



August 27, 2018

Ms. Kimberly Rush, P.E.
Permitting and Waste Cleanup Program Administrator
Central District
Florida Department of Environmental Protection
Orlando, Florida 32803-3767

Re: Financial Assurance Responsibility Report (Fiscal Year 2018)
Tomoka Farms Road Landfill ID #27540 (North Cell Class I, South Cell, and Class III
Landfills) and Plymouth Avenue Landfill ID #27539

Dear Ms. Rush,

On behalf of the Volusia County Solid Waste Division, HDR Engineering, Inc. is hereby submitting updated closure and long-term care cost estimates for the above-referenced landfills, fulfilling the requirements of 62-701.630(4) F.A.C.

Please contact me if you have any questions or comments at (904) 598-8979.

Sincerely,

HDR Engineering, Inc.

Mark Roberts, P.E.
Project Manager

cc: Cory Dilmore, FDEP
Susan Eldredge, FDEP
Regina Montgomery, Volusia County Solid Waste Division
Jennifer Stirk, Volusia County Solid Waste Division
Kendra Hively, Volusia County Solid Waste Division

enc: Financial Assurance Responsibility Report (2018)

RECEIVED
AUG 28 2018
DEP Central Dist.

VOLUSIA COUNTY SOLID WASTE SYSTEM

FINANCIAL RESPONSIBILITY

CLOSURE & LONG-TERM CARE COST ESTIMATES

FY 2018

Prepared for:



VOLUSIA COUNTY – SOLID WASTE DIVISION
1990 Tomoka Farms Road
Port Orange FL 32128

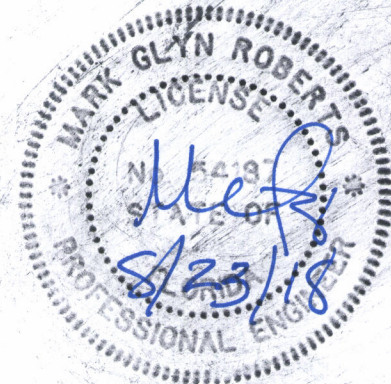
Prepared by:



HDR ENGINEERING, INC.
200 W Forsyth St, Suite 800
Jacksonville, FL 32202
Telephone: (904) 598-8900 Fax (904) 598-8988

August 2018

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DEP Central Dist.



SECTION 1.0

Executive Summary

The following report provides an estimate of closing and long-term 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. This report addresses costs associated with the currently permitted, constructed and operating landfills, but does not provide costs associated with the North Cell Class I Phase III Area 4 expansion permitted for future landfilling. However, the financial assurance for the currently operating North Cell footprint has been recalculated based on unit costs approved by FDEP in 2018 as part of Area 4 permitting. The financial assurance mechanism for the future Area 4 will be fully funded according to Florida Department of Environmental Protection (FDEP) approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in Area 4 (FAC 62-701.630(1)(b)).

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 2018 would be met by the Escrow Accounting Method, as defined in FAC 62-701.630(5). The 2017 closing and long-term care cost estimates, approved by FDEP, were adjusted assuming the Class I and Class III landfill areas will be closed in accordance with the requirements of the existing FDEP Operations Permits. For the Class III landfill, the approved closure and long-term care costs were adjusted using the current year annual inflation factor published by the U.S. Department of Commerce and provided by the FDEP. For the Class I North Cell, the units costs for closure and long-term care are based on 2018 unit costs approved by FDEP as part of the Area 4 expansion permit modification submitted and approved in 2018. Accordingly, no inflation adjustment for the North Cell was made. The financial assurance for the currently operating North Cell footprint was reduced due primarily to the use of on-site soils in the updated cost estimate.

The long-term care cost estimates for the Plymouth Avenue Landfill and TFR Facility's South Cell were updated by adjusting the previously approved costs based on the current year annual

inflation factor published by the U.S. Department of Commerce and provided by the FDEP. The current year inflation factor is 1.018 for estimates due September 1, 2018.

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 (including Phase II Area 3) and Class III landfills at the TFR Facility.
- The County continued long-term care activities at Plymouth Avenue Landfill.

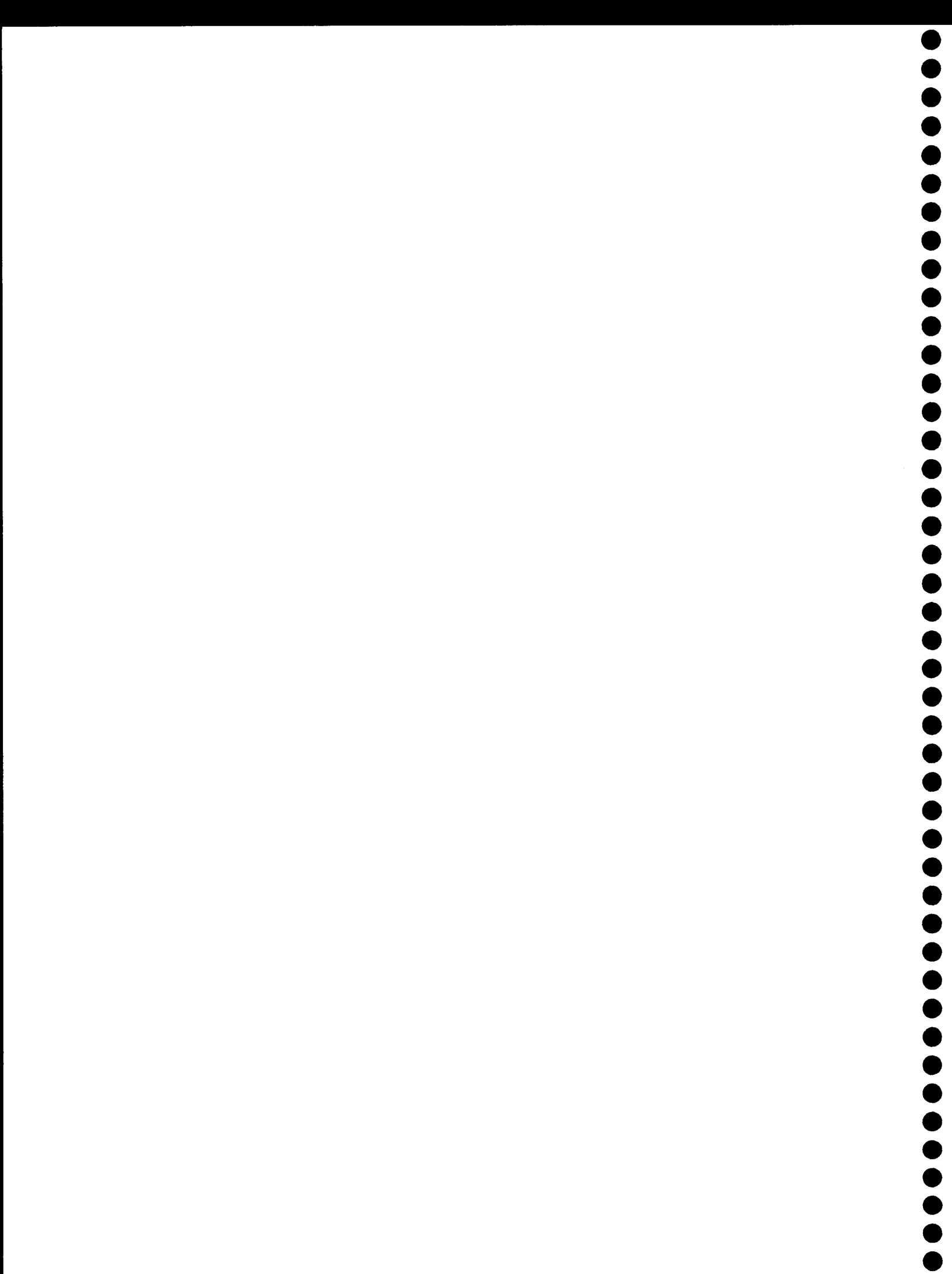
This report includes:

- Updated closing and long-term care cost estimates for the Class I solid waste disposal area at the TFR Facility is based on approved 2018 unit costs for Phase III Area 4 construction. No inflation adjustment since the unit costs is for current year. .
- Updated closing and long-term care cost estimates for the Class III solid waste disposal area at the TFR Facility based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the closed South Cell landfill based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the 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 2018 in the amount of \$13,490,611.06 per Table 7.

The FY 2018 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 \$12,884,060 as of September 30, 2017. The calculated increase to the Volusia County escrow fund for FY2018 financial responsibility equals \$606,551.

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 2018 is summarized as follows. The financial assurance forms must be submitted by September 1, 2018 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 INFORMATION:

Facility Name: Tomoka Farms Road Landfill-North Cell, Class I WACS ID: 27540

Permit Application or Consent Order No.: 0078767-030-SO-01 Expiration Date: 05/13/2033

Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida

Permittee or Owner/Operator: Volusia County Solid Waste Division

Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29° 07' 50" Longitude: 81° 06' 02"

Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)

Collected by: J.E. Zapert Company/Affiliation Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
North Cell - Excluding Area 4	77.85	June 1999	19 years	5 years	NA	NA

Total disposal unit acreage included in this estimate: Closure: 77.85 Long-Term Care: 77.85

Facility type: ☒ Class I ☐ Class III ☐ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

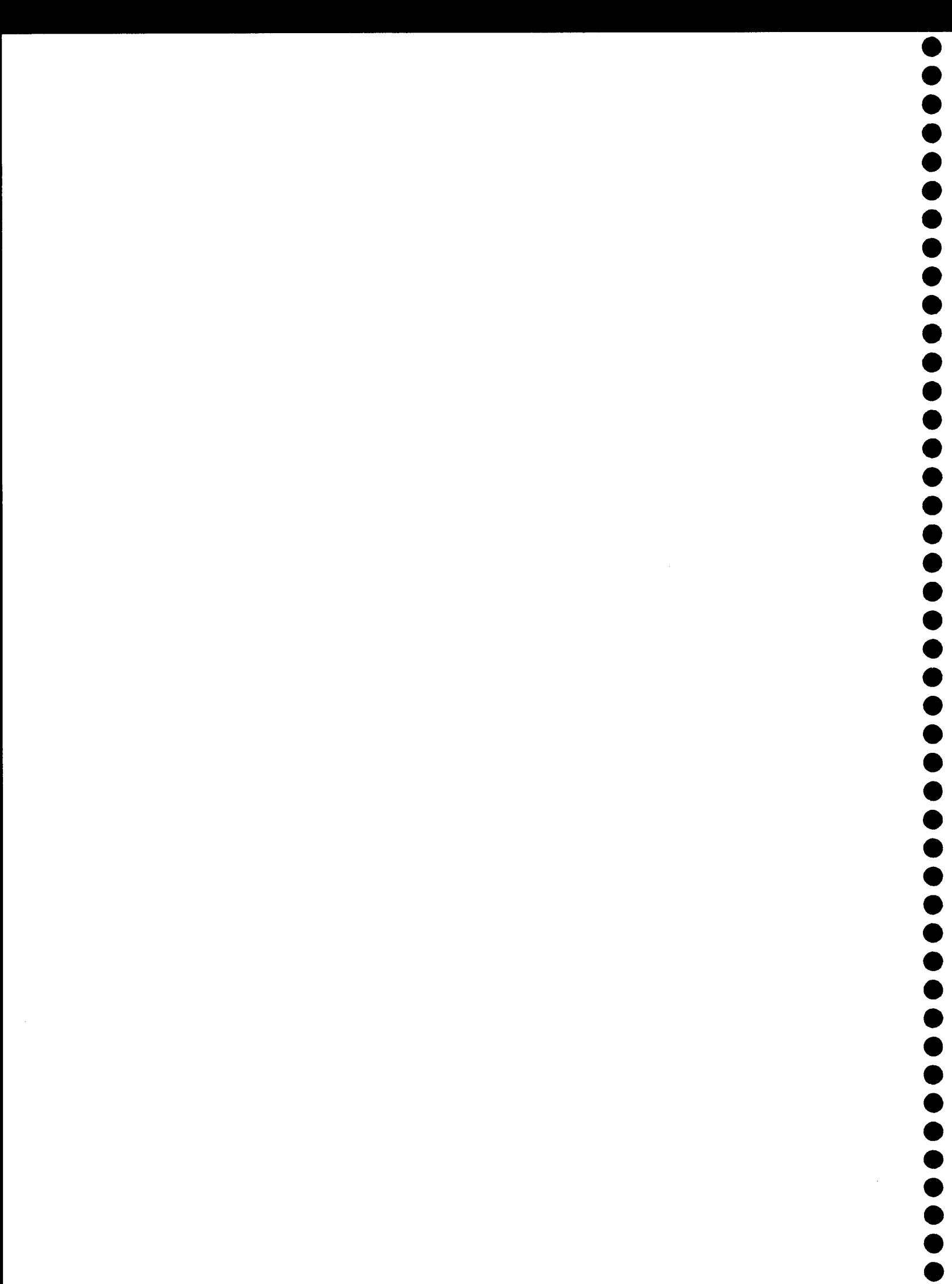
Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Temple Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600



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 adjustment 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 Deflator 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 closing cost estimate dated: _____

Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Closing Cost Estimate:
_____	_____	_____
	x	=

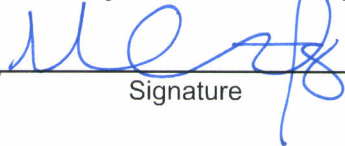
This adjustment is based on the Department approved long-term care cost estimate dated: _____

Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	Inflation Adjusted Annual Long-Term Care Cost Estimate:
_____	_____	_____
	x	=
Number of Years of Long Term Care Remaining:	_____	_____
	x	=
Inflation Adjusted Long-Term Care Cost Estimate:	_____	_____

Signature by: ☐ Owner/Operator

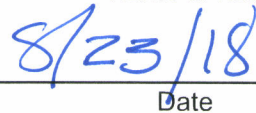
☒ Engineer

(check what applies)


Signature

Mark G. Roberts, Project Manager

Name & Title


Date

(904)-598-8900

Telephone Number

200 W. Forsyth St., Ste. 800

Address

Jacksonville, FL 32202-4321

City, State, Zip Code

Mark.Roberts@hdrinc.com

E-Mail Address

IV. ESTIMATED CLOSING COST (check what applies)☒ **Recalculated Cost Estimate**☐ **New Facility Cost Estimate**

Notes: 1. Cost estimates for the time period when the extent and manner of landfill operation makes closing most exp

2. Cost estimate must be certified by a professional engineer.

3. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

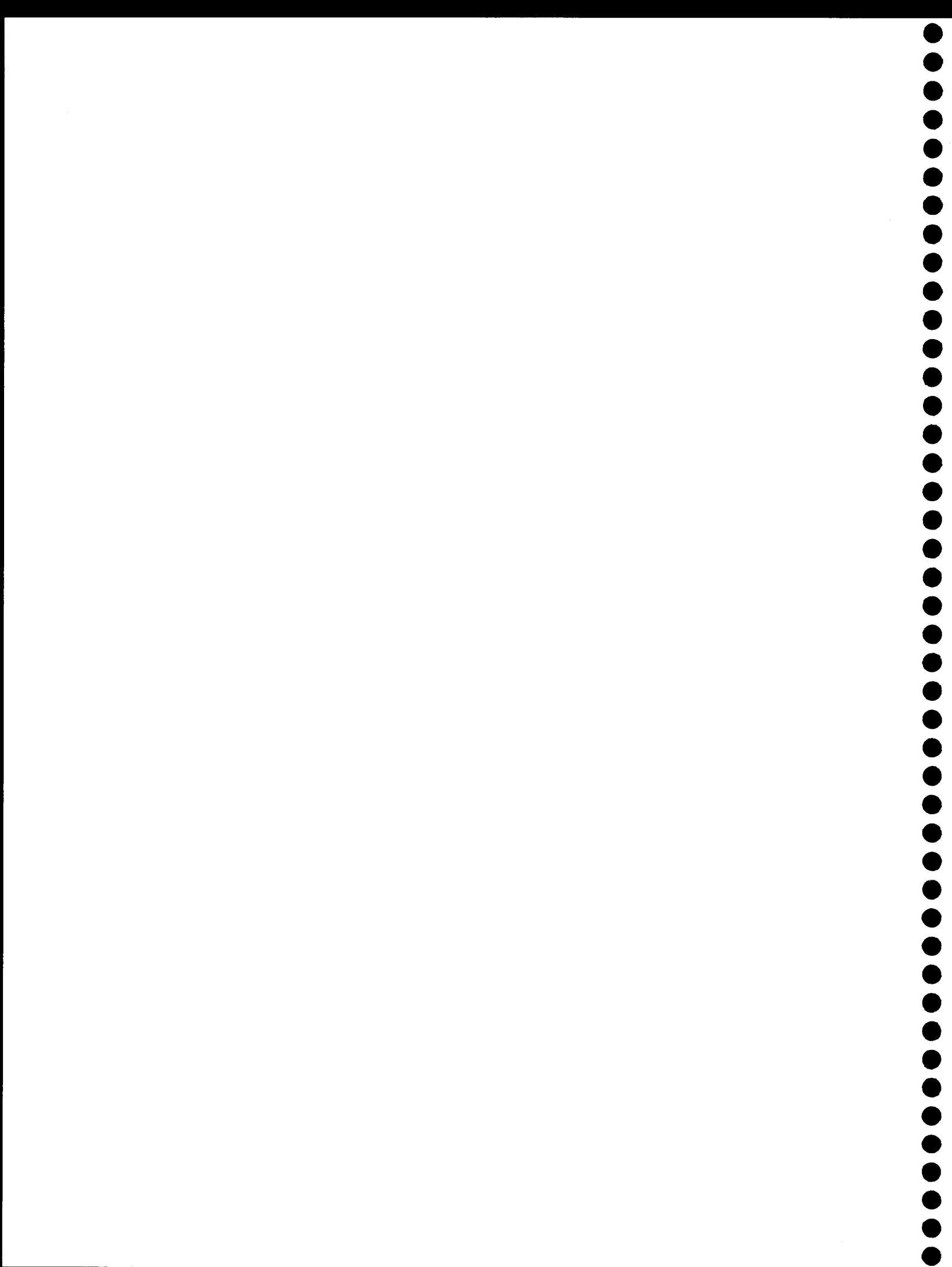
4. In some cases, a price quote in support of individual item estimates may be required.

Description	Unit	Number of Units	Cost / Unit	Total Cost
1. Proposed Monitoring Wells (Do not include wells already in existence.)				
	EA			
				Subtotal Proposed Monitoring Wells:
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY			
Placement and Spreading	CY			
Compaction	CY			
Off-Site Material	CY			
Delivery	CY			
				Subtotal Slope and Fill:
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY	207,287	\$4.88	\$1,011,560.56
Synthetics - 40 mil	SY	410,626	\$5.10	\$2,094,192.60
Synthetics - GCL	SY			
Synthetics - Geonet	SY			
Synthetics - Other (explain)	SY	410,626	\$7.43	\$3,050,951.18
Double Sided Geocomposite				Subtotal Cover Material:
				\$6,156,704.34
4. Top Soil Cover:				
Off-Site Material	CY	69,396	\$4.88	\$338,652.48
Delivery	CY			
Spread	CY			
				Subtotal Top Soil Cover:
				\$338,652.48
5. Vegetative Layer				
Sodding	SY	352,093	\$3.03	\$1,066,841.79
Hydroseeding	AC	8.83	\$3,125.00	\$27,593.75
Fertilizer	AC			
Mulch	AC			
Other (explain)				
				Subtotal Vegetative Layer:
				\$1,094,435.54
6. Stormwater Control System:				
Earthwork	CY			
Grading	SY			
Piping	LF	8,124	\$21.06	\$171,091.44
Ditches	LF			
Berms	LF			
Control Structures	EA	15	\$1,550.00	\$23,250.00
Other (explain)	LS	1	\$532,360.00	\$532,360.00
See Attachment 2, Items 6(c) & 6(d)				Subtotal Stormwater Control System:
				\$726,701.44

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	_____	_____	_____
Pipe and Fittings	LF	_____	_____	_____
Monitoring Probes	EA	_____	_____	_____
NSPS/Title V requirements	LS	1	_____	_____
Subtotal Passive Gas Control:				_____
8. Active Gas Extraction Control:				
Traps	EA	_____	_____	_____
Sumps	EA	_____	_____	_____
Flare Assembly	EA	_____	_____	_____
Flame Arrestor	EA	_____	_____	_____
Mist Eliminator	EA	_____	_____	_____
Flow Meter	EA	_____	_____	_____
Blowers	EA	_____	_____	_____
Collection System	LF	_____	_____	_____
Other (explain) _____	LS	1	\$501,134.00	\$501,134.00
Subtotal Active Gas Extraction Control:				\$501,134.00
See Attachment 2, Items 8(a) to 8(q)				
9. Security System:				
Fencing	LF	1	\$2,000.00	\$2,000.00
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System:				\$2,000.00
10. Engineering:				
Closure Plan Report	LS	1	\$50,000.00	\$50,000.00
Certified Engineering Drawings	LS	1	\$25,000.00	\$25,000.00
NSPS/Title V Air Permit	LS	1	\$20,000.00	\$20,000.00
Final Survey	LS	1	\$25,000.00	\$25,000.00
Certification of Closure	LS	1	\$50,000.00	\$50,000.00
Other (explain) _____	_____	_____	_____	_____
Subtotal Engineering:				\$170,000.00

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	160	\$130.00	80	\$130.00	\$31,200.00
On-Site Engineer	300	\$100.00	180	\$100.00	\$48,000.00
Office Engineer	200	\$100.00	144	\$100.00	\$34,400.00
On-Site Technician	_____	_____	2,992	\$65.00	\$194,480.00
Other (explain) _____	_____	_____	1	\$50,000.00	\$50,000.00
Lump Sum Amount					

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	\$75,000.00	\$75,000.00
Subtotal Professional Services:				\$433,080.00



Subtotal of 1-11 Above: \$9,422,707.80

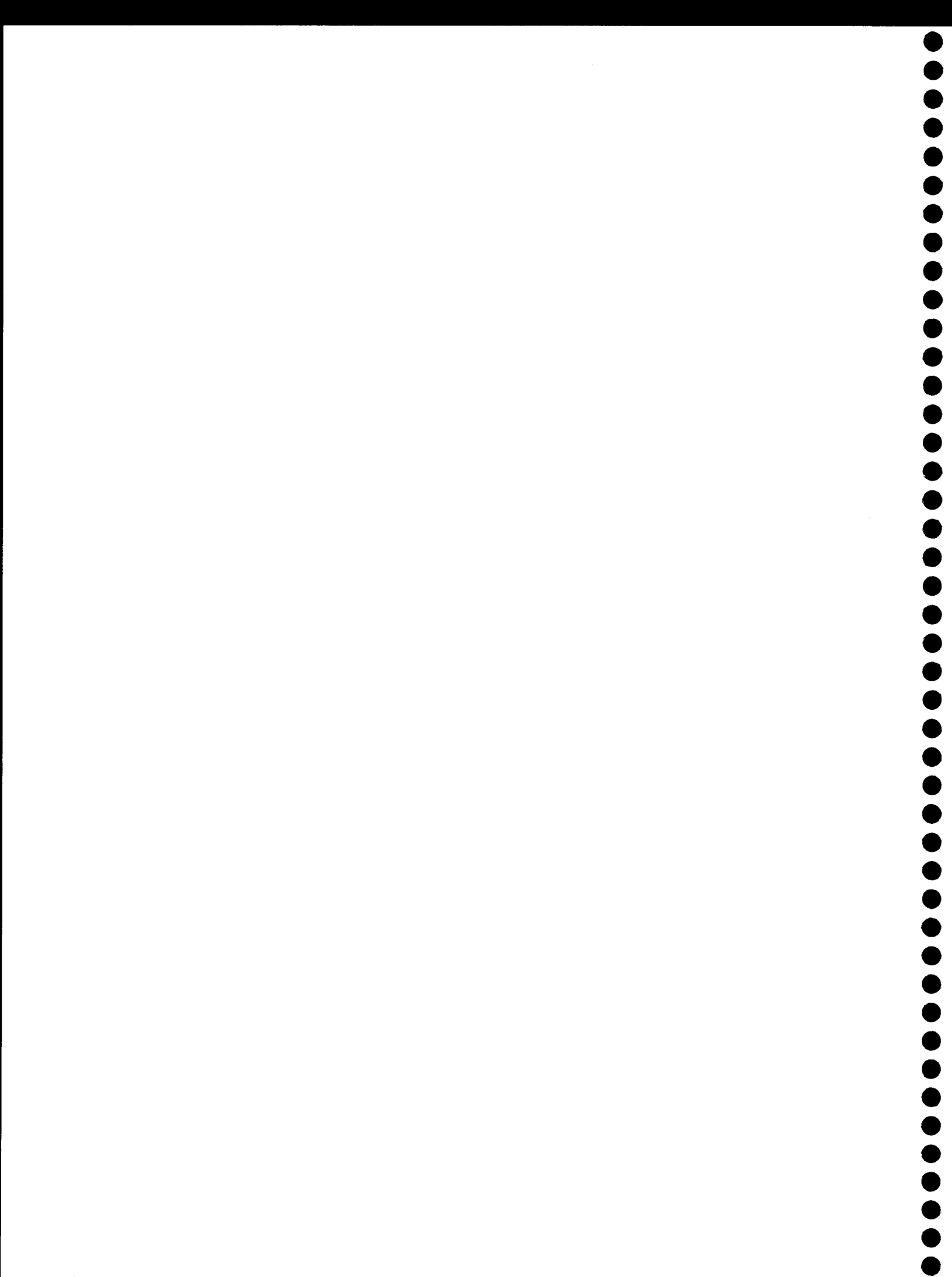
12. Contingency	<u>10</u>	% of Subtotal of 1-11 Above	\$942,270.78
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Subtotal Contingency: \$942,270.78

Estimated Closing Cost Subtotal: \$10,364,978.58

Description	Total Cost
13. Site Specific Costs	
Mobilization	\$487,194.85
Waste Tire Facility	
Materials Recovery Facility	
Special Wastes	
Leachate Management System Modification	
Other (explain) _____	
Subtotal Site Specific Costs:	\$487,194.85

TOTAL ESTIMATED CLOSING COSTS (\$): \$10,852,173.43



V. ANNUAL COST FOR LONG-TERM CARE

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.

(Check Term Length) ☐ 5 Years ☐ 20 Years ☒ 30 Years ☐ Other, ____ Years

Notes: 1. Cost estimates must be certified by a professional engineer.

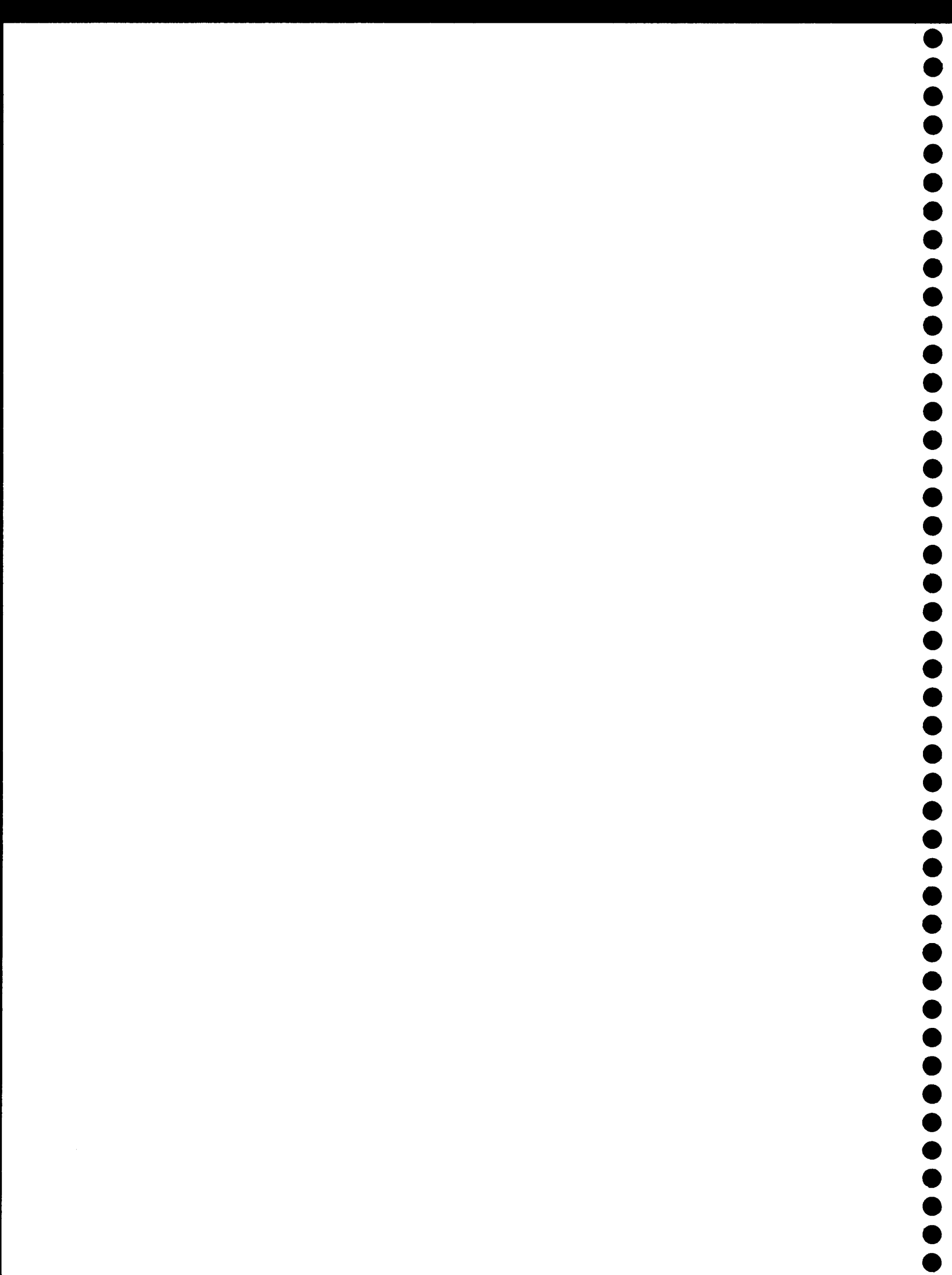
2. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

3. In some cases, a price quote in support of individual item estimates may be required.

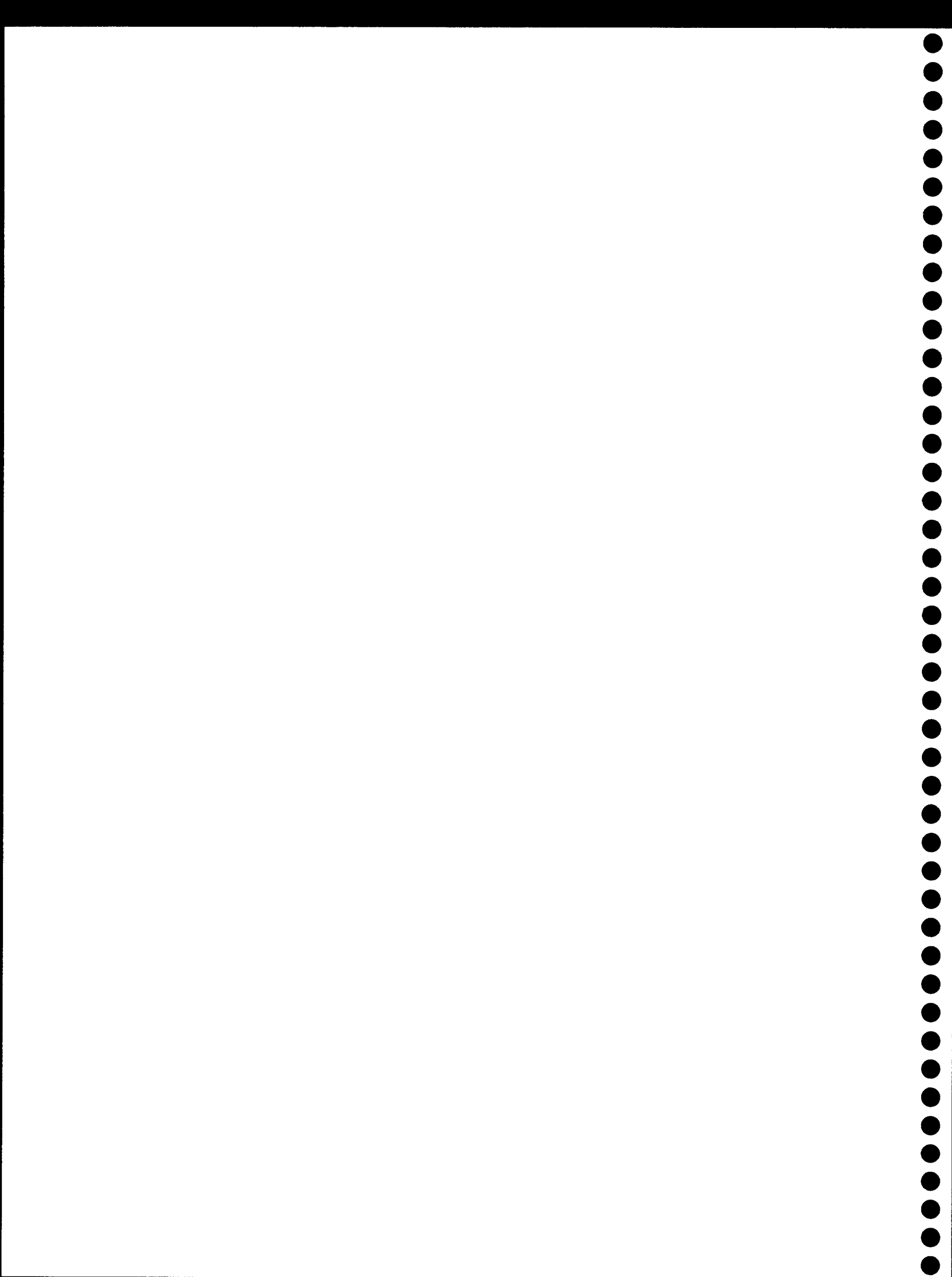
All items must be addressed. Attach a detailed explanation for all entries left blank.

Description	Sampling Frequency (Events / Year)	Number of Wells	(Cost / Well) / Event	Annual Cost
1. Groundwater Monitoring [62-701.510(6), and (8)(a)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Groundwater Monitoring:				_____
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	7	\$423.15	\$5,924.10
Annually	1	_____	_____	_____
Subtotal Surface Water Monitoring:				\$5,924.10
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	_____	_____	_____
Quarterly	4	1	\$2,150.00	\$8,600.00
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Gas Monitoring:				\$8,600.00
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)c]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Leachate Monitoring:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	1	\$500.00	\$500.00
Sumps, Traps	EA	_____	_____	_____
Lift Stations	EA	_____	_____	_____
Cleaning	LS	1	\$1,500.00	\$1,500.00
Tanks	EA	_____	_____	_____



Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	30	\$10.00	\$300.00
Sludge Removal	CY			
<u>Aeration Systems</u>				
Floating Aerators	EA			
Spray Aerators	EA			
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	1,186	\$31.00	\$36,766.00
Subtotal Leachate Collection / Treatment Systems Maintenance:				\$39,066.00
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF	1	\$500.00	\$500.00
Replacement	EA			
Abandonment	EA			
Subtotal Groundwater Monitoring Well Maintenance:				\$500.00
7. Gas System Maintenance				
Piping, Vents	LF	1	\$5,000.00	\$5,000.00
Blowers	EA	1	\$1,200.00	\$1,200.00
Flaring Units	EA	1	\$400.00	\$400.00
Meters, Valves	EA	1	\$500.00	\$500.00
Compressors	EA			
Flame Arrestors	EA	1	\$1,200.00	\$1,200.00
Operation	LS	1	\$24,840.00	\$24,840.00
Subtotal Gas System Maintenance:				\$33,140.00
8. Landscape Maintenance				
Mowing	AC	81.58	\$120.20	\$9,805.92
Fertilizer	AC			
Subtotal Landscape Maintenance:				\$9,805.92
9. Erosion Control and Cover Maintenance				
Sodding	SY	8,495	\$3.03	\$25,739.85
Regrading	AC			
Liner Repair	SY	1,416	\$10.00	\$14,160.00
Clay	CY	944	\$4.88	\$4,606.72
Subtotal Erosion Control and Cover Maintenance:				\$44,506.57
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	1	\$5,000.00	\$5,000.00
Subtotal Storm Water Management System Maintenance:				\$5,000.00
11. Security System Maintenance				
Fences	LS	1	\$500.00	\$500.00
Gate(s)	EA			
Sign(s)	EA			
Subtotal Security System Maintenance:				\$500.00



Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	<u>1</u>	<u>\$1,800.00</u>	<u>\$1,800.00</u>
Subtotal Utilities:				<u>\$1,800.00</u>

13. Leachate Collection/Treatment Systems Operation

Operation

P.E. Supervisor	HR	<u> </u>	<u> </u>	<u> </u>
On-Site Engineer	HR	<u> </u>	<u> </u>	<u> </u>
Office Engineer	HR	<u> </u>	<u> </u>	<u> </u>
OnSite Technician	HR	<u>104</u>	<u>\$65.00</u>	<u>\$6,760.00</u>
Materials	LS	<u>1</u>	<u> </u>	<u> </u>

Subtotal Leachate Collection/Treatment Systems Operation: \$6,760.00

14. Administrative

P.E. Supervisor	HR	<u>30</u>	<u>\$135.00</u>	<u>\$4,050.00</u>
On-Site Engineer	HR	<u>48</u>	<u>\$75.00</u>	<u>\$3,600.00</u>
Office Engineer	HR	<u>60</u>	<u>\$75.00</u>	<u>\$4,500.00</u>
OnSite Technician	HR	<u> </u>	<u> </u>	<u> </u>
Other <u> </u>	HR	<u>30</u>	<u>\$35.00</u>	<u>\$1,050.00</u>

Administrative Assistant

Subtotal Administrative: \$13,200.00

Subtotal of 1-14 Above: \$168,802.59

15. Contingency	<u>10</u>	% of Subtotal of 1-14 Above	<u>\$16,880.26</u>
Subtotal Contingency:			<u>\$16,880.26</u>

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Subtotal Site Specific Costs:				<u> </u>

ANNUAL LONG-TERM CARE COST (\$ / YEAR): \$185,682.84

Number of Years of Long-Term Care: 30

TOTAL LONG-TERM CARE COST (\$): \$5,570,485.34

VI. CERTIFICATION BY ENGINEER

This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and/or long-term care of the facility and comply with the requirements of Rule 62-701.630 F.A.C. and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Cost Estimates shall be submitted to the Department annually, revised or adjusted as required by Rule 62-701.630(4), F.A.C.


Signature

Mark G. Roberts, Project Manager
Name and Title (please type)

8/23/18
Date

54187
Florida Registration Number
(please affix seal)

200 W. Forsyth St., Ste. 800
Mailing Address

Jacksonville, FL 32202-4321
City, State, Zip Code

Mark.Roberts@hdrinc.com
E-Mail address (if available)

(904)-598-8900
Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR


Signature of Applicant

Regina Montgomery, Director
Name and Title (please type)

RMontgomery@co.volusia.fl.us
E-Mail address (if available)

3151 East New York Avenue
Mailing Address

DeLand, FL 32724
City, State, Zip Code

(386)-943-7889
Telephone 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 INFORMATION:

Facility Name: Tomoka Farms Road Landfill- Class III Landfill WACS ID: 27540
 Permit Application or Consent Order No.: 0078767-034-SO-T3 Expiration Date: 9/24/2024
 Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida
 Permittee or Owner/Operator: Volusia County Solid Waste Division
 Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29 ° 07 ' 53 " Longitude: 81 ° 05 ' 31 "
 Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
 Collected by: J.E. Zapert Company/Affiliation Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Class III LF	88.06	June 1998	20 years	19 years	NA	NA

Total disposal unit acreage included in this estimate: Closure: 88.06 Long-Term Care: 88.06

Facility type: ☐ Class I ☒ Class III ☐ C&D Debris Disposal
 (Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

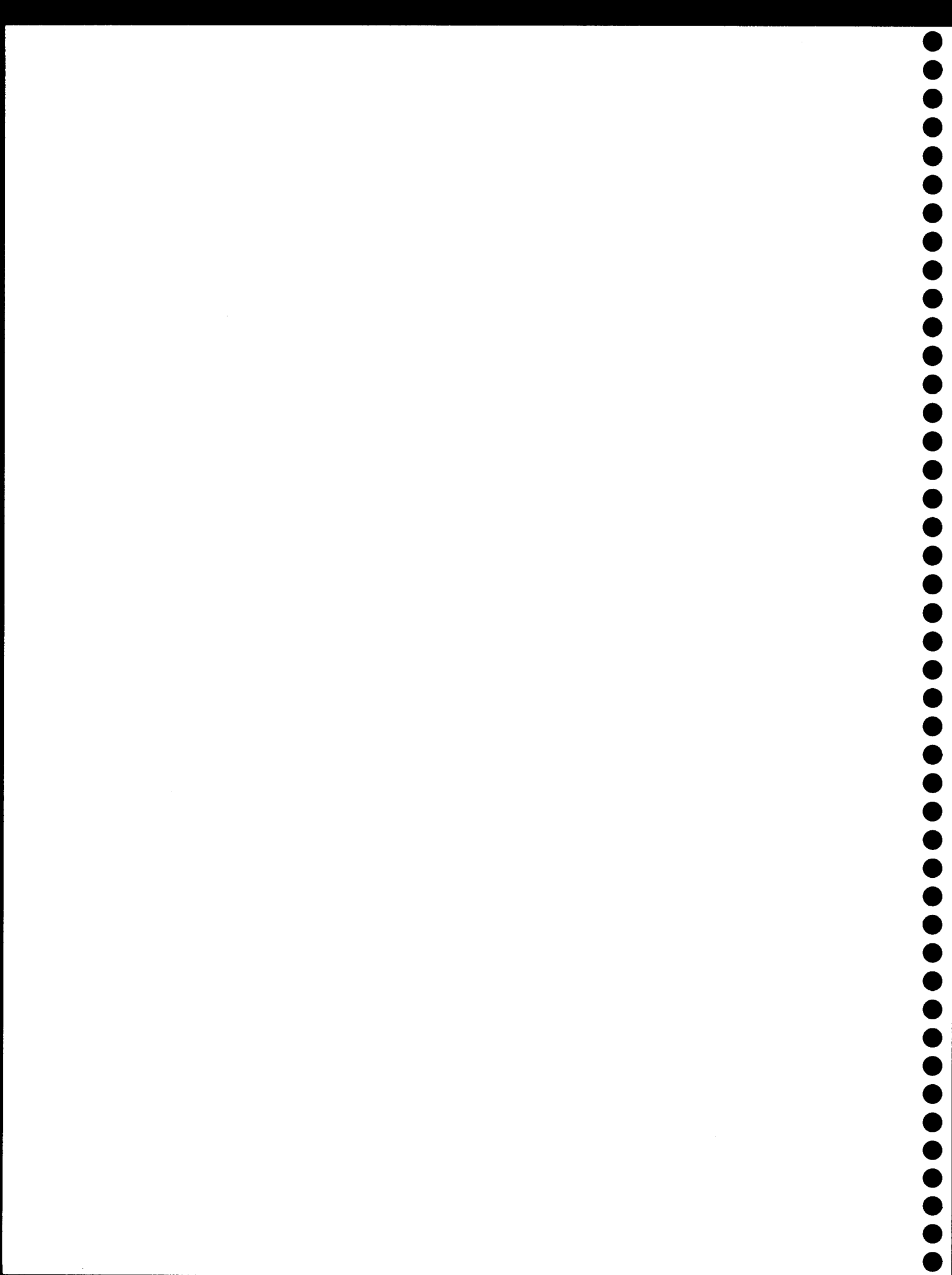
Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

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13051 N. Telecom Pky.
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South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600



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 adjustment 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 Deflator 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 closing cost estimate dated:

9/1/2017

Latest Department Approved
Closing Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Closing
Cost Estimate:

\$8,984,133.66

x

1.018

=

\$9,145,848.07

This adjustment is based on the Department approved long-term care cost estimate dated:

9/1/2017

Latest Department Approved
Annual Long-Term Care
Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Annual
Long-Term Care Cost
Estimate:

\$60,160.93

x

1.018

=

\$61,243.83

Number of Years of Long Term Care Remaining:

x

30

Inflation Adjusted Long-Term Care Cost Estimate:

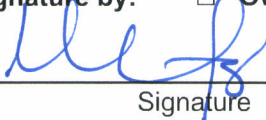
=

\$1,837,314.80

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800

Address

Mark Roberts, Project Manager

Name & Title

Jacksonville, FL, 32256

City, State, Zip Code

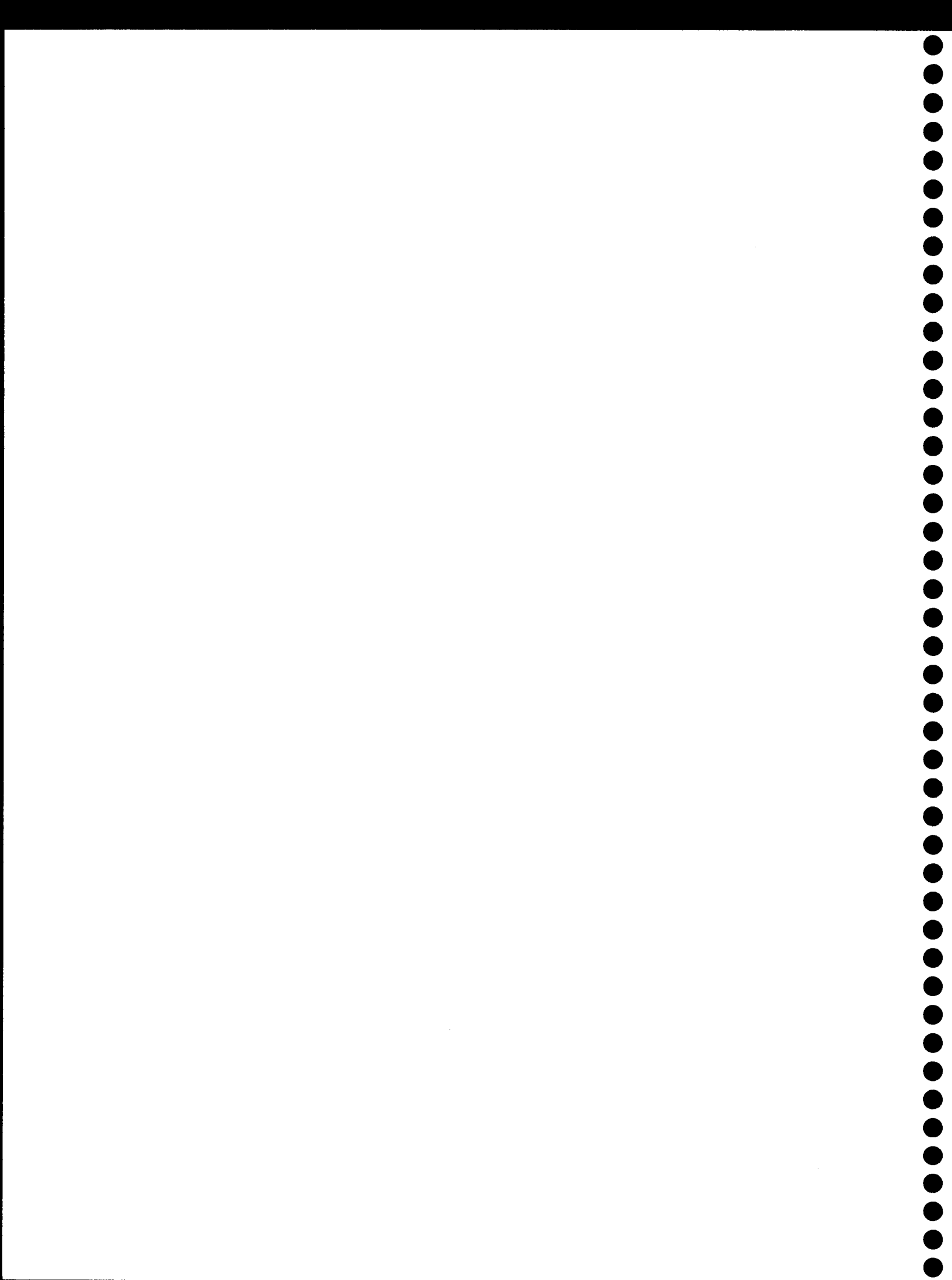
8/23/18
Date

Mark.Roberts@hdrinc.com

E-Mail Address

(904) 598 8900

Telephone 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 INFORMATION:

Facility Name: Tomoka Farms Road Landfill- South Cell WACS ID: 27540
Permit Application or Consent Order No.: 0078767-030-SO-01 Expiration Date: 05/13/2033
Facility Address: 1990 Tomoka Farms Road, Daytona Beach, Florida
Permittee or Owner/Operator: Volusia County Solid Waste Division
Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29° 07' 50" Longitude: 81° 06' 02"
Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
Collected by: J.E. Zapert Company/Affiliation: Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
South Cell	114	June 1978	Approx. 23 years	NA	2001	2001

Total disposal unit acreage included in this estimate: Closure: NA Long-Term Care: 114

Facility type: ☒ Class I ☒ Class III ☒ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8360

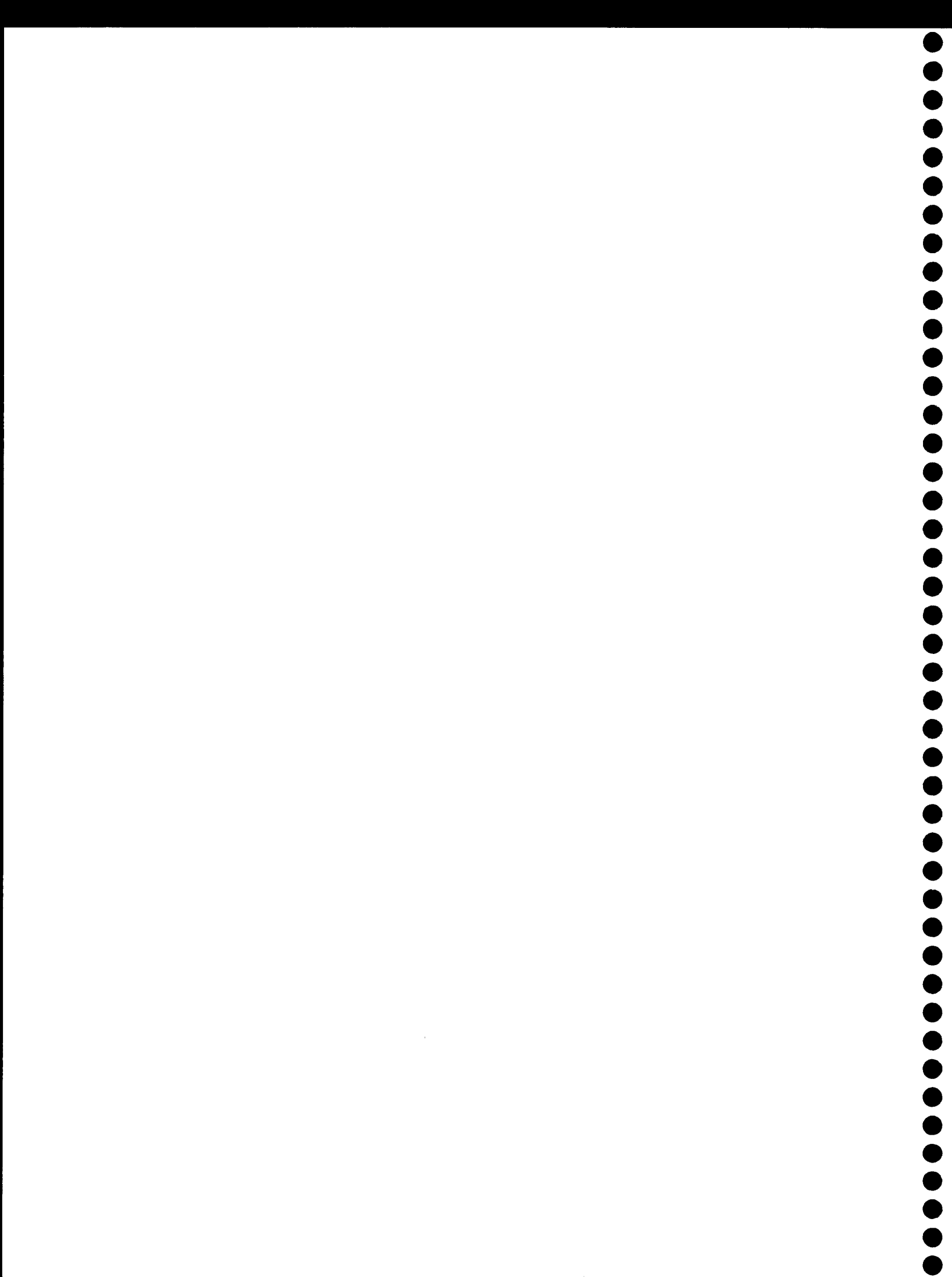
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III. ESTIMATE ADJUSTMENT

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 adjustment 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 Deflator 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 closing cost estimate dated: _____

Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Closing Cost Estimate:
_____	_____	x =	_____


This adjustment is based on the Department approved long-term care cost estimate dated: 9/1/2017

Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$124,601.83	1.018	x =	\$126,844.66
Number of Years of Long Term Care Remaining:		x	30
Inflation Adjusted Long-Term Care Cost Estimate:		=	\$3,805,339.89

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800
Address

Mark Roberts, Project Manager
Name & Title

Jacksonville, FL 32202
City, State, Zip Code

8/23/18
Date

Mark.Roberts@hdrinc.com
E-Mail Address

(904) 598-8900
Telephone Number



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
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Form Title: Closure Cost Estimating Form
For Solid Waste Facilities
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CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Plymouth Avenue Landfill WACS ID: 27539
Permit Application or Consent Order No.: 0127461-004-SF Expiration Date: 12/22/2026
Facility Address: Northeast of the intersection of Plymouth Ave and Grand Ave, west of DeLand, Florida
Permittee or Owner/Operator: Volusia County Solid Waste Division
Mailing Address: 3151 East New York Avenue, DeLand, Florida 32724

Latitude: 29 ° 02 ' 35 " Longitude: 81 ° 20 ' 50 "
Coordinate Method: AutoCAD/GPS Datum: NAD 1983/90 (east)
Collected by: J.E. Zapert Company/Affiliation Sliger & Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Plymouth LF	129.4	1940s				2/7/2000

Total disposal unit acreage included in this estimate: _____ Closure: NA Long-Term Care: 39

Facility type: ☒ Class I ☒ Class III ☒ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☒ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

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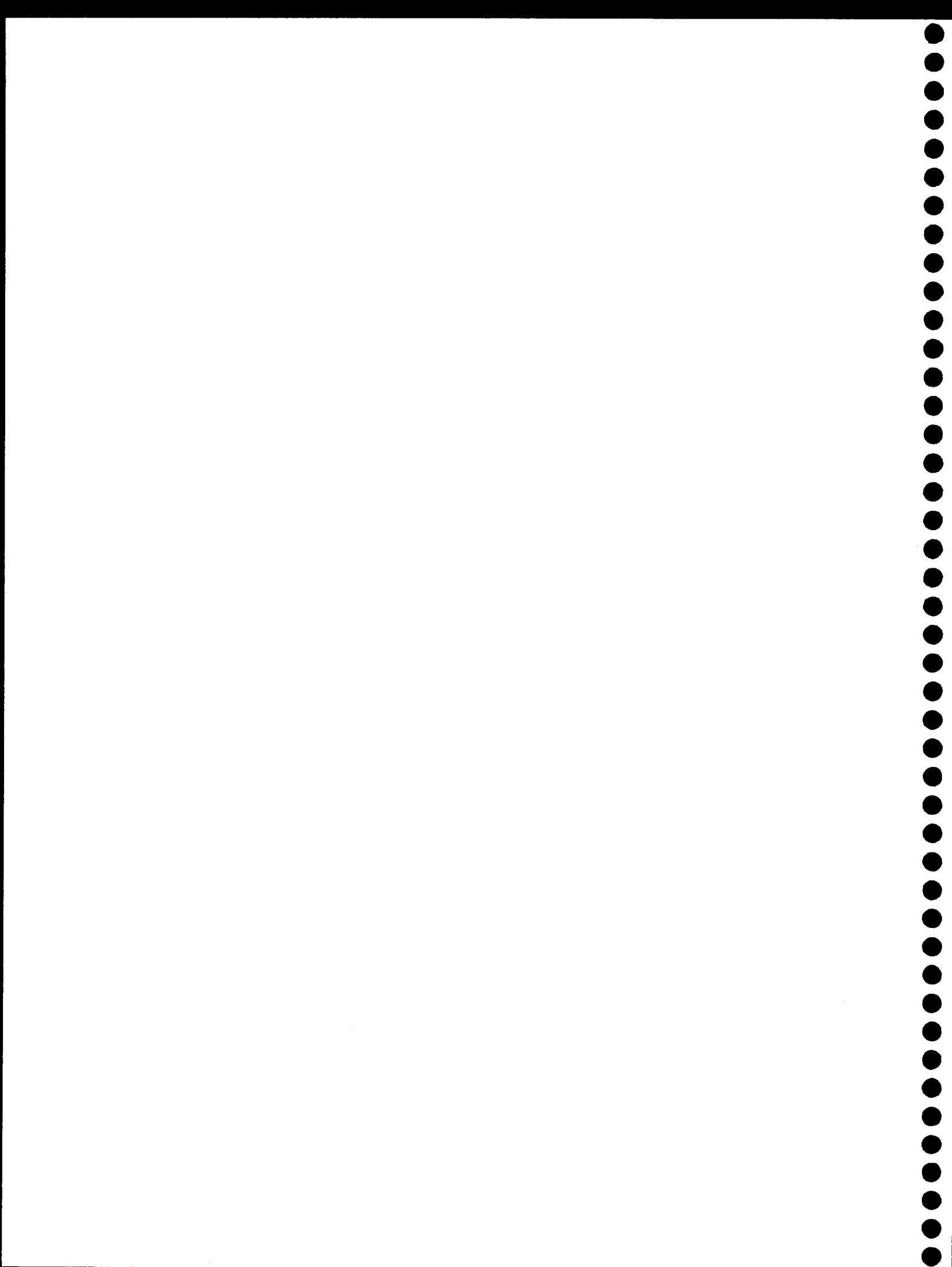
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This adjustment is based on the Department approved closing cost estimate dated: _____

Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Closing Cost Estimate:
_____	_____	x	_____
		=	_____

This adjustment is based on the Department approved long-term care cost estimate dated: 9/1/2017

Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$112,426.05	1.018	x	\$114,449.72
		=	
Number of Years of Long Term Care Remaining:		x	12
		=	
Inflation Adjusted Long-Term Care Cost Estimate:		=	\$1,373,396.63

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)


Signature

200 W Forsyth St, Ste 800
Address

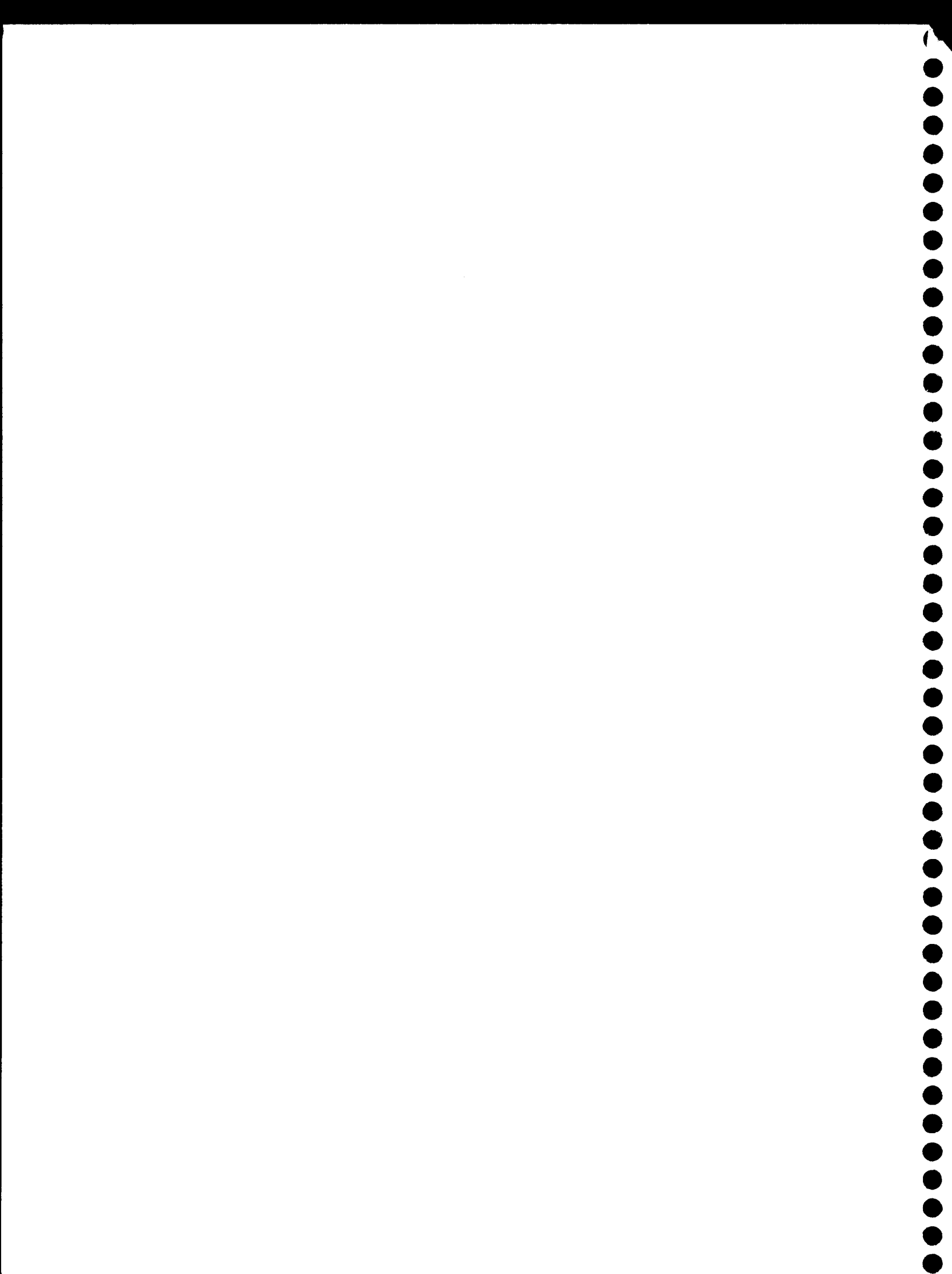
Mark Roberts, Project Manager
Name & Title

Jacksonville, FL 32202
City, State, Zip Code

8/23/18
Date

Mark.Roberts@hdrinc.com
E-Mail Address

(904) 598-8900
Telephone 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 Class I South Cell landfill, Plymouth Avenue landfill and Class III landfill at the TFR Facility by updating the 2017 FDEP-approved cost estimates with the annual inflation factor. The financial responsibility for the Class I North Cell landfill was adjusted based on approved unit costs from Area 4 Expansion Permit Application. The quantities used are same as approved financial assurance dated June 02, 2015. An inflation rate of 1.018 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. The 2017 cost estimates for the Class I North Cell landfill, Class I South Cell landfill and Class III landfill at the TFR Facility and the closed Plymouth Avenue Landfill were approved by the FDEP via an email dated September 19, 2017.

SECTION 3.0

Methodology

Closure and long-term care costs for the Class I South Cell and Class III landfills at TFR Facility and the Plymouth Avenue Landfill were adjusted for inflation based on the FY2017 Financial Responsibility Closure and Long-Term Care Cost Estimates Report cost estimates approved by the FDEP. The closure and long-term care costs for Class I North Cell were recalculated per approved unit costs associated with Area 4 Construction Permit Application. The Area 4 construction permit #0078767-041-SC-01 was issued on July 20, 2018. The quantities used are same as in the approved Class I North Cell closure and long-term care estimates submitted with May 2015 minor permit modification application. The minor modification was approved by FDEP on June 2, 2015. No modifications to the TFR South Cell, TFR Class III or Plymouth Avenue landfills or their permits have occurred since the previous year's financial assurance submittal that would necessitate a recalculation of their financial assurance responsibility.

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

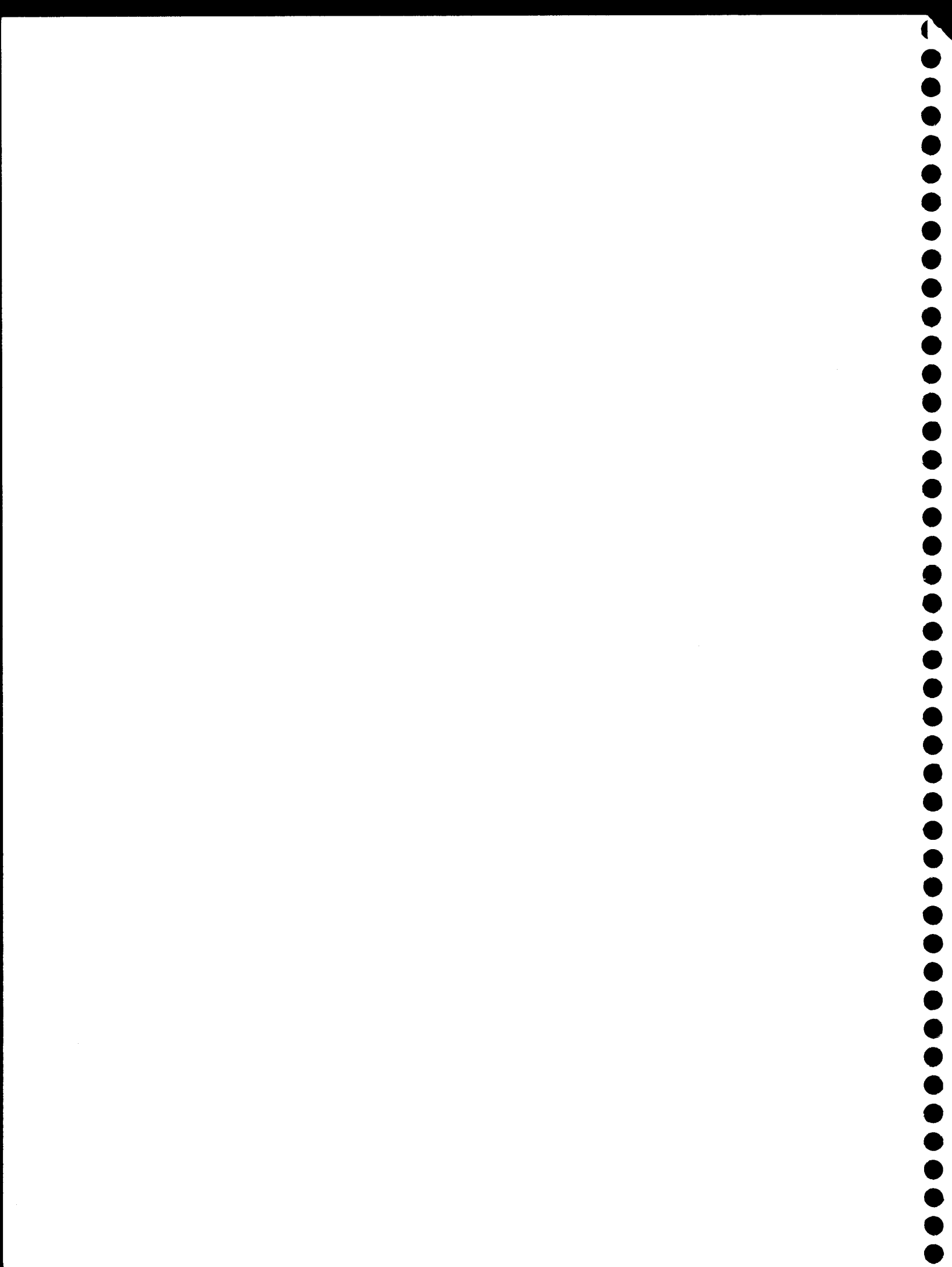
Population projections and a seven-year-averaged per capita landfill capacity utilization rate for Class I and Class III solid waste is used to project future landfill airspace utilization rates. The amount of permitted airspace utilized since the previous financial assurance report was determined by comparing new aerial topographic mapping flown in July 2018 with last year's aerial topographic survey flown in April 2017. 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 assumed to be Volusia County. The population projections are based on the data supplied by the Office of Economic and Demographic Research (EDR).

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.

Although permitted for construction, the Phase III Area 4 expansion has not yet been constructed and certified by the FDEP for waste disposal. Therefore, the Phase III Area 4 expansion was not included in the calculations presented in this report. Per FAC 62-701.630(1)(b), the financial assurance mechanism for the Phase III Area 4 expansion will be funded according to FDEP-approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in these areas. Based on future population projections, per capita utilizations and volume calculation by HDR, the Phase III Area 4 expansion will increase the total waste capacity by 2.3 million cubic yards and increase the site life by 6.1 years.

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 132 tons of tires by the cost of hauling and disposal of tires by a third party contractor currently \$80/ton for regular tires (approx. 97% of total tires) and \$200/ton for oversized tires (approx. 3% of total tires). The quantity of waste tires (approx. 132 tons of quarterly ending inventory) was calculated by averaging quarterly waste tire quantities reported since 2017 report submittal (*Quarterly Waste Tire Report & Inventory Update* reports submitted to the department: 2nd quarter 2017, 3rd quarter 2017; 4th quarter 2017; and 1st quarter 2018).



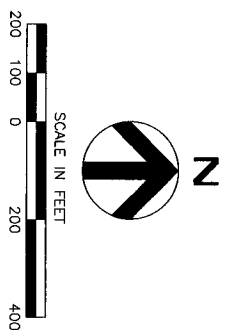
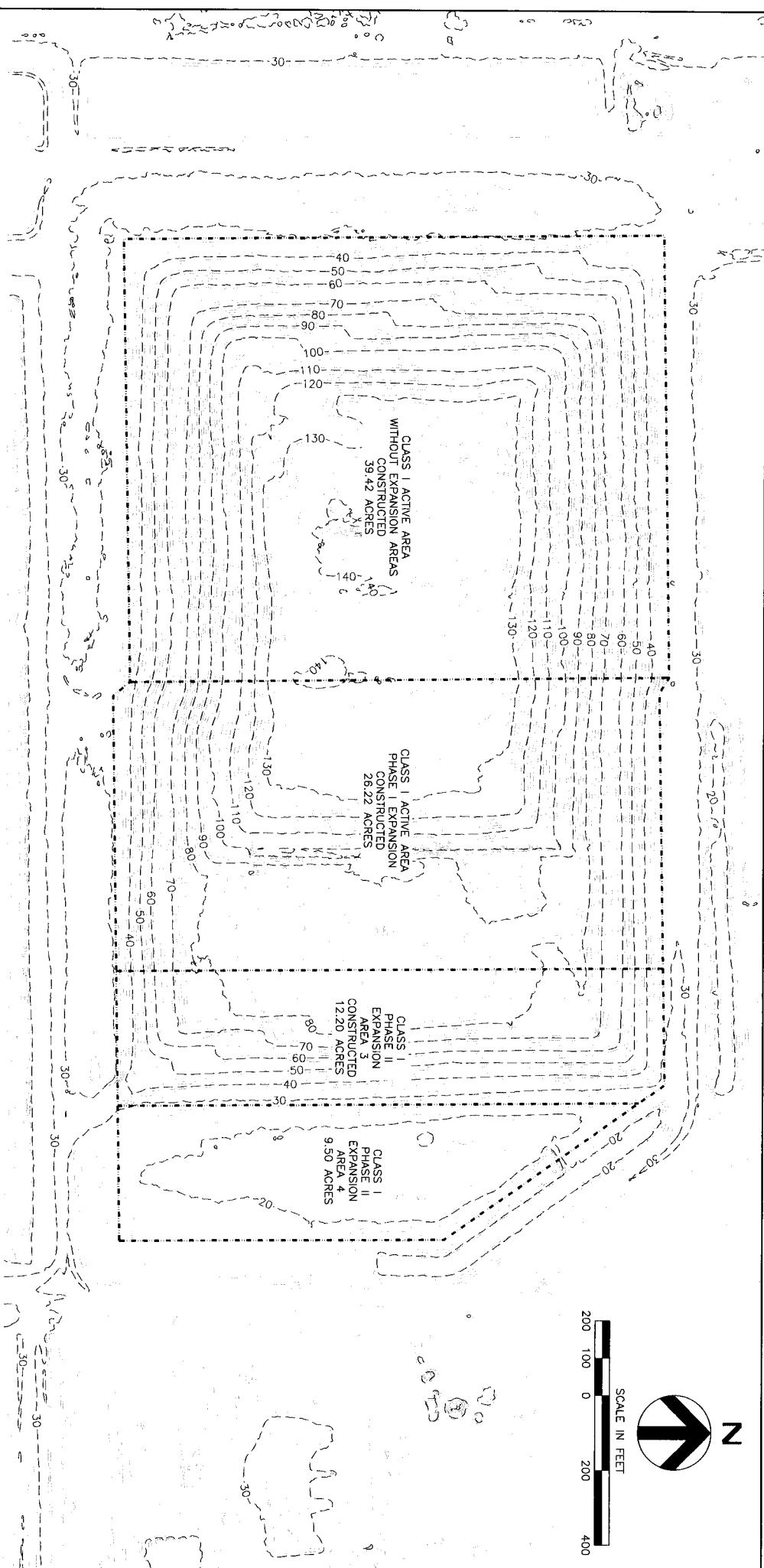
SECTION 4.0

Figures and Tables

The figures and tables are organized as follows:

<u>Figure Number</u>	<u>Title</u>
1	Existing Topographic Survey (July 2018) - Class I North Cell – Tomoka Farms Road Landfill
2	Final Grading Plan without Phase III Area 4 Expansion – Class I North Cell– Tomoka Farms Road Landfill
3	Final Grading Plan with Phase III Area 4 Expansion – Class I North Cell – Tomoka Farms Road Landfill
4	Existing Topographic Survey (July 2018) - Class III Landfill-Tomoka Farms Road Landfill
5	Final Grading Plan - Class III Landfill – Tomoka Farms Road Landfill
6	Aerial Site Plan (July 2018) – Tomoka Farms Road Landfill

<u>Table Number</u>	<u>Title</u>
1	Population Projections of Wasteshed Service Areas
2	Annual Rate of Landfill Capacity Utilization
3	North Cell Class I Landfill - Projected Capacity Utilization
4	Class III Landfill - Projected Capacity Utilization
5	Summary of Closing & Final Closure of Landfills
6	Summary of Estimated Cost
7	Summary of Escrow Analysis
8	Estimate of Accrued Liability (As of September 30, 2018)



LEGEND

----- AREA BOUNDARY

- NOTES:
1. TOPOGRAPHIC INFORMATION TAKEN FROM AERIAL SURVEY PERFORMED BY PICKETT & ASSOCIATES ON JULY 11, 2018.
 2. ELEVATIONS SHOWN HEREON REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
 3. BOUNDARIES ARE APPROXIMATE.

DATE

07/18

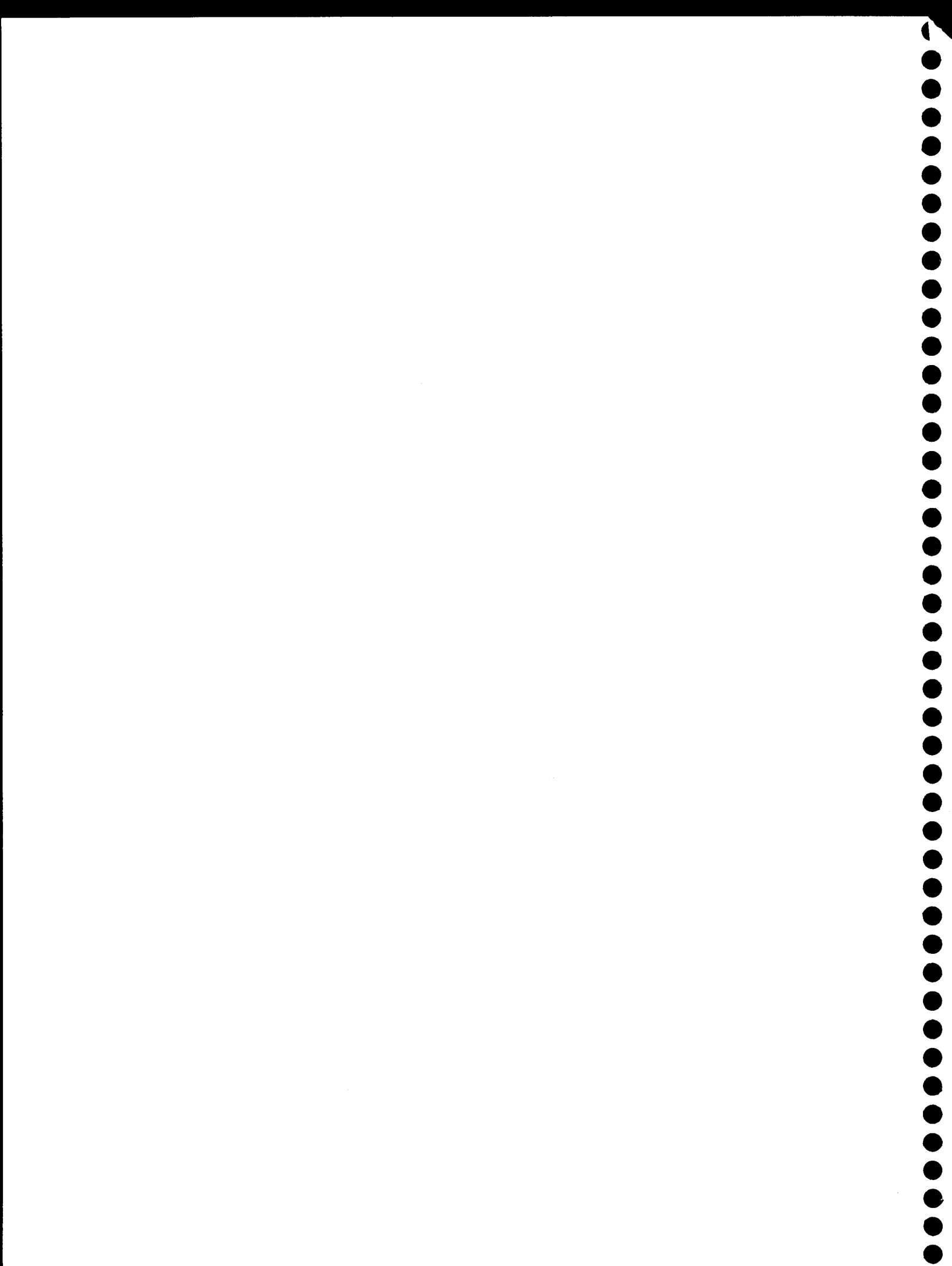
FIGURE

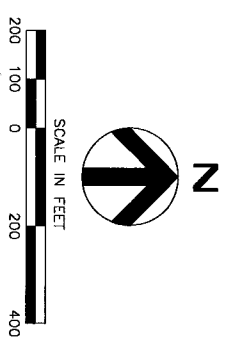
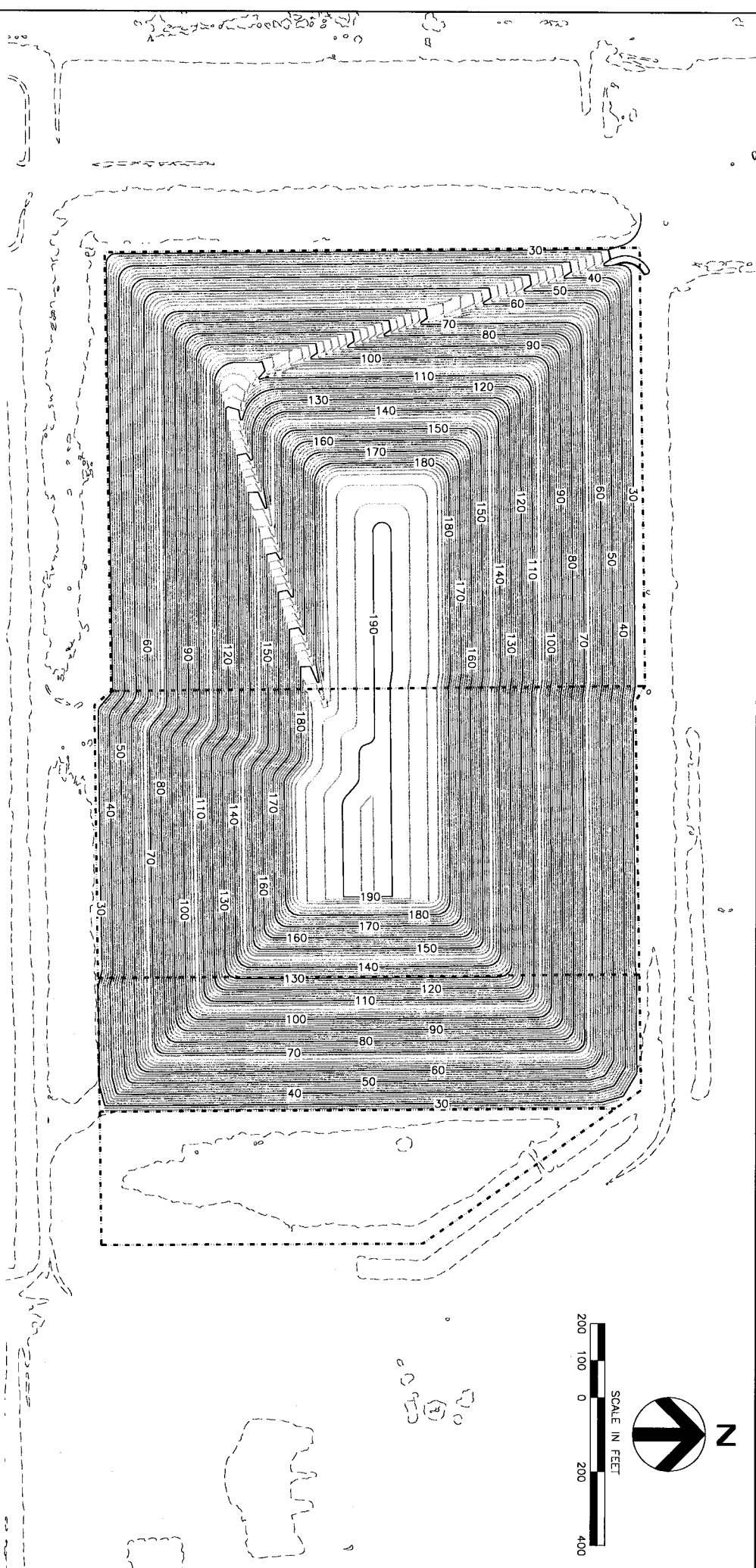
1

**EXISTING TOPOGRAPHIC SURVEY
(JULY 2018)
CLASS I NORTH CELL**

VOLUSIA COUNTY, FLORIDA

H-22





LEGEND
 - - - - - AREA BOUNDARY

- NOTES:
1. FINAL GRADING IS TAKEN FROM MINOR PERMIT MODIFICATION APPLICATION, DATED MAY 27, 2015 AND PREPARED FOR INCLUSION OF PHASE II AREA 3 INTO OPERATIONS PERMIT FOR THE CLASS I NORTH CELL LANDFILL.
 2. ELEVATIONS SHOWN HEREON REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
 3. BOUNDARIES ARE APPROXIMATE.

H-2

FINAL GRADING PLAN WITHOUT PHASE II AREA 4 EXPANSION CLASS I NORTH CELL

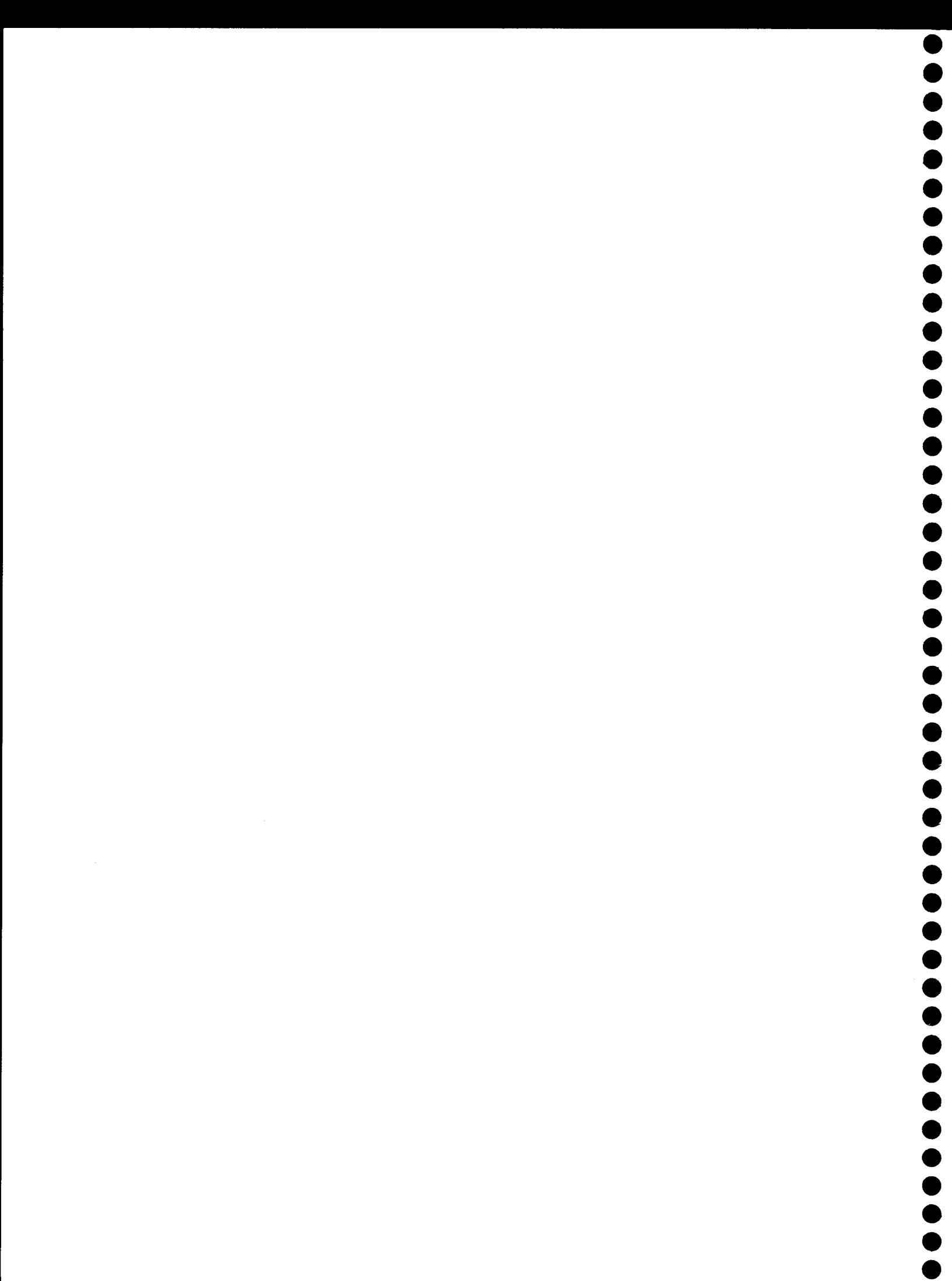
VOLUSIA COUNTY, FLORIDA

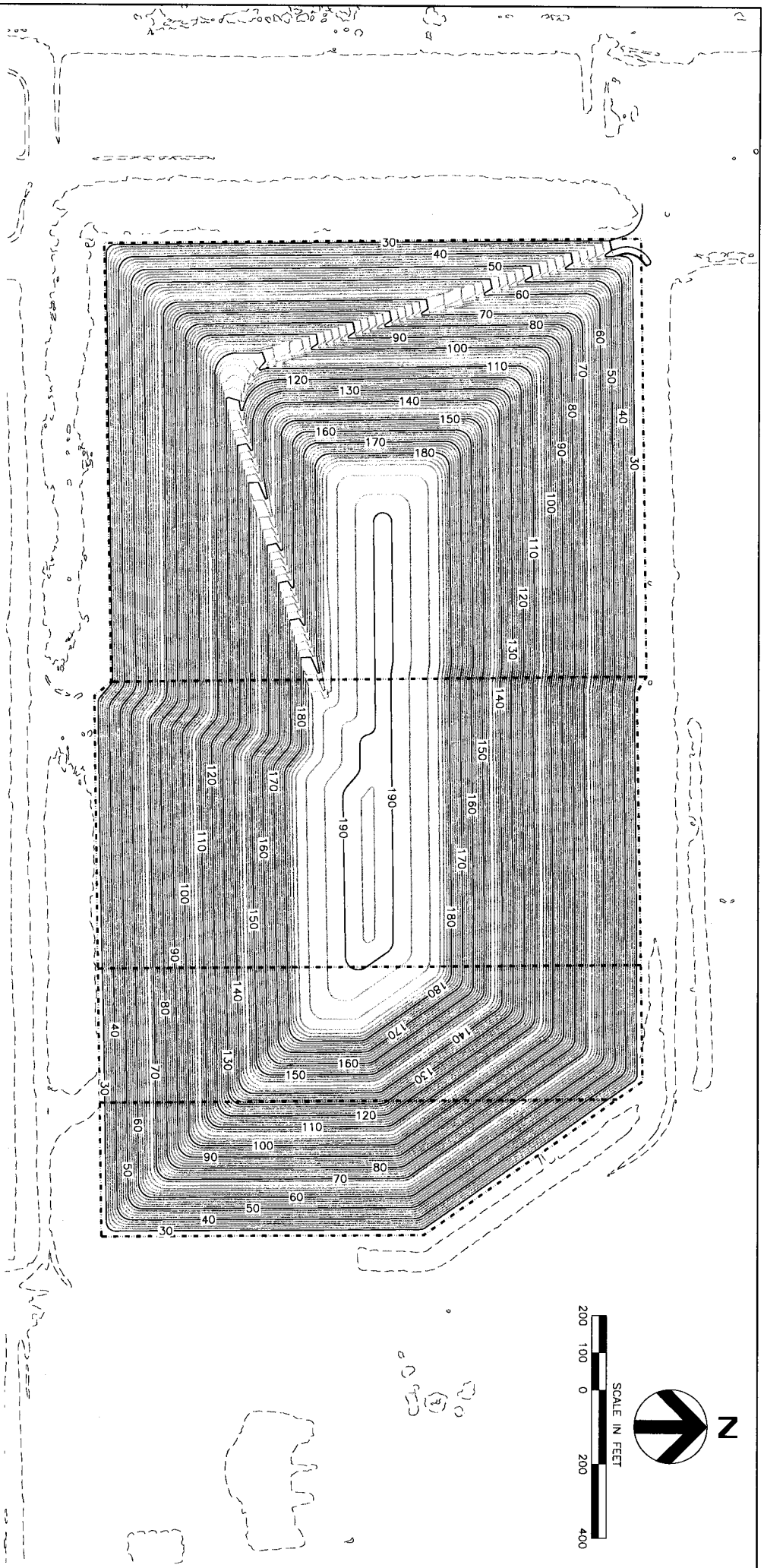
DATE

07/18

FIGURE

2

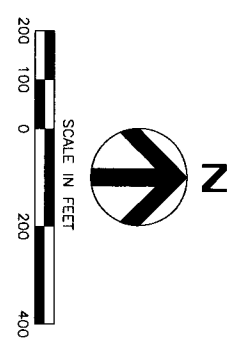




LEGEND

----- AREA BOUNDARY

- NOTES:
1. FINAL GRADING IS TAKEN FROM FIGURE 3 OF FINANCIAL RESPONSIBILITY CLOSURE AND LONG-TERM CARE COST ESTIMATE REPORT FOR FISCAL YEAR 2014 (DATED AUGUST, 2014).
 2. ELEVATIONS SHOWN HEREON REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
 3. BOUNDARIES ARE APPROXIMATE.



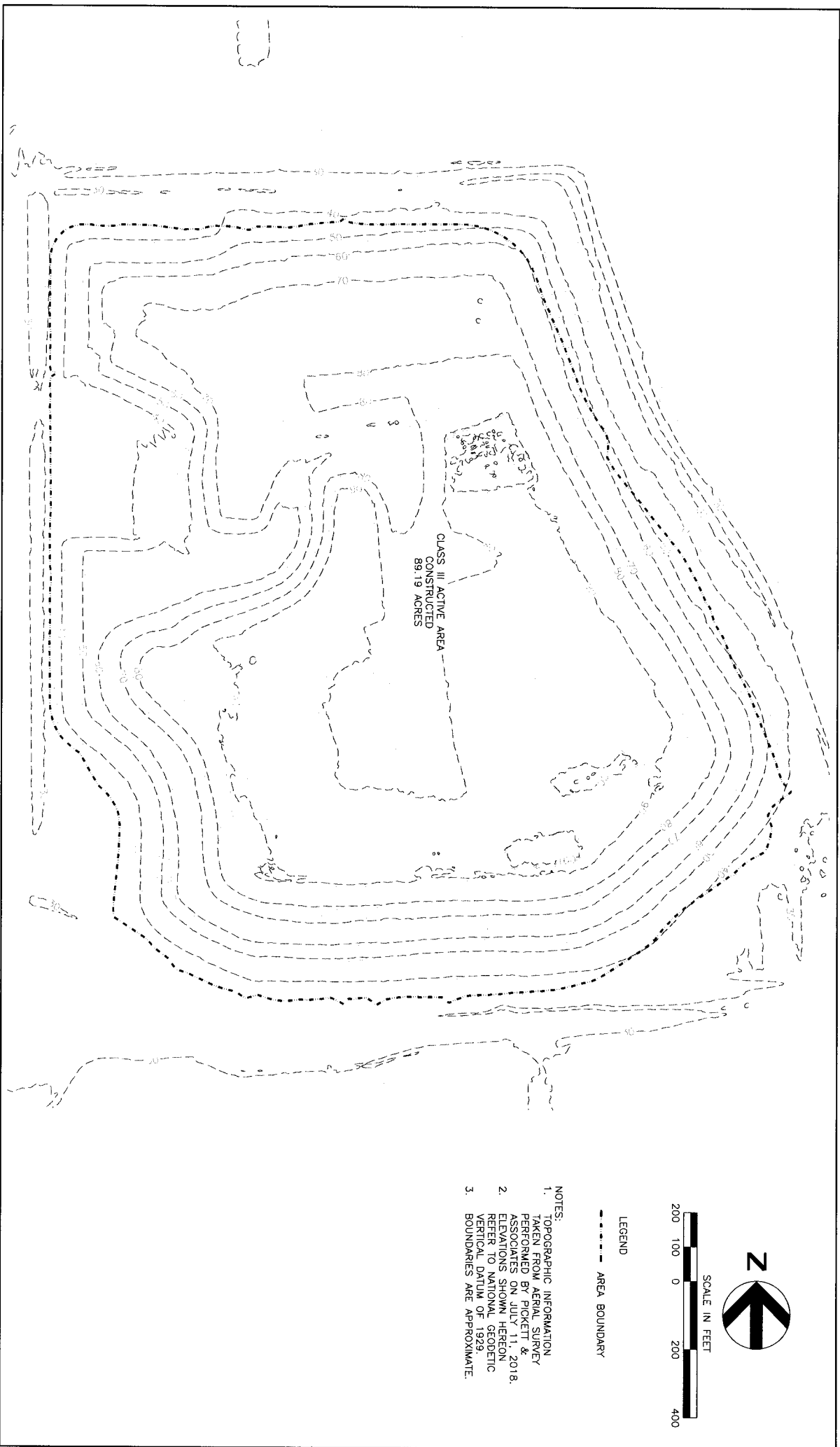
H-22

FINAL GRADING PLAN WITH PHASE II AREA 4 EXPANSION CLASS I NORTH CELL

VOLUSIA COUNTY, FLORIDA

DATE
07/18

FIGURE
3



H-22

EXISTING TOPOGRAPHIC SURVEY (JULY 2018) CLASS III LANDFILL

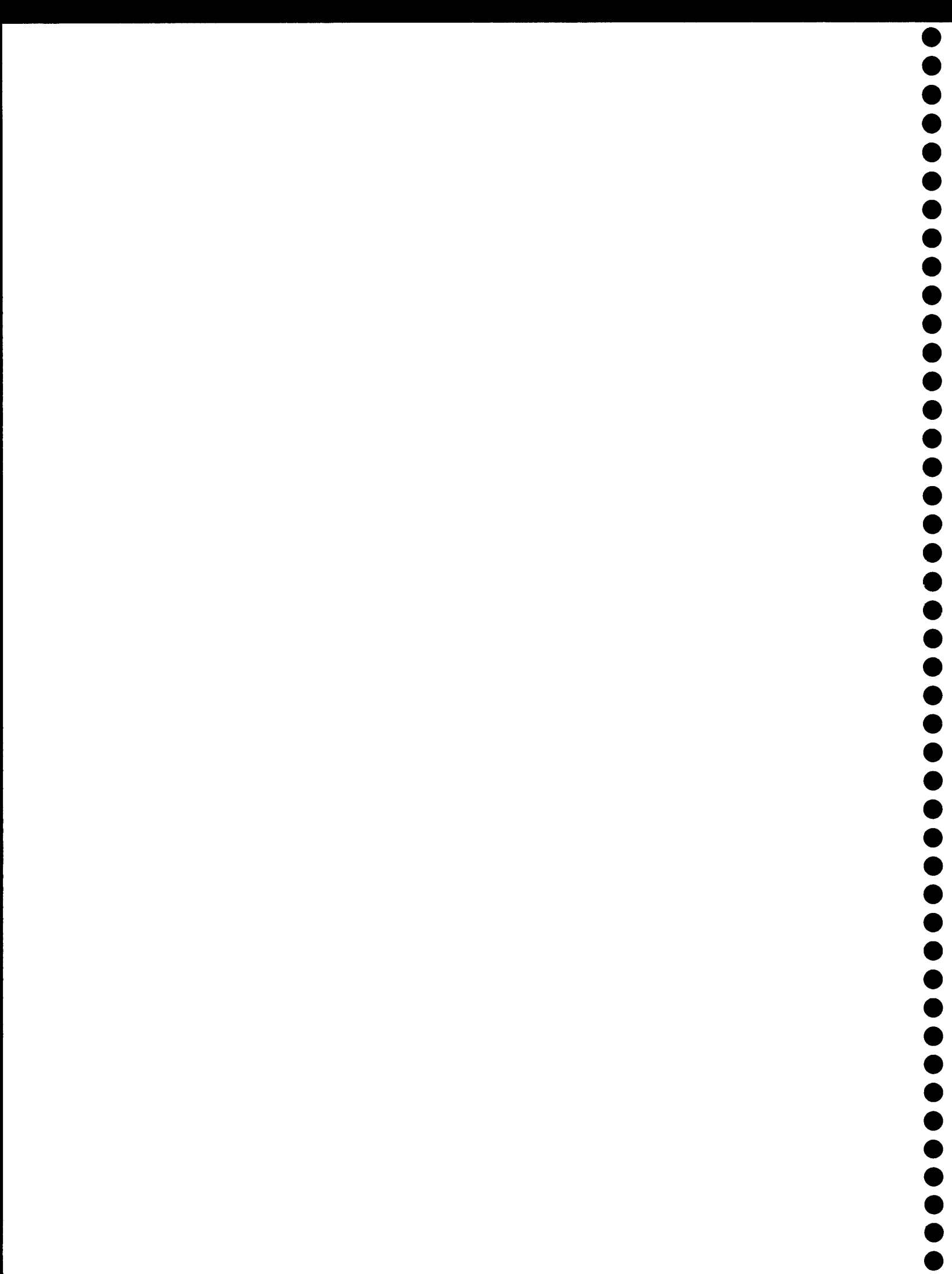
VOLUSIA COUNTY, FLORIDA

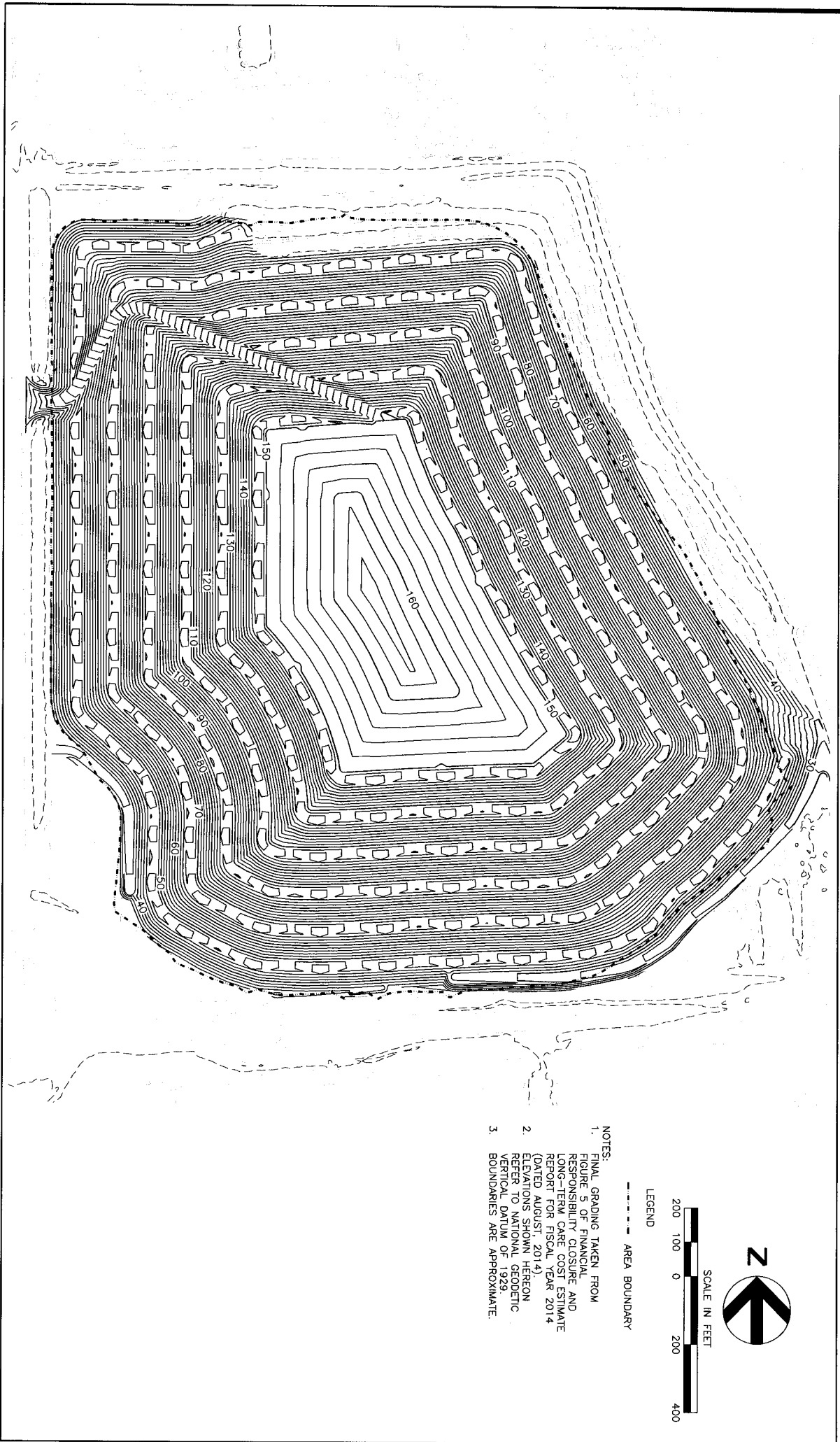
DATE

07/18

FIGURE

4





- NOTES:
1. FINAL GRADING TAKEN FROM FIGURE 5 OF FINANCIAL RESPONSIBILITY CLOSURE AND LONG-TERM CARE COST ESTIMATE REPORT FOR FISCAL YEAR 2014 (DATED AUGUST 2014).
 2. ELEVATIONS SHOWN HEREON REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929.
 3. BOUNDARIES ARE APPROXIMATE.



FINAL GRADING PLAN CLASS III LANDFILL

VOLUSIA COUNTY, FLORIDA

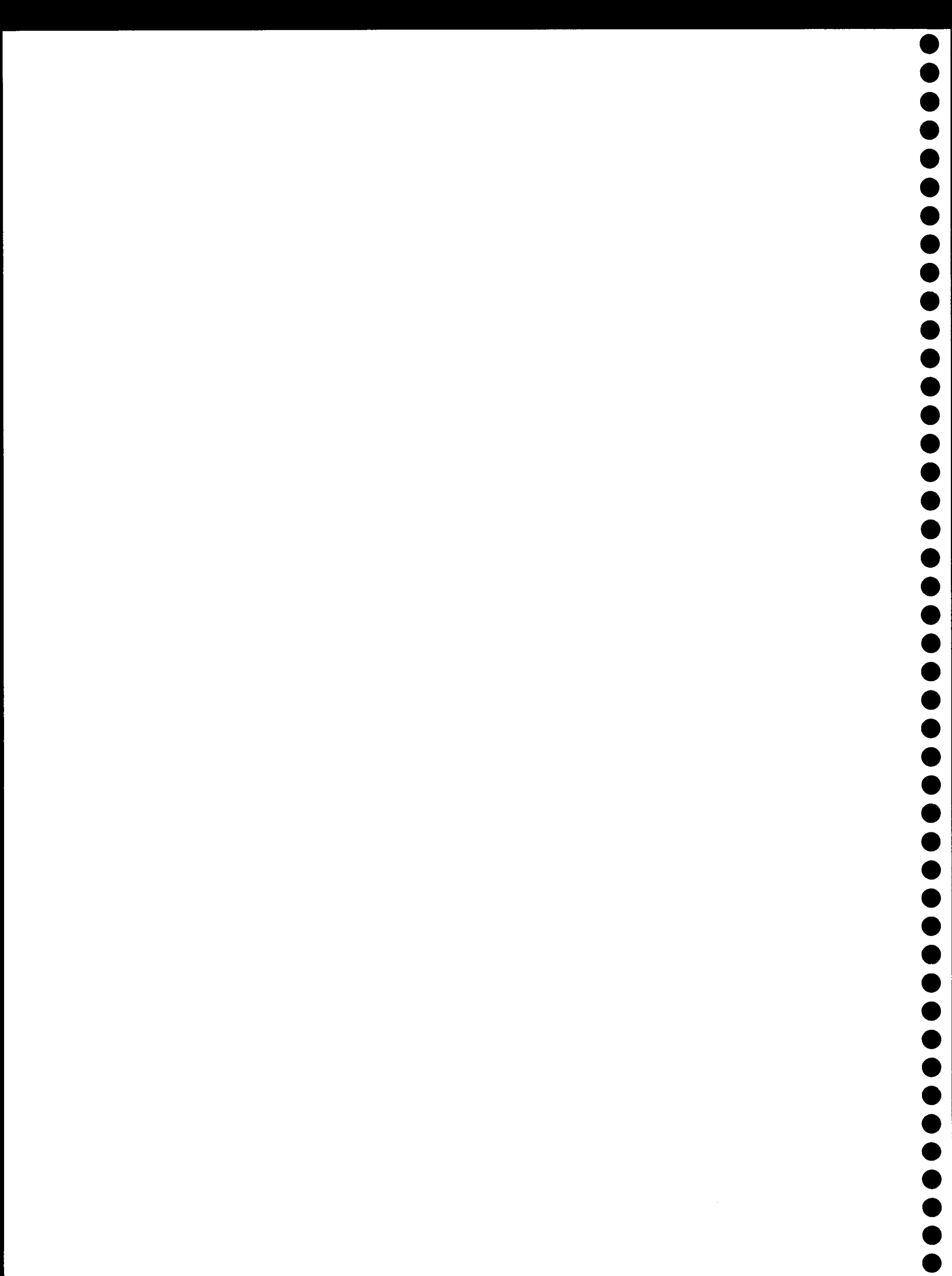
H22

DATE

07/18

FIGURE

5





AERIAL SITE PLAN
(JULY 2018)

VOLUSIA COUNTY, FLORIDA

H22

DATE

07/18

FIGURE

6

**Table 1: Population Projections of Wasteshed Service Areas
2018 Financial Assurance Report
Volusia County, Florida**

Year ^{2,3}	Service Area Populations ¹			Class I Wasteshed	Class III Wasteshed
	Volusia County	Flagler County	City of Deltona		
2011	495,400	96,241	85,233	506,408	410,167
2012	497,145	97,160	---	594,305	497,145
2013	498,978	---	---	498,978	498,978
2014	503,851	---	---	503,851	503,851
2015	510,494	---	---	510,494	510,494
2016	517,411	---	---	517,411	517,411
2017	523,405	---	---	523,405	523,405
2018	531,408	---	---	531,408	531,408
2019	537,491	---	---	537,491	537,491
2020	543,489	---	---	543,489	543,489
2021	549,236	---	---	549,236	549,236
2022	554,726	---	---	554,726	554,726
2023	559,988	---	---	559,988	559,988
2024	565,056	---	---	565,056	565,056
2025	569,960	---	---	569,960	569,960
2026	574,727	---	---	574,727	574,727
2027	579,366	---	---	579,366	579,366
2028	583,881	---	---	583,881	583,881
2029	588,277	---	---	588,277	588,277
2030	592,556	---	---	592,556	592,556
2031	596,721	---	---	596,721	596,721
2032	600,766	---	---	600,766	600,766
2033	604,681	---	---	604,681	604,681
2034	608,456	---	---	608,456	608,456
2035	612,083	---	---	612,083	612,083
2036	615,557	---	---	615,557	615,557
2037	618,894	---	---	618,894	618,894
2038	622,114	---	---	622,114	622,114
2039	625,236	---	---	625,236	625,236
2040	628,281	---	---	628,281	628,281

Notes:

1. The Office of Economic and Demographic Research (EDR) is the source for Volusia County population estimates for 2011 through 2040. The City of Deltona population based on August 2017 Financial Responsibility Report.
2. From June 2009 to September 2011 waste generated by City of Deltona was diverted from disposal in the Class I & III landfills.
3. Per Volusia County, Flagler County's Class I waste was not accepted for disposal at the Class I landfill from 2013 onwards.

Table 2: Annual Rate of Landfill Capacity Utilization
2018 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) ^(3,4)
2011	335,394	506,408	0.662
2012	399,352	594,305	0.672
2013	351,235	498,978	0.704
2014	354,489	503,851	0.704
2015	348,715	510,494	0.683
2016	393,627	517,411	0.761
2017	402,248	523,405	0.769
Projected Rate of Class I Landfill Space Utilization Per Capita (CY/Yr)			0.708

B. Class III Landfill

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class III Landfill Space Utilization Per Capita (CY/Yr) ^(3,4)
2011	122,020	410,167	0.297
2012	78,803	497,145	0.159
2013	125,074	498,978	0.251
2014	154,533	503,851	0.307
2015	144,195	510,494	0.282
2016	242,864	517,411	0.469
2017	223,982	523,405	0.428
Projected Rate of Class III Landfill Space Utilization Per Capita (CY/Yr)			0.313

Notes:

1) The year shown refers to the period in between the annual aerial topographic surveys (i.e. year 2017 refers to April 18, 2017 to July 11, 2018). For the year 2017, the annual utilized airspace, 494,820 cubic yards for the Class I North Cell and 275,529 cubic yards for the Class III Landfill, was divided by 1.23014 to normalize for the 449 days in between aerial photograph dates (April 18, 2017 to July 11, 2018).

2) Annual utilization for the years 2011 through 2016 is provided by HDR Engineering's 2017 Financial Assurance Report dated August 2017. The Class I 2017 annual utilization was calculated by Autodesk AutoCAD Civil 3D using the April 18, 2017 and July 11, 2018 aerial topographic surveys by Pickett and Associates, Inc. The extent of the area used in the volume calculation was the "Existing Edge of Liner" Final Cover/Closure Site Plan SCS Engineers, 7/24/2009. 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 permitted Class III" line shown on the SCS Engineers permit renewal drawing dated June 2009. The western margin of the permitted Class III boundary was truncated (approximately 10 acres) since activities unrelated to waste disposal, compaction or decomposition (i.e. removal of yard trash stockpiles) occurred in this area.

3) Reduced Class III landfill per capita space utilization for 2012 tonnages may be attributed to a downturn in construction.

4) The projected rate of landfill space utilization is assumed to be the average rate of per capita utilization for the past seven years.

5) 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
2018 Financial Assurance Report
Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining without Phase III, Area 4 Expansion (CY)	Percent of Permitted Disposal Capacity Used
2016 ⁽²⁾	4/18/17	---	---	2,632,192	75%
2017 ⁽³⁾	4/19/17 to 7/11/18	494,820	8,494,766	2,137,569	80%
2017	7/12/18 to 9/30/18	81,221	8,575,987	2,056,348	81%
2018	10/1/18 to 9/30/19	376,237	8,952,223	1,680,111	84%
2019	10/1/19 to 9/30/20	380,544	9,332,767	1,299,568	88%
2020	10/1/20 to 9/30/21	384,790	9,717,557	914,777	91%
2021	10/1/21 to 9/30/22	388,859	10,106,416	525,918	95%
2022	10/1/22 to 9/30/23	392,746	10,499,162	133,172	99%
2023	10/1/23 to 1/31/24	133,172	10,632,335	0	100%
				Calculated Closure Date	January 2024

Notes:

1) Year generally represents October 1 to September 30 (i.e. year 2018 is from October 1, 2018 to September 30, 2019).

2) Source is 2017 Financial Responsibility Report, HDR Engineering dated August 2017.

3) The volume capacity remaining as of the July 11, 2018 topo survey was calculated to be approximately 2,393,871 cubic yards. This volume was calculated using the final cap grade contours and the July 11, 2018 aerial topographic survey. The final cover volume was estimated to be 256,302 cubic yards which assumes a permitted 2-foot thick soil cover for the entire closure area. The remaining capacity, 2,137,569 cubic yards, was assumed to be utilized for waste disposal and daily/intermediate cover.

4) The total design capacity is assumed same as the total capacity used in 2017 Financial Responsibility Report prepared by HDR Engineering and dated August 2017.

Table 4: Class III Landfill - Projected Capacity Utilization
2018 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
2016 ⁽²⁾	4/18/2017	--	--	3,649,459	48%
2017 ⁽³⁾	4/18/17 to 7/11/18	275,529	3,635,332	3,373,930	52%
2017	7/11/18 to 9/30/18	36,356	3,671,688	3,337,574	52%
2018	10/1/18 to 9/30/19	166,331	3,838,019	3,171,243	55%
2019	10/1/19 to 9/30/20	168,235	4,006,254	3,003,008	57%
2020	10/1/20 to 9/30/21	170,112	4,176,366	2,832,896	60%
2021	10/1/21 to 9/30/22	171,911	4,348,277	2,660,985	62%
2022	10/1/22 to 9/30/23	173,629	4,521,906	2,487,356	65%
2023	10/1/23 to 9/30/24	175,276	4,697,182	2,312,080	67%
2024	10/1/24 to 9/30/25	176,863	4,874,045	2,135,217	70%
2025	10/1/25 to 9/30/26	178,397	5,052,442	1,956,820	72%
2026	10/1/26 to 9/30/27	179,890	5,232,332	1,776,930	75%
2027	10/1/27 to 9/30/28	181,342	5,413,673	1,595,589	77%
2028	10/1/28 to 9/30/29	182,755	5,596,428	1,412,834	80%
2029	10/1/29 to 9/30/30	184,131	5,780,559	1,228,703	82%
2030	10/1/30 to 9/30/31	185,470	5,966,029	1,043,233	85%
2031	10/1/31 to 9/30/32	186,774	6,152,802	856,460	88%
2032	10/1/32 to 9/30/33	188,040	6,340,842	668,420	90%
2033	10/1/33 to 9/30/34	189,265	6,530,107	479,155	93%
2034	10/1/34 to 9/30/35	190,447	6,720,554	288,708	96%
2035	10/1/35 to 9/30/36	191,582	6,912,136	97,126	99%
2036	10/1/36 to 4/1/37	97,126	7,009,262	0	100%
				Calculated Closure Date	April 2037

Notes:

- 1) Year generally represents October 1 to September 30 (i.e. year 2018 is from October 1, 2018 to September 30, 2019).
- 2) Source is 2017 Financial Responsibility Report, HDR Engineering dated August 2017.
- 3) The total air space remaining as of the July 11, 2018 aerial survey was calculated to be 3,809,046 cubic yards. The required volume for final cover is 435,116 cubic yards of final cover, per Renewal Application for Operating Permit, SCS, 2009. A remaining capacity of 3,373,930 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 2017 Financial Responsibility Report prepared by HDR Engineering and dated August 2017.

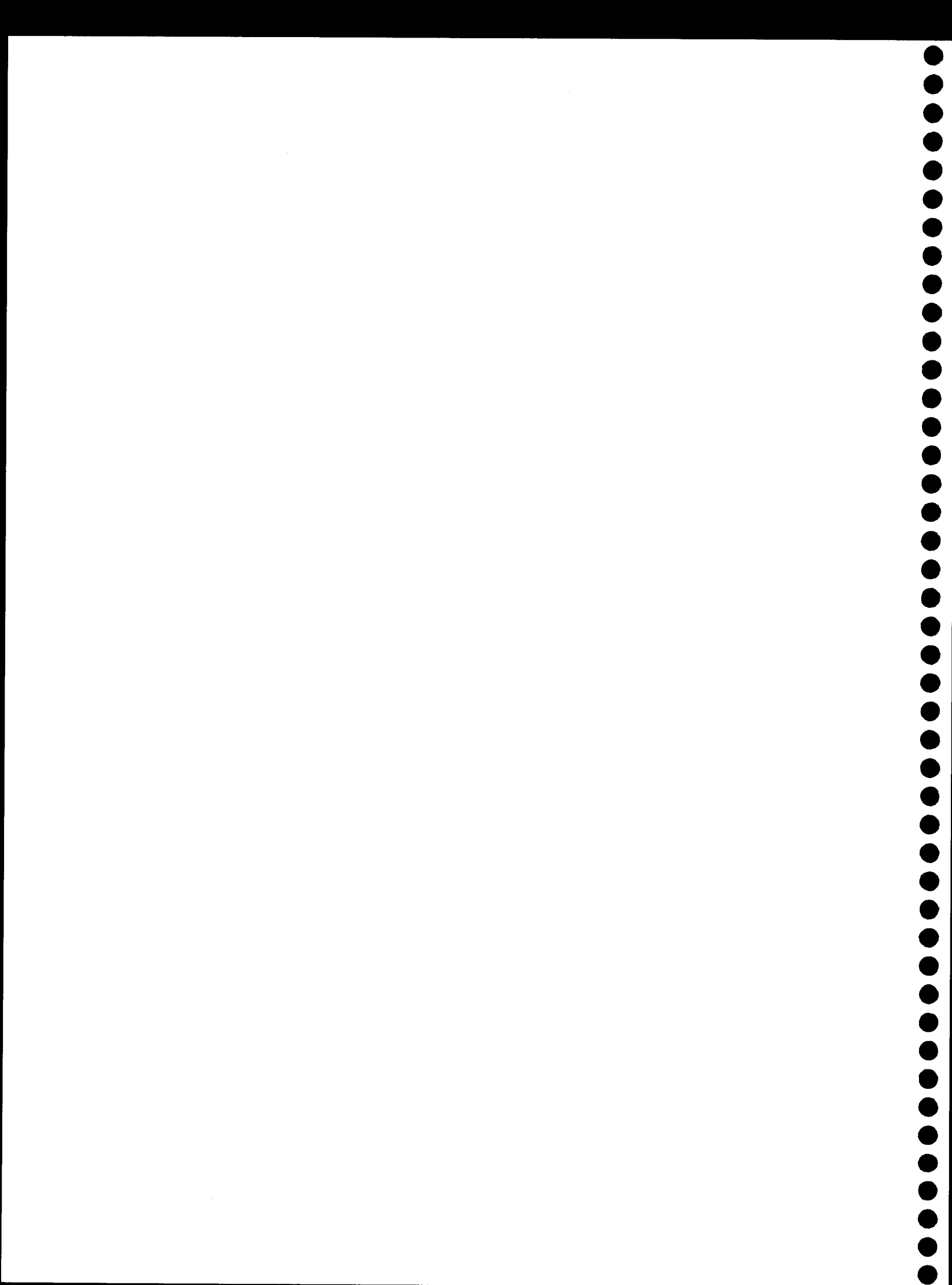


Table 5: Summary of Closing & Final Closure of Landfills
2018 Financial Assurance Report
Volusia County, Florida

	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
1. Tomoka Farms Road Landfill						
South Cell ⁽²⁾	---	0	114	---	0	30
North Cell Class I	January 2024	66	0	2024-2054	5	30
Class III Landfill	April 2037	88	0	2037-2067	19	30
2. Plymouth Ave. Landfill						
Final Closure (LTC Period) ⁽³⁾	---	0	39	---	0	12

Notes:

1) As calculated in Tables 3 and 4 of this report. Reference date is 9/1/2018.

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 two years.

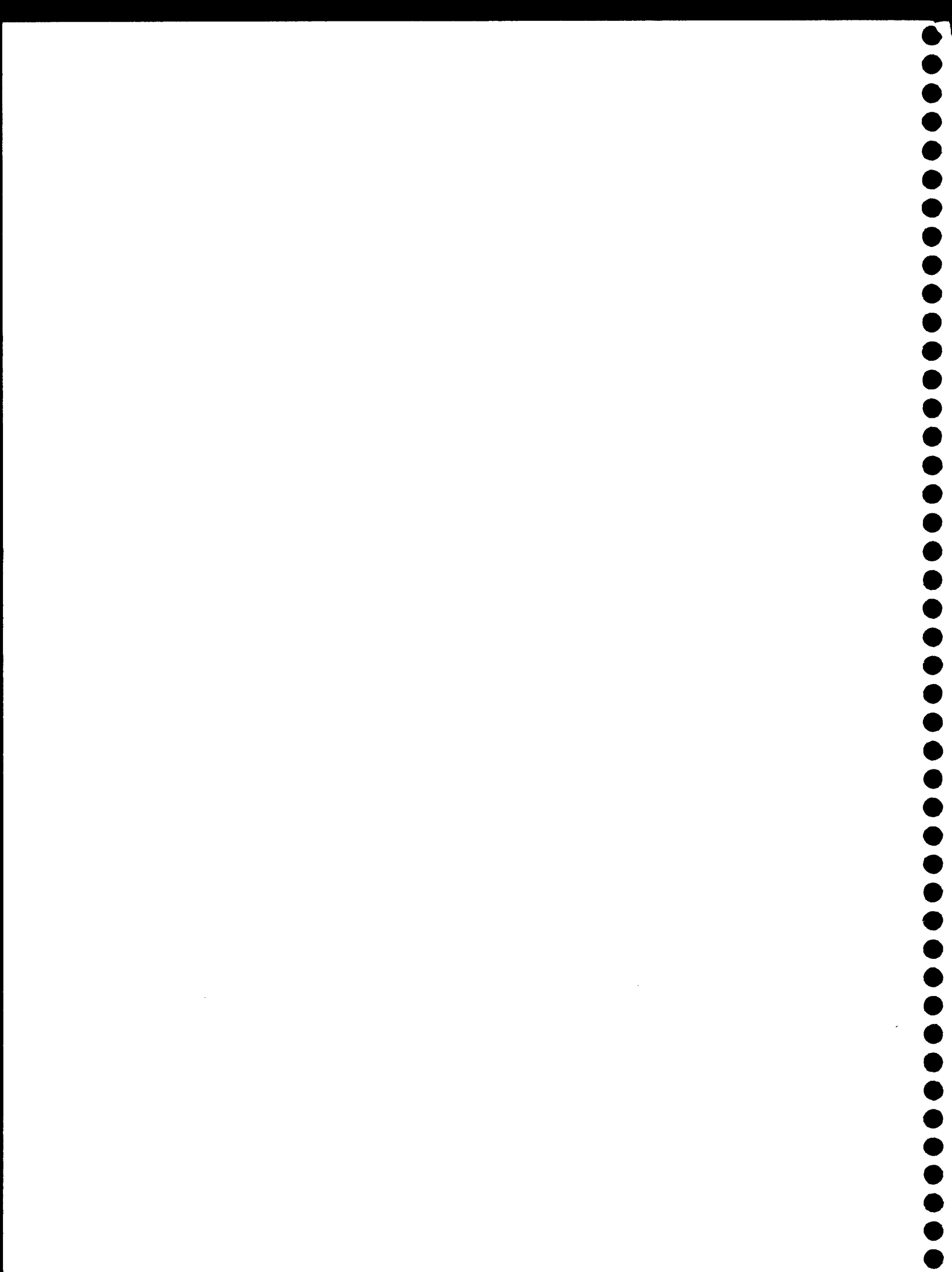


TABLE 6: Summary of Estimated Costs
2018 Financial Assurance Report
Volusia County, Florida

Facility	Updated Closing Cost Estimate	Updated Annual LTC Cost Estimate	Total Updated LTC Cost Estimate	Total Updated Cost Estimate
1. Tomoka Farms Road Landfill				
South Cell-Previously Closed (LTC Period) ¹	----	\$ 126,844.66	\$ 3,805,339.80	\$ 3,805,339.80
North Cell (in Operation) ¹	\$ 10,852,173.43	\$ 185,682.84	\$ 5,570,485.20	\$ 16,422,658.63
Class III Landfill (in Operation) ¹	\$ 9,145,848.07	\$ 61,243.83	\$ 1,837,314.90	\$ 10,983,162.97
2. Plymouth Ave. Landfill				
Previously Closed (LTC Period) ¹	----	\$ 114,449.72	\$ 1,373,396.64	\$ 1,373,396.64
3. Used Tire Area (in Operation) ²	\$ 11,035.00	---	----	\$ 11,035.00
Total Estimated Cost	----	----	----	\$ 32,595,593.04

Notes:

1) Refer to the FDEP Forms 62-701.900(28), F.A.C. provided in this Report. Note that the North Cell financial assurance was adjusted based on unit prices approved with Area 4 construction permit application (permit issued on July 20, 2018). The quantities used are consistent with approved Financial Assurance dated June 2, 2015 to include Phase II Area 3 into the Operations Permit. No inflation adjustment for North Cell.

2) The cost for closing the waste tire area was calculated by multiplying 132 tons of tires at average expense of disposing regular tires (\$80/ton and approx. 97% of total tires) and over-sized tires (\$200/ton and approx. 3% of total tires). Quantity of waste tires (132 tons, approx. ending inventory) is calculated by averaging quarterly waste tire quantities reported since 2017 report submittal (Quarterly Waste Tire Report & Inventory Update reports submitted to the department: 2nd quarter 2017; 3rd quarter 2017; 4th quarter 2017; and 1st quarter 2018).

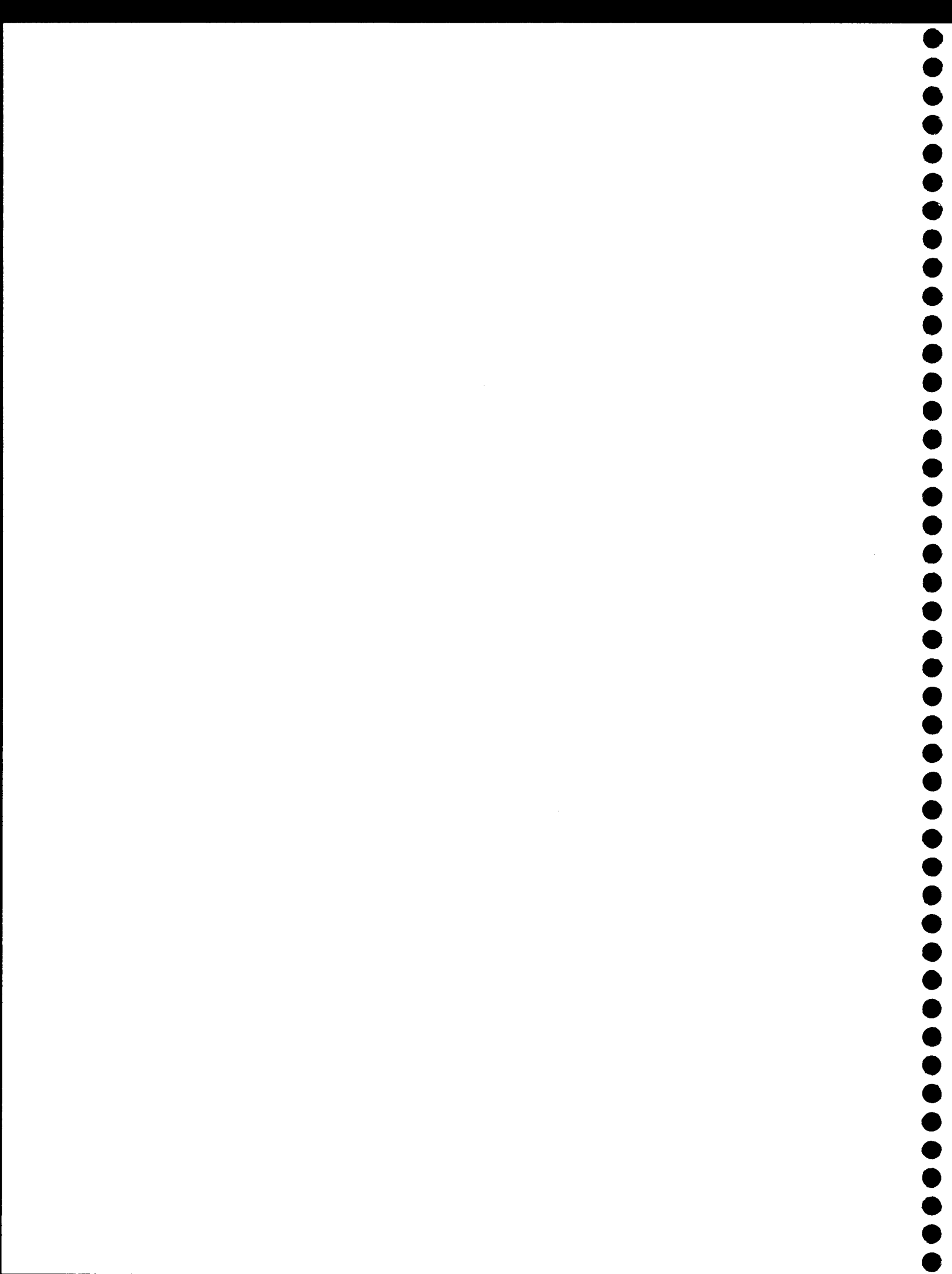


TABLE 7: Summary of Escrow Analysis
2018 Financial Assurance Report
Volusia County, Florida

Facility	South Cell Landfill	North Cell Class I Landfill	Class III Landfill	Plymouth Ave. Landfill	Used Tire Area	Total Cost
Estimated Updated Closing Cost (CE)	\$ -	\$ 10,852,173.43	\$ 9,145,848.07	\$ -	\$ 11,035.00	\$ 20,009,056.50
Months of Exhausted Design Life (DE) ^(1,2)	---	231	243	---	---	---
Months of Total Design Life (DL) ⁽²⁾	---	296	466	---	---	---
Documented Closure Expenses (E)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Remaining Years of Long-term Care	30	30	30	12	0	---
Estimated Updated Post-Closure LTC Cost	\$ 3,805,339.80	\$ -	\$ -	\$ 1,373,396.64	\$ -	\$ 5,178,736.44
Escrow Account Balance ⁽³⁾	\$ 125,344.00	\$ 8,324,229.00	\$ 4,301,635.00	\$ 113,014.00	\$ 19,838.00	\$ 12,884,060.00
Total Escrow Funding Required ⁽⁴⁾	\$ 126,844.66	\$ 8,469,094.81	\$ 4,769,186.87	\$ 114,449.72	\$ 11,035.00	\$ 13,490,611.06
Total Estimated Increase/(Decrease) for FY-18 Requirement	\$ 1,500.66	\$ 144,865.81	\$ 467,551.87	\$ 1,435.72	\$ (8,803.00)	\$ 606,551.06
Financial Responsibility Escrow Account Balance for 2018 FDEP Requirement						\$ 13,490,611.06

Notes:

1) Exhausted design life as of September 1, 2018.

2) North Landfill: opening date is June 1999 and closure date of January 2024 as calculated in Table 3. Class III landfill - opening date is June 1998 and closure date of April 2037 as calculated in Table 4.

3) See attached documentation from James & Moore for Escrow balance dated 9/30/2017 (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 $[CE \times DE/DL] - E$. 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.

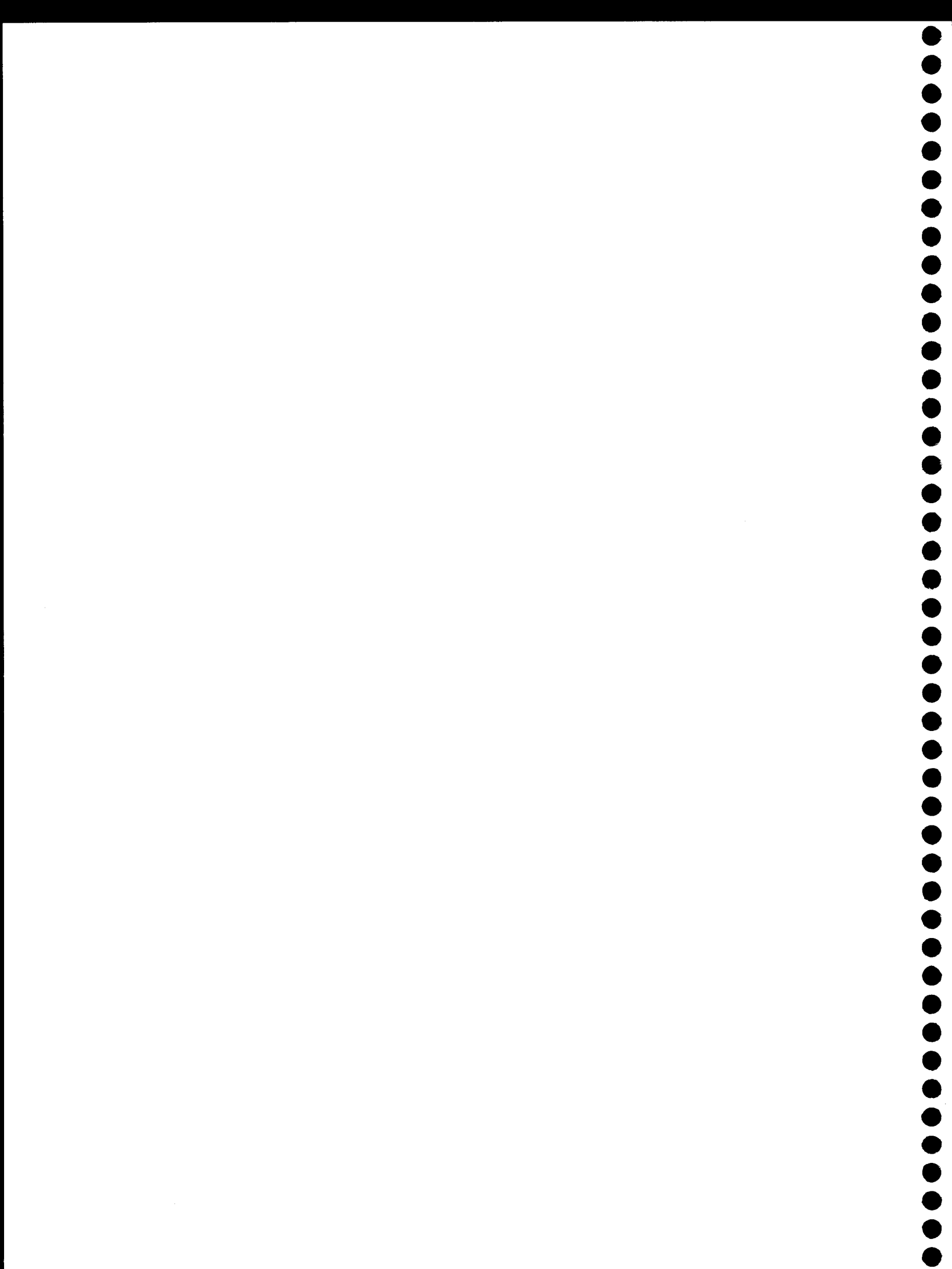


TABLE 8: Estimate of Accrued Liability (As of September 30, 2018)
2018 Financial Assurance Report
Volusia County, Florida

Item ¹	Tomoka Farms (South Cell)	Tomoka Farms (North Class I)	Tomoka Farms (Class III)	Plymouth Avenue	Waste Tire	Total
CLOSURE AND POST-CLOSURE COST ESTIMATES						
Closure Cost (Non-Completed) (Note 1)	\$ -	\$ 10,852,173.43	\$ 9,145,848.07	\$ -	\$ 11,035.00	\$ 20,009,056.50
Post Closure Care (30 Years) (Note 2)	\$ 3,805,339.80	\$ 5,570,485.20	\$ 1,837,314.90	\$ 1,373,396.64	\$ -	\$ 12,586,536.54
Total FY 2018 Estimates	\$ 3,805,339.80	\$ 16,422,658.63	\$ 10,983,162.97	\$ 1,373,396.64	\$ 11,035.00	\$ 32,595,593.04
% of Capacity Used	100.00%	80.66%	52.38%	100.00%	N/A	-
FY2018 LF Closure & LTC Cost Estimate (Current FY2018 Estimate x % of Capacity Used)	\$ 3,805,339.80	\$ 13,246,432.15	\$ 5,753,351.86	\$ 1,373,396.64	\$ 11,035.00	\$ 24,189,555.45
TRIAL BALANCE ADJUSTMENT						
FY2017 LF Closure & LTC Liability (as of 9/30/2017)	\$ 3,738,055	\$ 13,495,889	\$ 5,279,624	\$ 1,461,539	\$ 19,813	\$ 23,994,919.58
Less Amount Paid for Closure in 2018 included in Closure Cost Re-calculation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FY2018 LF Closure & LTC Liability Pre-Adjusted Balance (8/30/2018)	\$ 3,738,054.79	\$ 13,495,888.63	\$ 5,279,624.48	\$ 1,461,538.68	\$ 19,813.00	\$ 23,994,919.58
Adjustment for FY2018 Fiscal Year-End Change in LF Closure and LTC Estimate	\$ 67,285.01	\$ (249,456.48)	\$ 473,727.38	\$ (88,142.04)	\$ (8,778.00)	\$ 194,635.87

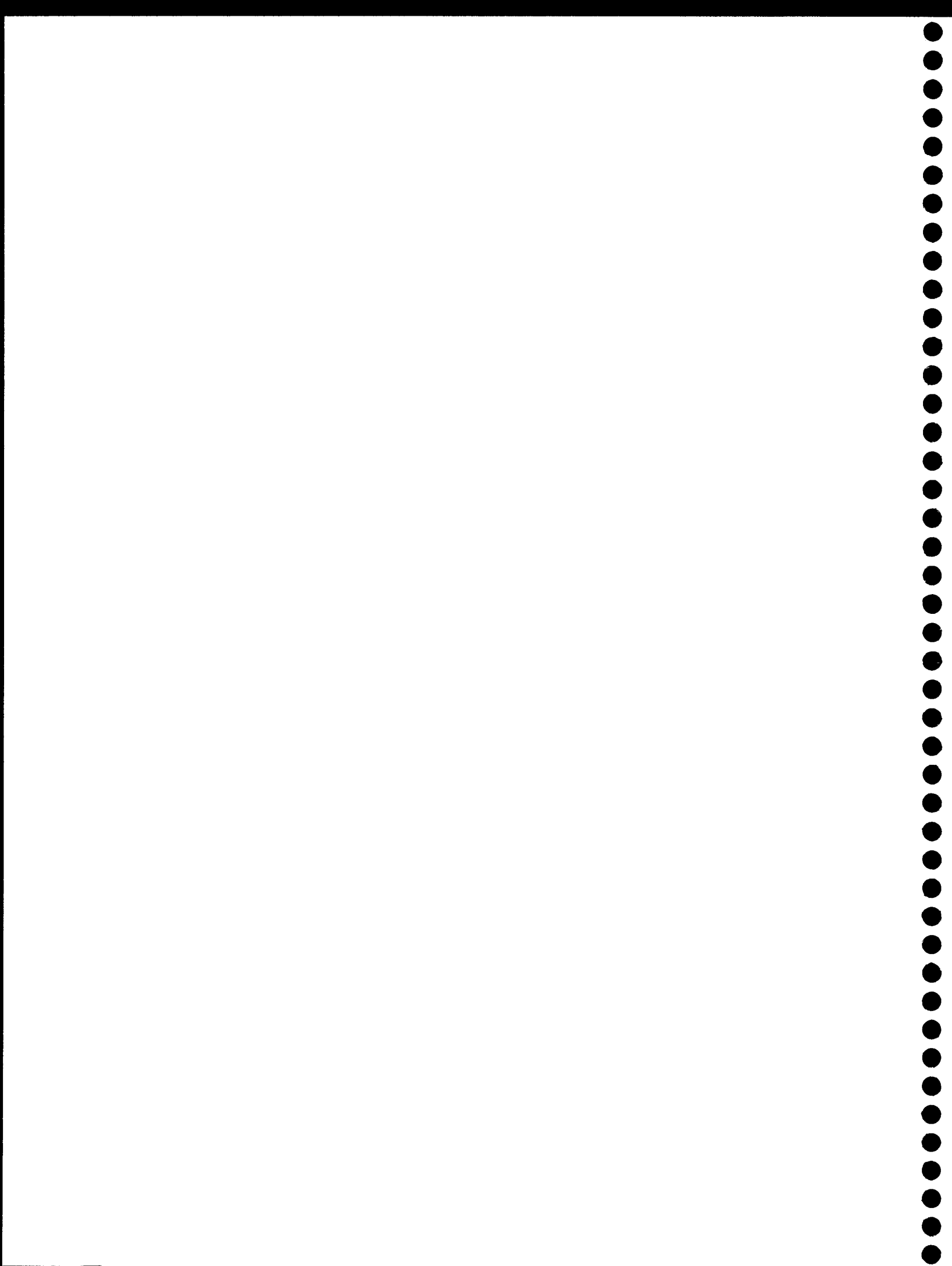
Notes:

- Closure costs, Long-Term Care Costs and Percent Used Capacity are based on this report.
- Post-Closure Care Costs are all based on 30 years except for Plymouth Avenue which is under long-term care period with 12 years of remaining long-term care.

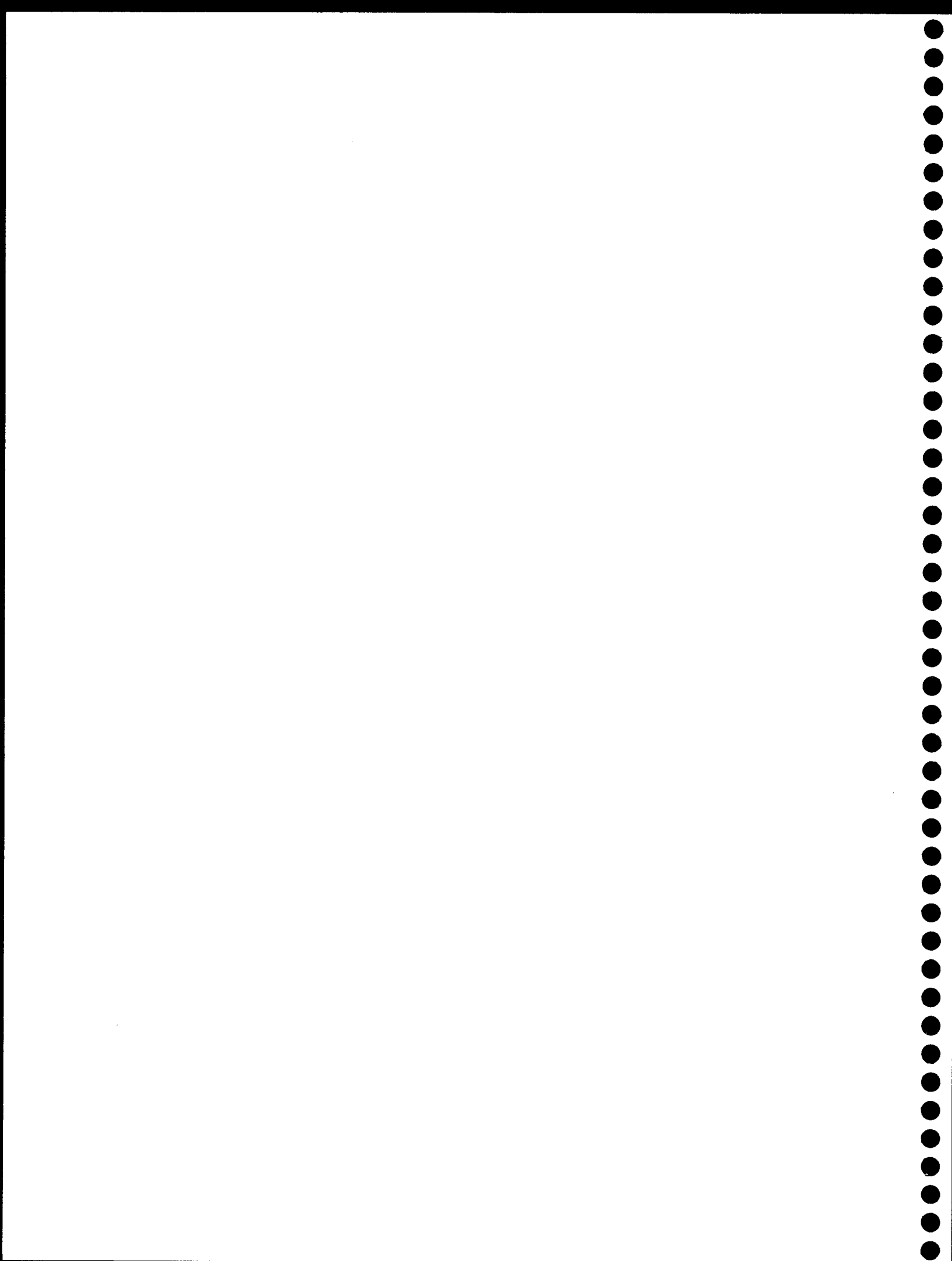
SECTION 5.0

Sources

1. Volusia County Solid Waste System, Financial Responsibility Closure and Long Term Care Costs Report, FY 2017, August 2017, HDR Engineering, Inc.
2. Schedule of Activity, Landfill Management Escrow Accounts, September 30, 2017, James Moore & Co., P.L. dated March 16, 2018.
3. Waste Tire Processing Price Agreement between County of Volusia and Wheelabrator 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 2017 dated July 7, 2017.
5. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 3rd Quarter 2017 dated October 09, 2017.
6. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 4th Quarter 2017 dated January 5, 2018.
7. Volusia County Public Works Department - Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 1st Quarter 2018 dated April 11, 2018.
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 Minor Permit Modification-Phase I and Phase II Area 3, dated May 27, 2015.
12. FDEP Operation Permit-Class III Landfill-Tomoka Farms Road Solid Waste Management Facility.
13. FDEP Closure Permit -South Cell Landfill -Tomoka Farms Road Solid Waste Management Facility.
14. FDEP Long-Term Care Permit -Plymouth Avenue Landfill.
15. Topography Survey and Mapping Report, Pickett & Associates, April 2017.
16. Topography Survey - Surveyor's Report, Pickett & Associates, July 2018.
17. Certified Topographic Survey Capacity Calculation Report, Aerial Cartographics of America, November 2008 (ACA Job Number 2008679).



COUNTY OF VOLUSIA, FLORIDA
SCHEDULE OF ACTIVITY
LANDFILL MANAGEMENT ESCROW ACCOUNTS
SEPTEMBER 30, 2017



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, 2017, 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. 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.

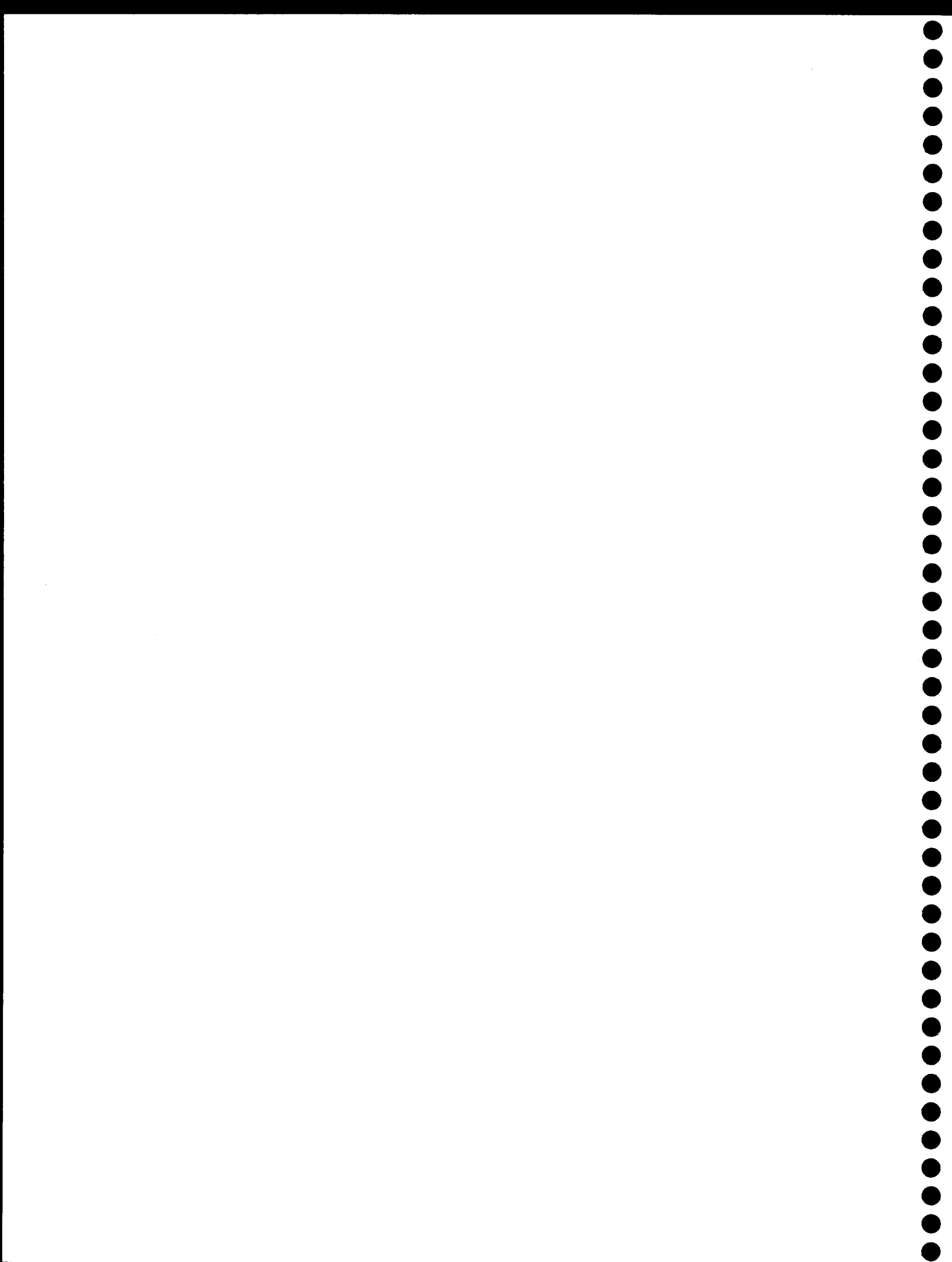
- 1 -

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Tallahassee, FL 32308-4386
Telephone: 850-386-6184



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, 2017, and the activity in the escrow account for the year then ended, on the basis of accounting described in Note 1.

Basis of Accounting

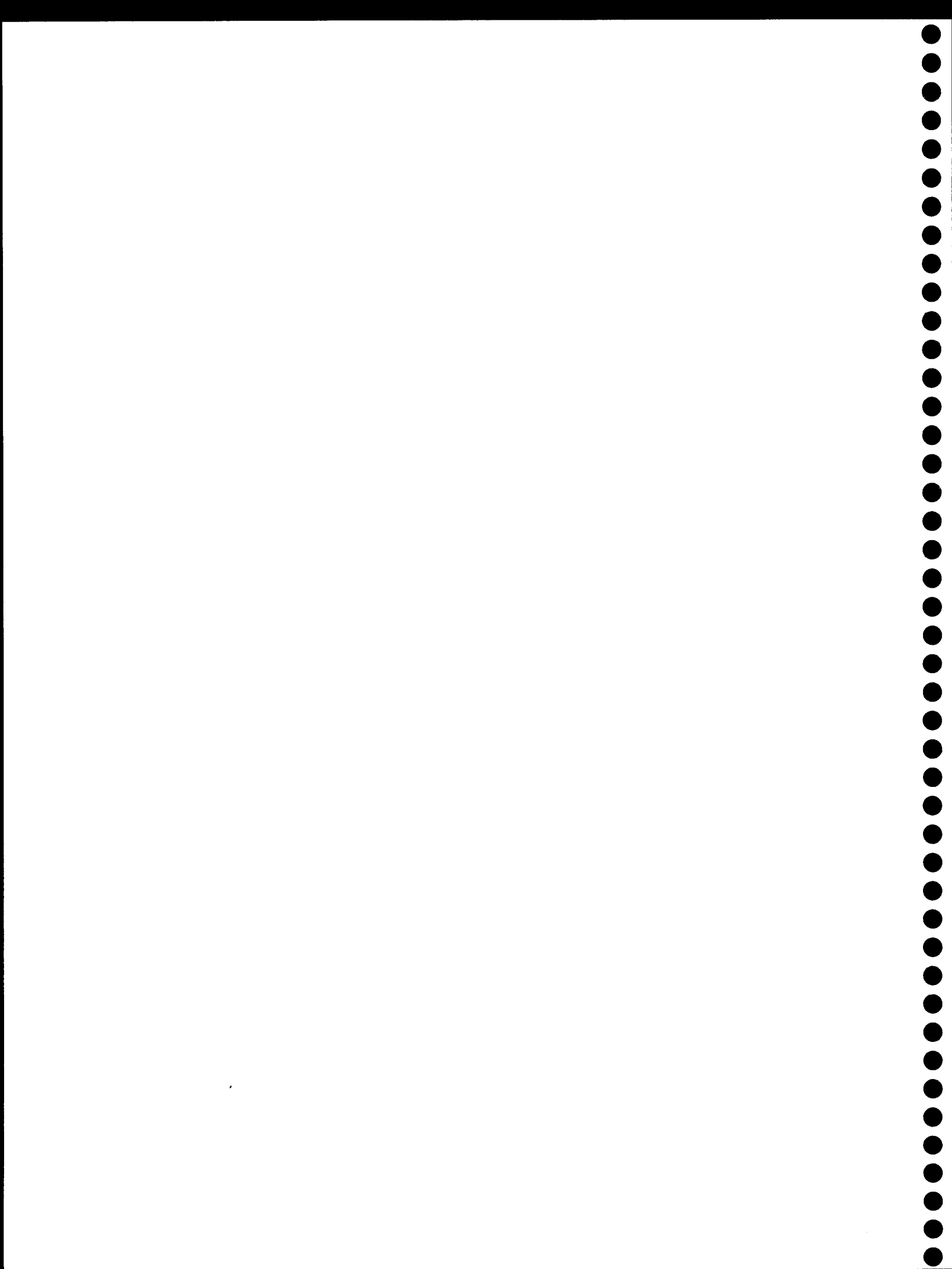
We draw attention to Note 1 of the schedule, which describes the basis of accounting. As discussed in Note 1, the County prepares the schedule using accounting practices prescribed or permitted by Rule 62-701.630(5)(c), Florida Administrative Code to demonstrate compliance with the State of Florida Department of Environmental Protection's regulatory basis of accounting, 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.

Restriction on Use

This report is intended 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 and is not intended to be and should not be used by anyone other than these specified parties.

James Moore & Co., P.L.

Daytona Beach, Florida
March 16, 2018



COUNTY OF VOUSIA, FLORIDA
LANDFILL MANAGEMENT ESCROW ACCOUNTS
SCHEDULE OF ACTIVITY
FOR THE YEAR ENDED SEPTEMBER 30, 2017

	<u>Tomoka Class III</u>	<u>Tomoka Class I</u>	<u>Tomoka South</u>	<u>Plymouth</u>	<u>Waste Tire</u>	<u>Total</u>
Escrow Account Balances, October 1, 2016	<u>\$ 3,756,348</u>	<u>\$ 7,662,931</u>	<u>\$ 123,254</u>	<u>\$ 97,650</u>	<u>\$ 4,357</u>	<u>\$ 11,644,540</u>
Deposits/transfers						
September 21, 2017	<u>522,693</u>	<u>615,206</u>	<u>1,348</u>	<u>14,776</u>	<u>15,456</u>	<u>1,169,479</u>
Interest Income						
October 31, 2016	935	1,907	31	24	1	2,898
November 30, 2016	908	1,852	30	24	1	2,815
December 31, 2016	1,227	2,504	40	32	1	3,804
January 31, 2017	1,481	3,021	49	38	2	4,591
February 28, 2017	1,368	2,790	45	36	2	4,241
March 31, 2017	1,716	3,502	56	45	2	5,321
April 30, 2017	1,971	4,021	65	51	2	6,110
May 31, 2017	2,103	4,289	69	55	2	6,518
June 30, 2017	2,377	4,849	78	62	3	7,369
July 31, 2017	2,766	5,643	91	72	3	8,575
August 31, 2017	2,839	5,792	93	74	3	8,801
September 30, 2017	<u>2,903</u>	<u>5,922</u>	<u>95</u>	<u>75</u>	<u>3</u>	<u>8,998</u>
Total interest income	<u>22,594</u>	<u>46,092</u>	<u>742</u>	<u>588</u>	<u>25</u>	<u>70,041</u>
Escrow Account Balances, September 30, 2017	<u>\$ 4,301,635</u>	<u>\$ 8,324,229</u>	<u>\$ 125,344</u>	<u>\$ 113,014</u>	<u>\$ 19,838</u>	<u>\$ 12,884,060</u>
Cash and Cash Equivalents	<u>\$ 4,301,635</u>	<u>\$ 8,324,229</u>	<u>\$ 125,344</u>	<u>\$ 113,014</u>	<u>\$ 19,838</u>	<u>\$ 12,884,060</u>

The accompanying notes to the schedule of activity
are an integral part of this schedule.

COUNTY OF VOLUSIA, FLORIDA
LANDFILL MANAGEMENT ESCROW ACCOUNTS
NOTES TO SCHEDULE OF ACTIVITY
SEPTEMBER 30, 2017

(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.

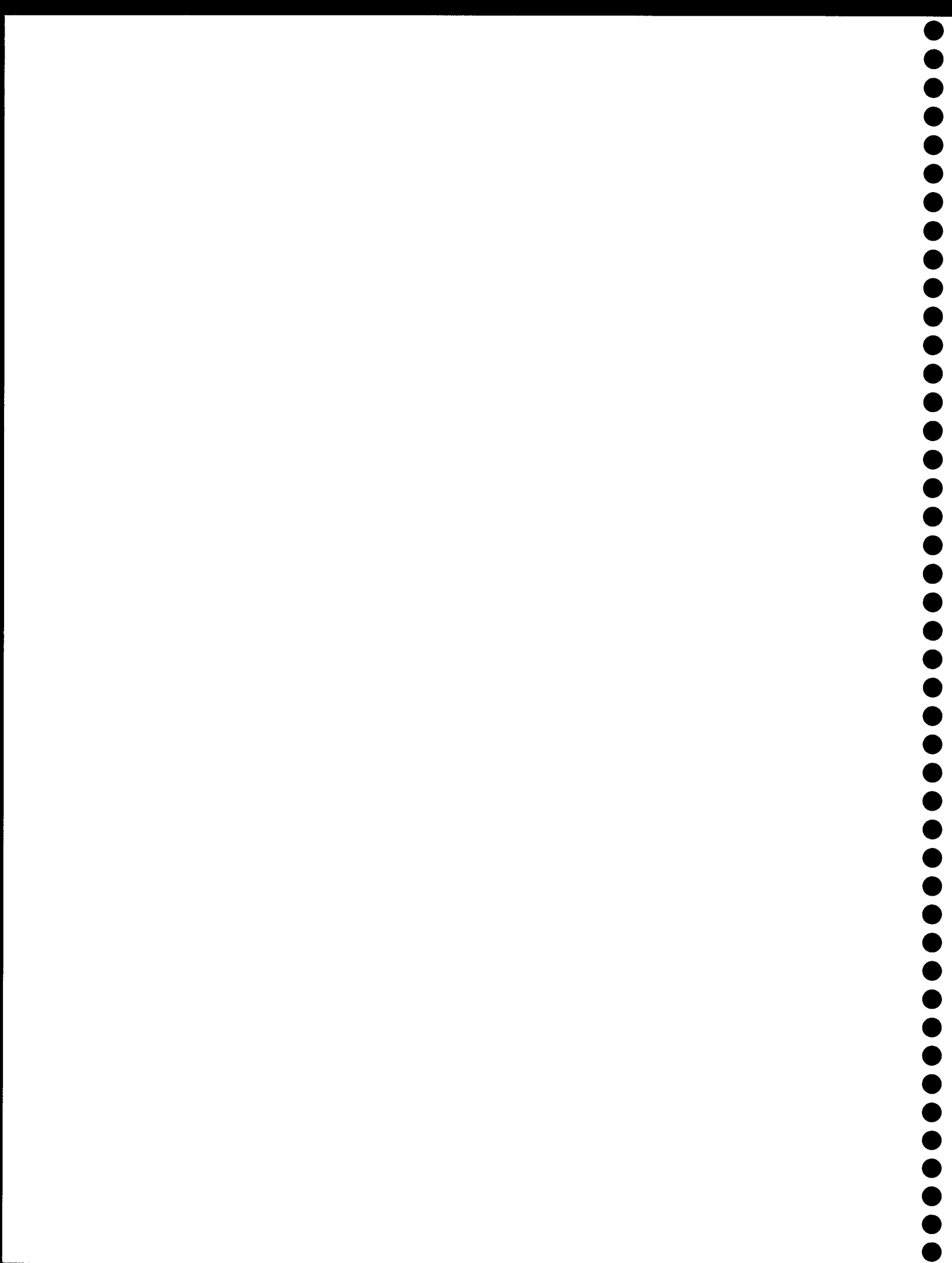
(2) Landfill Management Escrow:

The County records the landfill management escrows as restricted cash to fund postclosure care costs of the Plymouth Landfill and closure costs and postclosure care costs of the Tomoka Landfill. The escrow, which is held in a separate bank account 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 November 20, 2007.

Attachment A

Surveyor's Report

Tomoka Farms Road Solid Waste Disposal Facility



SURVEYOR'S REPORT

Tomoka Farms

Prepared for:



Prepared by:



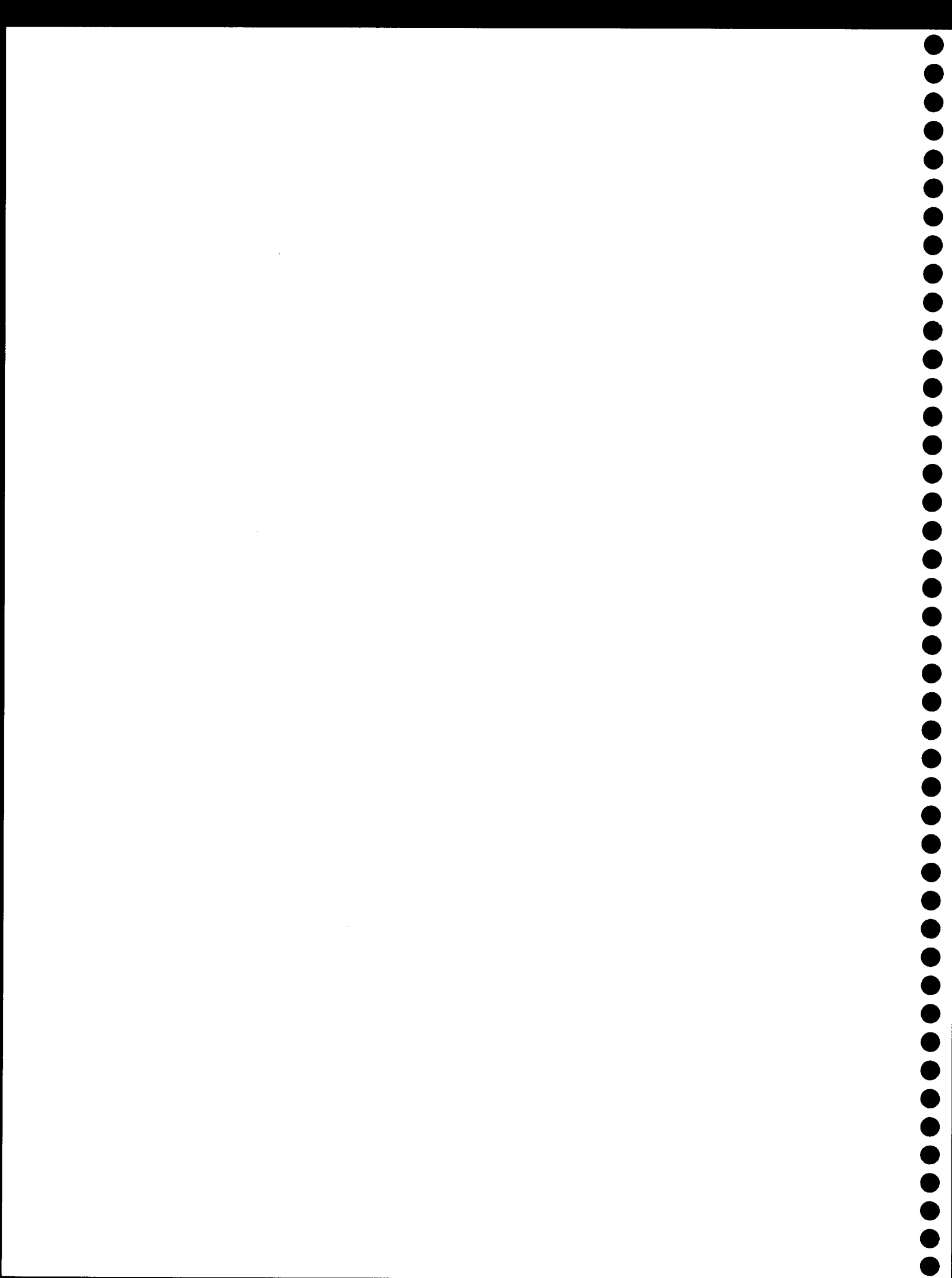
PICKETT
SURVEYING • ENGINEERING

PICKETT & ASSOCIATES PROJECT NO.: 17691-3

TITLE/TYPE OF SURVEY: Topographic Survey

DATE OF SURVEY: This Map is based on aerial imagery & Lidar data flown
07/11/18

***NOTE: THIS REPORT AND ACCOMPANYING MAP TITLED TOMOKA FARMS
LANDFILL, 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:

<u>Pt#</u>	<u>Northing</u>	<u>Easting</u>	<u>Elevation</u>
1	1748049.09	622992.96	30.06
2	1742581.29	623883.43	28.84
4	1742953.03	629467.66	24.80
5	1747185.68	625821.02	25.39

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:

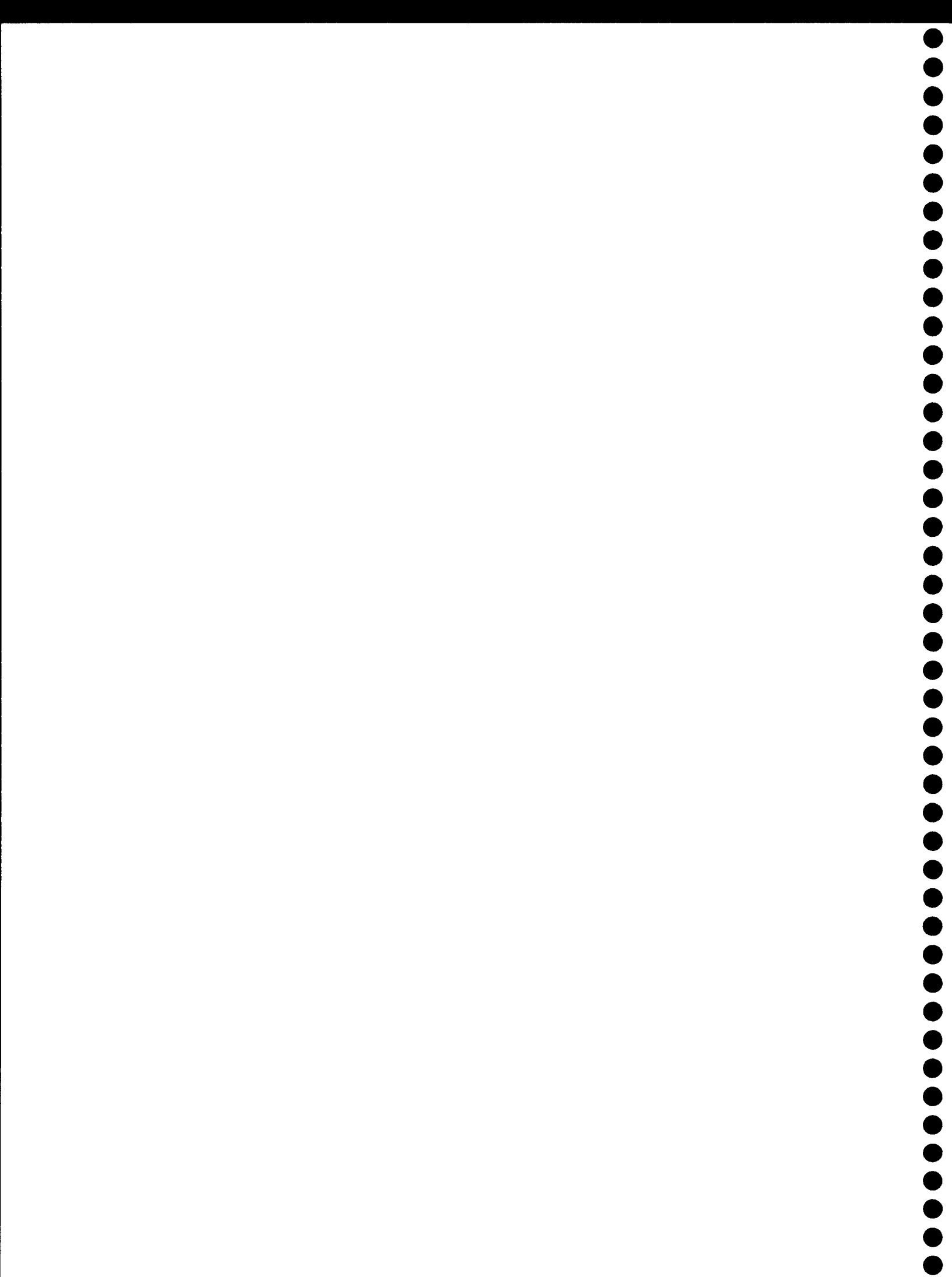
Contours have an estimated vertical positional accuracy of 0.5'. Spot elevations on paved surfaces have an estimated vertical accuracy of 0.25'.

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:

The planimetrics shown are limited to those features visible on aerial imagery. Color digital imagery was acquired at an average altitude of 3736' using a metric precision digital camera whose focal length is 70.3mm. Mapping was performed using LiDAR and softcopy photogrammetric techniques. The LiDAR data has an estimated point sample distance of 0.74 foot and a density of 1.84 points per square foot (± 19.8 points per square meter). For a vertical accuracy check, the LiDAR data was compared to five (5) points set as targets for aerial imagery. The Root Mean Square Error of the Elevations (RMSEZ) is 0.11 foot, being the equivalent of 0.216' FGDC/NSSDA Vertical Accuracy. All measurements are in U.S. Survey Feet.

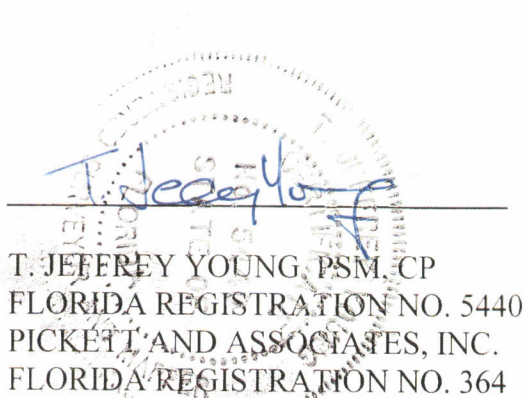


Limitations:

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. Not all aerial targets were visible.

MAP PLOTTING:

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



T. JEFFREY YOUNG, PSM, CP
FLORIDA REGISTRATION NO. 5440
PICKETT AND ASSOCIATES, INC.
FLORIDA REGISTRATION NO. 364

7/11/18

SURVEY DATE

Attachment B

FY – 2018 Escrow Account Balance

Morgan Stanley

PO Box 219804
Kansas City, MO 64121-9804

INVESTMENT MANAGEMENT

Morgan Stanley Global Liquidity Solutions

Account Statement

09/01/17 through 09/30/17

Page 1 of 2

MB 01 000420 21190 B 2 A

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



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

MLI 4285

Portfolio Value Summary

Market Value as of 09/30/17 **\$12,884,060.79**

	Month-to-date	Year-to-date
Opening Value	\$11,705,582.36	\$11,654,058.27
+ Purchases	\$1,169,479.18	\$1,169,479.18
+ Reinvested Income	\$8,999.25	\$60,523.34
- Withdrawals	\$0.00	\$0.00
+/- Change in Value	\$0.00	\$0.00
Closing Value	\$12,884,060.79	\$12,884,060.79

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.

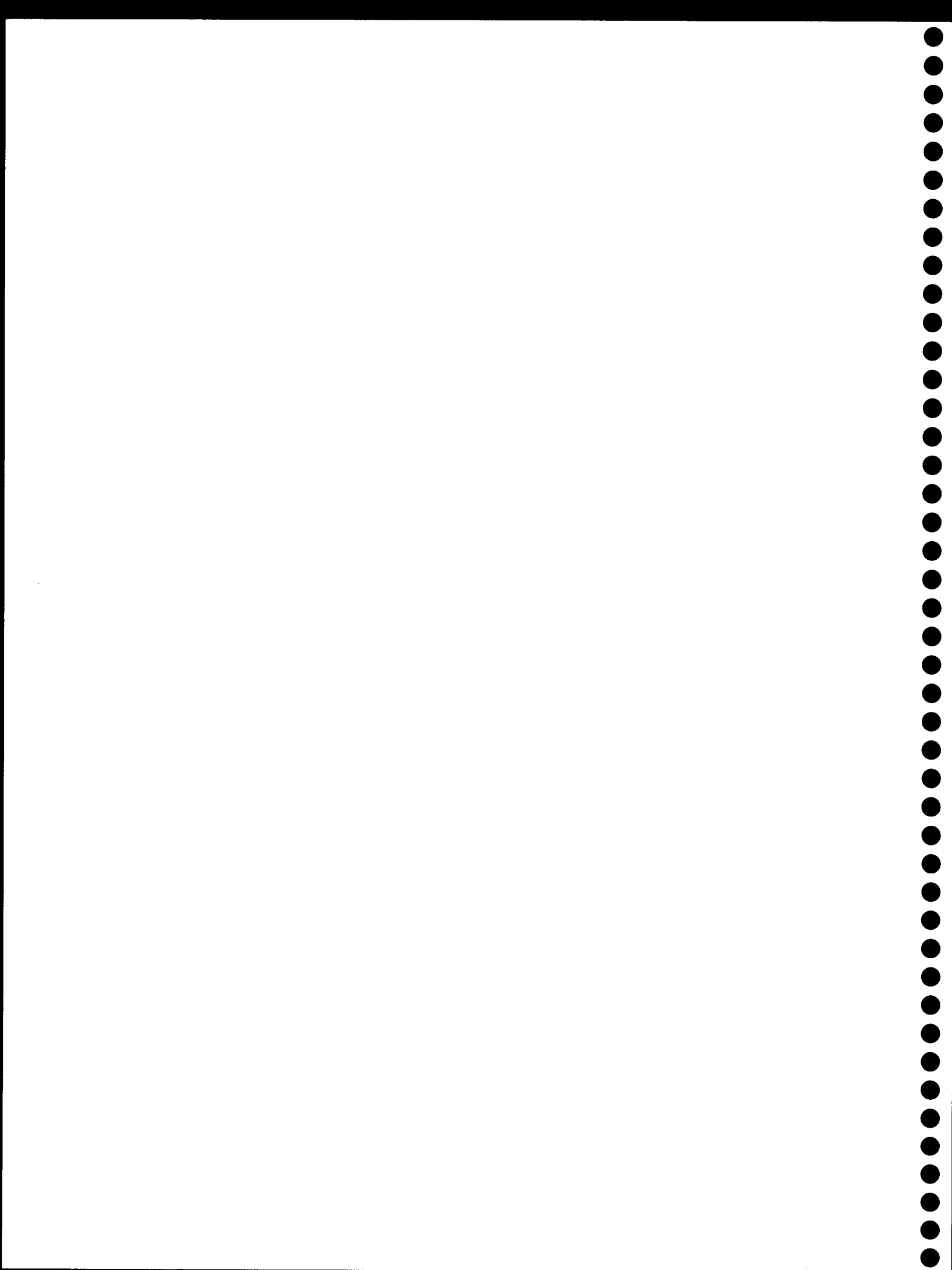
Asset Allocation

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 09/01/17	+	Purchases	+	Reinvested income	-	Withdrawals	+/-	Change in value	=	Closing value as of 09/30/17
Government Port Institutional Class / 756014866	\$11,705,582.36		\$1,169,479.18		\$8,999.25		\$0.00		\$0.00		\$12,884,060.79
Total Accounts											\$12,884,060.79



Account Detail

Government Portfolio Institutional Class

ACCOUNT OWNER

COUNTY OF VOLUSIA FL SOLID WASTE RE
FINANCIAL AND ADMINISTRATIVE SERVIC
ATTN MYRIAM LEMAY

INFORMATION

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

SUMMARY

INCOME

Shares owned	12,884,060.790		<i>This</i>	
Share price	\$1.0000		<i>period</i>	<i>Year-to-date</i>
Market Value as of 09/30/17	\$12,884,060.79	Dividend/interest	\$8,999.25	\$60,523.34
		Long term capital gain	\$0.00	\$0.00
		Dividends are		Reinvested
		Capital gains are		Reinvested

ACTIVITY

Trade date	Transaction description	Dollar amount	Share price	Shares this transaction	Total shares owned
	Beginning Balance as of 09/01/17	\$11,705,582.36	\$1.0000		11,705,582.360
09/21/17	Shares Purchased By Wire	1,169,479.18	1.0000	1,169,479.180	12,875,061.540
09/29/17	Income Reinvest	8,999.25	1.0000	8,999.250	12,884,060.790
	Ending Balance as of 09/30/17	\$12,884,060.79	\$1.0000		12,884,060.790

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.