last year's report methodology, it was assumed that the escrow funding required for closing the waste tire facility is equal to the calculated cost of disposing the waste tires.

TABLE 8: Estimate of Accrued Liability (As of September 30, 2021) 2022 Financial Assurance Report Volusia County, Florida

		Tomoka		Tomoka		Tomoka		Plymouth	Waste		
Item ¹	Farms			Farms		Farms	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Total
		(South Cell)	(North Class I)		(Class III)		Avenue		Tire	
CLOSURE AND POST-CLOSURE COST ESTIMATES	LOSURE AND POST-CLOSURE COST ESTIMATES										
Closure Cost (Non-Completed) (Note 1)	\$	-	\$	18,652,868.25	\$	9,798,874.10	\$	-	\$	154,420.00	\$ 28,606,162.35
Post Closure Care (30 Years) (Note 2)	\$	3,746,203.08	\$	10,939,468.80	\$	1,968,501.85	\$	1,002,554.04	\$	-	\$ 17,656,727.77
Total FY 2022 Estimates	\$	3,746,203.08	\$	29,592,337.05	\$	11,767,375.95	\$	1,002,554.04	\$	154,420.00	\$ 46,262,890.12
% of Capacity Used		100.00%		79.11%		69.32%		100.00%		N/A	-
FY2022 LF Closure & LTC Cost Estimate (Current FY2022 Estimate X % of Capacity Used)	\$	3,746,203.08	\$	23,410,003.99	\$	8,156,706.07	\$	1,002,554.04	\$	154,420.00	\$ 36,469,887.18
TRIAL BALANCE ADJUSTMENT											
FY2021 LF Closure & LTC Liability (as of 9/30/2021)	\$	3,598,658.24	\$	14,364,452.23	\$	7,287,194.26	\$	1,083,451.79	\$	49,939.00	\$ 26,383,695.52
Less Amount Paid for Closure in 2021 included in Closure Cost Re-calculation	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
FY2022 LF Closure & LTC Liability Pre-Adjusted Balance (8/30/2022)	\$	3,598,658.24	\$	14,364,452.23	\$	7,287,194.26	\$	1,083,451.79	\$	49,939.00	\$ 26,383,695.52
Adjustment for FY2022 Fiscal Year-End Change in LF Closure and LTC Estimate	\$	147,544.84	\$	9,045,551.76	\$	869,511.81	\$	(80,897.75)	\$	104,481.00	\$ 10,086,191.66

^{1.} Closure costs, Long-Term Care Costs and Percent Used Capacity are based on this report.

^{2.} Post-Closure Care Costs are all based on 30 years except for Plymouth Avenue which is under long-term care period with 8 years of remaining long-term care.

SECTION 5.0

Sources

- 1. Volusia County Solid Waste System, Financial Responsibility Closure and Long Term Care Costs Report, FY 2021, August 2021, HDR Engineering, Inc.
- 2. Schedule of Activity, Landfill Management Escrow Accounts, September 30, 2021, James Moore & Co., P.L. dated March 18, 2022.
- 3. Waste Tire Processing Price Agreement between County of Volusia and Wheelebrator Ridge Energy, Inc. (3131 K-Ville Avenue, Auburndale, FL 33823).
- 4. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 2nd Quarter 2021 dated July 7, 2021.
- 5. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 3rd Quarter 2021 dated October 05, 2021.
- 6. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 4th Quarter 2021 dated January 20, 2022.
- 7. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 1st Quarter 2022 dated April 05, 2022.
- 8. FDEP Operation Permit-North Cell Class I Landfill Tomoka Farms Road Solid Waste Management Facility.
- 9. FDEP Construction Permit-North Cell Class I Landfill Phase III Area 4 Expansion Tomoka Farms Road Solid Waste Management Facility.
- 10. FDEP Closure Permit-North Cell Class I Landfill-Tomoka Farms Road Solid Waste Management Facility.
- 11. FDEP Operation Permit-Class III Landfill-Tomoka Farms Road Solid Waste Management Facility.
- 12. FDEP Closure Permit -South Cell Landfill -Tomoka Farms Road Solid Waste Management Facility.
- 13. FDEP Long-Term Care Permit -Plymouth Avenue Landfill.
- 14. Topography Survey and Mapping Report, Pickett & Associates, May 2021.
- 15. Topography Survey Surveyor's Report, Pickett & Associates, June 2022.
- 16. Certified Topographic Survey Capacity Calculation Report, Aerial Cartographics of America, November 2008 (ACA Job Number 2008679).
- 17. South Cell 5-Year Submittal Report Specific Condition A.7 https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.280602.1]&[profile=Discovery Compliance]

Attachment A

Surveyor's Report Tomoka Farms Road Solid Waste Disposal Facility

SURVEYOR'S REPORT

TOMOKA FARMS LANDFILL

Prepared for:



Prepared by:



PICKETT AND ASSOCIATES PROJECT NO.: 22-000-1327 TITLE/TYPE OF SURVEY: Topographic Survey DATE OF SURVEY: This Map is based on aerial imagery & Lidar data flown 06/07/22

NOTE: THIS REPORT AND ACCOMPANYING MAP TITLED TOMOKA FARMS, ARE NOT FULL AND COMPLETE WITHOUT THE OTHER AND ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

HORIZONTAL DATUM:

The horizontal control was referenced to the North American Datum of 1983(NAD83) 1990 Adjustment, State Plane Coordinates, Florida East Zone. The horizontal data was Client provided.

VERTICAL DATUM:

The vertical control will be referenced to the National Geodetic Vertical Datum of 1929 (NGVD29). The vertical data was Client provided.

Control Points Used for planimetric mapping:

Pt#	Northing	Easting	Elevation
2	1743109.85	630415.84	26.76
3	1742903.38	626371.69	32.89
4	1741990.47	624177.86	29.95
5	1745436.54	623213.62	30.72
6	1745404.38	626174.18	31.27
8	1745501.18	628817.95	25.86
9	1748663.12	626771.86	25.73
11	1748049.23	622992.90	31.16
12	1744084.14	622935.47	30.29

ACCURACY STATEMENT: The following stated plus or minus tolerances encompass a minimum of 90% of the difference between photogrammetrically measured values and any ground truth of all well-identified features. Mapped features will meet or exceed the Florida Standards of Practice.

VERTICAL:

Contours have an estimated vertical positional accuracy of 0.5'. Spot elevations on paved surfaces have an estimated vertical accuracy of 0.25'.

HORIZONTAL:

Well-identified features have an estimated horizontal positional accuracy of 1.66', as per the Standards of Practice, Ch.5J-17, adopted by the State of Florida Department of Agriculture and Consumer Services, regulating Professional Surveyors and Mappers. All measurements are in U.S. Survey Feet.

Measurement Methods:

Color digital imagery was acquired at an average altitude of 3000' using a metric precision digital camera whose focal length is 70.3mm. The planimetrics shown are limited to those features visible on aerial imagery. Mapping was performed using LiDAR and softcopy photogrammetric techniques. The LiDAR data has an estimated point

sample distance of 0.55 foot and a density of 3.2 points per square foot (±34.444 points per square meter). For a vertical accuracy check, the LiDAR data was compared to the Nine (9) points used as targets for aerial imagery. The Root Mean Square Error of the Elevations (RMSEZ) is 0.08 foot, being the equivalent of 0.156' FGDC/NSSDA Vertical Accuracy. All measurements are in U.S. Survey Feet.

Limitations:

This mapping should be used for preliminary design work only and should not replace an actual field survey where the required accuracy is greater than the accuracy stated in this report. No responsibility is assumed for areas outside the contracted scope or for the ground control provided the Client.

MAP PLOTTING:

This map is intended to be displayed at a scale of 1'' = 50' (1:600) or smaller.

DocuSigned by:

Docusigned by:

1. Jeffry Young
A6EFA9CCF926472...

6/07/22

T. JEFFREY YOUNG, PSM, CP FLORIDA REGISTRATION NO. 5440 PICKETT AND ASSOCIATES, LLC FLORIDA REGISTRATION NO. 364 SURVEY DATE

Attachment B

FY – 2022 Escrow Account Balance

COUNTY OF VOLUSIA, FLORIDA SCHEDULE OF ACTIVITY LANDFILL MANAGEMENT ESCROW ACCOUNTS SEPTEMBER 30, 2021



INDEPENDENT AUDITORS' REPORT

To the Honorable County Council Members of the County of Volusia, Florida:

Report on the Schedule of Activity

We have audited the accompanying Schedule of Activity for the County of Volusia, Florida (the County) Landfill Management Escrow Accounts, as of and for the year ended September 30, 2021, and the related notes to the schedule.

Management's Responsibility for the Schedule of Activity

Management is responsible for the preparation and fair presentation of the schedule in accordance with accounting practices prescribed or permitted by Rule 62-701.630(5)(c), Florida Administrative Code to demonstrate compliance with the State of Florida Department of Environmental Protection's regulatory basis of accounting and budget laws. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedule that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the schedule based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the County's preparation and fair presentation of the schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the County's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the schedule referred to above presents fairly, in all material respects, the cash balance of the escrow account as of September 30, 2021, and the activity in the escrow account for the year then ended, on the basis of accounting described in Note 1.

Basis of Accounting

We draw attention to Note 1 of the Schedule, which describes the basis of accounting. As discussed in Note 1, the County prepares the Schedule using accounting practices prescribed or permitted by Rule 62-701.630(5)(c), Florida Administrative Code to demonstrate compliance with the State of Florida Department of Environmental Protection's regulatory basis of accounting and budget laws, which practices differ from accounting principles generally accepted in the United States of America. The effects on the schedule of the variances between the regulatory basis of accounting and accounting principles generally accepted in the United States of America, although not reasonably determinable, are presumed to be material. Our opinion is not modified with respect to this matter.

Purpose of This Report

The purpose of this report is solely for the information and use of the County Council and management of the County and for filing with the State of Florida Department of Environmental Protection. Accordingly, this communication is not suitable for any other purpose.

James Maore : 6., P.L.

Daytona Beach, Florida March 18, 2022

COUNTY OF VOUSIA, FLORIDA LANDFILL MANAGEMENT ESCROW ACCOUNTS SCHEDULE OF ACTIVITY FOR THE YEAR ENDED SEPTEMBER 30, 2021

	Tomoka Class III	Tomoka Class I	Tomoka South	Plymouth	Waste Tire	Total
Escrow Account Balances, October 1, 2020	\$ 5,449,042	\$ 9,230,410	\$ 120,322	\$ 120,458	\$ 3,792	\$ 14,924,024
Deposits/transfers						
Total Deposits	1,067,611	235,343	(367)	(74)	46,147	1,348,660
Interest Income						
October 31, 2020	93	157	2	2	-	254
November 30, 2020	90	152	2	2	-	246
December 31, 2020	139	235	3	3	-	380
January 31, 2021	139	235	3	3	-	380
February 28, 2021	109	184	2	2	-	297
March 31, 2021	120	204	3	3	-	330
April 30, 2021	116	197	3	3	-	319
May 31, 2021	120	204	3	3	-	330
June 30, 2021	116	197	3	3	-	319
July 31, 2021	120	204	3	3	-	330
August 31, 2021	120	204	2	2	-	328
September 30, 2021	120	202	2	2	-	326
Total interest income	1,402	2,375	31	31	-	3,839
Escrow Account Balances, September 30, 2021	\$ 6,518,055	\$ 9,468,128	\$ 119,986	\$ 120,415	\$ 49,940	\$ 16,276,524
Cash and Cash Equivalents	\$ 6,518,055	\$ 9,468,128	\$ 119,986	\$ 120,415	\$ 49,940	\$ 16,276,524

COUNTY OF VOLUSIA, FLORIDA LANDFILL MANAGEMENT ESCROW ACCOUNTS NOTES TO SCHEDULE OF ACTIVITY SEPTEMBER 30, 2021

(1) Reporting Entity and Basis of Accounting:

The County of Volusia, Florida (the County) is a political subdivision of the State of Florida, which is responsible for legislative and fiscal administration of the County.

The Schedule of Activity for the County Landfill Management Escrow Accounts (the Schedule) is prepared and submitted to the State of Florida Department of Environmental Protection pursuant to Section 62-701.630 of the Florida Administrative Code (the Code). The Schedule contains only the escrow balances required by the Code and is not intended to present the financial position of the County of Volusia, Florida's Refuse Disposal Fund, or any fund in the County's financial statements.

(2) Landfill Management Escrow:

The County records the landfill management escrows as restricted cash to fund post-closure care costs of the Plymouth Landfill and closure costs and post-closure care costs of the Tomoka Landfill. The escrow, which is held in a separate bank account at Morgan Stanley and reported as part of the County's cash and cash equivalents in the Refuse Disposal Fund, is calculated annually based on the "balance" method, which uses months of exhausted design life as a percentage of total design life times the estimated costs calculated by inflationary indexes or, if changes to the facility are made, by a study performed by a Registered Professional Engineer. The funds are held in accordance with the escrow agreement dated April 17, 2008.

Morgan Stanley

PO Box 219804 Kansas City, MO 64121-9804

INVESTMENT MANAGEMENT

Morgan Stanley Global Liquidity Solutions

MB 01 000456 92376 B 2 A

COUNTY OF VOLUSIA FL SOLID WASTE RE FINANCIAL AND ADMINISTRATIVE SERVIC ATTN MYRIAM LEMAY 123 W INDIANA AVENUE ROOM 300 DELAND FL 32720-4615

Account Statement

09/01/21 through 09/30/21

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Contacting Us



INVESTOR SERVICES 888-378-1630



ON THE INTERNET www.morganstanley.com/im matrix.ms.com



BY MAIL PO Box 219804 Kansas City, MO 64121-9804

Portfolio Value Summary

Market Value as of 09/30/21		\$16,276,523.51
	Month-to-date	Year-to-date
Opening Value	\$14,927,536.72	\$14,924,903.13
+ Purchases	\$1,348,660.22	\$1,348,660.22
+ Reinvested Income	\$326.57	\$2,960.16
- Withdrawals	\$0.00	\$0.00
+/- Change in Value	\$0.00	. \$0.00
Closing Value	\$16,276,523.51	\$16,276,523.51

It is a pleasure to announce our new investment platform, Treasury Investment Portal. This portal replaces Liquidity Link and offers a convenient and secure way of investing with the Morgan Stanley Institutional Liquidity Funds. Access to Treasury Investment Portal includes trading rights, principal and accrual balances, as well as access to a wide range of MSILF reports including monthly statements, holdings reports, daily rates, fund commentary and fact sheets.

To learn more or to sign up for access to Treasury Investment Portal, please call Client Services at the number listed above.

Asset Allocation

Asset Allocation, also known as Diversification, is the act of splitting investments up into different companies, sectors, industries, or countries in order to protect your overall portfolio from drastic downturns in the market.

100% of your Morgan Stanley funds are invested in one of several available categories. If you would like to alter your current position, please call our client service team at the number listed on your statement.

Accounts Summary

Fund/Account Beginning value as of 09/01/21	+	Purchases	+	Reinvested income	•	Withdrawals	+/-	Change in value	=	Closing value as of 09/30/21
Government Port Institutional \$14.927.536.72		56014866 \$1,348,660,22		\$326.57		\$0.00	·	\$0.00		\$16,276,523,51
\$14,321,330.12		\$1,540,000.ZZ		4020.07						<u> </u>

Total Accounts

\$16,276,523.51

Morgan Stanley

PO Box 219804 Kansas City, MO 64121-9804

Account Statement

09/01/21 through 09/30/21

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INVESTMENT MANAGEMENT

Morgan Stanley Global Liquidity Solutions

Account Detail

ACCOUNT OWNER INFORMATION COUNTY OF VOLUSIA FL SOLID WASTE RE ACCOUNT OWNER ACCOUNT OWNER ACCOUNT OWNER ACCOUNT OWNER

FINANCIAL AND ADMINISTRATIVE SERVIC
ATTN MYRIAM LEMAY

Account number: 756014866
Fund number: 8302
CUSIP number: 61747C707
Ticker symbol: MVRXX

 SUMMARY
 INCOME

 Shares owned
 16,276,523.510

 Share price
 \$1,0000

 Market Value as of 09/30/21
 \$16,276,523.51
 Dividenda

 16,276,523.510
 This period
 Year-to-date

 \$16,276,523.51
 Dividend/interest
 \$326.57
 \$2,960.16

 Long term capital gain
 \$0.00
 \$0.00

 Dividends are
 Reinvested

 Capital gains are
 Reinvested

ACTIVITY

Trade			Share	Shares this	Total shares
date	Transaction description	Dollar amount	price	transaction	owned
	Beginning Balance as of 09/01/21	\$14,927,536.72	\$1.0000		14,927,536.720
09/23/21	Shares Purchased By Wire	1,348,660.22	1.0000	1,348,660.220	16,276,196.940
09/30/21	Income Reinvest	326.57	1.0000	326.570	16,276,523.510
	Ending Balance as of 09/30/21	\$16,276,523.51	\$1.0000		16,276,523.510

Thank you for choosing Morgan Stanley Investment Management. Your satisfaction is important to us. If you identify any inaccuracy or discrepancy on your statement, it is your responsibility to notify us promptly but no later than 10 business days following receipt of your initial confirmation. To further protect your rights as a customer, oral communication should be reconfirmed in writing.