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March 27, 2020

Mr. Steven Morgan, Air & Solid Waste Permitting Manager Permitting & Waste Cleanup Program Florida Department of Environmental Protection 13051 North Telecom Parkway Temple Terrace, FL 33637-0926

RE: Response to Second Request for Additional Information (RAI)

Pasco County – Solid Waste

Facility Name: Enterprise Road Class III Recycling and Disposal

Facility Site ID: 87895

DEP Application No.: 177982-029-SO/MM

Dear Mr. Morgan:

Thank you for your review of the additional information for a minor modification to the operations permit submitted on October 30, 2019 for the above referenced facility. The following information is provided in response to the Department's Second Request for Additional Information (RAI) letter dated November 7, 2019.

The attachments provided are as follows:

• Attachment 1: Revised Permit Renewal Application Documentation

Attachment 2: Site Life Calculations
 Attachment 3: Gas Probe Data

Attachment 4: Re-grading Photographs

Information is provided in the order requested in the referenced correspondence. In each case, the Department's request is stated in italics with the response immediately following in **bold**.



Section 3 - Engineering Report [Rules 62-701.320(7)(d) & 62-701.330(3)(d), F.A.C.]

1. Section 3.8 Method of Cell Sequence, Phasing Sequence 3: The response dated October 25, indicates that the correct top slopes of waste should be 2% MIN and 4% MAX. However, this section still reflects top slopes of 1% to 2%. Please revise accordingly.

Response to 1: This section has been revised.

2. Section 3.8 Method of Cell Sequence, Phasing Sequence 4: This section was revised to indicate that the closure design will include constructing sideslope berms "(2% min to 4% max)"; however, the plan set sheet C3.00, Detail 1, indicates the closure berm has a slope of 2H:1V. Please revise accordingly.

Response to 2: This section has been revised.

- 3. Section 3.8.3 Life Expectancy:
 - a. The bulleted assumptions utilized still list side slopes ratios (4H:1V), top slope grade (1 to 2%), bench elevations (122' and 147') and waste elevations (122', 147', 167', 172') that are inconsistent with those provided in the Plan Set and the Operation Plan. Please revise the assumptions accordingly.

Response to 3a: This section has been revised.

b. The bulleted assumption of 36 inches of cover over 67.0 acres. This acreage does not include Cell 17, only Cells 1 – 7 and 15 – 16. Please revise the acreage amount to include Cell 17.

Response to 3b: This section has been revised.

c. The narrative indicates the airspace volume remaining calculated was, <u>as of October 2019</u> and that the calculation accounted for a final cover volume of <u>322,829 cubic yards</u>. Please explain how the airspace volume remaining was determined beyond the use of data from the October 2018 topographic survey and ensure an accurate final cover volume is used. Please review and revise accordingly.

Response to 3c: This section has been revised accordingly. The airspace was calculated via 2019 Civil3D. Calculations are included in Attachment 2.

d. After addressing Comments #3.a., b. and c., above, please recalculate: final cover volume, airspace volume remaining and remaining life, accordingly using the most recent/revised conceptual closure numbers and provide the calculation sheet(s).

Response to 3d: Updated site life calculations are included in Attachment 2.

4. 3.10.1.1 Gas Probe Locations: The response dated October 25, indicates "Gas probe locations have been updated to accurately reflect existing conditions which now include GP-4 and GP-5..." As of the date of this correspondence, no completion data for gas probes GP-4

and GP-5 have been provided. Please provide As-builts and relevant survey data so that these probes may be properly incorporated into the permit modification.

Response to 4: Additional gas probe data, including survey, are included in Attachment 3.

GAS PROBE	EASTING	NORTHING	LATITUDE	LONGITUDE
GP-4	612545.64700	1454919.98000	28°20'09.9244"	-082°08'08.1685"
GP-5	613003.45100	1454879.35200	28°20'09.5272"	-082°08'03.0446"

<u>Section 3 - Appendix 3-A Operations Plan [Rule 62-701.330(3)(i), F.A.C. & Rule 62-701.500(2), F.A.C.</u>]

5. Section 8.1 Cell Sequence, Phasing Sequence 3: The response dated October 25, indicates that the correct top slopes of waste should be 2% MIN and 4% MAX. However, this section still reflects top slopes of 1% to 2%. Please revise accordingly.

Response to 5: This section has been revised.

6. Section 8.1 Cell Sequence, Phasing Sequence 4: This section was revised to indicate that the closure design will include constructing sideslope berms "(2% min to 4% max)"; however, the plan set sheet C3.00, Detail 1, indicates the closure berm has a slope of 2H:1V. Please revise accordingly.

Response to 6: This section has been revised.

<u>Section 4 - Operations Plan Minor Modification Permit Plan Set [Rule 62-701.320(7)(f) & 62-701.330(3)(b), F.A.C.]</u>

7. Drawing CO.02 – Aerial Site Plan: As previously indicated in RAI #1, Comment #28, Pond No.3. is existing and the top and bottom (TOP, BTM) elevations have not been provided on this drawing. Please revise accordingly.

Response to 7: The plan set has been revised in its entirety.

- 8. Drawing CO.03 Site Plan:
 - a. The revised drawing has been updated to include the now-installed monitoring wells associated with Cell 17. However, monitoring well MW-22B is not shown on the plan. Please revise accordingly.

Response to 8a: The plan set has been revised in its entirety.

b. As previously indicated in RAI #1, Comment #29.b., the map symbol for gas probe GP- 11R indicates it is a "future gas probe location"; however, this gas probe has already been installed. Please revise the map symbol for this probe to indicate it as a "gas probe location".

Response to 8b: The map symbol for GP-11R has been revised accordingly.

<u>Section 5 - Groundwater Monitoring Plan [Rule 62-701.510, F.A.C.]</u>

9. Figure 1 – Site Map:

a. The site map has been updated to include the now installed monitoring wells associated with Cell 17. Monitoring wells MW-21B, MW-23B were not installed, however are shown on the plan as existing monitoring wells. Please revise to remove these wells.

Response to 9a: Figure 1 Site Map has been revised to reflect the monitoring well completion RPT submitted to the Department on June 6, 2019.

b. Based on an October 31, 2019 site inspection and Drawing C0.03 of the site plan, it appears gas probe GP-5 is incorrectly located. Please revise figure accordingly.

Response to 9b: Figure 1 Site Map has been revised accordingly.

Sequence of Filling Waste According to Plans [62-701.500(2)(f), F.A.C.]

10. Site Inspection: Following a March 12, 2019 inspection of the Facility, a Compliance Assistance Offer (CAO) was issued on April 3, 2019. A response to the CAO was submitted by Locklear & Associates, dated April 17, 2019 which acknowledged that landfilling was occurring at an elevation above what is listed in the current operation permit and indicated that landfilling activities were to be moved back to Cell 16 at this time. During an October 31, 2019 site inspection, the facility operator indicated that landfilling was not moved to Cell 16, but instead the permittee is continuing to fill in the areas, where according to the above April 17, 2019 submittal, landfilling was to cease. The permittee therefore continues to operate out of compliance with the current operation permit. Please provide documentation demonstrating that operation of the Facility has returned to compliance.

Response to 10: Based on discussions with FDEP we understand that our response to RAI 2 is to adequately address these items, specifically modifying the fill sequence, interim fill elevations, and slopes.

On March 12, 2019, FDEP staff conducted an inspection of the facility. One issue identified in the subsequent inspection report dated April 3, 2019 was the potential overfilling of side slopes (see Question Number 2.16). The Department's comment also referenced the Cell 17 and vertical expansion construction permit application process which was underway at the time of the inspection. The Applicant met with Department staff on May 14, 2019 to address this and other compliance concerns. It was agreed during this meeting that the Applicant would evaluate the side slope concerns and that the Department would address compliance through the addition of a specific condition with the operations permit. On June 21, 2019, FDEP issued permit number 177982-025-SC/T3 which included a condition requiring the side slopes be regraded to match the currently permitted fill sequence/conceptual closure drawings (see Appendix 3, Specific Condition 7). The Applicant agreed with the Department that the appropriate approach to resolve the issue was a combination of revising the existing permit drawings as part of the operations permit modification application process currently underway and regrading portions of the landfill where necessary. This two-pronged effort has been completed and the results of these efforts are provided herein.

In addition to revisions made to address the Department's comments provided in the Request for Additional Information 2, the following documents have been revised to address the side slope issue:

- Engineering Report (provided in Attachment 1)
- Operations Plan (provided in Attachment 1)
- Financial Assurance Cost Estimates (provided in Attachment 1)
- Plan Set (provided in Attachment 1)

As detailed on pages 7 and 10 of the Engineering Report and Operations Plan, respectively, the previously permitted fill sequence has been simplified. The previously submitted fill sequence plan included substantially more detail than required and, as such, created potential limitations on how the facility can be operated. We have simplified the fill sequence plan to provide the Site Operator the latitude to move between cells when site conditions warrant based on his/her discretion. As such, multiple sheets of the previously submitted plan set which showed interim fill sequence phases have been eliminated. Sheets C1.00 and C1.10 of the Plan Set provided in Attachment 1 show final top of waste grades, which will serve to direct filling operations. The plan set was revised as follows:

- 1. The toe of the top of waste was moved to the 200 feet setback and the side slope was drawn at 3:1.
- 2. The terraces were removed and replaced with tack-on berms as we have discussed with the Department on several occasions.

In addition to the changes in the drawings described above, the Applicant re-graded the southern slopes to conform to the 3:1 requirement. The re-graded slopes were surveyed by Rapid Surveying on March 20, 2020 and a copy of the survey is provided in Operations Plan Modification Permit Plan Set. Photographs of the regrading effort are provided in Attachment 4. The regraded surface is also shown on Section C-C' on Sheet C1.10 of the Plan Set provided in Attachment 1.

Based on the revised Plan Set (Attachment 1), the specific purpose survey (Attachment 1), and re-grading photographs (Attachment 4) the facility will be in compliance with the revised conceptual closure design once the modified permit is issued.

It is our understanding that the Department may issue a Consent Order to address some of the items identified in the October 31, 2019 site inspection.

Please feel free to call me at (352) 672-6867 with any questions regarding this submittal.

Sincerely,

John Locklear

John Locklear, P.G.

President

Locklear & Associates

cc: John Arnold, P.E. Angelo's Recycled Materials

Lisa J Baker, P.E. Locklear & Associates

Attachments

Attachment 1: Revised Permit Renewal Application Documentation

Attachment 2: Site Life Calculations
Attachment 3: Gas Probe Data

Attachment 4: Re-grading Photographs

Attachment 1

Revised Permit Renewal Application Documentation

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NOTE: Contents page is from the 2018 Permit Renewal Application submitted by

Locklear & Associates, Inc. Only items in **BOLD** are provided in the current application package. The remaining items are unchanged.

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<u>Section 3 - Engineering Report [Rules 62-701.320(7)(d) & 62-701.330(3)(d), F.A.C.]</u>

ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY MINOR MODIFICATION PERMIT APPLICATION ENGINEERING REPORT

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD

855 28th Street South St. Petersburg, Florida 33712

Prepared by:

LOCKLEAR & ASSOCIATES, INC.

4140 NW 37th Place, Suite A Gainesville, Florida 32606

JULY OCTOBER MARCH 20192020

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SECTION 3 ENGINEERING REPORT

3.1 GENERAL

This Engineering Report is part of a comprehensive Florida Department of Environmental Protection (FDEP or Department) permit renewal modification application for the Enterprise Road Class III Recycling and Disposal Facility (Facility). The Engineering Report is designed to meet the requirements of Rule 62-701, F.A.C. and Pasco County's Land Development Code (LDC) and includes the following major components (and their respective location within this Engineering Report):

- Operations Plan Minor Modification Permit Plan Set, by Locklear & Associates, Inc. (Section 4);
- Figures (Appendix 3-C);
- An evaluation of the applicability of bottom liner and leachate collection system requirements (Section 2, Part G, G-1);
- Updated report evaluating geotechnical site conditions (Section 2, Part I, I-1);
- Updated Groundwater Monitoring Plan (Section 5);
- An analysis of slope stability (Section 2, Part I, I-2);
- Updated Closure and Reclamation Plan (Section 7);
- Updated financial assurance cost estimates (Section 7 Appendix 7-A);
- Updated Operations Plan (Section 3 Appendix 3-A);
- Updated Contingency Plan (Section 3 Appendix 3-B).

3.2 SITE LOCATION AND DESCRIPTION

The facility receives approximately 1500 tons per day of Class III waste, which includes Construction and Demolition debris, from Pasco County and other surrounding Counties (including Pinellas, Hernando, Hillsborough and Polk). The Facility was originally permitted by the Department on October 5, 2001.

The subject site is located in Sections 5 and 8, Township 25 South, Range 22 East, in Pasco County, Florida, as shown on the United States Geological Survey (USGS) quadrangle map presented in Figure 3-1 in Appendix 3-C. More specifically, the Facility is located at the northwest corner of the intersection of Enterprise Road and Auton Road, southeast of Dade City, Florida (Figure 3-1 in Appendix 3-C). The site occupies approximately 160 acres of land on the north side of Enterprise Road. The square property is approximately 2,640 feet on a side and is located in the southwest quarter of Section 5 and the northwest quarter of Section 8.

There are no airports within 5 miles of the site, see Figure S-4 (Appendix 3-C).

3.2.1 Prohibition Compliance

In order to comply with Rule 62-701.300, F.A.C., the Facility will abide by the following:

- The Facility will not dispose of solid waste at the proposed site until proper permitting is obtained.
- Disposal of solid waste will not occur in areas that are: unable to provide support for the waste; geological formation or subsurface features that would allow unimpeded discharge to surface water on groundwater; are within 500 feet of an existing potable water well (Figure S-1 in Appendix 3-C); are within a dewatered pit; are in a frequently flooded area; are in a body of water; are within 200 feet of a surface water body that discharges offsite (Figure S-2 in Appendix 3-C); are on a right of way; are within 1,000 feet of an existing community potable water; or are within 3,000 ft. of Class I surface waters (Figure S-3 in Appendix 3-C).
- Open burning will not occur on the site unless the burning takes place in a permitted air curtain incinerator.
- Hazardous wastes, PCB's, biohazardous wastes, special wastes, liquids, and oily
 wastes will not be disposed of at the Facility. Random load checks and the use of
 spotters at the working face will ensure that these wastes are not placed for disposal at
 the Facility.

3.3 SURROUNDING LAND USES AND ZONING

Figure 3-2 in Appendix 3-C presents an aerial photograph map depicting the surrounding land uses and designated FDOT FLUCCS codes in the site vicinity. Open land, pastureland, row crop, tree crop, and upland hardwood forest land uses surround the site. A few scattered residences also surround the site. All adjoining properties are zoned AC. Parcel 05-25-22-0000-00500-0000 to the northwest of the facility has a mining permit and is not part of the landfill operations. To the north is the East Pasco County Class I Sanitary Landfill, which is closed. To the east is an old borrow pit and agricultural land. South of the site is agricultural land and orange groves, and to the west are orange groves. Figure 3-2B in Appendix 3-C presents an aerial photograph map with future land use classifications.

Current site zoning designation, AC with a conditional use, is consistent with the Class III Landfill use. Revised Figure S-1 depicts the locations of five (5) water wells proximate to the landfill limit. The well north of future cell 17 has been abandoned. The on-site non-potable Supply Well is operated and maintained by the facility and only utilized to flush on-site toilets. The well approximately 1000' south of the southeast corner of the facility is identified as "irrigation" by

SWFWMD. The 500-foot setback from the approved landfill footprint to potable wells complies with the setback requirements of Rule 62-701.300(2)(C), F.A.C.

3.4 TOPOGRAPHY

The USGS 7.5 minute quadrangle map shown in -Figure 3-3 in Appendix 3-C shows the land surface of the subject site has elevations ranging from 85 feet to 175 feet National Geodetic Vertical Datum (NGVD). Natural land surface generally slopes to the northeast on the northern half of the property and southeast on the southern half of the site. A 2018 site-specific topographic survey is shown on Sheets 1 and 2 of the Operations Plan Minor Modification Permit Plan Set provided in Section 4.

3.4.1 100-Year Flood Prone Areas

Figure S-5 depicts a 100-year flood prone area map from the U.S. Federal Emergency Management Administration for the subject vicinity. As shown, the site is not within and would not be impacted by an estimated 100-year storm flood.

3.5 SOILS

According to the Soil Survey of Pasco County, Florida, published by the U.S. Department of Agriculture Soil Conservation Services (USDA-SCS), the majority of the subject site and surrounding areas are covered by fine sands. A copy of the USDA-SCS Soils Survey Map showing the mapped areas of the major soil types at the subject site and its vicinity is presented in Figure 3-5 Soil Survey Map.

USDA-SCS soil type 12- Astatula fine sands encompass a small portion in the northeast portion of the site. Astatula sands are nearly level to gently sloping, and excessively drained mainly in the sandhills. Seasonal high water table (SHWT) is typically at a depth of greater than 72 inches in Astatula soil. The permeability is very rapid throughout the soil. Both the available water capacity and natural fertility of the Astatula soil are low.

USDA soil type 32 - Lake fine sands comprise the majority of the soils found on the property. These soils are nearly level to gently sloping and excessively well drained. They occur along ridgetops and on low hillsides in the uplands. Permeability is rapid throughout the soil and the water table is below a depth of 120 inches. The available water capacity is very low in all layers and the natural fertility and organic matter content are both low.

USDA soil type 72 - Orlando fine sands are found in a small area in the northeast portion of the property. These soils are nearly level to gently sloping and well drained. The water table is typically at a depth greater than 72 inches with permeability of the soil rapid throughout. The available water capacity is low in the surface layer and very low in the other layers.

3.6 LANDFILL SITE IMPROVEMENTS

Portions of the 160-acre landfill site are also currently being operated as orange groves. The following site improvements have been installed to meet landfill operational requirements.

3.6.1 Entrance Facilities

An office trailer (gatehouse) is located onsite for the gate attendant. This trailer has hand washing and toilet facilities. Potable bottled water is supplied to the trailer. Electric and telephone services are available to the trailer office. Site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown in Operations Plan-Minor Modification Permit Plan Set provided in Section 4.

3.6.2 Roads

The primary haul route servicing the Facility is Enterprise Road. Enterprise Road is serviced by Clinton Avenue and C.R. 35A.

Enterprise Road has been improved to an all-weather access roadway from C.R. 35A to the entrance of the Facility. All on-site roads are maintained by the Applicant to allow for all weather access. Access roads to the working face are constructed from on-site soils and/or recovered materials such as concrete and asphalt. This is done on an as needed basis

3.6.3 Effective Barrier

A 6-foot high security fence has been constructed along the south and east boundaries. The security fence consists of a 6-foot high-galvanized chain link fence, hereafter referred to as the "security fence." A five-foot wire fence runs along the north and west property boundaries. The chain link fence has been installed in accordance with the permit issued October 2001. Three (3) foot square "NO TRESPASSING" signs with 5-inch letters have been installed at no less than 500-feet spacing and at all corners to notice unauthorized access. The only point of access into the facility will be through the gate at the entrance. This gate will be locked during closed hours.

An 8-foot high landscape berm has been constructed along the site's frontage to Enterprise and Auton Roads, see Operations Plan Minor Modification Permit Plan Set provided in Section 4.

3.6.4 Weighing or Measuring Incoming Waste

A scale system is used to keep records of materials received at the Facility. The scales are calibrated every six (6) months. Vehicles are weighed when they enter the Facility, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to unloading debris, the tonnage or volume of waste materials received will be determined and the appropriate fee assessed.

3.6.5 <u>Vehicle Traffic Control and Unloading</u>

Generally, truck traffic will be controlled on a first-in, first-out basis, as directed by the spotter at the working face. There is adequate space for truck staging at the site's entrance gate (7-8 trucks) to mitigate any queuing onto Enterprise Road. The Facility will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide truck traffic.

3.7 EXCAVATION OPERATIONS AND CELL CONSTRUCTION

On-site soils will be excavated according to the Pasco County Class I Mining Permit. The soils will be excavated and removed for various uses, including construction, roadways, and in landfilling operations. The County permit allows an excavation up to within a 200-foot setback from the property boundary and an excavation slope of 6H:1V. The Class I Mine will be "reclaimed" as a Class III landfill. The 6H:1V excavation slopes are associated with the mining of the existing soil. Once the landfill is ready to accept waste, the mine side slopes will be excavated to 2H:1V side slopes (cell slopes). Waste will be placed against this excavated slope and then built above existing grade. The Operations Plan Minor Modification Permit Plan Set (Section 4) show the phasing of the cell construction and filling operation at the Facility.

Excavation slopes will not exceed 6H:1V pursuant to the Pasco County permit; however, once an excavation phase is complete and construction commences on a new cell, the slopes will be excavated to 2H:1V. A portion of the excavated soils from the mining operation will be used as landfill construction material. Excavated soils will be reserved to provide adequate cover material for the landfill operation. Cell construction will follow the sequence described in Section 3.8.

As new cells are excavated and constructed, the cells will be over excavated to approximately three-feet below the approved excavation base grade to allow for the construction of a 3' clay layer. If limerock is encountered during construction, the following actions will be taken: Where limerock is encountered at or below the elevation of the cell clay layer:

- In the event that limerock is encountered during clay layer excavation or construction activities, the excavation / construction activities shall cease and the Department shall be notified by email within 24 hours of discovery.
- Excavation / construction activities related to determining location, elevation, and extent of limestone or to remediation in accordance with these procedures will resume no sooner than 24 hours after notice, unless otherwise directed by the Department
- Written notification will be submitted within 7 days of discovery.
- The written notification shall include the location, elevation, and extent of limestone noted on a plan sheet, a description of the materials encountered, and a description of the completion of excavation / clay backfill in the identified area or the anticipated

- timeframe for completion of these activities.
- The limerock will be over-excavated (5-feet laterally beyond limerock boundary and 3-feet vertically below the bottom of the compacted clay layer) and the area backfilled with clay meeting the specifications in the FDEP Operation/Construction permit and Engineering Report.
- Excavation / construction activities will resume no sooner than 24 hours after notice, unless otherwise directed by the Department

Where limerock is encountered during mining operations at elevations above the elevation of the cell clay layer and do not extend into the clay layer:

- Document on the limerock observation log the location, elevation, and extent of limestone noted on a plan sheet, and a description of the materials encountered
- Submit limerock observation log to FDEP within 7 days of discovery
- Where limerock is encountered within 10-feet of the design elevation of the top of compacted clay layer, in addition to the procedures noted above, over excavate 1-foot vertically and laterally around the exposed limerock and backfill with compacted clay to temporarily prevent infiltration during mining operations.

If limerock encountered during mining operations at elevations above the cell clay layer extends to or below the elevation of the cell clay layer, the procedures identified above under the heading "Where limerock is encountered at or below the elevation of the cell clay layer" shall be followed.

Stockpiled clay, obtained from on-site excavation, will be sampled for laboratory proctor testing for use as cell floor and cell side slope material to construct a three-foot thick clay barrier layer. Material with acceptable permeability and proctor test results will be placed onto the constructed cell floor in lifts, and compacted by multiple passes with a 40,000 lb., D-6 Dozer, or equivalent.

A three-foot thick clay layer will also be placed on the 2H:1V side slopes of the exterior excavation side slopes of each cell to complete the continuous clay barrier layer. Due to the steepness of the slope, clay placement and compaction will require an iterative process consisting of several horizontal lifts, stepped up progressively until the base elevation of the landfill is reached. In order to achieve the required compaction and hydraulic conductivity, as well as to achieve a constant three feet of clay along the slope, each lift along the cell wall will need to exceed three feet wide and be wide enough for the compacting equipment. Soil in excess of three feet wide on the slopes may be removed after compaction and compliance testing have been approved. Acceptable test results mean the results of the laboratory proctor and permeability tests indicate that the permeability of the material meets the requirements of the construction permit (1x10-8 cm/s), and the optimum moisture content is not too high for the equipment to manage. Soil liner construction quality assurance shall be in compliance with 62-701.400(8). Optimum moisture content for the on-site stockpiles has been approximately 13 to 20 percent.

The dozer will compact the material in the bottom of the excavation and up the side slopes into

the dozer track marks. After each lift is compacted with the dozer, a 12-ton, 84-inch vibratory sheeps-foot roller, or equivalent, will be used to roll the material. The daily activities will be recorded, including any tie-in locations, thickness of each compacted lift, verification of the compaction and moisture content testing, verification of equipment used for compaction, and verification of dozer tracks at the tie-in surfaces (no smooth surfaces). Field logs and photographs documenting the field work will be provided to the Department. A topographic survey will confirm the top of excavation and top of clay grades.

Excavation will be such that 2H:1V slopes will only be encountered on the outer edge boundaries of each cell. A 3H:1V working face slope, beginning at the 2H:1V slope face, will be used for landfilling the waste.

Leachate generated from all cells currently flows to a toe drain extending east to west along the northern perimeter of Cell 16. Leachate generated will flow north to the proposed toe drain extension. The existing toe drain will be extended along the northern perimeter to the northwest corner of Cell 17. The toe drain flows west to east and terminates in a manhole located between Cell 16 and Pond 3. The toe drain will "daylight" approximately 3 feet above the bottom of the manhole. A dedicated pump with float control system will be used to transfer leachate from the manhole to Pond 3 as the primary leachate treatment and disposal approach. During intervals in which leachate cannot be pumped to Pond 3, leachate will be collected and hauled off-site to a permitted wastewater treatment facility for treatment and disposalneeded.

3.8 METHOD OF CELL SEQUENCE

Angelo's Aggregate Materials is currently (as of March 2020 January 2019) filling in Cells 1-7, 15 and 16 of the Class III Landfill. The cell construction and filling sequence operations will be as follows:

Filling will continue in Cells 1-7, 15 and 16 until such time as the Department authorizes the waste disposal operations in Cell 17. Filling will then move to Cell 17 until waste grades are generally at the same elevation as those in Cell 16. The Site Operator may elect to move filling operations between Cell 16, Cell 17, and Cells 1-7 and 15 based on site conditions and disposal needs. Filling will occur such that the final waste grades (slopes and elevations) shown in Sheet XX of the Permit Plan Set are not exceeded.

Phasing Sequence 1	As shown in Operations Plan Minor Modification Permit Plan Set
	Continue filling Cells 1-7, 15 and 16 in 10 12-foot lifts to waste
	elevation of 172'
	Maximum slope is 3H:1V from base grade to waste elevation 167';
	12% MIN to 42% MAX grade from waste elevation 167' to 172'
	Sideslope berms and stormwater appurtenances are to be
	constructed at final closure.
	Construct Cell 17 in accordance with permitted design.

Phasing Sequence 2	As shown in Operations Plan Minor Modification Permit Plan Set Continue filling Cells 1-7, 15 and 16 in 10—12 foot lifts to waste elevation of 172' Begin filling Cell 17 with 4—6 feet lift north of the temporary stormwater and leachate diversion swale until cell is floored out. Remove temporary swale and fill with 4—6 feet lift. Continue filling Cell 17 in 10—12 feet lifts from base grade to waste elevation 147'. Maximum slope is 3H:1V from base grade to waste elevation 147'. A 10-ft wide stormwater bench is to be constructed at elevation 137'. Sideslope—berms—and—stormwater—appurtenances—are—to—be constructed at final closure.
Phasing Sequence 3	As shown in Operations Plan Minor Modification Permit Plan Set Construct overall landfill vertical expansion to include maximum sideslope of 3H:1V from base grade to waste elevation 137', 187' and 212'; 12% MIN to 24% MAX grade from waste elevation 217' 212' to 212'217' 10-ft wide stormwater benches to be constructed at waste elevations 137' and 187'.
Phasing Sequence 4	As shown in Operations Plan Minor Modification Permit Plan Set Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B, 7, 15, 16 and 17 in accordance with the revised overall landfill vertical expansion closure design. Construct sideslope berms (2% min. to 4% max.2H:1V) and stormwater appurtenances. Construct landfill gas vents.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, tThe following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.

- Avoid channelizing stormwater flows
- Use mulch, grass, and maintain intermediate covers
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.

3.8.1 Vertical Expansion / Conceptual Closure

The landfill is permitted to be completed to a maximum height of 220 feet, NGVD. The final grading plan is shown on Drawing C2.00 of the Operations Plan Minor Modification Permit Plan Set provided in Section 4. The Conceptual Closure Plan includes permitted Cells 1-7 and 15, 16 and 17.

The Conceptual Closure Plan includes construction of <u>tack-on</u> berms <u>on at</u> the stormwater <u>benches</u> terraces (tack on) as shown on the plans. that will The terraces (tack on) are graded to direct stormwater to <u>drop inlets</u> and <u>downcomer pipesfilter point mat spillways</u> spaced approximately every 400 – 500 feet along the <u>benchesterraces</u> (tack on). The terraces (tack on) include an 8-inch perforated pipe toe drain system with an 8-inch solid HDPE header pipes located at each spillway. The <u>downcomer spillway</u> pipes will discharge through an energy dissipater to the existing stormwater system. The facility's overall stormwater management system is governed by the mining operations and ERP Permits. Grades and elevation vary based on ongoing mining operations and topography. A detailed design that will tie the conceptual closure plan into the facility's stormwater management system will be submitted at the time of closure.

The top (12% min. to 24% max. grade) and side slope (4H:1V and 3H:1V) designs provide for proper drainage and minimize rainfall infiltration into the landfill surface.

3.8.2 Erosion Control

The following engineering controls will be used to minimize erosion at the working face:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.

- As soon as possible following the construction of the clay layer, begin to fill against the Cell 7 2H:1V slope with the landfill material.
- Avoid channelizing stormwater flows
- Vegetative cover will be placed on top of the intermediate cover for erosion control purposes.
 All or part of the intermediate cover may be removed before placing additional waste or installing final cover.

3.8.3 <u>Life Expectancy</u>

The cell capacity and lifespan estimate for Cells 1 - 7, 15, 16 and 17 and vertical expansion have been estimated using the October 2018 topographic survey performed by Pickett and Associates (Sheets 1 and 2 of Section 4 in the Operations Plan Minor Modification Plan Set); and recent and projected tonnages.

Using the October 2018 topographic survey as a base, a three-dimensional AutoCAD model of Cells 1-7, 15, 16 and 17 with vertical expansion at closure was generated, using the following assumptions:

- For all cells except Cell 16 and Cell 17, 3H:1V side slopes from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 167'; 12% MIN to 42% MAX grade from waste elevation 167' to 172'
- For Cell 16 and Cell 17, 3H:1V from base grade to waste elevation 122'; 4H:1V from waste elevation 122' to 147'.
- 10-foot inset for benches at waste elevations 122-ft and 147-ft NGVD
- 36 inches of cover over the 67.0 acre<u>81.4 acre</u> 2D surface was subtracted from the maximum volume

The airspace volume remaining as of October 2018–2019 was calculated to be approximately 259,3126,536,314 yd³ after accounting for the final cover volume of 322,829 yd³.

The following design parameters were used to compute landfill design life remaining:

- **Density:** An in-place density of 1,350 lb/yd³ (0.675 tons/ yd³) was used for the design life estimate and is a typical density for Class III waste.
- Waste acceptance rate: a waste acceptance rate of 1500 tons per day was used based on facility records.

The remaining life in Cells 1 - 7, 15, 16 and 17 and vertical expansion was calculated to be $\frac{11}{10}$ years from the survey date, or 2029.

3.9 WASTE COMPACTION AND APPLICATION OF COVER

Waste received will be segregated based on compactability. Bulky, incompressible items, such as concrete, asphalt, and tree debris, will be separated and stockpiled for future processing. Tree debris may be separated from the waste and periodically mulched on-site. The remaining debris is disposed of in designated cells using onsite equipment to place the debris and a Caterpillar 826 Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all permitted cells are filled. For final buildout grade and closure detail, see Operations Plan Minor Modification Permit Plan Set provided in Section 4, respectively. The Conceptual Closure Plan includes permitted Cells 1-7, 15, 16, 17 and vertical expansion. Fill grades shall be such that final cover elevations are not exceeded on all slopes.

Final cover consisting of 18 inches of compacted soil barrier layer and 18 inches of soil that will sustain vegetative growth, as specified in the Closure and Reclamation Plan provided in Section 7. Cell closure shall generally conform to the lines and maximum grades specified on the Plan Set (Operations Plan Minor Modification Permit Plan Set provided in Section 4 and the requirements of Rule 62-701.600 F.A.C., Rule 62-701.400 (7), F.A.C., and Rule 62-701.400(8), F.A.C.). Pesticides when deemed necessary to control rodents, insects and other vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Landfill Manager. Temporary storage of soil fill or recycling materials may occur within the inactive, or closed cell areas.

3.10 DESIGN OF GAS, LEACHATE AND STORMWATER CONTROLS

3.10.1 Gas Monitoring and Control

The type of materials to be disposed of in the Class III Landfill are not expected to generate significant amounts of methane or other gases since the landfill's design prevents groundwater contact. Therefore, no active gas control systems or venting is proposed. However, because some biodegradable waste may be accepted, a passive gas control system is proposed, see Section 3.10.1.5. The Landfill Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas around the perimeter of the site. The Manager will notify the FDEP of any exceedances and immediately take corrective actions. Corrective actions will include placement of additional cover material or mulch, or lime containing materials such as crushed concrete that is documented to abate the odors. Quarterly gas point monitoring is currently conducted. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be

prevented by the approved facility design. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

3.10.1.1 Gas Probe Locations

Gas monitoring points are spaced approximately 600 linear feet apart surrounding the landfill. Operations Plan Minor—Modification Permit Plan Set provided in Section 4 presents these locations of the gas probes surrounding the landfill. Gas Probes (GP) 6-4 through 15 are existing, GP 1 through 5-3 and 16 are proposed and will be installed as part of future cell construction completion or certification at closure. The remaining gas probes are to be installed in accordance with the following schedule in Table 3.10:

Table 3.10 Gas Probe Installation Schedule	
Gas Probe	Cell Construction Completion
GP-1	Future Cell 10 or closure
GP-2	Future Cell 11 or closure
GP-3	Future Cell 12 or closure
GP-16	Future Cell 9 or closure

One remaining gas probe on the eastern portion of the property is currently located immediately adjacent to the disposal area rather than at the property boundary as required by Rule. Probes GP-6, -7, -8, -11, -12 and -13 were abandoned and replaced with GP-6R, -7R, -8R, -11R, -12R and -13R along the property boundary in 2013 and 2017.

3.10.1.2 Gas Probe Design

Figure 3-14 presents the gas probe design for the subject landfill site. These gas probes are designed to be surface sealed and to provide a greater permeability than the surrounding sediments to act as collector points for any methane gas, if present. Based on the landfill design, all of the gas probes are designed to be approximately 20-foot in depth with an 18-foot open screen for the monitoring point, or to depth of adjacent waste. These depths will allow the screened interval to intercept the full cross-section of the landfilled waste that could potentially generate methane.

The groundwater table may be encountered at depths of approximately 50-foot, or more below land surface (bls) across most of the site. Accordingly, gas probes are not designed to intercept the groundwater table. The gas probes are constructed of Schedule-40 polyvinyl chloride plastic pipe (PVC). The PVC casing and screen will be flush-threaded and have a screen slot size large enough to accommodate easy methane extraction from the monitoring point. The sand/bentonite slurry proposed for a surface seal will be a blend of 4 parts of sand to one part of granular bentonite. The sand and the bentonite will be mixed dry and hydrated immediately prior to placing it in the annular space of the borehole. The gas probe points are proposed to be installed by hollow-stem auger to construct an eight-inch borehole to be filled with pea gravel. The pea gravel will

meet the requirements of FDOT standard size No. 10 aggregate washed pea gravel. Each gas probe will be protected by a surface mounted well protector and locked for security purposes. Each gas probe will terminate at the surface with a PVC ball valve to accommodate easy monitoring of methane levels, with a portable meter. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded.

3.10.1.3 Methane Gas Measurement

In accordance with the requirements of the current FDEP permits, methane gas levels are monitored at each of the active gas monitoring points quarterly, with results submitted to the FDEP. A lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter will be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Attachment 4 of the Operations Plan provided in Appendix 3-A presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The reporting action limit for methane in structures is 25% of the LEL, or 1.25% methane by volume. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

3.10.1.4 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Facility operator will institute measurement of methane in nearby, at, or below grade structures, i.e., stormwater collection points, or any maintenance or office buildings within 100 feet of the subject gas probe on a weekly basis until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from nearby structures, as indicated above, until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

3.10.1.5 Passive Gas Vents

Within 90 days of closure of each landfill cell, a passive landfill gas vent will be installed at the highest point of the cell to prevent explosions, fires and damages to vegetation from methane gas buildup. Sheet C3.00 in Section 4 shows the location of the 12 gas vents and Figure 3-16 presents the design of a typical vent. The facility's gas emissions are expected to be far below the threshold of a Title V or an NSPS permit.

3.10.2 Leachate Control

Any leachate that may be produced at the landfill will be controlled with the use of a continuous 3-foot thick clay layer (1x10⁻⁸ cm/s) on the bottom of the cells. The clay layer beneath each individual cell forms a continuous barrier layer that is graded to direct leachate to the toe drain extending east to west along the northern perimeter of Cell 16 and Cell 17. The toe drain slopes from west to east and terminates in a manhole between Cell 16 and Pond 3. The toe drain "daylights" approximately 3 feet above the bottom of the manhole. A dedicated pump with float control system is used to transfer leachate from the manhole to Pond 3 as the primary leachate treatment and disposal approach. During intervals in which leachate cannot be pumped to Pond 3, leachate will be collected and hauled off-site to a permitted wastewater treatment facility for treatment and disposal needed. Leachate that is discovered to be hazardous, will be managed as hazardous waste.

The controlled method of screening waste also supplements the leachate control. Because the Applicant privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo's and the scale house attendants. For those haulers that are unfamiliar to the Applicant, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

3.10.3 Stormwater Controls

The approved Stormwater Management Plan for the landfill consists of berms, swales, and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. During excavation, construction and waste disposal a 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the excavation area and pumped to stormwater Pond 3. The remaining portion of the temporary stormwater pond will be filled as part of the construction of Cell 17. Pond 3 has been permitted through the Industrial Wastewater division of FDEP. Additional details concerning the stormwater management system are provided in Drawing Sheet C3.00.

3.11 EROSION CONTROL

The perimeter swales and ponds surrounding the landfill prevent stormwater from leaving the property. The series of berms described in Section 3.10.3 above will help prevent erosion.

Additionally, landfill side slopes will be constructed at 3H:1V from base grade to elevation 220' 212' NGVD and will receive intermediate cover to be maintained until final landfill closure that will occur when all existing and proposed cells are filled. See the Reclamation and Closure Plan provided in Section 7 for further details.

3.12 FINAL GRADE PLAN

The final grading plan is shown on Drawing C2.00 The filling sequence of the landfill is shown on Sheets XX C1.00 through C3.10 of the Operations Plan Minor Modification Permit Plan Set provided in Section 4. The excavated areas will be certified to the approved bottom grades prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas.

3.13 SETBACKS AND VISUAL BUFFERS

The following setbacks (buffers) shall be used:

- 1. Minimum of 200 feet from the property boundary to landfill footprint.
- 2. Minimum of 500 feet setback from surrounding potable residential wells to landfill footprint.

Buffer areas maintain visual screening of the landfill by the following methods.

- 1. 8-foot high berms along the frontage of Enterprise and Auton roads.
- 2. Landscaping and trees to provide visual buffers within setback areas
- 3. Existing trees within the setbacks will be maintained.

3.14 FOUNDATION ANALYSIS

A Geotechnical analysis was conducted on the landfill site to evaluate if the base and geologic setting are capable of providing structural support. Universal Engineering Sciences, Inc. completed the Geotechnical Report revised December 12, 2018. Slope stability and settlement analysis provided in Section 2, Appendix I-2 was completed by Civil Design Services, Inc. and revised December 21, 2018. These revisions included the Cell 17 and Cells 1-7, 15 and 16 vertical

expansion. The report concludes that the landfill base will adequately support the Class III landfill wastes without excessive settlement. It also states that the potential for sinkhole development on the site is low. In the event a sinkhole is discovered on-site, or within 500-feet of the site, the Department will be notified within 24 hours. A reclamation plan of action will be submitted to the Department within seven days.

3.15 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These are to be conducted at the location of each permeability test.
- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrogeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements. Field test methods, including rejection criteria and corrective measures, shall coincide with 62-701.400(8).

Upon completion of construction of any cell within the disposal facility, the certification of construction completion will be provided to the FDEP on form 62-701.900(2), F.A.C. The applicant will provide the completed form to the FDEP, along with the quality assurance test results described above, and arrange for an inspection prior to acceptance of Class III wastes into the constructed disposal area.

3.16 OPERATIONS PLAN

The Landfill's Operations Plan is included as Appendix 3-A.

3.17 CONTINGENCY PLAN

The Landfill's Contingency Plan is included as Appendix 3-B.

<u>Section 3 - Appendix 3-A Operations Plan [Rule 62-701.330(3)(i), F.A.C. & Rule 62-701.500(2), F.A.C.]</u>

ENTERPRISE ROAD CLASS III RECYCLING AND DISPOSAL FACILITY MINOR MODIFICATION PERMIT APPLICATION LANDFILL OPERATIONS PLAN

Prepared for:

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JULY OCTOBER MARCH 20192020

Supervision.

No. 74652

Florida BE #7465

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1.0 DESIGNATION OF RESPONSIBLE PERSON(S) AND REFERENCES

Mr. John Arnold, P.E. is designated by Angelo's Aggregate Materials, LTD. (Applicant) as the individual responsible for operation and maintenance of the Enterprise Road Class III Recycling and Disposal Facility (Facility) in accordance with Rule 62-701.500, F.A.C. All correspondence and inquiries concerning the Facility permits and operation should be addressed to him at:

Mr. John Arnold, P.E. Angelo's Aggregate Materials, LTD. 855 28th Street South St. Petersburg, Florida 33712 Telephone: (813) 477-1719

Updated plan sheets and figures are provided in Sections 3 and 4. Section 3 figures were unchanged and therefore are referenced and not provided as part of this application.

2.0 LANDFILL SITE IMPROVEMENTS

The 160 acre landfill site is also permitted by Pasco County to be a Class I mine (Pasco County Petition #CU04-26, approved 9/23/2004). The following site improvements have been installed to continue operation of the Class III Landfill.

2.1 <u>Facilities</u>

An office trailer (gate house) is located onsite for the gate attendant. This trailer has hand washing and toilet facilities. Bottled potable water is used to provide drinking water for the trailer. Electric and telephone services are available to the trailer office. Site entrance improvements also include an all-weather entrance roadway, scales and perimeter road as shown on the Operations Plan Minor Modification Plan Set provided in Section 4.

2.2 <u>Primary Haul Routes</u>

The primary haul routes used to reach the Facility are U.S. 301, S.R. 52, C.R. 35A, U.S. 98, and Clinton Avenue. These routes lead to Enterprise Road, which is used to access the facility.

Enterprise Road was improved by the Applicant to an all-weather, paved access roadway from C.R. 35A to Auton Road. Enterprise Road is a Pasco county owned roadway that is maintained by the county. The Facility has an all-weather, paved access roadway that will be maintained by the Applicant to provide adequate access at all times.

2.3 Effective Barrier

The existing Facility property previously had a five-foot high wire fence along the perimeter of the site. A 6-foot security fence has been constructed along the south and east boundaries. The security fence consists of a 6-foot high galvanized chain link fence, hereafter referred to as the "security fence." The five-foot wire fence still exists along the north and west property boundaries. The chain link fence has been installed in accordance with permit issuance in October, 2001. Three (3) foot square "NO TRESPASSING" signs with five-inch letters has been installed at no less than 500-feet spacing and at all corners to notice unauthorized access. The only point of access into the landfill site will be through the ticket gate at the entrance. This gate will be locked during closed hours.

An 8-foot high landscape berm has been constructed along the frontages of Enterprise and Auton roads as a visual and noise buffer.

3.0 OPERATING HOURS

The landfill will have the following operating hours:

Day	Hours of Operation
Monday through Friday	7:00 am to <u>65</u> :00 pm
Saturday	7:00 am to <u>1</u> 2:00 pm

Operational hours may be extended periodically to meet special requests of customers, but at no time will normal operating hours extend beyond 7:00 A.M. to 7:00 P.M. Monday through Saturday. Waste will not be accepted during non-daylight hours.

4.0 CONTINGENCY OPERATIONS

If a natural disaster occurs at the facility rendering it unusable, the waste accepted at the Facility would be rerouted to another permitted landfill. If a storm occurs within the surrounding community, storm debris waste will also be accepted at the facility, providing additional staff if required. In terms of equipment breakdown, there will be two operating pieces of equipment for all stages of landfill operation. Currently, Angelo's has on-site two compactors [Cat 826 (2)], two loaders (Cat 950, Cat 980), two dozers (Cat D5, Cat D8), four excavators [John Deere 450 (2), Komatsu PC1100, Komatsu PC300], and two articulated dump trucks (Volvo). If both should breakdown, replacements can be rented or substituted from onsite or offsite within 24 hours.

The site access roads will be constructed to allow passage of vehicles under all expected weather conditions. See Appendix 3-B of the Engineering Report for the Contingency Plan.

5.0 WASTE STREAM QUALITY CONTROL PLAN

5.1 <u>Visual Inspection</u>

An estimated 1500 tons of Class III waste material is currently received at the facility daily. Materials brought onto the Enterprise Road Class III RDF site will be inspected three times. The first inspection takes place at the site entrance. The site will only accept Class III debris (which includes construction and demolition debris by definition); therefore, any vehicles hauling unacceptable waste can be turned away by the attendant at the ticket gate. The gate attendant will question all waste carriers as to the character and origination of their wastes. A mirror is installed overhead and angled to allow gate inspection of all loads after they are untarped. A video camera has been installed over the scale location that allows the gate attendant to visually screen all carrier loads prior to disposal, mainly to identify fire or smoking loads. For loads that are not accepted, a Rejected Load Form will be completed.

The second inspection is a visual inspection that will occur at the working face by a certified, trained spotter. The spotter stationed at the working face will be responsible for spotting trucks bringing in disposal loads. The spotter will show the drivers where to unload, and will also inspect the trucks to make sure unacceptable materials are not unloaded. The spotter will have the authority to ensure that unacceptable materials are reloaded on the truck the material was brought in on.

The third inspection will occur as the waste is spread by the equipment operator. Any unacceptable wastes observed will be placed in the appropriate container located at the working face. The equipment operator may also serve as the spotter and will perform both visual inspections - as the waste is unloaded and as the waste is spread.

The facility will deploy and use spotters based on the volume of waste disposed at the working face. No more than two loads will be allowed to dump simultaneously per spotter at the working face.

5.2 Documentation of Waste Received

Documentation includes recording the name of the company disposing of the waste, driver's signature/information, all vehicle identification numbers, quantity of waste (tons), and type of waste (to meet FDEP and Pasco County's requirements). All vehicles entering the landfill will be weighed. The type of material and location from which the waste was generated will be recorded. This provides a record for tracing ownership of individual loads. See Landfill Operating Records, Section 19.2 for more details.

5.3 Contingency for Unacceptable Materials

If unacceptable waste materials are delivered to the landfill, the truck will be refused entry after inspection at the gate. If the unacceptable waste materials are observed by a spotter while unloading, they will be reloaded onto the delivery vehicle. Should the vehicle leave before the unacceptable waste has been discovered, Enterprise Road Class III RDF personnel will place the

unacceptable material into an appropriate container located at the working face. A maximum of 20 cubic yards of covered dumpster storage for Class I waste will be provided near the active face of the landfill, as shown on the Operations Plan Minor Modification Permit Plan Set provided in Section 4. These containers are transported by Central Carting Disposal (or other qualified vendor) to a disposal facility permitted to accept Class I material. The covered storage containers will control vectors and odors and Class I waste will be removed within 30 days of discovery. If the storage containers cannot be secured to control vectors and odors, the putrescible waste will be stored no longer than 48-hours.

Unacceptable nonputrescible, non-hazardous wastes, such as batteries, paint, chemicals or similar items that are inadvertently accepted will be removed when observed and stored in a roll-off container or pile at the working face and removed daily to a lockable storage unit. A maximum of 40 cubic yards of stored unacceptable, nonputrescible, non-hazardous wastes may be provided near the active face of the landfill, as shown on the Operations Plan Minor Modification Permit Plan Set provided in Section 4. These materials will be removed from the site at least every 30 days (sooner if required) by a qualified vendor and taken to their facility for processing and proper disposal. Class I material is removed by Republic Services; Fluorescent bulbs and other related hazardous materials are removed by US Ecology. This plan should meet the inspection needs for the site to prevent disposal of unacceptable wastes.

If suspect regulated hazardous wastes are identified by operators or spotters by random load inspection or discovered deposited at the landfill, the FDEP will be notified promptly, as well as the hauler and generator of the wastes, if known. The area where the hazardous wastes are stored will immediately be secured from public access. If the generator or hauler cannot be identified, Enterprise Road Class III RDF will assume the cleanup, transportation and disposal of the waste at a permitted hazardous waste management facility.

5.4 Acceptable and Unacceptable Class III Landfill Waste Materials

The Enterprise Road Class III RDF will accept only those solid wastes as defined in Rule 62-701.200 (14), F.A.C. as Class III wastes, except as allowed otherwise by permit.

Acceptable Class III waste materials include the following:

- Land clearing debris
- Demolition debris
- Glass
- Carpet
- Cardboard
- Asbestos
- Plastic

- Construction debris
- Non-Treated Wood Pallets
- Unpainted, painted and untreated wood scraps from manufacturing
- Waste Tires (Processed)*
- Paper
- Furniture other than appliances
- Yard trash

- Automobiles and parts without visible contamination from petroleum products or other chemicals
- * Processed waste tires are acceptable for disposal in the Class III Landfill provided that they have been cut into sufficiently small parts. The processed waste tire parts may be disposed of or used as initial cover at a permitted landfill. For use as initial cover, a sufficiently small part means that 70 percent of the waste tire material is cut into pieces of 4 square inches or less and 100 percent of the waste tire material is 32 square inches or less. For purposes of disposal, a sufficiently small part means that the tire has been cut into at least eight substantially equal pieces. Any processed tire which is disposed of in a landfill and which does not meet the size requirement above must receive initial cover, as defined in subsection 62-701.200(53), F.A.C., once every week.

The following is a compilation of unacceptable Class III waste materials:

- Putrescible Household Waste
- Paint (liquid)
- Any toxic or hazardous Materials (i.e., batteries, solvents, oils, etc.)
- Contaminated soils
- Electronics

- Refrigerators, freezers, air conditioners (white goods)
- Biomedical waste
- Automobiles or parts that are contaminated with petroleum products or other chemicals.
- Septic tanks and pumping
- Whole waste tires (except at the waste tire processing facility)
- CCA Treated wood

The site has a visible sign at the site entrance on Enterprise Road as provided in Attachment 1. The sign identifies the accepted wastes, hours of operation, landfill classification, and site's 24-hour emergency contact and telephone number. Industrial or excavated waste will be considered for acceptance on a case by case basis, only with prior consent of the Department.

5.5 Random Load Inspection

In accordance with Rule 62-701.500(6) a., F.A.C., the owner or operator will implement a load-checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The load checking program will consist of the following minimum requirements:

1. The landfill operator will examine at least three random loads of solid waste delivered to the landfill per week. The waste collection vehicle drivers selected by the inspector will be directed to discharge their loads at a designated location in the landfill. A detailed inspection of the discharged material will be made for any unauthorized wastes. The

landfill operator will assure the random inspections will be distributed between both loads originating from the transfer facility and other private waste haulers delivering waste to the landfill.

2. If unauthorized wastes are found, the facility will contact the generator, hauler, or other party responsible for shipping the waste to the landfill to determine the identity of the waste sources.

The following procedures will be followed when inspecting the load:

- A. The load will be "broken apart" by both the spotter and equipment operator to allow for a thorough inspection.
- B. The inspectors will be searching and removing de minimis amounts of unauthorized waste contained in the load.
- C. If the load contains more than de minimis amounts of unauthorized materials, they will immediately be reloaded onto the customer's vehicle for removal from the site. In the event that the transporter will not remove the unacceptable materials, the materials will be loaded into an appropriate container and removed from the site. The customer/generator will be contacted and notified of the site policies as well as charged for the off-site disposal services.
- D. In all cases, if more than minimal unacceptable wastes are found during the inspection, the customer will be notified to assure the prevention of future occurrences.

All inspection will be documented on the site's "Random Load Inspection Form," signed by the inspector, and kept in a current Log Book, see Attachment 2. Log books will be maintained at the landfill for at least 3 years. Inspections will be performed by trained site personnel.

5.6 Asbestos Waste Disposal

Asbestos-containing materials (ACM's) will be accepted for disposal in accordance with 40 CFR Part 61.154. Arrangements for disposal of ACM's between the Facility and the waste generator/hauler will be recorded in the operations record as to the quantity and date of shipment to the landfill. The loads are accepted at pre-arranged times during operational hours.

To ensure that all waste deposited at the Facility meets state and local requirements, all facility personnel will receive training from their supervisor on the identification of unacceptable materials, which is any waste other than properly labeled and bagged ACM. Unregulated, non-friable asbestos containing materials are not required to be bagged, but all other requirements are unchanged.

Each load of ACM arriving at the facility must be accompanied by a completed Waste Shipment Record (WSR) in accordance with 40 CFR 61.150. Each load will be inspected to insure that it is properly bagged, that bags are intact and properly sealed, and that the required warning labels and generator labels are affixed. Bags will not be opened prior to disposal.

ACM arriving at the Facility for disposal will be visually screened by facility personnel a minimum of two times. The first screening will be at the scales, controlling access to the Facility, where the truck drivers will be questioned as to the contents of the load and the shipping documents will be reviewed. The gate attendant will direct the drivers to the appropriate disposal area.

The second screening will be at the working face where a trained inspector/spotter will again question the driver and make a visual examination of the load prior to dumping and as it is dumped. This examination will ensure the ACM is properly bagged, the bags are intact and properly sealed, and that the warning labels and generator labels are affixed.

Facility personnel will direct the waste hauler to the designated ACM disposal location in each cell, to be determined by the Operator. The ACM will be covered with 6-inches of soil at the end of any day that ACM is accepted. This designated ACM location will be recorded and updated by the annual topographic survey in accordance with 40 CFR 61.154. ACM disposal records will be maintained for the life of the landfill and disposal locations documented in the Closure Report.

5.7 <u>Incidental Recycling Operations</u>

The Class III landfill does have a separate, dedicated materials recycling area. However, if recyclable wastes are incidentally received, such as metals, concrete rubble, asphalt, and wood wastes, the facility will separate them in stockpiles or in roll-off containers. Concrete and asphalt will be periodically transported to an appropriate location for crushing. Yard and wood wastes may be chipped for use onsite or be placed in roll-off containers for shipment to a wood recycler. These materials will be removed from the site approximately every 6 months. However, if the storage capacity is exceeded, the materials will be removed sooner. Incidental recyclable materials that are identified at the disposal area will be placed in containers located near the working face, as follows and as shown on the Operations Plan Minor Modification Permit Plan Set provided in Section 4.

TYPE	MAX. QTY	STORAGE
Ferrous Metal	500 CY	Roll-off or pile
Aluminum	300 CY	Roll-off or pile
Stainless Steel 300 CY Roll-off or pile		Roll-off or pile
Copper	25 CY	Trash pail, roll-off or pile
Asphalt	300 CY	Roll-off or pile
Concrete / Rubble 300 CY Roll-off or pile		Roll-off or pile
Recyclable electronics 8 CY Covered dumpster		Covered dumpster

Trucks identified at the entrance as carrying primarily recyclable products, (i.e., concrete, metal, wood, paper) will be refused entrance into the landfill.

5.7.1 Reports

A Recovered Materials report will be submitted by type of waste recovered and tonnage to the FDEP and Pasco County Solid Waste Department. These reports will also be compiled into an annual report to the FDEP.

5.8 Wood Acceptance Area

The facility is a registered Source-Separated Organics Processing Facility and in compliance with the requirements specified in Rule 62-709.320 and Rule 62-709.330. Initial inspection will be performed at the scalehouse by the attendant. Wood wastes are stockpiled until processing takes place every 180 days. Personnel trained to identify and remove any unacceptable wastes will be present during processing. Unacceptable wastes, if found, will be removed prior to wood processing.

5.9 CCA Treated Wood Management Plan

The following serves as the CCA-treated wood management plan required by 62-701.730(20), F.A.C. Employees will be trained in the proper management of CCA-treated wood. CCA-treated (chromate-copper arsenate) wood must be stored in the temporary storage container for waste destined to go to a lined facility. CCA-treated wood is not allowed to be disposed of in the Enterprise Class III Recycling and Disposal Facility.

The following is strictly prohibited:

- Disposal of CCA-treated wood in any unlined landfill or disposal facility
- Burning of CCA-treated wood in an open burn or an air curtain incinerator
- Mulching of CCA-treated wood or use of CCA-treated wood in other soil amendment products

There are several ways for employees to identify CCA-treated wood: 1) determining the place of origin, 2) identification by shape – typically large, dimensioned pieces of wood and 3) identification by color. CCA-treated wood has been used in a variety of applications including fencing, docks, outdoor decks and stairs, playground equipment and landscaping. The wood is typically large – dimensioned 4-inches or larger.

The most common method for visually identifying treated wood among lumber, timber and plywood is to look at the color of the wood. Untreated wood and borate-treated wood typically have a light-yellow color. Wood treated with copper varies in color from a very light green to an intense green color depending on the degree of treatment. A higher degree of treatment is typical for marine applications and for structure with a high load-bearing support. Once the wood treated

with copper has been in-service and has weathered, the green color is generally converted to a silver color. It still may be difficult to visually distinguish weathered treated wood from weathered untreated wood.

Employees are cautioned against handling CCA-treated wood. Workers handling wood preserved with CCA should be sure to wash their hands before eating or smoking. CCA-treated wood splinters in the hands and fingers of workers are reported to be very problematic and should be removed as soon as possible. It is important to make sure that the entire splinter is removed. Removal may require medical attention.

The most efficient way to minimize CCA-treated wood disposal in the facility is to communicate with landfill customers. Dedicated, separate suitable temporary container for CCA-treated wood at demolition and construction job sites can be used. At the scale house, personnel will question transporters on the type of wood and direct customers to dispose CCA-treated wood at a Class I landfill. Personnel will also perform a visual inspection at the scale house if necessary, especially for loads originating from the construction and demolition of fences and decks.

The facility shall incorporate CCA-treated wood into its spot-checking program. Spotters visually inspect and determine if any dimensioned wood is in the load, such as railroad ties and fence posts or building materials. If CCA-treated wood is found, the load will be diverted to a Class I landfill for disposal. Tipped loads will be spread and inspected for the presence of CCA-treated wood. CCA-treated wood will be adequately protected from rain to prevent leaching of contaminants.

6.0 WEIGHING OR MEASURING INCOMING WASTE

A scale system is used to weigh incoming waste. The scales will be calibrated every six (6) months. Vehicles will be weighed when they enter the disposal site, and based upon the tare weight of the vehicle, the waste tonnage will be determined. Prior to unloading debris, the tonnage or volume of the waste material disposed will be determined and the appropriate fee assessed. Weigh tickets will be kept on-site for a minimum of 5 years.

6.1 Fee Schedule

The fee schedule for disposal varies depending on the client, type of waste and volume received.

Waste Type	Unit	Fee per Unit
Class III	CY	Variable

This fee schedule will be periodically revised according to the prevailing market for waste disposal. The Operator will notify clients immediately in writing of all fee schedule changes.

7.0 VEHICLE TRAFFIC CONTROL AND UNLOADING

Generally, truck traffic will be controlled by first-in, first-out, as directed by the spotter located at the working. There will be adequate space for truck staging at the site's entrance (7-8 trucks) to mitigate any queuing onto Enterprise Road. Enterprise Road Class III RDF will discourage any truck staging prior to landfill opening. Signs will be posted at the entrance gate and on interior roads to guide mining truck traffic vs. landfill truck traffic to their appropriate areas of the site.

8.0 METHOD OF CELL SEQUENCE AND LIFE EXPECTANCY

8.1 Cell Sequence

Angelo's Aggregate Materials is currently (as of January 2019 March 2020) filling in Cells 1-7, 15 and 16 of the Class III Landfill. The cell construction and filling sequence operations will be as follows:

Filling will continue in Cells 1-7, 15 and 16 until such time as the Department authorizes the waste disposal operations in Cell 17. Filling will then move to Cell 17 until waste grades are generally at the same elevation as those in Cell 16. The Site Operator may elect to move filling operations between Cell 16, Cell 17, and Cells 1-7 and 15 based on site conditions and disposal needs. Filling will occur such that the final waste grades (slopes and elevations) shown in Sheet XX of the Permit Plan Set are not exceeded.

Phasing Sequence 1	As shown in Operations Plan Minor Modification Permit Plan Set
	Continue filling Cells 1-7, 15 and 16 in 10 12-foot lifts to waste
	elevation of 172'
	Maximum slope is 3H:1V from base grade to waste elevation 167';
	1% to 2% grade from waste elevation 167' to 172
	Sideslope berms and stormwater appurtenances are to be constructed at final closure.
	Construct Cell 17 in accordance with permitted design.
Phasing Sequence 2	As shown in Operations Plan Minor Modification Permit Plan Set
	Continue filling Cells 1-7, 15 and 16 in 10 12-foot lifts to waste
	elevation of 172'
	Begin filling Cell 17 with 4 6 feet lift north of the temporary
	stormwater and leachate diversion swale until cell is floored out.
	Remove temporary swale and fill with 4 6 feet lift.
	Continue filling Cell 17 in 10 12 feet lifts from base grade to waste
	elevation 147'. Maximum slope is 3H:1V from base grade to waste
	elevation 147'.
	A 10-ft wide stormwater bench is to be constructed at elevation
	137'.
	Sideslope berms and stormwater appurtenances are to be
	constructed at final closure.

Phasing Sequence 3	As shown in Operations Plan Minor Modification Permit Plan Set
	Construct overall landfill vertical expansion to include maximum
	sideslope of 3H:1V from base grade to waste elevation 137', 187'
	and 212'; 1% to 2% grade from waste elevation 212' to 217'
	10-ft wide stormwater benches to be constructed at waste elevations
	137' and 187'.
	_
Phasing Sequence 4	As shown in Operations Plan Minor Modification Permit Plan Set
Phasing Sequence 4	As shown in Operations Plan Minor Modification Permit Plan Set Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B,
Phasing Sequence 4	1
Phasing Sequence 4	Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B,
Phasing Sequence 4	Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B, 7, 15, 16 and 17 in accordance with the revised overall landfill
Phasing Sequence 4	Construct final closure cover system over Cells 1, 2, 3, 4, 5, 6, 6B, 7, 15, 16 and 17 in accordance with the revised overall landfill vertical expansion closure design.

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height.

As each sequence is active, <u>T</u>the following procedures will be followed

- The access road to the working face will be constructed and graded as necessary
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length
- Avoid channelizing stormwater flows
- Use mulch, grass, and maintain intermediate covers
- Weekly cover of six (6) inches of soil will be placed on the working face
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste
- During excavation, construction and waste disposal a 6-foot berm adjacent to active and filled
 cells retains stormwater from the filling area and diverts stormwater from the excavation area
 and pumped to stormwater Pond 3. The remaining portion of the temporary stormwater pond
 will be filled as the construction of Cell 17 is completed.

8.2 Erosion Control

The following engineering controls will be used to minimize erosion at the working face:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the construction of the clay layer, begin to fill against the 2H:1V slope with the landfill material.
- Avoid channelizing stormwater flows

Vegetative cover will be placed on top of the intermediate cover for erosion control purposes. All or part of the intermediate cover may be removed before placing additional waste or installing final cover

8.3 <u>Life Expectancy.</u>

The capacity and lifespan estimates are provided in Section 3.8.3 of the Engineering Report.

9.0 WASTE COMPACTION AND APPLICATION OF COVER

Waste received will be segregated based on compatibility. Bulky, incompressible items, such as concrete and tree debris, will be separated and stockpiled for future processing. Tree debris is separated from the waste and periodically mulched for on-site uses. The remaining debris is disposed of in designated "cells" using a CAT 826G Compactor, or equivalent to place, spread the waste daily and compact the debris weekly. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The facility may also use a 50/50 mixture of mulch and soil as cover in accordance with Policy Memo # SWM-05.4 dated April 25, 2001. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all permitted cells are filled. For final buildout grade and closure details, see Operations Plan Minor Modification Plan Set provided in Section 4. The Conceptual Closure Plan includes permitted Cells 1-7 and 15, 16, and Cell 17 and vertical expansion.

Cell closure will generally conform to the lines and grades specified in the Landfill Conceptual Closure Plan. The grading plan will conform to the rules and regulation specified in 62-701.600, as well as 62-701.400(7) and 62-701.400(8), Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other vectors will be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging will not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may occur in the closed cell areas.

10.0 OPERATION OF GAS, LEACHATE AND STORMWATER CONTROLS

10.1 Gas Monitoring and Control

The type of materials to be disposed in the Class III Landfill are not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact therefore, a passive gas control system is proposed. The Landfill Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas by driving around the perimeter of the site, record the results, and notify the FDEP and County of any positive detection and immediately take corrective actions. Corrective actions will include placement of additional soil cover, or mulch, or lime containing materials such as crushed concrete that is documented to abate the odors. Quarterly gas monitoring is currently conducted.

Within 30 days of being notified by the Department that objectionable odors per Rule 62-701.200(77), F.A.C. have been confirmed off-site, the Facility will submit to the Department for approval an odor remediation plan. The plan will describe the nature and extent of the problem and the proposed long-term solution, which will be implemented within 30 days of approval. The plan will include procedures to implement a routine odor monitoring program to determine the timing and extent of objectionable odors and a means of evaluating the effectiveness of the remedy.

The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the approved facility design thus preventing possible odor operation. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate odors.

A system of passive gas vents will be installed to manage landfill gas. The location of the gas vents is shown on the Operations Plan Minor Modification Permit Plan Set provided in Section 4. The construction details of the vents are shown on Figure 3-16, Appendix 3-C of the Engineering Report. The vents will be installed during the final closure and installation of the final cover over each landfill cell.

A system of 16 gas monitoring points will be installed to monitor gas at the site, see Operations Plan Minor Modification Plan Set provided in Section 4. The construction details of a typical gas probe are shown on Figure 3-14, Appendix 3-C of the Engineering Report.

10.1.1 Methane Gas Measurement

In accordance with the requirements of the current FDEP permits, methane gas levels are monitored at each of the active gas monitoring points quarterly, with results submitted to the FDEP. A lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Attachment 4 of the Operations Plan provided in Appendix 3A of the Engineering Report presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The reporting action limit for methane in structures is 25% of the LEL, or 1.25% methane by volume. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

10.1.2 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Facility operator will institute measurement of methane in nearby, at, or below grade structures, i.e., stormwater collection points, or any maintenance or office buildings within 100 feet of the subject gas probe on a weekly basis until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from nearby structures, as indicated above, until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

10.2 Leachate Control

Any leachate that may be produced at the landfill will be controlled with the use of a continuous

3-foot thick clay layer (1x10⁻⁸ cm/s) on the bottom of the cells. The clay layer beneath each individual cell forms a continuous barrier layer that is graded to direct leachate to the toe drain extending east to west along the northern perimeter of Cell 16 and Cell 17. The toe drain slopes from west to east and terminate in a manhole between Cell 16 and Pond 3. The toe drain "daylights" approximately 3 feet above the bottom of the manhole. A dedicated pump with float control system is used to transfer leachate from the manhole to Pond 3 as neededthe primary leachate treatment and disposal approach. During intervals in which leachate cannot be pumped to Pond 3, leachate will be collected and hauled off-site to a permitted wastewater treatment facility for treatment. Leachate that is discovered to be hazardous, will be managed as hazardous waste.

As described above, the leachate collection system is designed, constructed, and maintained to prevent clogging of the system. In the unlikely event the IW pond becomes unable to accept leachate, an alternate disposal facility is available for transport and disposal of the leachate.

In accordance with Rule 62-701.500(8)(h), F.A.C., a video inspection or high-pressure water cleaning of the leachate and detection system collection pipes, laterals and headers for the landfill will be performed every 5 years as part of the permit renewal process.

The controlled method of screening waste also supplements the leachate control. Because the Applicant privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo's and the scale house attendants. For those haulers that are unfamiliar to the Applicant, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

10.3 Stormwater Control

The approved Stormwater Management Plan for the landfill consists of berms, swales, and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. During excavation, construction and waste disposal a 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the excavation area and pumped to stormwater Pond 3. The remaining portion of the temporary stormwater pond will be filled as the construction of Cell 17 is completed. Pond 3 has been permitted through the Industrial Wastewater division of FDEP. Additional details concerning the stormwater management system are provided in Drawing Sheet C3C2.00.

The site manager will perform weekly inspections of the storm water management system. Any areas in need of maintenance will be repaired within seven days.

11.0 **SIGNS**

Signs will be posted at the entrance to the Facility site which will list the following information:

The operating entity;
Hours of operation;
No scavenging allowed;
No hazardous waste accepted;
List of acceptable and unacceptable waste; and,
24-hour phone number of emergency contact.

The scalehouse attendant will direct each driver to the area appropriate to unload wastes. Signs will also be posted to direct trucks to either the borrow pit or the landfill working face.

12.0 DUST ABATEMENT PLAN

The Facility will provide a water tanker to water the landfill access roads if and when dust becomes a problem. This will also be done whenever the County receives complaints about dust or when a dust problem is observed during a County or State inspection.

13.0 DUST, LITTER, AND VECTOR CONTROL PLAN

The nature of the waste to be disposed in the landfill does not typically create litter and vector problems. Daily placement of waste and/or compaction will be the primary means utilized to control litter and vectors. The facility personnel will perform daily inspections of the facility and the access road to assure litter is controlled. As needed, laborers will pick up blowing debris and dispose of it in appropriate containers and/or on site. Temporary fencing to contain litter at the working face of the landfill may be used as needed. These litter controls will also be implemented whenever the County or State receives a complaint from adjacent landowners or a litter problem is observed during an inspection.

If vectors (rodents, insects, and domestic animals) become a nuisance at the Facility, the Operator may obtain the services of a licensed pest management company to review the operations and recommend control measures.

14.0 FIRE PROTECTION AND FIRE FIGHTING FACILITIES

Fires that originate in landfills are primarily extinguished by soil application. Supplemental fire protection will be furnished by the Dade City Fire Department (Station No. 1). The Fire

Department will be notified immediately of all landfill fires. An emergency contact list will be posted at the scalehouse with contact phone numbers.

During a fire, incoming trucks will be directed toward another area of the landfill so that a temporary active face can be established. Once the fire is extinguished, appropriate cover will be applied to the waste and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming trucks will be redirected to another landfill.

Onsite fire prevention facilities will include:

- Fire extinguishers mounted in the cab of all heavy equipment and in the office/ scalehouse;
- Telephones to notify personnel of a fire;
- Onsite equipment (dozer) and fill dirt to extinguish fires on working face; and
- Site water truck

Soil for firefighting purposes will be borrowed from the closest unexcavated area of the site to the fire. Details of all firefighting episodes will be recorded in the landfill operating record.

14.1 Hot Loads and Spills

Any hot load (of authorized material) found will be dumped on an area at least 500 feet away from the active working face. The load will immediately be covered with soil if a fire is imminent. Once the fire is extinguished, the load will be pushed and spread using a dozer, allowing for the load to be inspected by a spotter. The waste will not be disposed of until it has cooled completely, and the fire hazard has been mitigated.

In the event of a fire at the working face, waste acceptance will cease until the fire has been completely extinguished and additional cover material compacted in the area of the fire. If the fire is located elsewhere in the landfill, waste acceptance operations may continue at the manager's discretion.

Since liquid disposal is prohibited in a Class III landfill, spills from waste vehicles are not anticipated. In the case of a fuel spill or leak, the contaminated soil will be collected to the extent possible, contained in a drum or roll off container, and taken offsite within thirty (30) days for proper disposal or treatment.

15.0 LANDFILL PERSONNEL

The scalehouse attendant and certified landfill operator will be onsite during all operating hours. In addition, there will be a minimum of one (1) other person (spotter) onsite, for a total of three (3). The state certified landfill operator will be assigned to manage the daily landfill operations. The personnel will be stationed at the landfill ticket gate and active disposal face. Additional personnel will be assigned to the landfill operation as the demand necessitates. Two spotters are generally located at the working face at all times that waste is accepted. However, there are up to eight spotter-trained or in-house trained spotter employees on-site each day and therefore; additional trained employees can be relocated to the working face as necessary to inspect the incoming waste. Certificates for current trained personnel are attached as Attachment 6 to this plan.

At least one (1) spotter will be at the working face at all times the facility is accepting waste. The spotter will direct vehicle traffic around the working face and will direct drivers where to empty their vehicles. The loads will be inspected as described in Section 5.0. If the load is acceptable, the waste will be spread and compacted as necessary. If the load is unacceptable, the spotter will direct the driver to reload the waste into the vehicle, if possible. If the driver is unable to reload the material, on-site personnel will reload the material for the driver using onsite equipment. The spotter will also discourage scavenging by the public.

The equipment operator spreading waste at the working face may also act as a spotter in accordance with the following:

- 1. The heavy equipment operator must be trained as a spotter;
- 2. When unauthorized waste is discovered, the heavy equipment operator must either move the unauthorized waste away from the active area for later removal and proper management, or must stop operation and notify another person on the ground or on other equipment who will come to the active area and remove the unauthorized waste before operations are resumed;
- 3. Each load of waste must be visually inspected for unauthorized waste prior to being compacted or loaded into a transfer vehicle.

A typical work schedule is as follows:

Dov	Operating	Scalehouse	Certified	Spottor(g)	Equipment
Day	Hours	Attendant	Operator	Spotter(s)	Operator*
M-F	7 am – 6 - <u>5</u>	1 (7 am – 6- <u>5</u>	1 (7 am – 6- <u>5</u>	Min. 1 (7 am – 6- <u>5</u>	Min. 1
	pm	pm)	pm)	pm) For 2 or more	(7 am - 6 - 5)
				(7 am - 4 pm),	pm)
				(12 pm - 6 - 5 pm)	
S	7 am $- 12$	$1 (7 am - 3pm_1)$	1 (7 am $-3-1$		Min. 1
	pm	<u>pm</u>)	pm)		$(7 \text{ am} - \frac{2}{12})$
					pm)

^{* -} Equipment Operator may also serve as a spotter

15.1 <u>Training Plan</u>

The Facility will implement an employee training plan to properly train their landfill operators and spotters to operate the landfill in accordance with this Operations Plan, state and local regulations, and accepted disposal practices and to properly manage any hazardous or prohibited materials which are received at the landfill.

A trained operator will be at the site during all times that the landfill receives waste. All facility operators will be trained at an approved FDEP training course. Each operator will submit proof of training and documentation to the FDEP upon receipt of their certificates.

Landfill operators must have at least one year of work experience in landfill operation and a high school diploma; or have at least two (2) years' experience at a Class I, II, or III landfill. Each operator will complete at least 24 hours of initial training in an FDEP-approved training course, and will pass an examination as part of that training. Sixteen (16) hours of continuing training will be completed within three (3) years of each operator's initial training from an approved course documented by the form in Attachment 3. A list of FDEP approved training courses for operators and spotters are included in Attachment 5.

The Facility spotters will complete an initial eight (8) hour FDEP-approved course and four (4) hours of continuing training every three (3) years. Records documenting each employee's training course completion and schedule will be maintained and kept at the landfill office at all times.

Interim operators must become trained operators within one year of employment as an interim operator and interim spotters must become trained spotters within 3 months of employment as an interim spotter.

16.0 COMMUNICATIONS FACILITIES

The landfill scalehouse will have both telephone and facsimile facilities. In addition, all landfill operating areas (gate house, working face etc.) will have radio communication or cell phones with the base station at the gate house.

17.0 EQUIPMENT INVENTORY

Equipment currently planned for use at the landfill site includes:

A. Two compactors [Cat 826 (2)], two loaders (Cat 950, Cat 980), two dozers (Cat D5, Cat D8), four excavators [John Deere 450 (2), Komatsu PC1100, Komatsu PC300], and two articulated dump trucks (Volvo)D-8 Caterpillar bulldozer, CAT 826 G Compactor; two 2.5 cud loaders, water truck, 590 John Deer backhoe, or equivalent are sufficient for adequate operation of the facility. A wood chipper/grinding machine (Hogzilla), or equivalent, will be moved to the site periodically (approximately once every six months) to process wood

wastes as needed. Additional equipment, such as a grader <u>or water truck</u> may be rented as needed.

B. Arrangements will be made to provide alternate equipment within 24 hours following an equipment breakdown.

Equipment rental companies that may be used to obtain reserve equipment include the following:

Ring Power - Brooksville, Florida

Contact: 352-796-4978

Flagler Equipment - Tampa, Florida

Contact: 813-630-0077

C. There will be safety devices present on equipment to shield and protect the operators from potential hazards during operation.

17.1 Equipment Maintenance

The Facility will conduct routine heavy equipment and vehicle maintenance onsite. Maintenance includes fueling of heavy equipment with diesel fuel, lubrication, oil changes and, antifreeze changes. Tire repairs will be handled by an outside service company.

A permanent equipment fueling facility will be installed and registered in accordance with F.A.C. 62-761. Pasco County will be copied on the registration.

Oil and antifreeze changes will be contained by large drip pans to catch the waste oils. These wastes will then be transferred either to a 250-gallon waste oil skid tank or to a 55-gallon drum for waste antifreeze, which will be located in a containment area. The containment area is a covered metal storage shed. Enterprise RDF plans to enter into contracts with licensed recyclers to periodically pick up the waste oil and antifreeze. Records of these pickups will be maintained by Enterprise RDF. All virgin lubricants will be stored undercover within the gate house building or suitable enclosure.

18.0 SAFETY DEVICES

All operating equipment which will be utilized at the landfill site will be fitted with rollover protection and fire extinguishers. All landfill personnel will be required to wear safety helmets, safety shoes, eye protective glasses, gloves, and safety vests. The onsite heavy equipment will meet OSHA safety requirements. First aid equipment will be kept in the office trailer and in the operating equipment.

19.0 RECORDS, PERMITS AND REPORTS

A copy of any Florida Department of Environmental Protection (FDEP) and Pasco County approved engineering drawings, permits and supporting information, and topographic survey will be kept at the facility for reference and inspections. Permits will be posted at site per ordinance. A waste type and quantity intake (in tons) log will be kept daily, compiled monthly and a report will be submitted annually to Pasco County and the FDEP.

An annual estimate of the remaining life and capacity in cubic yards of the landfill will be reported annually to the FDEP.

19.1 Water Quality Monitoring

The Facility will conduct the required initial and semi-annual groundwater monitoring at the sites' monitoring wells as described in the Facility's Groundwater Monitoring Plan. Semi-annual reports of this monitoring will be submitted to Pasco County and FDEP in accordance with this plan. Quarterly monitoring will also be conducted and reported at specific wells per Pasco County conditions.

19.2 Landfill Operating Records

The operating record for the landfill will document daily as a minimum the following activities:

- Self-inspections of landfill conditions, safety equipment and unacceptable waste received, any odor detected;
- Records used to develop permit applications;
- Change in construction, operation or closure permits and supporting designs;
- Water quality sampling events, analytical reports, well installation or repair;
- Employee training;
- Random load checks;
- Facility construction, major maintenance, or demolition;
- Other activities that significantly affect facility operations.

Self-inspections of the landfill conditions are conducted daily, and more extensive inspections are included weekly. Daily inspections include general inspection of site access, site security, and conditions of intermediate cover. Weekly inspections include more detailed inspections of the

conditions of the surface water and stormwater management systems and groundwater monitoring wells.

The Operating Record will be kept at the landfill and be accessible to the landfill operators to maintain and for FDEP or Pasco County inspection at reasonable times.

Operational records will be maintained for the design life of the landfill, with the exception of weigh tickets which will be kept at least 5 years. Water quality monitoring information, maintenance records, and permit reports will be maintained for a minimum of 10 years. Background water quality records will be maintained for the design period of the landfill.

20.0 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell.

21.0 FINAL GRADE PLAN

Interim grades of the cells are shown on the plans (Operations Plan Minor Modification Plan Set in Section 4) and in the cross-sections. Permitted mining activities will continue in accordance with the site's Class I mining permit. The final elevations after construction of future cells is planned to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage. The Landfill Conceptual Closure Plan is provided in the Operations Plan Minor Modification Permit Plan Set.

22.0 CLOSURE AND LONG-TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, storm water controls and monitoring devices is discussed in the Closure Plan (Section 7).

23.0 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion will consist of the following:

• In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These tests will be conducted in the location of each permeability test.

- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.
- Observance for unstable areas such as limestone, sinkholes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrogeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements. Field test methods, including rejection criteria and corrective measures, shall coincide with 62-701.400(8).

Upon completion of construction of any cell (or cell increment) within the disposal facility, the Applicant will provide the FDEP with the necessary reports, documents, and form 62-701.900(2), F.A.C. demonstrating that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP in accordance with Rule 62-701.320(9) a., F.A.C., along with the quality assurance test results described above.

24.0 HISTORY OF ENFORCEMENT ACTION

In 2000, OGC Case No. 00-0009 was opened against the applicant for the Frontier Recycling facility (now Angelo's Recycling Facility) in Largo, Florida. A model consent order was used to resolve the issues of the case. The DEP's database did not include information regarding the subject of the enforcement.

In 2004, OGC Case No. 04-0887 (solid waste) and No. 04-0426 (stormwater) were opened against the applicant for Angelo's Recycling facility in Largo, Florida. ARM requested a minor permit modification to resolve the solid waste enforcement case. Formal enforcement was not taken to resolve the stormwater case. Instead, it was handled through submittal of a new permit application.

In 2006, OGC Case No. 06-0783 was opened against the applicant for the Enterprise Class III Landfill and Recycling Facility in Pasco County, Florida. ARM performed the corrective actions that were required to bring the facility into compliance and the assessed civil penalties were paid.

In 2007, OGC Case No. 07-1985 was opened against the applicant for the Angelo's C&D Recycling Waste Processing Facility in Apopka, Florida. ARM performed the corrective actions that were required to bring the facility into compliance and the assessed civil penalties were paid.

In 2007, Warning Letter #WL07-0019SW51SWD was issued to Angelo's Aggregate Materials, Ltd. for the Enterprise Class III Landfill. The Warning Letter was settled June 5, 2008 for total fines of \$18,397. In the "Proposed Settlement of Warning Letter WL07-0019SW51SWD", the Department acknowledged that Angelo's would not be considered "irresponsible" under FDEP Rule 62-701.320, FAC, as a result of the enforcement action.

In 2007, Warning Letter # WL07-0008SW52SWD was issued to Angelo's Aggregate Materials, Ltd. for the Recycling Waste Processing Facility in Largo, FL. The Warning Letter was settled April, 2009 for total fines of \$24,986. In the "Proposed Settlement of Amended Warning Letter WL07-0008SW52SWD", the Department acknowledged that Angelo's would not be considered "irresponsible" under FDEP Rule 62-701.320, FAC, as a result of the enforcement action.

ATTACHMENT 1 FACILITY ENTRANCE SIGN



ATTACHMENT 2 RANDOM LOAD INSPECTION FORM

ENTERPRISE RECYCLING AND DISPOSAL FACILITY

RANDOM LOAD INSPECTION FORM

1.	DATE:	
2.	TIME:	
3.	HAULING COMPANY:	
4.	VEHICLE INFORMATION:	A) TRUCK #B) LICENSE PLATE #
5.	NAME OF DRIVER:	
6.	SOURCE OF WASTE MATERI	<u>^L</u> :
7.	DESCRIPTION OF WASTE MA	ATERIAL:
8.	IF YES, WHAT MATERIALS W FOLLOWED?	UNACCEPTABLE WASTE MATERIALS? YES: NO: VERE FOUND, AND WHAT PROCEDURES WERE
9.	OTHER OBSERVATIONS:	
		<u> </u>
10.	INSPECTOR SIGNATURE:	
		SIGNED

Note: Forms must be maintained in Inspection Log Book

ENTERPRISE CLASS III LANDFILL **Load Rejection Form** Date: _____ Time: am/pm CUSTOMER/GENERATOR Name _____ Address _____ City/State/Zip TRANSPORTER/HAULER Same as Customer/Generator Name _____ Address _____ City/State/Zip _____ Vehicle License and State **REASON FOR REJECTION** Suspected Special Waste Suspected Medical Waste Non-Processable Suspected Hazardous Waste Other (Explain below) Suspected Asbestos Explanation **ACKNOWLEDGEMENT** Rejected prior to dumping Rejected After Load was Dumped Comments _____ Driver's Signature_____ Operator's Signature_____ Transporter/Hauler Notified? YES NO Customer/Generator Notified? YES NO If yes, name of person contacted If yes, name of person contacted

ATTACHMENT 3 FACILITY TRAINING LOG

ENTERPRISE RECYCLING AND DISPOSAL FACILITY

TRAINING LOG

COURSE	TRAINED OPERATOR INSTRUCTOR	HRS. ATTENDED	SIGNATURES/ DATE
			,
			L

ATTACHMENT 4 GAS MONITORING SURVEY FORM

ENTERPRISE RECYCLING & DISPOSAL FACILITY CLASS III LANDFILL **GAS MONITORING SURVEY FORM**

Date:										
Sampler:										
GAS	TIME OF	AMBIENT	AMBIENT AIR	AMBIENT AIR		IETHANE LEV			IETHANE LE	
PROBE	READING	AIR TEMP	OXYGEN	METHANE	Pre-P	urge Measu	rement	Post-P	urge Measu	rement
NO.		(°F)	CONTENT (%)	(%) OF LEL	% O 2	% by vol.	% of LEL	% O2	% by vol.	% of LEL
1	Not installed									
2	Not installed									
3	Not installed									
4										
5										
6R										
7R										
8R										
9R										
10R										
11R										
12R										
13R										
14R										
15										
16	Not installed									
Scale house					N/A	N/A	N/A	N/A	N/A	N/A
•	NR -Not requi	red, no metl	nane indicated i	n pre-purge mea	surement					

Notes: (wind direction, weather conditions damage to gas probes, adjacent off-site activity observed, etc.)

ATTACHMENT 5 LIST OF APPROVED COURSES

Florida's Solid Waste Operators & Spotters University of Florida

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Tracks

Courses

Providers **Participants** Reports

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Track Detail

Class I, III Landfill Operator

Is a solid waste facility that accepts Class I waste that is not hazardous waste and can be disposed in a lined landfill. The landfill may also accept yard trash, construction and demolition debris, processed tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances, or other materials approved by the FDEP that are not expected to produce leachate which poses a threat to public health or the environment. Operators required 24 hours initial course and pass exam with 70% proficiency, then 16 hours of continuing education every 3-year period.

Requirements

Initial Courses

- 24-Hour Initial Training Course for Landfill Operators (Class I, II, III and C&D Sites)
- · Initial Training Course for Landfill Operators and C&D Sites 24 Hour
- SWANA Manager of Landfill Operations [MOLO] & Exam
- · SWANA-Management of Landfill Operations
- SWANA-Manager of Landfill Operations (MOLO) Course and Exam

Hours

Hours Required	Effective Date
15	01/01/1800
16	05/27/2001

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tel: (352) 392-9570 3900 SW 63rd Blvd. Gainesville, FL 32608 fax: (352) 392-6910 train@treeo.ufl.edu



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Track Detail

Spotter / Waste Screener

Is a person employed at a solid waste management facility whose job it is to inspect incoming waste and to identify and properly manage any hazardous or prohibited materials, which are received at the facility. Spotter required 8 hours initial course, then 4 hours of continuing education every 3-year period.

Requirements

Initial Courses

- · 8-Hour Initial Training Course for Spotters at Class I, II, III Facilities, Waste Processing Facilities and C&D Facilities
- · 8-hour Initial Training for Spotters
- 8-Hour Spotter Training for Class I II III Landfill C&D Sites and Transfer Facilities
- 8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations
- Environmental Management Systems: An Introduction
- · Spotter Training
- · Spotter Training for Solid Waste Facilities
- · Spotter Training for Solid Waste Facilities Spanish
- · Spotter Training for Solid Waste Management Staff with Elements of a Solid Waste Operations Plan
- · Waste Screening and Identification for Landfill Operators and Spotters
- Waste Screening at MSW Mgmt Facilities [Onsite Delivery]

Hours

Hours Required	Effective Date
4	01/01/1800

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Florida's Solid Waste Operators & Spotters University of Florida

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Course Information

Course #	Name /	Status
582	16-Hour Initial Training Course for Transfer Station and MRF Operators	Active
575	2010 North American Environmental Field Conference and Expo	Active
516	24 Hour HazMat Techician Level	Active
608	24-Hour Initial Training Course for Landfill Operators (Class I, II, III and C&D Sites)	Active
478	40 Hour HazWoper	Active
507	40-Hour HazWoper	Active
626	40-Hour HazWoper Course in Accordance to 29 CFR 1910.120	Active
646	40-Hour OSHA HazWoper	Active
69	40-hour OSHA HAZWOPER Training Course	Active
450	40hr General Site Worker Hazardous Waste Operations	Active
463	4-Hour Refresher Course for Spotters at Landfills, C&D Sites and Transfer Stations	Active
616	6-Hour DOT Regulations	Active
601	8 Hour General Site Worker Refresher Training	Active
623	8 Hour HazWoper Refresher Training	Active
203	8-Hour Initial Training Course for Spotters at Class I, II, III Facilities, Waste Processing Facilities and C&D Facilities	Active
219	8-hour Initial Training for Spotters	Active
62	8-Hour OSHA HazWoper Annual Refresher	Active
644	8-Hour OSHA HazWoper Refresher	Active
488	8-Hour Spotter Training for Class I II III Landfill C&D Sites and Transfer Facilities	Active
462	8-Hour Training Course for Spotters at Landfills, C&D Sites and Transfer Stations	Active
410	Adult CPR	Active
0	Adult CPR	Active
675	Air Regulations and How They Impact MSW Facilities	Active
624	ANSI/AIHA Z10-2006 Occupational Safety and Health Management Systems Training Course Construction Standard	Active
652	Asbestos: Awareness (Class IV)	Active
630	Basic Life Support	Active
639	Bird and Wildlife Management for Utilities	Active
550	Bloodborne Pathogens	Active
618	Carbon Markets, Offsets & Project Level GHG Accounting	Active
614	Chemical Spill Response Training for Hazardous Materials Operations/OSHA Level II	Active
386	Community Hurricane Preparedness - online	Active
525	Composting Wastewater Residuals (Biosolids) in Charlotte County	Active
656	Confined Space Awareness	Active
657	Confined Space Competent Person Training	Active
436	Confined Space Entry Safety Course	Active
440	Construction and Demolition Debris Workshop	Active
485	Contemporary Techniques of Supervision/Management	Active
357	CPR and First Aid	Active

520	Design of Waste Containment Liners and Closure Systems Disaster Debris Management	Active
457	Disaster Debris Management	Active
544	EIA/NSWMA Safety Seminar	Active
542	Electrical Troubleshooting & Preventive Maintenance	Active
596	Emergency Response and Recovery Training	Active
557	Environmental Quality Training Workshop	Active
563	Environmental Safety Occupational Health [EOSH] 2009 Training Symposium	Active
568	Environmental Sampling Field Course	Active
679	Environmental Studies	Active
500	Excavation and Trenching Safety Procedures	Active
100	Excavation and Trenching: Competent Person Training	Active
228	FDEP 8 Hour HazWoper OSHA Refresher	Active
435	FDEP 8 Hour HazWoper OSHA Refresher [DeHate]	Active
433	FDEP Annuals SQG Workshop [5/3-5/06]	Active
434	FDEP Household Hazardous Waste Workshop [5/1-3/06]	Active
445	FEMA Debris Management Course	Active
678	FEMA Debris Management Course - G202	Active
484	Fires at Landfills and Other Solid Waste Management Facilities	Active
411	First Aid (Standard) Workplace Training	Active
634	Florida Composting Facility Operator Training Course: Introduction to Handling Source Seperated Organics	Active
491	Florida Construction & Demolition Debris & Management Workshop - May 2008	Active
451	Florida Water & Pollution Control Operators Association Short School - Stormwater Section	Active
579	Food Recycling and Composting Workshop	Active
521	Foundations of Project Management	Active
156	Four Hour Spotter Refresher for Class I, II and III Landfills, Waste Processing Facilities and C&D Facilities	Active
591	Fundamentals of Emergency Management	Active
638	General Site Worker 8-hour Refresher Course Hazardous Waste Operations & Emergency Response	Active
423	Geosynthetic Testing and Landfill Design Issues Short Course	Active
629	Getting Back to Basics With Landfill Gas	Active
545	GHG Reporting for Landfill & Wastewater Treatment - Webinar	Active
558	Greenhouse Gas Accounting	Active
0	Greenhouse Gas Accounting- Measuring an Organization's Carbon Footprint	Active
604	Greenhouse Gas Recovery at Solid Waste Landfills	Active
224	Hazardous Materials in Construction and Demolition Waste OnLine	Active
503	Hazardous Materials Incident & Waste Training - 24 Hours	Active
356	Hazardous Materials Incident Response Operations-40hr	Active
469	Hazardous Materials Operations / OSHA Level II	Active
439	Hazardous Materials Training	Active
510	Hazardous Waste Management Course	Active
535	Hazardous Waste Management: The Complete Course - 16 hour	Active
541	Hazardous Waste Management: The Complete Course - 8 hour	Active
540	Hazardous Waste Operations with Emergency Response	Active
63	Hazardous Waste Regulations for Generators	Active
514	Hazardous/Chemical Safety Training	Active
555	HazMat IQ	Active
216	HazWoper 40-Hour Health & Safety Online	Active
		, 100,00

218	HazWoper 8-Hour Refresher Online	Active
422	HazWoper 8-Hour Refresher OSHA Course	Active
659	HazWoper Refresher	Active
617	HazWoper Training for Escambia County	Active
170	Health & Safety Issues for Solid Waste Management Facilities	Active
498	Health and Safety for Solid Waste Workers-4 Hours	Active
281	Health and Safety for Solid Waste Workers-8 Hours	Active
149	Health and Safety Training for Landfill Operations	Active
495	Heavy Equipment Safety	Active
492	Hurricane Debris Management Workshop	Active
683	Hydraulic Excavator Operator Training	Active
613	Identification of Unknowns	Active
476	Improving Landfill Operations	Active
517	Improving Transfer Station Efficiency	Active
442	Initial Training Course for Landfill Operators and C&D Sites - 24 Hour	Active
443	Initial Training Course for Transfer Station Operators and Material Recovery Facilities - 16 Hour	Active
628	Innovative Recycling Grant Workshop at Polk County Landfill	Active
574	Integrated Waste Management Workshop	Active
645	Introduction to Debris Operations in FEMA Public Assistance Program IS-632	Active
212	Introduction to Electrical Maintenance	Active
527	Introduction to Heavy Equipment and Skill Testing	Active
0	Introduction to Wastescreening for Spotters-Spanish	Active
546	IS-700.a NIMS An Introduction	Active
472	Landfill and Transfer Station Operators: Waste Acceptability and Safety Issues Review	Active
676	Landfill Design and Construction	Active
518	Landfill Gas Collection and Re-Use	Active
686	Landfill Gas Collection System Operations and Compliance Training Course	Active
511	Landfill Gas Control and Compliance Seminar	Active
650	Landfill Operations	Active
399	Landfill Operator and MRF Operator Training	Active
589	Landfill Operator Training - 2007 Certified Operators Class	Active
588	Landfill Operator Training 2008 - Certified Operators Class	Active
553	Landfills and Transfer Stations: Past, Present and Future	Active
552	Landfills: Past, Present and Future	Active
441	Laws and Rules	Active
277	Laws and Rules for Florida Engineers	Active
677	Leachate and Landfill Gas Management System Design	Active
684	Linear Construction - Stormwater Compliance for Road and Utility Construction	Active
538	Maintenance of Traffic Training	Active
654	Mathematics for Landfill Operators	Active
523	Maximizing Beneficial Use of Disaster Debris	Active
674	Measurement and Improvement of Performance at Solid Waste Management Facilities ("If you Can't	Active
	Measure it. You Can't Manage It")	, 100140
3	Military Service Active Duty	Active
528	NAHAMMA Conf HHW / SQG Workshop - 2009 - HazMat IQ Training	Active
528	NAHAMMA Conference HHW / SQG Workshop - 2009 - General Session	Active
609	NAHMMA 2010 Annual Conference	Active
653	NAHMMA 2011 Florida Chapter Annual Conference	Active
424	National Incident Management System [NIMS] and Introduction IS-00700	Active

454	North American Hazardous Materials Management Association Conference 2007 - FL Chapter	Active
489	North American Hazardous Materials Management Association Conference 2008- FL Chapter	Active
670	North Carolina Landfill Manager Course	Active
1001	OK per "Current" Class I II III Transcript	Active
621	Online Laws and Rules	Active
438	Operating Considerations for Transfer Stations	Active
655	Operational Techniques and Compliance Inspections for Landfills	Active
412	Operator Certification for Caterpillar Landfill Equipment	Active
0	OSHA 10-Hour General Industry Course	Active
547	OSHA 10-Hour General Industry Outreach Course	Active
619	OSHA 10-Hour Industrial Outreach Safety Training Program	Active
592	OSHA 1910 General Industry 10-Hour Course	Active
0	OSHA 24 Hour Emergency Response Course (Technician Level)	Active
0	OSHA 8-hour HazWoper Refresher Training	Active
561	OSHA Annual Refresher at KSC	Active
515	OSHA Operations Level Course	Active
532	Paint Filter Test - 1 Hour	Active
192	Pedestrian, Vehicles and Equipment Safety at Transfer Stations	Active
494	Permit Required Confined Space Awareness	Active
104	Permit Required Confined Space Entry	Active
0	Permit Required Confined Space Entry Supervisor	Active
497	Personal Protection Equipment (PPE) and Safety Procedures	Active
602	Personal Radiation Detector Course [PRD] PER-243	Active
533	Principles of Landfill Fires E-Course	Active
468	Project Risk Management	Active
603	Recycle Florida Today - 2010 Annual Conference	Active
651	Recycle Florida Today - 2011 Annual Conference	Active
432	Recycle Florida Today 2006 Annual Conf	Active
431	Recycle Florida Today 2006 Issues Forum 1/2006	Active
414	Recycle Florida Today 2006 Issues Forum 1/23-24/06	Active
460	Recycle Florida Today 2007 Annual Confrence - 6/4-7/2007	Active
512	Recycle Florida Today 2008 Annual Conference	Active
554	Recycle Florida Today Conference [June 2009]	Active
479	Recycled Florida Today 2007 Issues Forum 1/2007	Active
0	Recycled Florida Today 2007 Issues Forum 1/2007	Active
661	Refresher Training Course for Experienced Solid Waste Operators-16 Hours	Active
663	Refresher Training Course for Experienced Solid Waste Operators-4 Hours	Active
662	Refresher Training Course for Experienced Solid Waste Operators-8 Hours	Active
627	RFT / SWANA FL Winter Meeting & Issues Forum 2011	Active
687	RFT / SWANA FL Winter Meeting & Issues Forum 2012	Active
581	RFT/SWANA-FL Winter Wonderland in Waste - 2010 Issues Forum	Active
565	Sanitary Landfill Design	Active
690	Sector L: Landfills & Land Application Sites	Active
4811	Solid Waste Operator & Spotter Refresher Training - Spring 2008 a	Active
584	Southeast Recycling 2010 Conference & Trade Show	Active
640	Southeast Recycling 2011 Conference & Trade Show	Active
692	Southeast Recycling 2012 Conference & Trade Show	Active
580	Southwest Partners Meeting	Active

605	SPCC - Spill Prevention Control Act - online	Active
526	Spill Prevention, Control, and Countermeasure Regulation Seminar	Active
400	Spotter Training	Active
0	Spotter Training	Active
214	Spotter Training	Active
437	Spotter Training Course for Waste Processing and Transfer Stations	Active
248	Spotter Training for Solid Waste Facilities	Active
378	Spotter Training for Solid Waste Facilities - Spanish	Active
474	Spotter Training for Solid Waste Management Staff with Elements of a Solid Waste Operations Plan	Active
471	Spotters at Landfills and Transfer Stations: Safety Awareness Review	Active
506	Storage Tank Conference - Central Florida 18th Annual	Active
505	Storage Tank Conference - North Florida 14th Annual	Active
578	Storage Tank Conference -16th Annual Central Florida State Conference	Active
453	Storage Tank Conference 17th Annual	Active
475	Storage Tank Conference Central Florida State 13th Annual	Active
647	Stormwater Erosion And Sedimentation Control Inspector Training Program	Active
202	Stormwater Inspector Certification Course	Active
594	Stormwater Matters	Active
632	Supervisor Safety Training for Solid Waste Operations Staff	Active
586	Sustainability and Recycling	Active
429	SWANA - Compost on Subtitile D Landfills - Webinar	Active
416	SWANA - eCourse - Litter Management at Landfills	Active
567	SWANA – Groundwater Monitoring, Sampling, Analysis and Well Construction	Active
636	SWANA - Integrated Solid Waste Management	Active
693	SWANA - Landfill Gas Basics 1-Day Course	Active
635	SWANA - Landfill Gas Systems Operation and Maintenance	Active
694	SWANA - Landfill Gas Systems Operation and Maintenance - 1 day	Active
537	SWANA - Landfill Operations E- Course	Active
543	SWANA - Landfill Symposium 14th Annual (June 2009)	Active
597	SWANA - Manager of Landfill Operations [MOLO]	Active
598	SWANA - Manager of Landfill Operations [MOLO] & Exam	Active
560	SWANA - Manager of Recycling Course	Active
413	SWANA 2006 Recycling and Special Waste Conference	Active
562	SWANA E-Course Just the Math	Active
556	SWANA e-Course Operation Efficiency at Landfills	Active
599	SWANA e-course: Bioreactor Landfill Research & Development Agencies	Active
577	SWANA e-course: Carbon Credit and Production Tax Credits for LFG Projects	Active
576	SWANA e-course: Financing Solid Waste Facilities: The Roller Coaster to Oblivion?	Active
691	SWANA e-course: Traumatic Injury and Fatality Risks in Solid Waste	Active
564	SWANA- Health & Safety E-Study (Home Study Course)	Active
566	SWANA- Managing Landfill Gas at MSW Landfills	Active
297	SWANA Online - Health & Safety at MSW Landfills	Active
296	SWANA Online - Training Sanitary Landfill Operation Personnel	Active
298	SWANA Online - Wastescreening at MSWS Facilities	Active
345	SWANA-Bioreactor Landfill Course	Active
404	SWANA-Bioreactor Landfill Manager	Active
250	SWANA-Construction and Demolition Debris Course	Active
685	SWANA-e Course: Groundwater Monitoring	Active

643	SWANA-e Course: Landfill Gas & Solid Waste Air Contaminant Hazards	Active
252	SWANA-FEMA's Debris Management	Active
425	SWANA-FL 2006 Spring Tri-State Conference [4/2-5/06]	Active
426	SWANA-FL 2006 Summer Conference [7/23-26/06]	Active
447	SWANA-FL 2007 Summer Conference [7/15-18/07]	Active
480	SWANA-FL 2008 Senior Managers Conference [1/2008]	Active
551	SWANA-FL 2009 Summer Symposium	Active
607	SWANA-FL 2010 Summer Conference	Active
658	SWANA-FL 2011 Summer Conference	Active
534	SWANA-FL Managers Meeting - 2009 Winter	Active
606	SWANA-FL Road-e-o: Heavy Equipment Safety Training	Active
94	SWANA-Health & Safety at MSW Landfills	Active
244	SWANA-Landfill Gas Basics	Active
428	SWANA-Landfill Gas Symposium 29th Annual [3/27-30/06]	Active
446	SWANA-Landfill Gas Symposium 30th Annual [3/4-8/07]	Active
483	SWANA-Landfill Gas Symposium 31st Annual [3/2008]	Active
536	SWANA-Landfill Gas Symposium 32nd	Active
689	SWANA-Landfill Gas Symposium 35th Annual - 2012	Active
231	SWANA-Landfill Gas System Operation and Maintenance	Active
539	SWANA-Landfill Gas System Operations Workshop	Active
93	SWANA-Landfill Operational Issues	Active
681	SWANA-Landfill Symposium (16th Annual - 2011)	Active
427	SWANA-Landfill Symposium 11th Annual [6/5-7/06]	Active
465	SWANA-Landfill Symposium 12th Annual [6/25-28/07]	Active
30	SWANA-Management of Landfill Operations	Active
1	SWANA-Manager of Landfill Operations (MOLO) - Exam Only	Active
1600	SWANA-Manager of Landfill Operations (MOLO) Course	Active
160	SWANA-Manager of Landfill Operations (MOLO) Course and Exam	Active
243	SWANA-Managing Composting Programs	Active
251	SWANA-Managing MSW Collection Systems	Active
234	SWANA-Managing MSW Recycling Systems	Active
222	SWANA-Managing Transfer Station Systems	Active
444	SWANA-Transfer Station Design & Operations	Active
42	SWANA-Transfer Station Design & Operations	Active
448	SWANA-WasteCon 2006 [9/19-21/06]	Active
455	SWANA-WasteCon 2007 [10/16-18/07]	Active
509	SWANA-WasteCon 2008	Active
559	SWANA-WasteCon 2009	Active
660	SWANA-WasteCon 2011	Active
570	The Complete Ground Water Monitoring Field Course The Complete Ground Water Monitoring Well Design Construction and Development Course	Active
572 569	The Complete Ground Water Monitoring Well Design, Construction and Development Course The Complete Ground Water Sampling Field Courses	Active
	The Complete Ground Water Sampling Field Course The Complete Ground Water Manitoring Course	Active
116	The Complete Surface Water and Sediment Field Course	Active
571	The Complete Surface Water and Sediment Field Course The Florida Starmyustar Construction Parmit Contractoria Short Course	Active
573	The Original Environmental Postsome	Active
530	The Original Environmental Bootcamp The Sense of Small, Oder Theory and Oder Control	Active
406	The Sense of Smell, Odor, Theory and Odor Control	Active
612	Things That Go Boom	Active

Topics in Solid Waste Management for Landfill Operators, MRF Operators and Transfer Station	Active
<u>Operators</u>	
<u>Tractor/Mower Operator Safety Training Program</u>	Active
Traffic and Equipment Safety at Landfills	Active
Train the Trainer: How to Design & Deliver Effective Training	Active
<u>Train-the-Trainer for Operator of Heavy Equipment</u>	Active
Trenching Shoring Services Safety in Excavation Course	Active
U.S. DOT Hazardous Materials/Waste Transportation	Active
<u>Understanding Hazardous Waste in Solid Waste Operations</u>	Active
Waste Expo [4/4-6/06]	Active
Waste Expo 2007	Active
Waste Expo 2010	Active
Waste Screening and Identification for Landfill Operators and Spotters	Active
Waste Screening at MSW Mgmt Facilities [Onsite Delivery]	Active
Waste Screening at Municipal Solid Waste [5/23/94, 12/5/01]	Active
Waste Screening Introduction-Spanish	Active
Waste Screening Refresher for Supervisors and Managers	Active
Waste Tech 2006 [2/27-28/06]	Active
Waste Tech 2007	Active
Waste-to-Fuels 2010 Conference	Active
Wet Weather Operations	Active
Wetlands Variance Training	Active
Wildlife and Plants at Florida Solid Waste Management Facilities	Active
Workzone Safety Training	Active
	Operators Tractor/Mower Operator Safety Training Program Traffic and Equipment Safety at Landfills Train the Trainer: How to Design & Deliver Effective Training Train-the-Trainer for Operator of Heavy Equipment Trenching Shoring Services Safety in Excavation Course U.S. DOT Hazardous Materials/Waste Transportation Understanding Hazardous Waste in Solid Waste Operations Waste Expo [4/4-6/06] Waste Expo 2007 Waste Expo 2010 Waste Screening and Identification for Landfill Operators and Spotters Waste Screening at MSW Mgmt Facilities [Onsite Delivery] Waste Screening at Municipal Solid Waste [5/23/94, 12/5/01] Waste Screening Introduction-Spanish Waste Screening Refresher for Supervisors and Managers Waste Tech 2006 [2/27-28/06] Waste Tech 2007 Waste-to-Fuels 2010 Conference Wet Weather Operations Wetlands Variance Training Wildlife and Plants at Florida Solid Waste Management Facilities

3900 SW 63rd Blvd. tel: (352) 392-9570 train@ fax: (352) 392-6910

train@treeo.ufl.edu



ATTACHMENT 6 TRAINING CERTIFICATES

Florida DEP Landfill Operators

Company Name: angelo All Districts District Only Printed: 03/08/2019

1. Hours Required: The hours needed before the expiration date in order to keep the certification valid.

Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	11/25/2013	16	11/24/2019
Construction and Demolition Debris Landfill Operator	11/25/2013	16	11/24/2019
Material Recovery Facility Operator	11/25/2013	8	11/24/2019
Spotter / Waste Screener	11/25/2013	4	11/24/2019
Transfer Station Operator	11/25/2013	8	11/24/2019
Baglieri, John · Angelo's Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	10/11/2017	8	10/10/2020
Transfer Station Operator	10/11/2017	8	10/10/2020
Blakely, Daniel · Angelo's Recycled Materials · Saint Petersburg	g		
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	10/12/2017	8	10/11/2020
Transfer Station Operator	10/12/2017	8	10/11/2020
Title Material Recovery Facility Operator Transfer Station Operator	Initial Date 01/20/2016 01/20/2016	Hours Required 1 8 8	Expiration Date 01/19/2019 01/19/2019
Canal, Randy · Angelos Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	07/23/2014	8	07/22/2020
Transfer Station Operator	07/23/2014	8	07/22/2020
Cox, Luther · Angelos Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	02/04/2017	8	02/03/2020
Transfer Station Operator	02/04/2017	8	02/03/2020
O C BUILT A STATE OF THE CONTRACT OF THE CONTR			
Curtin, Phillip Angelo's Recycled Materials - Saint Petersburd		Hours Required 1	Expiration Date
· · · · · · · · · · · · · · · · · · ·	Initial Date	HOURS Recuired	
Title	Initial Date 12/13/2018		
Title Class I, III Landfill Operator	12/13/2018	4 4	12/12/2021
		4	

De Dubeie	Maira	Angolog	Dogwolad	Matariala	St. Petersburg	~
De Rubeis.	Neiro ·	Andelos	Recyclea	iviateriais -	- St. Petersbur	a

Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	11/25/2013	16	11/24/2019
Construction and Demolition Debris Landfill Operator	11/25/2013	16	11/24/2019
Material Recovery Facility Operator	11/25/2013	8	11/24/2019
Spotter / Waste Screener	11/25/2013	4	11/24/2019
Transfer Station Operator	11/25/2013	8	11/24/2019

Guajazdo, Fabian Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	11/04/2016	8	11/03/2019
Transfer Station Operator	11/04/2016	8	11/03/2019

Hamilton, Lyddon · Angelos Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Spotter / Waste Screener	11/03/2016	4	11/02/2019

Harris, Erik · Angelo's Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	10/12/2017	8	10/11/2020
Transfer Station Operator	10/12/2017	8	10/11/2020

Harvey, Donald Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	11/04/2016	8	11/03/2019
Transfer Station Operator	11/04/2016	8	11/03/2019

Hendricks, Dondi · Angelos Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Spotter / Waste Screener	12/13/2018	4	12/12/2021

lafrate, Dominic Angelos Recycled Materials Lutz

Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	11/21/2008	16	11/20/2020
Construction and Demolition Debris Landfill Operator	11/21/2008	16	11/20/2020
Material Recovery Facility Operator	11/25/2013	8	11/24/2019
Spotter / Waste Screener	11/25/2013	4	11/24/2019
Transfer Station Operator	11/25/2013	8	11/24/2019

lafrate, Stephen M. Angelos Recycled Materials Largo

Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	11/25/2013	16	11/24/2019
Construction and Demolition Debris Landfill Operator	11/25/2013	16	11/24/2019
Material Recovery Facility Operator	11/25/2013	8	11/24/2019
Spotter / Waste Screener	11/25/2013	4	11/24/2019
Transfer Station Operator	11/25/2013	8	11/24/2019

Jordan, Eddie · Angelos Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	01/31/2012	8	01/30/2021
Transfer Station Operator	01/31/2012	8	01/30/2021

/2019	Operators Repo	ort	
Martinez, Alfredo T · Angelo's Recycle Materials · Saint Peters	sburg Pasco County		
Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	12/13/2018	16	12/12/2021
Construction and Demolition Debris Landfill Operator	12/13/2018	16	12/12/2021
Spotter / Waste Screener	10/10/2009	0	10/09/2015
Spotter / Waste Screener	10/10/2012	0	10/09/2015
Martinez, Saturnino · Angelos Recycled Materials · Saint Pete	rsburg		
Martinez, Saturnino · Angelos Recycled Materials · Saint Pete		Hours Required 1	Expiration Date
Martinez, Saturnino · Angelos Recycled Materials · Saint Pete Title Spotter / Waste Screener	Initial Date 12/13/2018	Hours Required 1	Expiration Date
Title Spotter / Waste Screener	Initial Date 12/13/2018	· ·	
Title	Initial Date 12/13/2018	· ·	
Title Spotter / Waste Screener Mathews, Katrina Angelos Recycled Materials Saint Peters!	Initial Date 12/13/2018 purg	4	12/12/2021

Moore, Robert · Angelos Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	07/23/2014	8	07/22/2020
Transfer Station Operator	07/23/2014	8	07/22/2020

Nunez, Demetrio · Angelo's Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Spotter / Waste Screener	12/13/2018	4	12/12/2021

Olson, Donna · Angelos Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	02/04/2017	8	02/03/2020
Transfer Station Operator	02/04/2017	8	02/03/2020

Pedraza, Jesus · Angelos Recycle Materials · Saint Petersburg · Pinellas County				
Title	Initial Date	Hours Required 1	Expiration Date	
Material Recovery Facility Operator	10/12/2017	8	10/11/2020	
Spotter / Waste Screener	01/14/2006	4	01/13/2021	
Transfer Station Operator	10/12/2017	8	10/11/2020	

Pryor, Derek · Angelos Recycled Materials · Saint Petersburg			
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	04/12/2017	8	04/11/2020
Transfer Station Operator	04/12/2017	8	04/11/2020

Richardson, Frank Angelo's Recycled Materials Saint Pete	ersburg		
Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	12/13/2018	8	12/12/2021
Transfer Station Operator	12/13/2018	8	12/12/2021

Title	Initial Date	Hours Required 4	Expiration Date
Material Recovery Facility Operator	12/13/2018	8	12/12/2021
Transfer Station Operator	12/13/2018	8	12/12/2021
Ritt, Robert · Angelos Recycled Materials · Saint Pet	tersburg		
Title	Initial Date	Hours Required 1	Expiration Date
	01/20/2016	8	01/19/2019
Material Recovery Facility Operator	01/20/2010		

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	07/23/2014	8	07/22/2020
Spotter / Waste Screener	01/19/2016	4	01/18/2019
Transfer Station Operator	07/23/2014	8	07/22/2020

Samuels, Howaldo Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Spotter / Waste Screener	11/03/2016	4	11/02/2019

Santos, Victor Alfonso - Angelos Recycled Materials - Largo

Title	Initial Date	Hours Required 1	Expiration Date
Class I, III Landfill Operator	09/04/2015	16	09/03/2021
Construction and Demolition Debris Landfill Operator	09/04/2015	16	09/03/2021

Scott, Willie - Angelos Recycle Materials - Dade City

Title	Initial Date	Hours Required 1	Expiration Date
Spotter / Waste Screener	10/10/2012	4	10/09/2018

Simmons, James Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	11/04/2016	8	11/03/2019
Transfer Station Operator	11/04/2016	8	11/03/2019

Stanley, Keith Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	02/04/2017	8	02/03/2020
Transfer Station Operator	02/04/2017	8	02/03/2020

Valdiviezo, Mario Angelos Recycled Materials Saint Petersburg

Title	Initial Date	Hours Required ¹	Expiration Date
Material Recovery Facility Operator	04/18/2018	8	04/17/2021
Transfer Station Operator	04/18/2018	8	04/17/2021

Wesson, Joyce - Angelo's Recycled Materials - Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	12/13/2018	8	12/12/2021
Transfer Station Operator	12/13/2018	8	12/12/2021

Westmoreland, Angela · Angelos Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	02/04/2017	8	02/03/2020
Transfer Station Operator	02/04/2017	8	02/03/2020

Williams, Jim · Angelos Recycled Materials · Saint Petersburg

Title	Initial Date	Hours Required 1	Expiration Date
Material Recovery Facility Operator	11/04/2016	8	11/03/2019
Transfer Station Operator	11/04/2016	8	11/03/2019

Jerry Wood, P.E. Certifies that

Demetrio Nunez

has successfully completed the 8-Hour Initial Training Course for Solid Waste Management Facility Operators titled:

8-Hour Initial Training Course for Spotters at Solid Waste Management Facilities in Florida #812

November 26, 2018

And has Successfully Completed the Required Examination in Accordance with the Initial Training Requirements for Landfill Operators in Florida Enny Work

Jerry Wood P.E./Instructor Signed December 17, 2018



Jerry Wood, P.E.

Certifies that

Saturnino Martinez

has successfully completed the 8-Hour Initial Training Course for Solid Waste Management Facility Operators titled:

8-Hour Initial Training Course for Spotters at Solid Waste Management Facilities in Florida #812

November 26, 2018

And has Successfully Completed the Required Examination in Accordance with the Initial Training Requirements for Landfill Operators in Florida

Jerry Wood, P.E./Instructor Signed December 17, 2018



Jerry Wood, P.F.

Certifies that

Alfredo Martinez

has successfully completed the 24-Hour Initial Training Course for Solid Waste Management Facility Operators entitled:

24-Hour Initial Training for Landfill Operators

(Class I, III and C&D Sites) #608

November 26 and December 12 & 13, 2018

And has Successfully Completed the Required Examination in Accordance with the Initial Training Requirements for Landfill Operators in Florida; Or has attended for Continuing Education hours.

Jerry Wood, P.E./Instructor
Signed December 17, 2018

Jerry Wood, P.F.

Certifies that

Phillip Curtin

has successfully completed the 24-Hour Initial Training Course for Solid Waste Management Facility Operators entitled:

24-Hour Initial Training for Landfill Operators

(Class I, III and C&D Sites) #608

November 26 and December 12 & 13, 2018

And has Successfully Completed the Required Examination in Accordance with the Initial Training Requirements for Landfill Operators in Florida; Or has attended for Continuing Education hours.

Jerry Wood, P.E./Instructor
Signed December 17, 2018



ATTACHMENT 7 SOURCE-SEPARATED ORGANICS PROCESSING FACILITY REGISTRATION



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

Source-Separated Organics Processing Facility Registration Confirmation of Submission

11/13/2018

Waste Registration Section

ANGELO'S AGGREGATE MATERIALS, LTD.

ENTERPRISE LF & RECYC (FKA SID LARKIN & SON, INC.)

41111 Enterprise Rd Dade City, FL 33525 1589

Dear ANGELO'S AGGREGATE MATERIALS, LTD.

Your application for Registration of a Source-Separated Organics Processing Facility (SOPF) for ENTERPRISE LF & RECYC (FKA SID LARKIN & SON, INC.) (located at 41111 Enterprise Rd, Dade City) in Pasco County is complete. Your facility identification number (WACS ID) is 87895. This registration is valid until August 1, 2019. The receipt number for the registration fee you paid is 986102

You must comply with the requirements specified in Chapter 62-709, Florida Administrative Code (F.A.C.) in order to maintain qualification for the registration program. A summary of the operating requirements is attached.

If you have any questions or need further assistance, please contact Waste Registration Section at (850) 245-8707 or by e-mail at Waste.Registration@dep.state.fl.us.

Please retain a copy of this confirmation for your records.

Sincerely,

Waste Registration Section

cc: Melissa Madden, Steven Tafuni; Southwest District, Southwest District



Florida Department of Environmental Protection

Solid Waste Section, Mail Station 4565 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

DEP Form # 62-709.901(3) Appl for Reg. and Ann Rep for a YT Trans			
Form Title Station or SW Organic Recycling Facility			
Effective Date February 15, 2010			
DEP Facility ID No.	87895		
DEP WACS ID No:	(Filled in by DEP) 87895		
1	(Filled in by DEP)		
This form is adopted by reference in subsection 62-709.901(3), F.A.C.			

Application for Registration and Annual Report for a Yard Trash Transfer Station or a Solid Waste Organics Recycling Facility

	PART A	- GENER	RAL INFORMATION				
1.	Type of Application: New <a> Renewal (due	July 1)	Annual report on	lly for facility opera	ting und	er permi	t: <u></u>
2.	Type of Facility: Yard trash recycling Yard trash transfer station	Vegeta	ative, animal byproducts o	Manure blend r manure compost			
3.	· · · · · · · · · · · · · · · · · · ·		☐ Animal byproducts contact with animal products				
4.	Facility Name: ENTERPRISE LF & RECYC (FKA SII) LARKIN	& SON, INC.)				
5.	Registrant Name (or Permittee if annual report only)	ENTER	RPRISE LF & RECYC (FKA S	SID LARKIN & SON, I	NC.)		
6.	Federal Employer Identification Number: 593448	428					
7.	Mailing Address: 855 28th St S						
	City Saint Petersburg	State	FL	Zip	33712	1916	
	Street Mailing Address (if different):						
	City	State		Zip			
8.	Facility Location - Street Address or Property Numb	er: 411 ⁷	I1 Enterprise Rd				
	City Dade City	County	Pasco				
9.	Contact Person: ARNOLD,JOHN	·	Telephone: (813) 4	77-1719			
	PART B - ADDITIONAL INFORMA	TION RE	QUIRED FOR REGISTRA	TION APPLICATION	NC		
10.	Records required by Rule 62-709.320, F.A.C., will be	e kept at	the facility?	Yes	<u>/</u>	No	
	If no, please indicate where these records will be ke	pt and ma	ade available upon Deparl	tment request to re	view the	records	:
11.	Does the registrant own the facility site?			Yes	<u></u>	No	
	If you answered no, please attach evidence that operate a yard trash transfer station or a solid wa				the lan	downer	to
12.	Has the organic recycling facility begun operations?			Yes	V	No	
	If this facility was operating in the previous cale	ndar yea	r, the annual report in Pa	art C must be com	pleted.		
13.	Include a check or money order for the \$35.00 regis Protection: Payment of \$35.00 for this registration was			rida Department o	Enviror	mental	
	I affirm that I have read Rules 62-709.320, 62-7 ecified in those rules. I also affirm that the information wledge. I have attached all documents and/or autho	n provide	d in the application is true,				
ohr	P. Arnold, Project Manager	Jo	phn P. Arnold, Project Manager John P. Arnold 11/13/2018				
_							
Pr	int Name and Title of Registrant or Authorized Agent		Signature	9		Date	

	PART C - ANNU	AL REPORT		
14.	Calendar Year (January 1 through December 31) Covered by	his Report: 2017		
15.	Values used in this report are in (SELECT ONE):	Tons Cubic Yards		
16.	For Existing Facilities that have not reported this informat	ion in the past, Amount of		
	a. Unprocessed Material On Site at Beginning of Report Yea	r: <u>0</u>		
	b. Processed Material On Site at Beginning of Report Year (otal): 0		
17.	Total Quantity of Material Received During Report Year:	12029.00		
18.	Total Quantity of Material Lost Due to Processing (e.g. grinding shrinkage, fires, etc.) During Report Year:	g, drying, 0		
19.	Total Quantity of Material Removed from Site for:			
	a. Use (e.g., landfill cover, fuel, mulch, compost, etc.):	12029.00		
	b. Disposal:	0		
	c. Other (transfer stations)	0		
20.	Total Quantity On Site at End of Report Year of:			
	a. Unprocessed Material:	0		
	b. Processed Material:	0		
Note	that the total sum of items 16 a and b plus 17 must equal to sur Total of items 16 and 17 12029.00	n of items 18, plus 19 a, b and c, plus 20 a and b. Total of Items 18, 19 and 20 12029.00		
I affirm that the information provided in the annual report is true, accurate, and correct to the best of my knowledge.				
John P. Arnold, Project Manager John		P. Arnold 11/13/2018		
Print Name and Title of Registrant/Permittee or Authorized Agent		Signature Date		
Emai	address (if available): John.Phillip.Arnold@gmail.com			

PART D - MAILING INSTRUCTIONS

This registration was completed and payment of \$35.00 (if applicable) was received via online transaction.

Remember to include the \$35.00 fee if this is also a registration application. Mail completed form to:

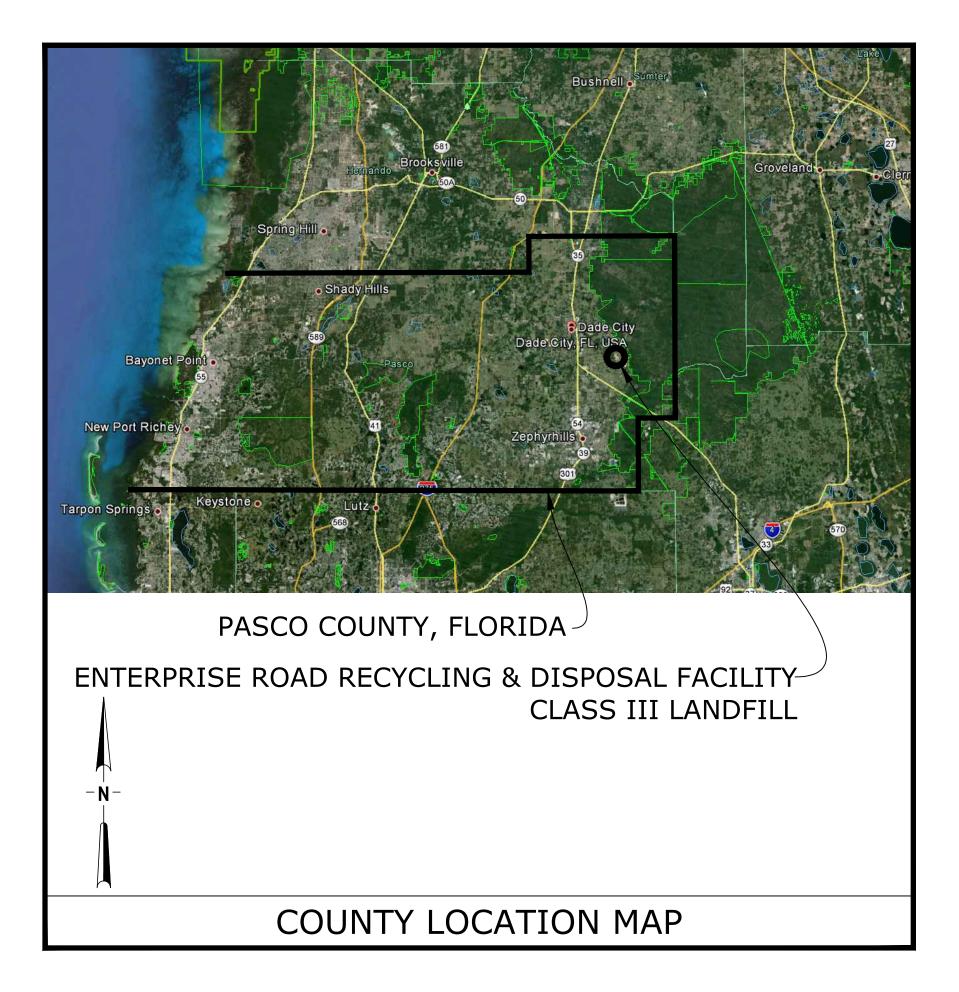
Department of Environmental Protection Solid Waste Section, MS 4565 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Section 4 - Operations Plan Modification Permit Plan Set [Rule 62-701.320(7)(f) & 62-701.330(3)(b), F.A.C.]

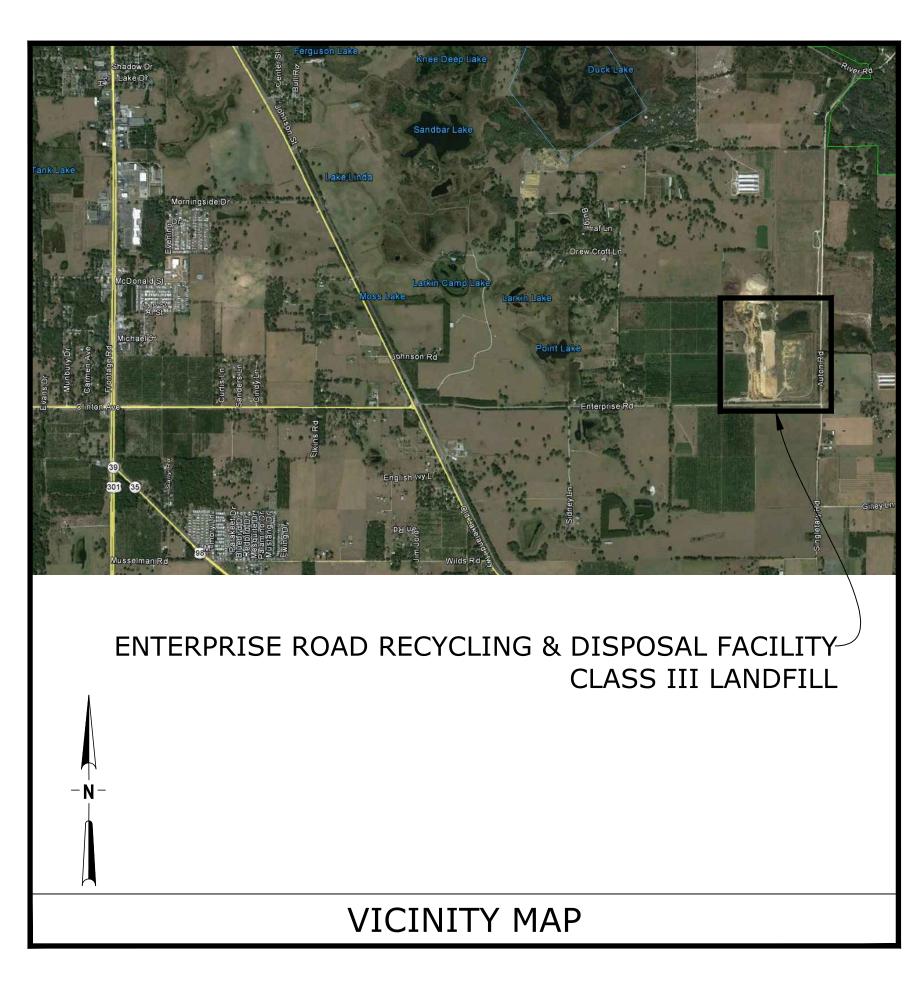
ENTERPRISE ROAD CLASS III LANDFILL RECYCLING & DISPOSAL FACILITY OPERATIONS PLAN MODIFICATION

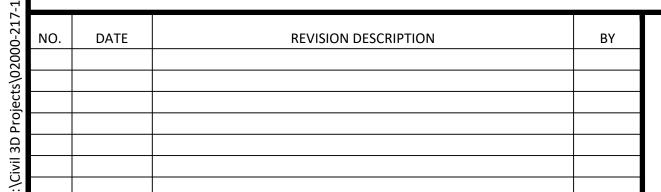
DADE CITY, PASCO COUNTY, FLORIDA

SUBMITTED TO: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



	Sheet List Table			
Sheet Number	Sheet Title			
C0.00	COVER SHEET			
C0.01	GENERAL NOTES AND ABBREVIATIONS			
C0.02	AERIAL SITE PLAN			
C0.03	SITE PLAN			
C0.04	CELL FLOOR GRADING PLAN			
C1.00	OVERALL LANDFILL GRADING AND VERTICAL EXPANSION			
C1.10	OVERALL LANDFILL GRADING AND VERTICAL EXPANSION SECTIONS			
C2.00	CONCEPTUAL CLOSURE			
C2.10	CONCEPTUAL CLOSURE SECTIONS			
C3.00	CLOSURE DETAILS			
C3.01	CLOSURE DETAILS			
SHEET 1	SPECIFIC PURPOSE SURVEY (BY RAPID SURVEYING INC)			
SHEET 1	TOPOGRAPHIC SURVEY (BY PICKETT SURVEYING & PHOTOGRAMMETRY)			
SHEET 2	TOPOGRAPHIC SURVEY (BY PICKETT SURVEYING & PHOTOGRAMMETRY)			

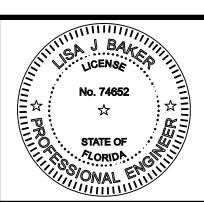






4140 NW 37th Place, Suite A
Gainesville, Florida 32606
Phone: 352.672.6867 Fax: 352.692.5390
Certificate of Authorization No. 30066

PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
OPERATIONS PLAN MODIFICATION
DADE CITY, PASCO COUNTY, FLORIDA



DESIGNED BY	LJB
DRAWN BY	MAF
CHECKED BY	JDL
VDDBU/ED BA	LIR

SHEET TITLE:

COVER SHEET

PROJECT NO.:
02000-217-17
SCALE:
AS SHOWN
DATE:
MARCH 2020
DRAWING:
CO.OO

- CONTRACTOR SHALL CERTIFY IN WRITING TO THE ENGINEER OF RECORD THE ACCURACY OF ALL SURVEY AND OTHER GRADING DATA PRIOR TO BEGINNING WORK.
- 4. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK (WHETHER OR NOT SHOWN ON THE PLANS).
- CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT EXISTING PIPING, MONITORING WELLS/PIEZOMETERS FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR OR REPLACE PIPING, MONITORING WELLS/PIEZOMETERS DAMAGED DURING CONSTRUCTION WITH EQUIVALENT MATERIALS AND CONSTRUCTION METHODS AS APPROVED BY FACILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 6. FIELD CONDITIONS MAY NECESSITATE SLIGHT ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED CONSTRUCTION TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- 7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH EXISTING PASCO COUNTY DESIGN AND CONSTRUCTION STANDARDS UNLESS THOSE STANDARDS CONFLICT WITH THESE CONTRACT DOCUMENTS IN WHICH CASE THESE CONTRACT DOCUMENTS SHALL GOVERN. SUCH CONFLICTS SHALL BE BROUGHT TO THE PROFESSIONAL'S ATTENTION IMMEDIATELY.
- 8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PREVAILING FEDERAL, STATE, LOCAL AND OTHER APPLICABLE REGULATIONS.
- 9. CONSTRUCTION MONUMENTS FOR VERTICAL AND HORIZONTAL CONTROL HAVE BEEN PROVIDED AT THE PROJECT SITE.
- 10. PRIOR TO BEGINNING EARTHWORK, THE CONTRACTOR SHALL PROVIDE STORMWATER AND EROSION CONTROL PLANS TO PREVENT PONDING AND CONTROL EROSION AND RUNOFF. NO PONDING OF WATER SHALL BE ALLOWED. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO PREVENT EROSION AND SHALL BE RESPONSIBLE FOR ALL WORK, INCLUDING PROVIDING EQUIPMENT, LABOR, FILL, ETC NECESSARY TO REMEDIATE AND/OR RESTORE ALL AREAS IMPACTED BY EROSION.
- 11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH THE OSHA EXCAVATION SAFETY STANDARDS AND TO ABIDE BY THEM.
- 12. THE CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, LIGHTS, AND FLAG PERSON AS REQUIRED BY DOT IN THE "MANUAL ON TRAFFIC CONTROL & SAFE PRACTICES."
- 13. ALL PIPING SHALL HAVE MINIMUM COVER OF 24" UNLESS OTHERWISE NOTED.
- 14. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED DEFLECTION ANGLE. MINIMUM PIPE RADIUS SHALL BE A MINIMUM OF 25% GREATER THAN THE MANUFACTURER'S RECOMMENDED MINIMUM RADIUS.
- 15. CONTAMINATED STORMWATER, DEWATERING DISCHARGE, LEACHATE, CONTAMINATED SOILS, OR EXCAVATED WASTE SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE LANDFILL OPERATIONS.
- 16. CONTRACTOR SHALL VERIFY ALL CLEARANCES PRIOR TO CONSTRUCTION.
- 17. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION AND SHALL UTILIZE WHATEVER MEANS NECESSARY TO MANAGE STORMWATER SUCH THAT IMPACT TO CONSTRUCTION IS MINIMIZED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE DUE TO STORMWATER.
- 18. NO DISTURBANCE SHALL BE ALLOWED OUTSIDE OF THE AREAS SHOWN ON THE FINAL GRADING PLAN UNLESS APPROVED BY THE ENGINEER, OR SPECIFICALLY NOTED ON THE PLANS.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ENVIRONMENTAL PROTECTION DURING THE LIFE OF THE CONTRACT. THE CONTRACTOR'S OPERATIONS SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WATER, AIR, SOLID WASTE, HAZARDOUS WASTE MATERIALS, OILY SUBSTANCES, AND NOISE POLLUTION. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENTATION CONTROL MEASURES AS NECESSARY TO COMPLY WITH THESE REGULATIONS FOR BOTH TEMPORARY AND PERMANENT CONSTRUCTION.
- 23. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS, CONDITIONS, AND REQUIREMENTS OF ALL APPLICABLE PERMITS, INCLUDING FDEP PERMITS FOR THE SITE.
- 24. THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, LANDFILL COVER MATERIAL, ACCESS ROADS, PIPES, STABILIZED EARTH, FENCES, SIGNS AND OTHER IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED OR DAMAGED DURING CONSTRUCTION, AS A RESULT OF CONSTRUCTION, OR AS DIRECTED BY THE ENGINEER WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
- 25. THE CONTRACTOR SHALL BE AWARE THAT THERE MAY BE SOME UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
- 26. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
- 27. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS, CONDITIONS, AND REQUIREMENTS OF ALL APPLICABLE PERMITS, INCLUDING FDEP AND WATER MANAGEMENT DISTRICT PERMITS FOR THE SITE.

GRADING NOTES

- 1. ALL AREAS WITHIN AND AROUND THE LIMITS OF CONSTRUCTION SHALL BE MAINTAINED AS NEEDED TO CONTROL EROSION DURING THE LENGTH OF THE PROJECT.
- 2. FILL ELEVATIONS SHALL BE SUCH THAT INTERMEDIATE AND FINAL COVER DESIGN ELEVATIONS SHALL BE ACHIEVED ON ALL SLOPES.

C:\Civil 3D Projects\02000-217



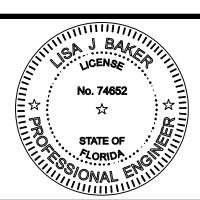
4140 NW 37th Place, Suite A

Gainesville, Florida 32606

Phone: 352.672.6867 Fax: 352.692.5390

Certificate of Authorization No. 30066

PROJECT TITLE:
PERMIT PLANS
ENTERPRISE ROAD CLASS III
RECYCLING & DISPOSAL FACILITY
OPERATIONS PLAN MODIFICATION
DADE CITY, PASCO COUNTY, FLORIDA



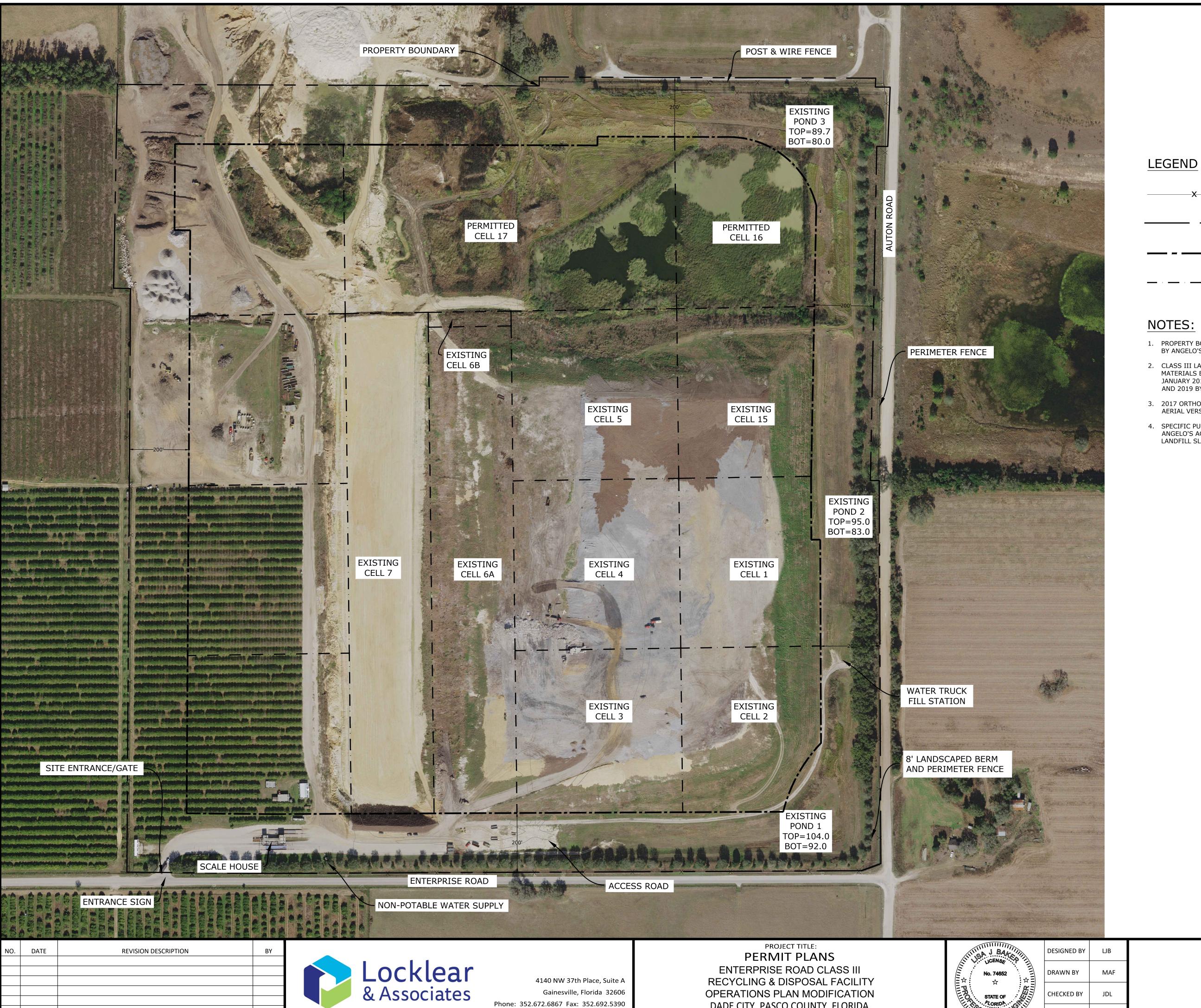
DESIGNED BY	LJB	
DRAWN BY	MAF	
CHECKED BY	JDL	
APPROVED BY	LJB	

GENERAL NOTES AND ABBREVIATIONS

SHEET TITLE:

PROJECT NO.:
02000-217-17
SCALE:
AS SHOWN
DATE:
MARCH 2020

REVIEW ONLY-NOT FOR CONSTRUCTION

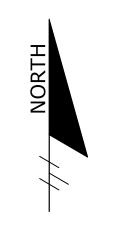


Gainesville, Florida 32606

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Certificate of Authorization No. 30066





PERIMETER FENCE PROPERTY BOUNDARY LANDFILL FOOTPRINT (AT BUILD OUT)

NOTES:

1. PROPERTY BOUNDARY SURVEY CONDUCTED BY SIMMONS & BEALL, INC. DATED 3-30-2001, PROVIDED BY ANGELO'S AGGREGATE MATERIALS.

LANDFILL CELLS

- CLASS III LANDFILL PERMITTED AND FUTURE CELL LAYOUT PER NOVEMBER 2006 ANGELO'S RECYCLED MATERIALS ENTERPRISE RECYCLING & DISPOSAL FACILITY (AS AMENDED FEBRUARY 2008 AND JANUARY 2010 BY JONES EDMUNDS, AS AMENDED MARCH 2013 BY KELNER ENGINEERING AND 2015 AND 2019 BY LOCKLEAR & ASSOCIATES).
- 3. 2017 ORTHOIMAGERY (AERIAL) IS BEING PROVIDED BY THE FDOT WEBSITE AND IS THE MOST RECENT AERIAL VERSION AVAILABLE FOR DOWNLOAD IN A MR.SID FILE FORMAT (SID).
- SPECIFIC PURPOSE SURVEY CONDUCTED BY RAPID SURVEYING, INC. DATED 3-20-2020, PROVIDED BY ANGELO'S AGGREGATE MATERIALS TO VERIFY ELEVATIONS AT THE TOP AND TOE OF THE SOUTH LANDFILL SLOPE.

SHEET TITLE:

CHECKED BY

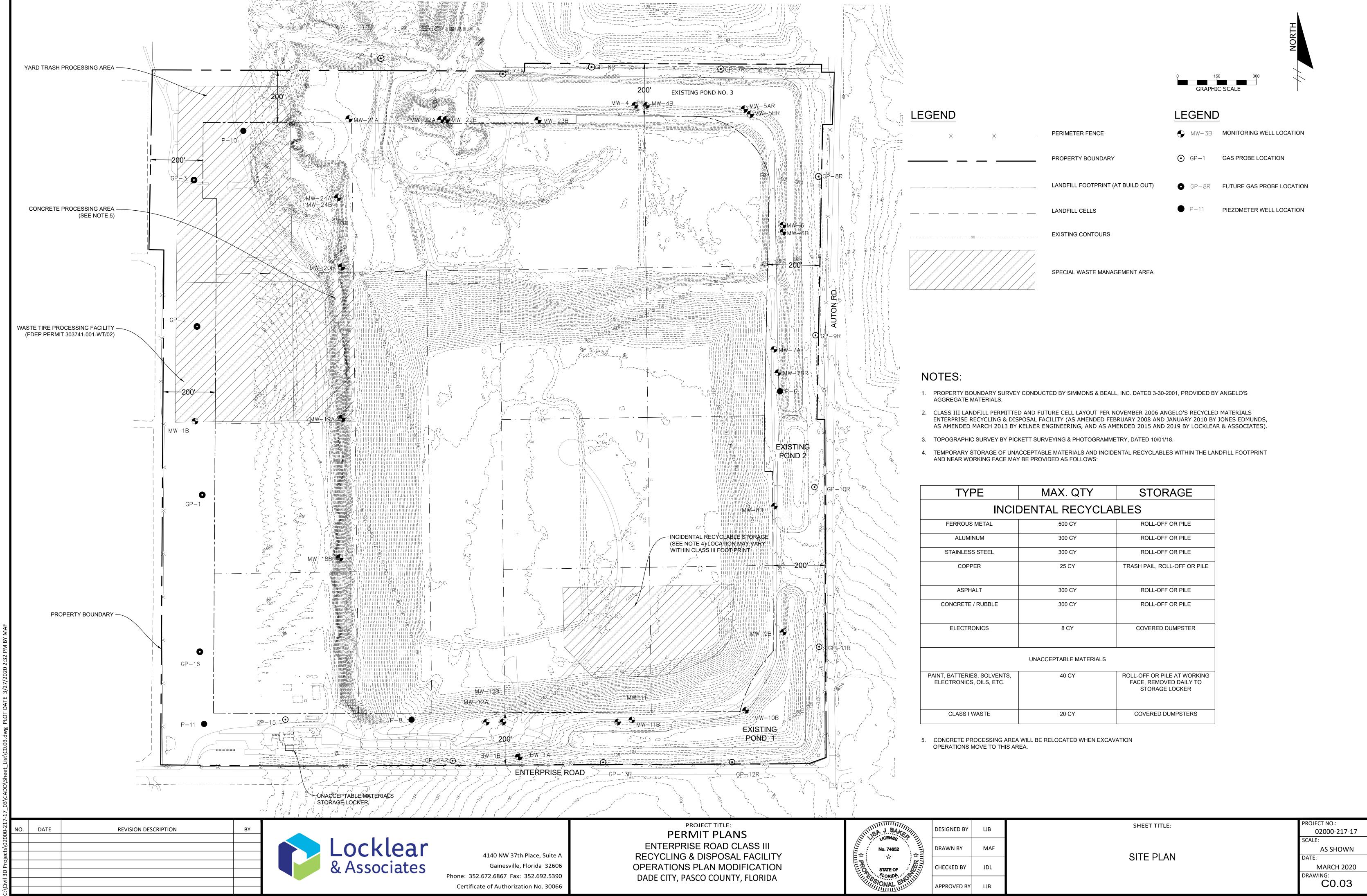
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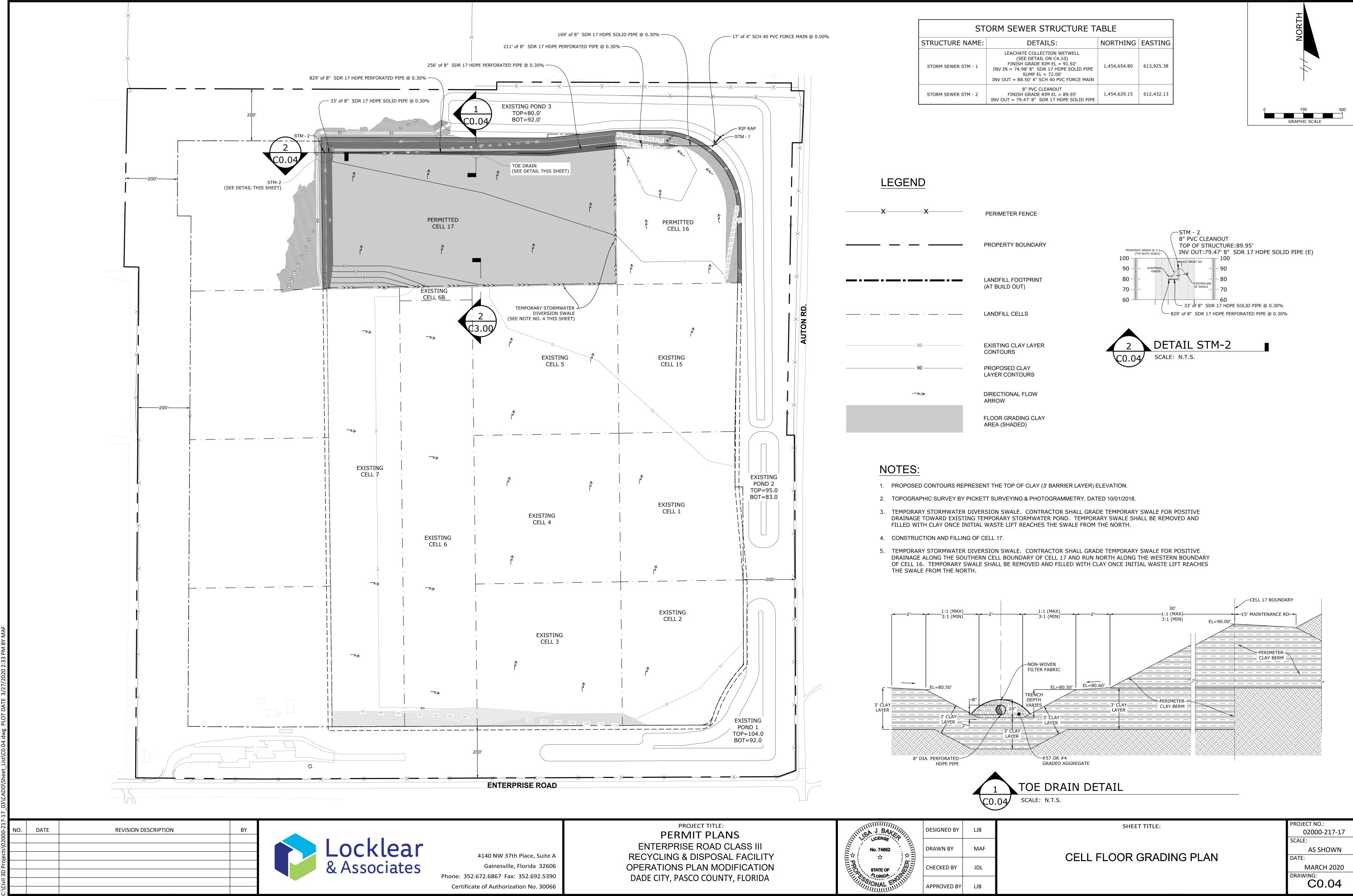
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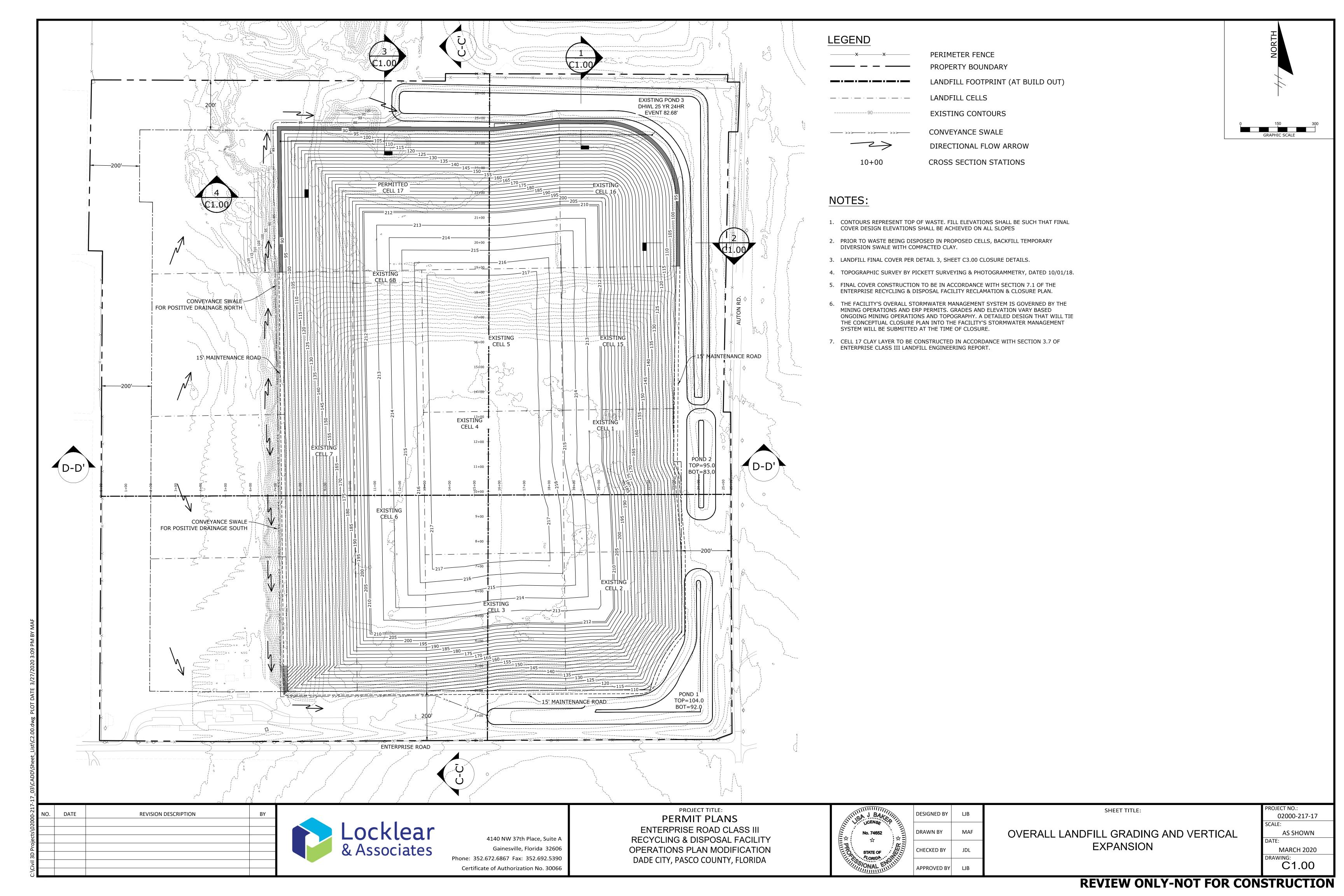
AERIAL SITE PLAN

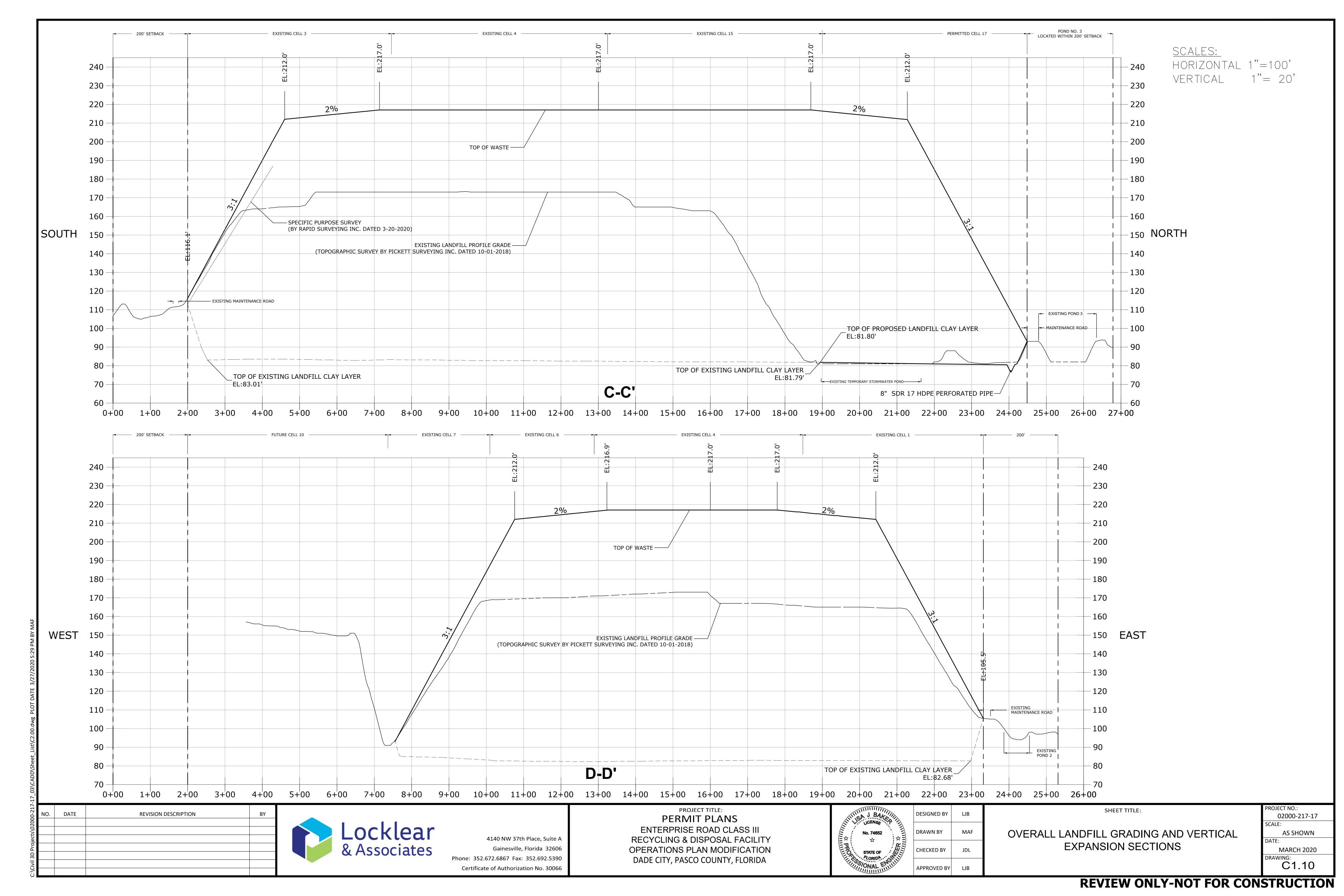
02000-217-17 **AS SHOWN** MARCH 2020

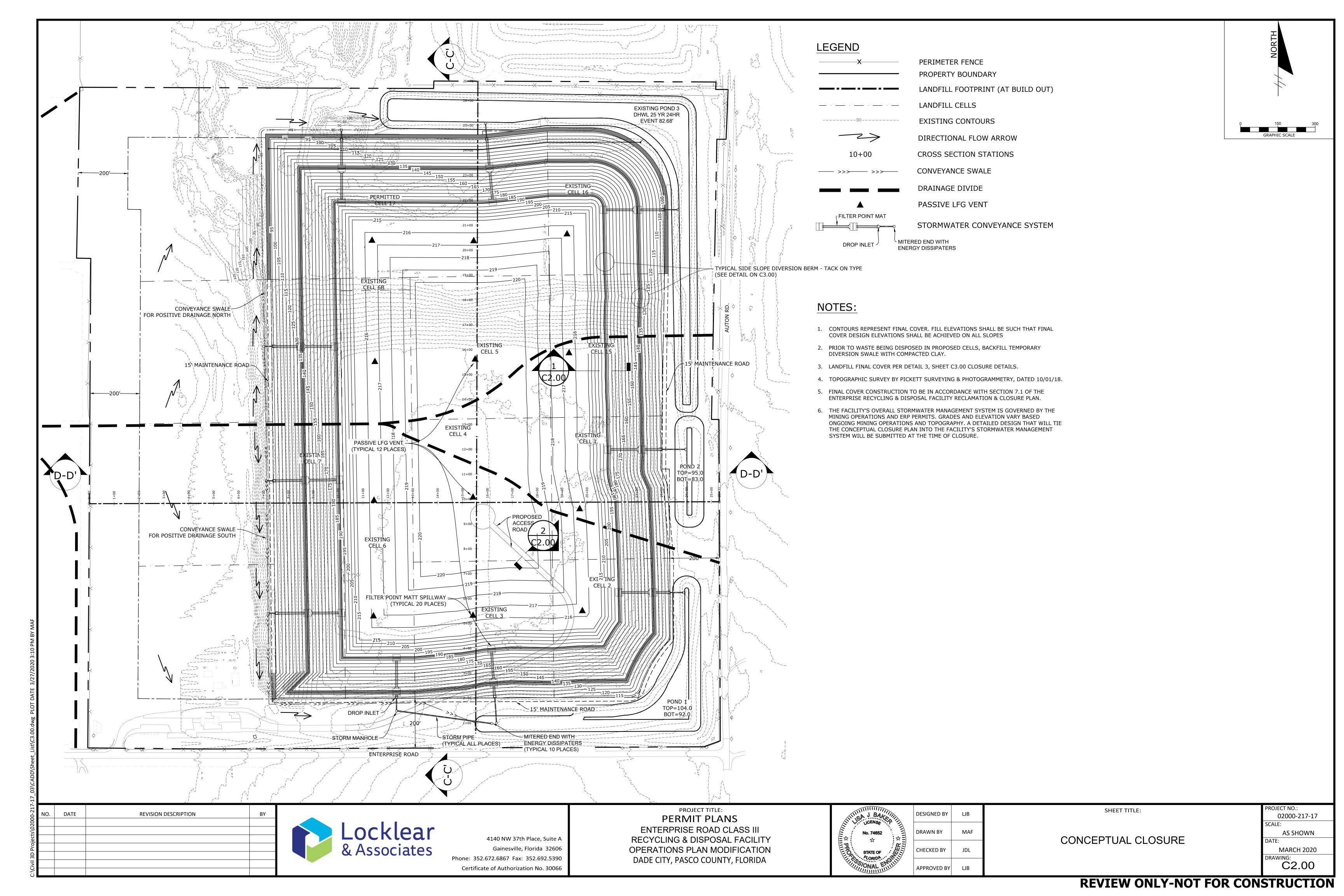
C0.02

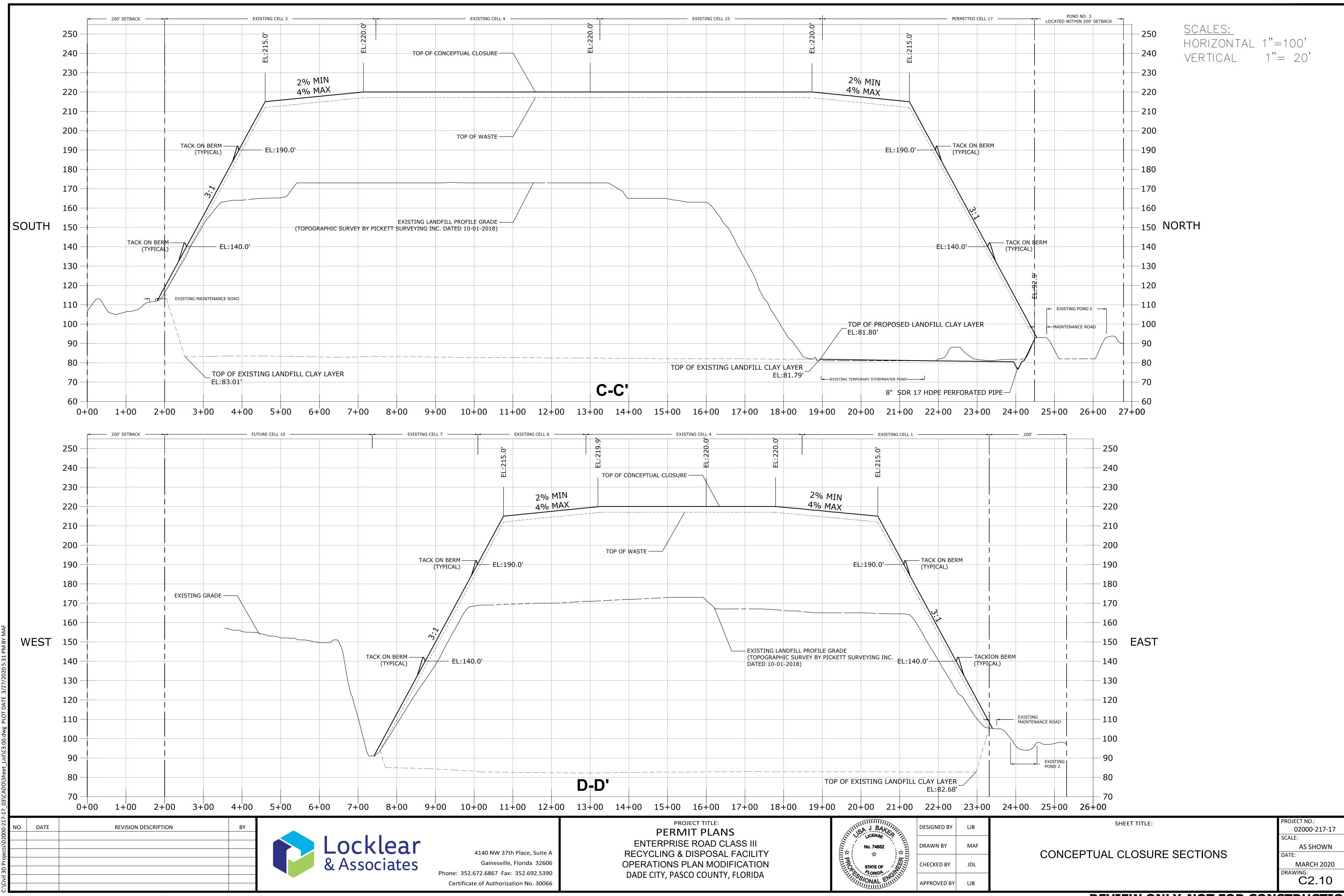


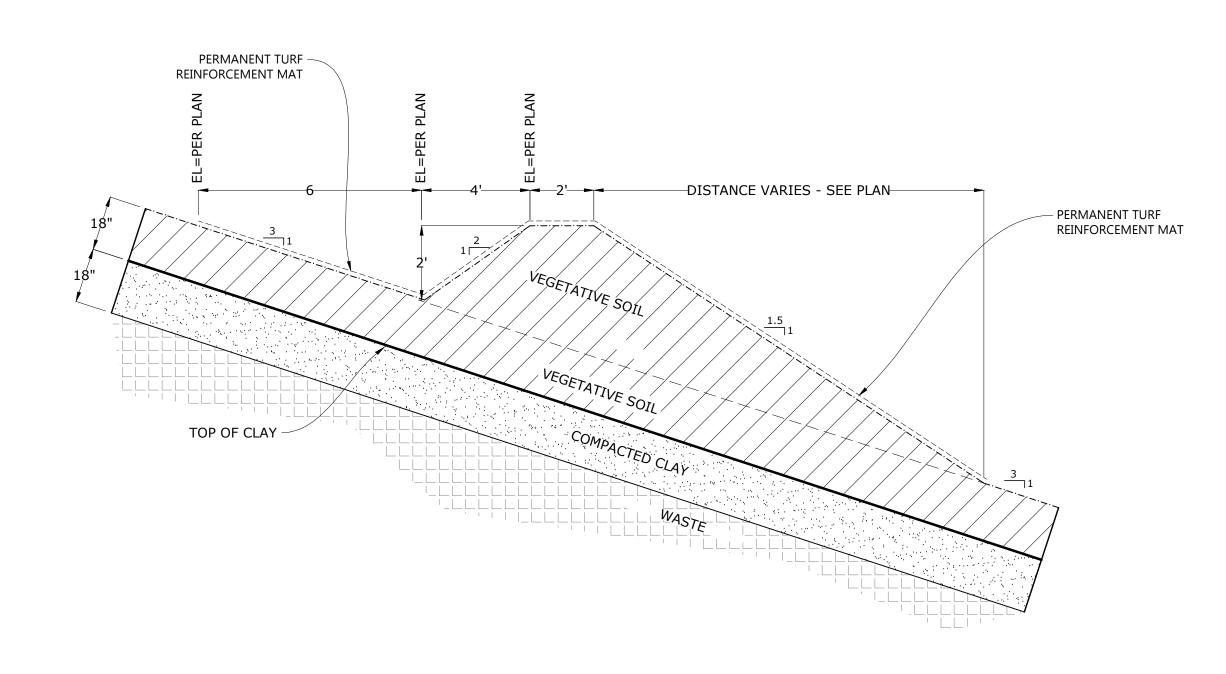






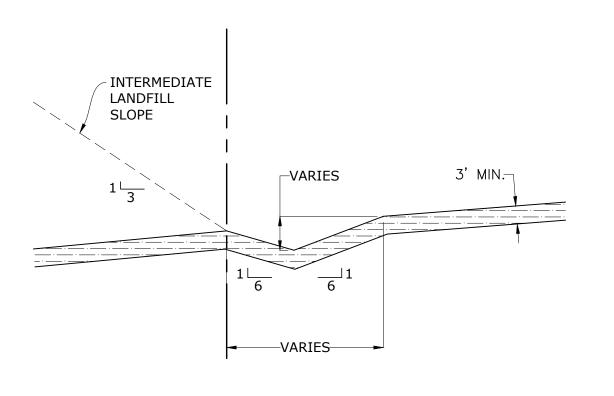






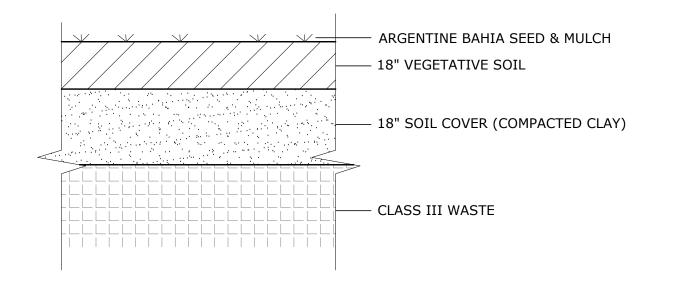
TYPICAL SIDE SLOPE DIVERSION BERM (TACK ON) DETAIL

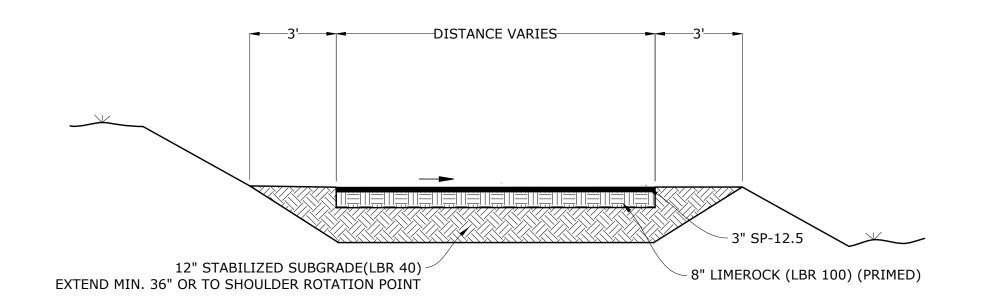
C2.00 SCALE: N.T.S.



NOTES:

- 1. FOR PERMITTED CELL 17 THE TEMPORARY DIVERSION SWALE IS CONSTRUCTED PRIOR TO WASTE ACCEPTANCE WITHIN CELL.
- 2. PRIOR TO WASTE BEING DISPOSED OF ON THE PREVIOUS INTERMEDIATE SLOPE THE TEMPORARY SWALE IS BACKFILLED AND COMPACTED WITH CLAY TO PROVIDE A CONTINUOUS CLAY BARRIER LAYER.
- 3. CLAY BARRIER LAYER TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION 3.7 OF THE ENTERPRISE CLASS III LANDFILL ENGINEERING REPORT
- 4. STEP BACK AND SCARIFY EXISTING CLAY LAYER IN 12" LIFTS PRIOR TO CONSTRUCTION NEW CLAY LAYER ADJACENT TO EXISTING.
- 5. FINAL COVER CONSTRUCTION TO BE IN ACCORDANCE WITH SECTION 7.1 OF THE ENTERPRISE RECYCLING & DISPOSAL FACILITY RECLAMATION & CLOSURE PLAN.





2 TEMPORARY STORMWATER DIVERSION SWALE DETAIL C3.00 SCALE: N.T.S.



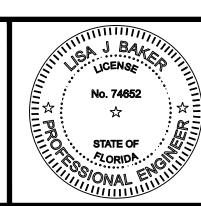


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Civil			
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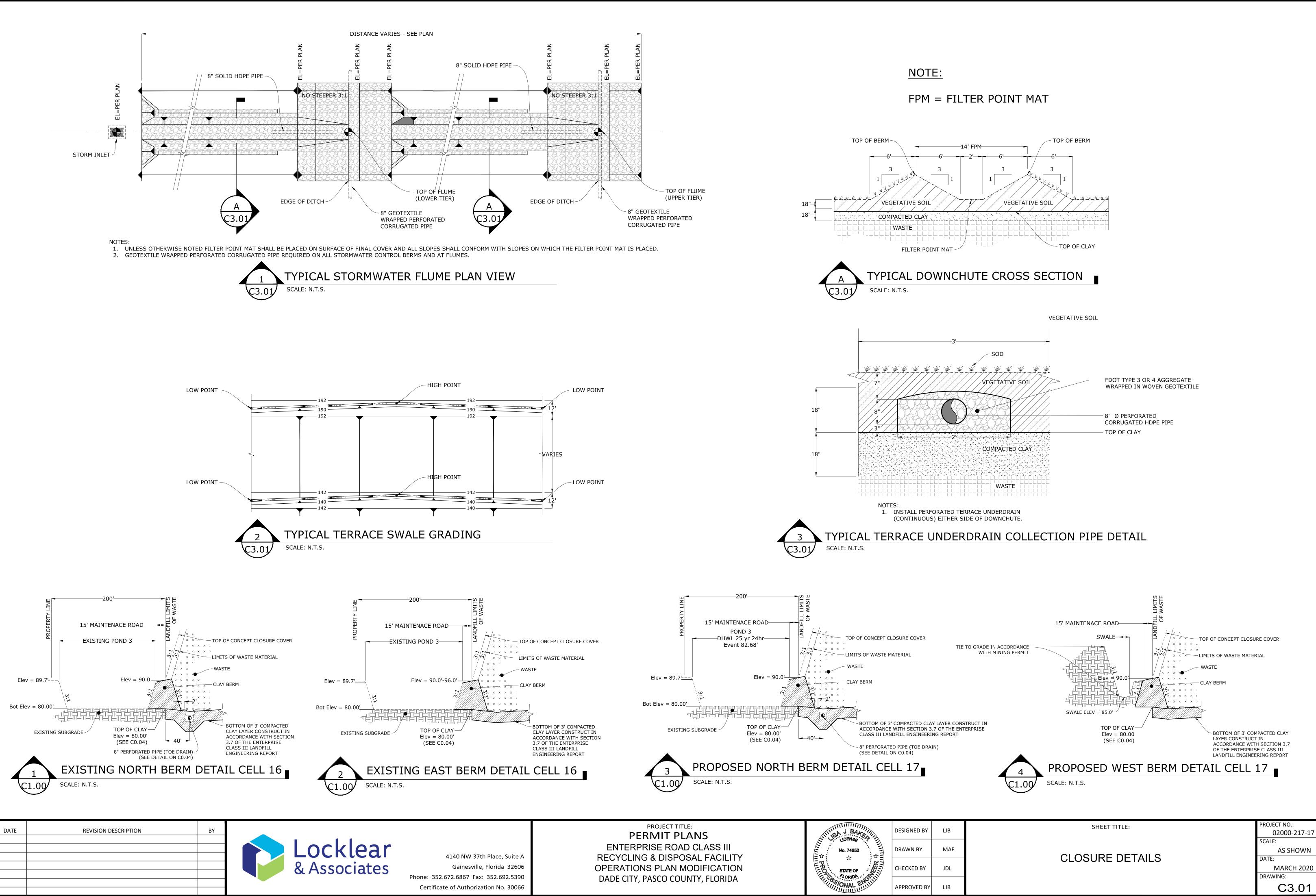


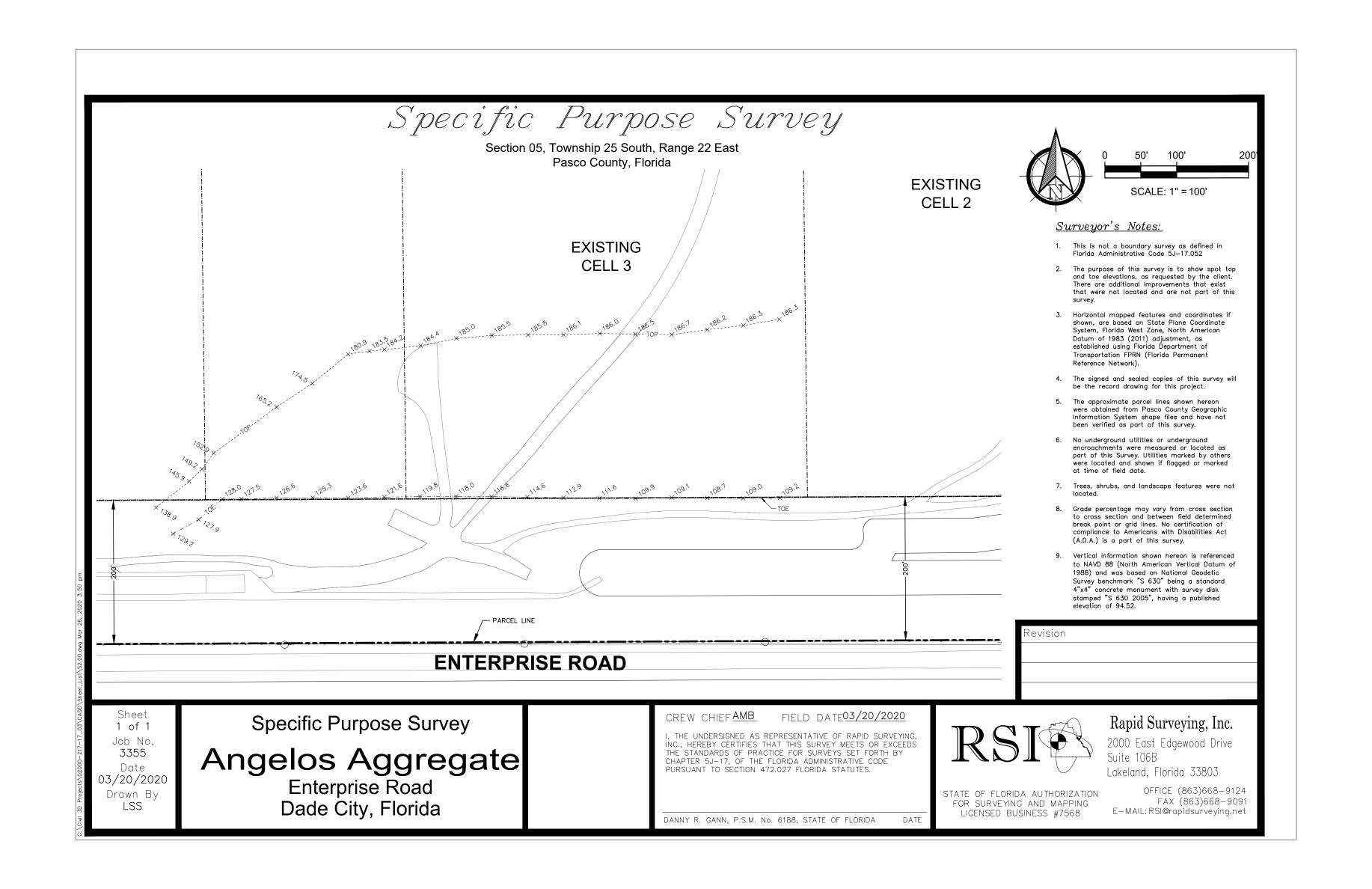
DESIGNED BY	LJB
DRAWN BY	MAF
CHECKED BY	JDL
APPROVED BY	LJB

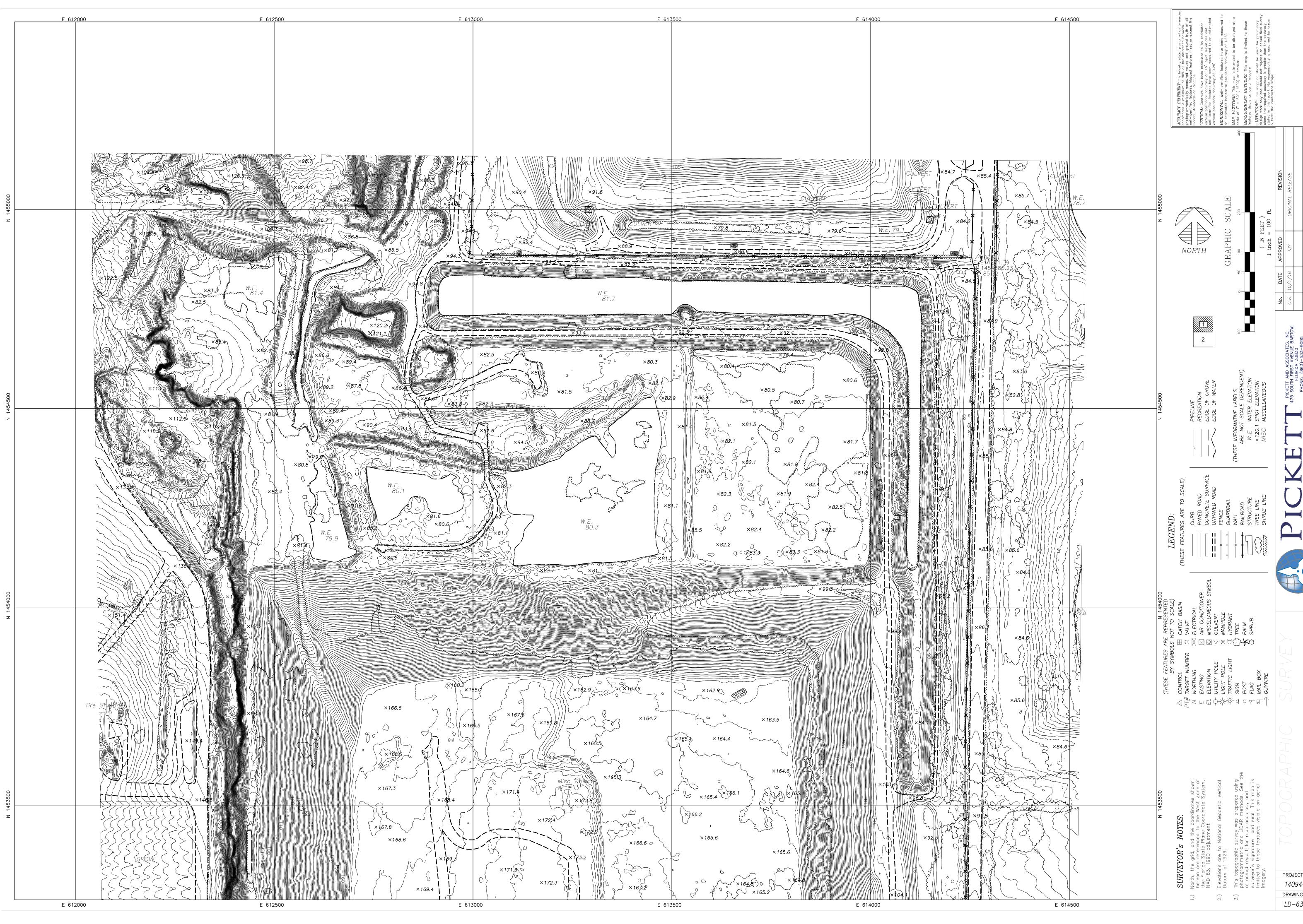
CLOSURE DETAILS

SHEET TITLE:

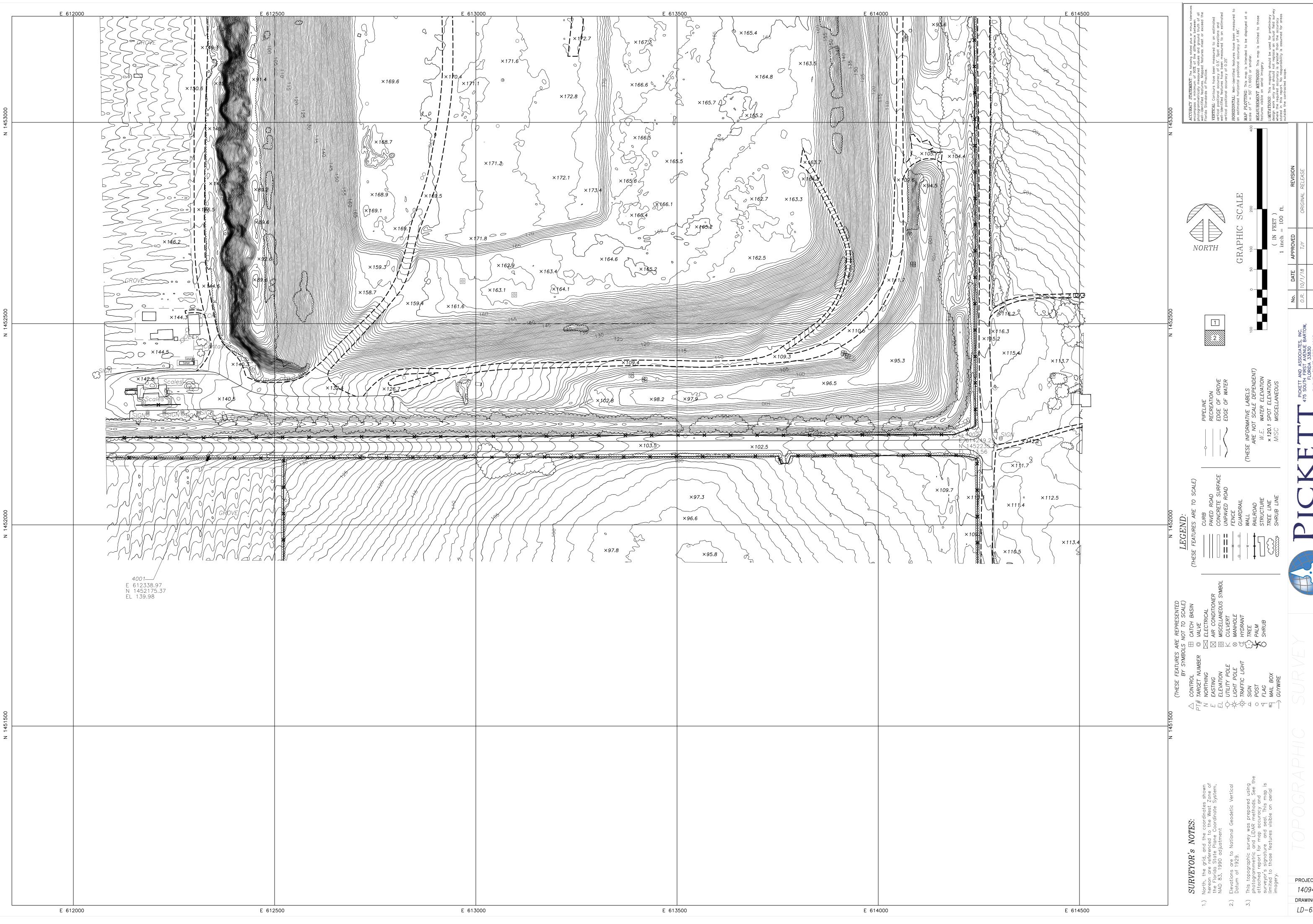
PROJECT NO.:
02000-217-17
SCALE:
AS SHOWN
DATE:
MARCH 2020
DRAWING:







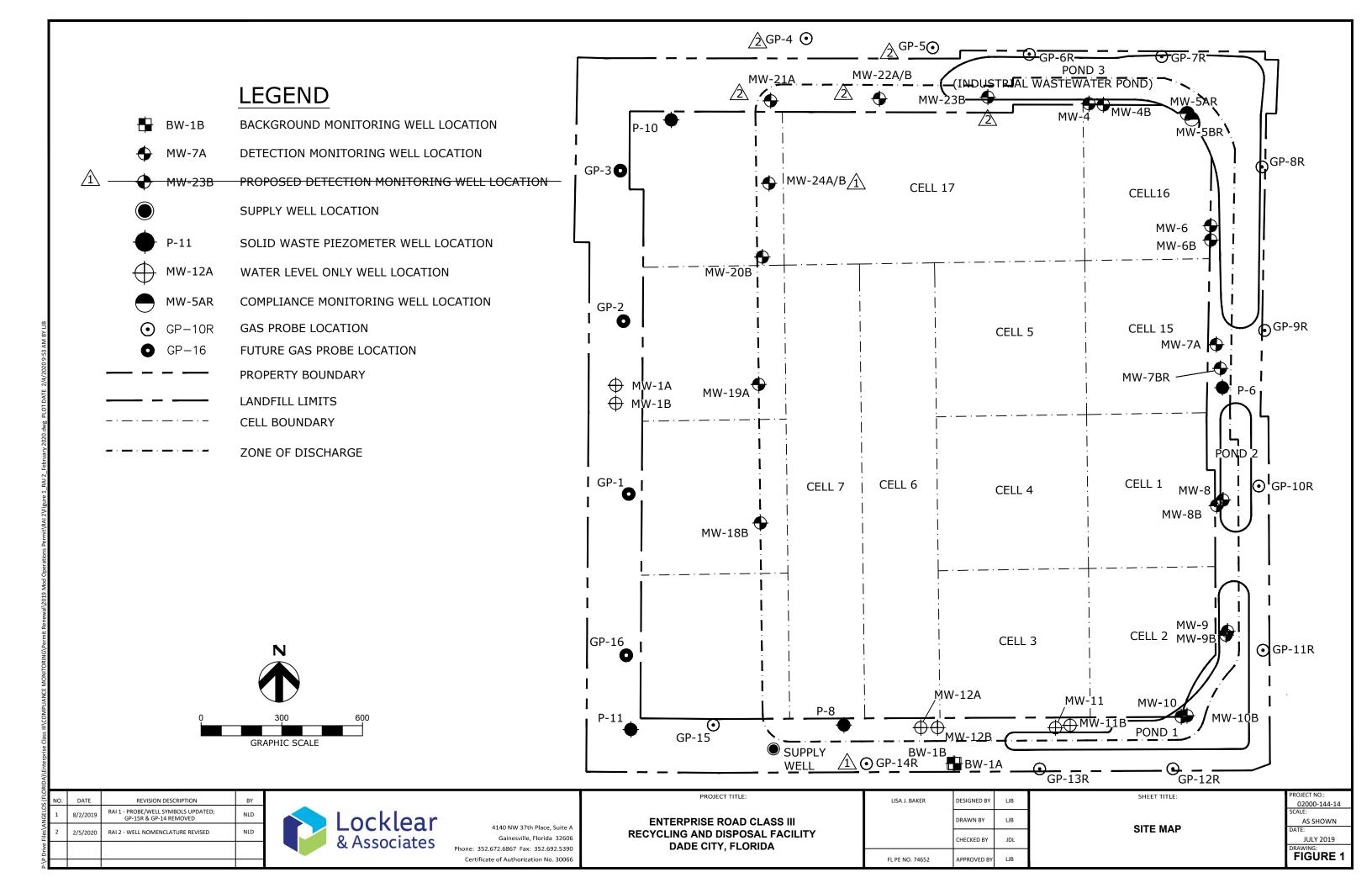
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RED FOR: ANGELO'S RECYCLED MATERIALS ENTERPRISE ROAD LANDFILL

LD-6398

<u>Section 5 - Groundwater Monitoring Plan [Rule 62-701.510, F.A.C.]</u>



<u>Section 7 – Appendix 7-A</u> <u>Financial Assurance Cost Estimates</u>



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. GENERA	AL INFORMATION:							
Facility Name: Enterprise Class III Recycling and Disposal Facility					WACS ID: 87895			
Permit Application or Consent Order No.: 177982-020-SO/T3					Expira	ition Date: <u>7/9/</u>	2018	
Facility Add	dress: 41111 Ente	erprise Roa	d, Dade City, I	Florida 33525				
Permittee o	or Owner/Operator:	Angelo's	Aggregate Ma	aterials, LTD.				
Mailing Add	dress: 855 28th S	treet, South	n, St. Petersbu	rg, Florida 33712				
Latitude:	28 °	19'	53 "	Longitude:	82°	08'	06 "	
Coordinate	Method: State P	lane		atum: NGVD 29				
Collected b	y:		C	company/Affiliation:	Pickett Survey	ing		
Solid Wast	e Disposal Units Inc	luded in Es	timate:					
			Date Unit Began Accepting	Active Life of Unit From Date of Initial Receipt	If active: Remaining	If closed: Date last waste	If closed: Official date of	
P	hase / Cell	Acres	Waste	of Waste	life of unit	received	closing	
	15, 16 and 17	81.4	2004	15	3	N/A	N/A	
,	,							
Total dispo	sal unit acreage inc	uded in this	s estimate:	Closure: <u>81.4</u>	Lor	ng-Term Care:	81.4	
	acility type: c all that apply)	Class I Other:	ĕ C	Class III 🗆	C&D Debris	s Disposal		
II. TYPE C	OF FINANCIAL ASS	URANCE [OOCUMENT (Check type)				
ř	Letter of Credit*			ce Certificate		row Account		
	Performance Bond	*	□ Financi	al Test	□ For	m 29 (FA Defe	erral)	
	Guarantee Bond*		□ Trust F	und Agreement				
	* - Indicates mechanism	s that require t	he use of a Standb	oy 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 Department approved closing cost estimate dated: Latest Department Approved **Current Year Inflation** Inflation Adjusted Closing Closing Cost Estimate: Factor, e.g. 1.02 Cost Estimate: This adjustment is based on the Department approved long-term care cost estimate dated: Inflation Adjusted Annual Latest Department Approved Current Year Inflation Long-Term Care Cost Annual Long-Term Care Estimate: Cost Estimate: Factor, e.g. 1.02 × Number of Years of Long Term Care Remaining: **Inflation Adjusted Long-Term Care Cost Estimate:** Signature by: □ Owner/Operator □ Engineer (check what applies) Signature Address

DEP FOR	RM 62-701	.900(28
Effective	January 6	2010

Name & Title

Date

Telephone Number

City, State, Zip Code

E-Mail Address

IV. ESTIMATED CLOSING COST (check what applies)

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.

Number								
Description	Unit	of Units	Cost / Unit	Total Cost				
1. Proposed Monitoring Wells	(Do not include	wells alread	ly in existence.)					
	EA	6	\$5,000.00	\$30,000.00				
		Subtotal	Proposed Monitoring Wells:	\$30,000.00				
2. Slope and Fill (bedding layer	between waste a	nd barrier la	yer):					
Excavation	CY							
Placement and Spreading	CY AC.	81	\$1,200.00	\$97,200.00				
Compaction	CY							
Off-Site Material	CY							
Delivery	CY							
			Subtotal Slope and Fill:	\$97,200.00				
3. Cover Material (Barrier Layer)):							
Off-Site Clay	CY	194,497	\$9.00	\$1,750,473.00				
Synthetics - 40 mil	SY							
Synthetics - GCL	SY							
Synthetics - Geonet	SY							
Synthetics - Other (explain)								
	_		Subtotal Cover Material:	\$1,750,473.00				
4. Top Soil Cover:			_					
Off-Site Material	CY	194,497	\$4.25	\$826,612.25				
Delivery	CY							
Spread	CY							
			Subtotal Top Soil Cover:	\$826,612.25				
5. Vegetative Layer								
Sodding	SY	3,000	<u>\$1.25</u>	\$3,750.00				
Hydroseeding	AC	81	\$9.75	\$789.75				
Fertilizer	AC							
Mulch	AC							
Other (explain) Return trips to	<u>EA</u>	2	\$500.00	\$1,000.00				
irrigate, establish vegetation	_		Subtotal Vegetative Layer:	\$5,539.75				
6. Stormwater Control System:								
Earthwork	CY							
Grading	SY							
Piping	LF	14,096	\$15.39	\$216,937.44				
Ditches	LF	2,000	\$2.00	\$4,000.00				
Berms	LF	12,600	\$3.90	\$49,140.00				
Control Structures	EA	10	\$3,515.74	\$35,157.40				
Other (explain) Drop Inlets,	<u>LS</u>	1	\$172,278.4 ①	\$172,278.40				
Filter point material	_	Subtotal	Stormwater Control System:	\$477,513.24				

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	10	\$4,649.38	\$46,493.80
Pipe and Fittings	LF		<u> </u>	
Monitoring Probes	EA	7	\$1,500.00	\$10,500.00
NSPS/Title V requirements	LS	1	Ψ1,000.00	+ ****,********************************
•			ubtotal Passive Gas Control	\$56,993.80
8. Active Gas Extraction Control	:			Ψοσ,σσσ.σσ
Traps	EA			
Sumps	EA			
Flare Assembly	EA			
Flame Arrestor	EA			
Mist Eliminator	EA			
Flow Meter	EA			
Blowers	EA			
Collection System	LF			
Other (explain)				
		Subtotal A	ctive Gas Extraction Control	
9. Security System:	-			
Fencing	LF			
Gate(s)	EA			•
Sign(s)	EA			
G ()			Subtotal Security System	:
10. Engineering:				
Closure Plan Report	LS	1	\$35,000.00	\$35,000.00
Certified Engineering Drawings	LS	1	\$15,000.00	\$15,000.00
NSPS/Title V Air Permit	LS	1		
Final Survey	LS	1	\$10,000.00	\$10,000.00
Certification of Closure	LS	1	\$25,000.00	\$25,000.00
Other (explain)	-			
	_		Subtotal Engineering	\$85,000.00
Description Hours	Cost	/ Hour H	lours Cost / Hour	Total Cost
11. Professional Services	-t Managana		Ovality Assumance	
·	<u>ct Management</u>	<u> </u>	Quality Assurance	
DE Cuponicos				
P.E. Supervisor	_			
On-Site Engineer	_			
On-Site Engineer Office Engineer	=	 		
On-Site Engineer Office Engineer On-Site Technician	-		4 6000	
On-Site Engineer Office Engineer On-Site Technician Other (explain)	\$13		1 \$233	\$366,226.00
On-Site Engineer Office Engineer On-Site Technician	\$13	33.	1 \$233	\$366,226.00
On-Site Engineer Office Engineer On-Site Technician Other (explain)	\$13		1 \$233	\$366,226.00
On-Site Engineer Office Engineer On-Site Technician Other (explain) See explanations		Number		
On-Site Engineer Office Engineer On-Site Technician Other (explain)			1 \$233 E Cost / Unit \$42,912.35	\$366,226.00 Total Cost \$42,912.35

		Subtotal of 1-11 Above:	\$3,738,470.39
12. Contingen	cy <u>10</u>	% of Subtotal of 1-11 Above	\$373,847.04
		Subtotal Contingency:	\$373,847.04
		Estimated Closing Cost Subtotal: _	\$4,112,317.43
Descriptio	n		Total Cost
13. Site Specif	ic Costs		
Mobilizati	on	_	\$130,000.00
Waste Tir	e Facility		
Materials	Recovery Facility		
Special W	/astes	_	\$17,266.21
Leachate	Management Sys	stem Modification	
Other (ex	plain)	_	
		Subtotal Site Specific Costs:	\$147,266.21
		TOTAL ESTIMATED CLOSING COSTS (\$):	\$4,259,583.64

V. ANNUAL COST FOR L				
See 62-701.600(1)a.1., 62-70				
certified closed and Departme (Check Term Length) 5 Year			-	e years remaining.
• ,	stimates must be certified by			
	stimates based on third party			r market value
	e cases, a price quote in sup			
All items must be address		•	•	
All items must be address		pianation for all entire	es leit blatik.	
	Sampling	Number of	(Coot / Moll) /	
Description	Frequency (Events / Year)	Wells	(Cost / Well) / Event	Annual Cost
	(Evolito / Total)	110110	270110	74111441 0001
1. Groundwater Monitorin	ng [62-701.510(6), and (8	B)(a)]		
Monthly	12			
Quarterly	4	<u> </u>		
Semi-Annually	2	32	\$485.00	\$31,040.00
Annually	1			
		Subtotal	Groundwater Monitorin	g: \$31,040.00
2. Surface Water Monitor	ring [62-701.510(4), and ((8)(b)]		
Monthly	12			
Quarterly	4			
Semi-Annually	2			
Annually	1			
		Subtotal S	urface Water Monitoring	g:
3. Gas Monitoring [62-701	· /-			
Monthly	12			
Quarterly	4	16		
Semi-Annually	2			
Annually	1		0.1.1.10.11.11	
	00 =04 =40(=) (0)()		Subtotal Gas Monitorin	g:
4. Leachate Monitoring [62-701.510(8)C]		
Monthly	12			
Quarterly Semi-Annually	4			
Annually	2 1			
Other (explain)	•			
Other (explain)		Subtr	otal Leachate Monitoring	n·
			ACT LEGISTATE MOTITOTING	ə·
		Number of		
Description	Unit	Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Ti	reatment Systems Maint	enance		
Maintenance				
Collection Pipes	LF			

Sumps, Traps

Lift Stations

Cleaning

Tanks

\$720.00

\$720.00

EA EA

LS

EΑ

		Number of		
Description	Unit	Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY			
Sludge Removal	CY			
<u> Aeration Systems</u>				
Floating Aerators	EA			
Spray Aerators	EA			
<u>Disposal</u>				
Off-site (Includes	1000 gallon			
ransportation and disposal)		Subtotal Leacha	te Collection / Treatment Systems Maintenance:	\$720.00
6. Groundwater Monitoring W	ell Maintenance		•	,
Monitoring Wells	LF			
Replacement	EA	1	\$3,500.00	\$3,500.00
Abandonment	EA			¥ 0,0 0 0 1 0 0
	Subto	otal Groundwater Monit	toring Well Maintenance:	\$3,500.00
7. Gas System Maintenance				Ψοίσουσο
Piping, Vents	LF			
Blowers	EA			
Flaring Units	EA			
Meters, Valves	EA			
Compressors	EA			
Flame Arrestors	EA			
Operation	LS	_1_	\$2,500.00	\$2,500.00
		Subtotal G	as System Maintenance:	\$2,500.00
B. Landscape Maintenance			•	+= ,======
Mowing	AC	325.6	\$33.00	\$10,744.80
Fertilizer	AC			
		Subtotal L	_andscape Maintenance:	\$10,744.80
9. Erosion Control and Cover	Maintenance		•	
Sodding	SY			
Regrading	AC			
Liner Repair	SY	1	\$5,207.60	\$5,207.60
Clay	CY			
	Su	ıbtotal Erosion Control	and Cover Maintenance:	\$5,207.60
10. Storm Water Managemen	t System Mainten	ance	•	
Conveyance Maintenance	LS	1	\$3,691.00	\$3,691.00
	Subtotal S	torm Water Manageme	nt System Maintenance:	\$3,691.00
11. Security System Mainten	ance		•	
Fences	LS	1	\$3,205.50	\$3,205.50
Gate(s)	EA			. ,
Sign(s)	EA			
		Subtotal Secur	ity System Maintenance:	\$3,205,50

		Number of		
Description	Unit	Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	<u>1</u> \$1,800.00		\$1,800.00
			Subtotal Utilities:	\$1,800.00
Leachate Collection/Treat	ment Systems C	peration		
<u>Operation</u>				
P.E. Supervisor	HR			
On-Site Engineer	HR			
Office Engineer	HR			
OnSite Technician	HR			
Materials	LS	1		
	Subtotal Le	achate Collection/Treatn	nent Systems Operation:	
14. Administrative				
P.E. Supervisor	HR			
On-Site Engineer	HR			
Office Engineer	HR	112	\$75.00	\$8,400.00
OnSite Technician	HR			
Other 1 - 5 year Report	<u>LS</u>	1	\$4,500.00	\$4,500.00
			Subtotal Administrative:	\$12,900.00
			•	
		5	Subtotal of 1-14 Above:	\$75,308.90
15. Contingency	10	% of Subtotal of 1-14 A	hove	¢7 520 90
10. Contingency		70 Of Gubtotal Of 1-14 A	Subtotal Contingency:	\$7,530.89
			- Cablolal Contingency	\$7,530.89
		Number of		
Description	Unit	Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
·				
			 -	
		Sub	total Site Specific Costs:	
			•	
	A	NNUAL LONG-TERM C	CARE COST (\$ / YEAR):	\$82,839.79
		Number of Ye	ears of Long-Term Care:	30
		TOTAL LONG-	TERM CARE COST (\$):	\$2.485.193.70

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.

> 74652 Florida Registration Number (please affix seal)

4140 NW 37th Place, Suite A Mailing Address

Gainesville, Florida 32606 City, State, Zip Code

lisa@locklearconsulting.com E-Mail address (if available)

352-672-6867 Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR

Signature of Applicant

John Arnold, P.E.

Name and Title (please type)

John.Phillip.Arnold@gmail.com E-Mail address (if available) 855 28th Street South

Mailing Address

St. Petersburg, Florida 33712

City, State, Zip Code

813-477-1719

Telephone Number

FACE - Attachment 1 General Information and Assumptions

FINANCIAL ASSURANCE CLOSURE AND LONG-TERM CARE COST ESTIMATES GENERAL INFORMATION AND ASSUMPTIONS

For the permit modification application, we have recalculated the closure and long-term care costs for Cells 1-7, 15, 16 and 17 and vertical expansion. Closure and Long-term Care costs include material, labor and professional services required for closing and the long-term care of the permitted disposal areas.

The cell capacity and lifespan estimate for Cells 1 - 7, 15, 16 and 17 have been recalculated as 3 years (from start of waste acceptance in 2004).

UNIT COST ESTIMATIONS AND CALCULATIONS:

This section provides detailed information and justification for the unit quantity and cost estimates shown on FDEP Form 62-701.900(28) *Financial Assurance Cost Estimate Form*. Cost references are provided in the Appendix and consist of third party quotes and information from recognized cost-estimating sources, such as the FDOT construction cost database.

Cost Estimate Information and Assumptions - Closure:

<u>Item 1: Proposed Monitoring Wells</u>

It is anticipated that an additional 6 monitoring wells will be required at an estimated \$5,000 per well.

Item 2: Slope and Fill

This item represents the cost of rough grading and sloping of the waste to the closure grades. The volume has been calculated per acre for the two-dimensional closure area. Refer to Reference 1 for unit costs.

Item 3: Cover Material (Barrier Layer)

This item includes purchasing, hauling, placing and compacting 18-inches of 1x10⁻⁸ off-site clay material to meet the closure specifications in the Closure and Remediation Plan. The volume was calculated for 18-inches of clay over the two-dimensional closure area. Refer to Reference 1 for unit costs.

<u>Item 4: Top Soil Cover</u>

This item includes purchasing, hauling and placing off-site soil material. The quantity represents 18" of soil material, across the 2-dimensional closure area. Refer to Reference 1 for unit costs.

<u>Item 5: Vegetative Layer</u>

This item includes the cost to hydroseed (including materials and installation) the closure area (Cells 1-7, 15, 16 and 17). The per-acre cost is provided in Reference 1.

The site Environmental Resource Permit (ERP) was issued for the site buildout, including cells 9 – 14 that are not included in this permit modification application. We have assumed that, following closure of Cell 6 or Cell 7, an approximately 2,000 LF by 15-ft wide swale will be constructed along the west side of the landfill to convey runoff to either the temporary stormwater pond to the north, or Pond 1 to the south. We have included the cost of 3,000 yd³ of sod to stabilize the swale sideslopes. The per-yard cost for sod is provided in Reference 1.

Other:

This line item was provided by the earthwork contractor for 2 return trips to irrigate and maintain sod and seed until established. The per-trip cost is provided in Reference 1.

Item 6: Stormwater Control System

This item includes costs associated with constructing conveyance ditches, installing corrugated/perforated pipe, filter point material, drop inlets, and energy dissipaters.

As discussed in Item 5 above, this closure cost estimate includes the cost of constructing a conveyance swale along the west side of the landfill. The per-foot cost for swale construction is provided in Reference 1.

The piping estimate represents 896 LF of 18-inch corrugated HDPE corrugated pipe and 13,200 LF of 8-inch corrugated perforated pipe as conceptually shown on the Operations Plan Modification Plan Set. Please refer to Reference 2 for the per foot cost of pipe.

The cost for berms represents construction of approximately 12,600 LF of tack-on berms at elevations 140' and 190' on the conceptual final cover plan shown on the Operations Plan Modification Set. Please refer to the cost for miscellaneous earthwork provided in Reference 1.

The cost for control structures represents the price of U-Endwall, baffles as conceptually shown on the Operations Plan Modification Plan Set. Please refer to Reference 4 for unit prices.

The cost under the "other" heading represents the cost of filter point matting at each spillway and the 10 drop inlet structures to be installed at the end of each spillway as shown on the conceptual final cover plan on the Operations Plan Modification Plan Set. Please refer to Reference 3 for unit prices in regards to the drop inlet structures and Reference 10 for construction quote in regards to filter point matting (approximately 37,150 SF).

Item 7: Gas Control: Passive

Wells:

This item includes the costs associated with constructing and installing 10 passive landfill gas vents, as shown in the Operations Plan Modification Plan Set. It is assumed that each well will be constructed to 20-feet above the bottom of the Cell, for an approximate total of 550 LF of well installation. Refer to Reference 6 for installation costs.

Monitoring Probes:

This item includes costs associated with installing 7 landfill gas monitoring probes on the west property boundary as on the Operations Plan Modification Plan Set. Locklear & Associates proposed this work at \$1500 per probe.

Item 8: Gas Control: Active Extraction

This item is not applicable – the Enterprise Class III RDF does not have active gas extraction.

Item 9: Security System

This item is not applicable – the Facility has perimeter fencing, signage and gates installed.

Item 10: Engineering

The total cost for engineering services associated with final closure have been estimated below and are typical of what would be required for any third party engineering consulting firm to perform these tasks. Locklear & Associates proposed this work as seen below.

The work is broken out as follows:

• Closure Plan (Closure permit application, review and update CQA Plan, Closure Plan, and Long-Term Care Plan): \$35,000

• Closure Drawings: \$15,000

• Closure Survey: \$10,000

• Certification of Construction Completion Report: \$25,000

Item 11: Professional Services

It is estimated that 4% of construction cost will be needed for contract management and construction management: 4% of \$3,329,332.04 = \$133,173.28.

It is estimated that 7% of construction cost will be needed for construction quality assurance and on-site observation: 7% of \$3,329,332.04 = \$233,053.24

CQA testing for the cover soils has been estimated by a third-party testing company (Reference 5) for the work described in the CQA Plan.

Item 12: Contingency

A contingency amount of 10% of the total cost was used in the cost estimate.

<u>Item 13: Site Specific Costs</u>

Mobilization:

Cost to mobilize for proceeding with closure operations are estimated in Reference 1.

Waste Tire Facility:

The Facility contains a waste tire processing facility (FDEP Permit 303741-001-WT/02). Financial assurance for the waste tire processing facility is submitted separately to FDEP and is not included in this estimate.

Special Wastes:

This line item includes costs associated with removing and disposing of unacceptable materials and/or incidental recyclables that may have been temporarily stored pending appropriate disposal. The Facility Operations Plan allows for storage of the following waste types and amounts: The transportation and disposal costs have been provided by Zimmer Equipment in Reference 7. It is assumed that a loader and operator will be used for one 10-hour day (Reference 2).

TYPE	MAX. QTY
Class I waste	20 CY
Paint, batteries, solvents, oils,	40 CY
etc.	
Ferrous Metal	500 CY
Aluminum	300 CY
Stainless Steel	300 CY
Copper	25 CY
Asphalt	300 CY
Concrete / Rubble	300 CY
Electronics	8 CY

- (RS Means 2020 015433204650) Rent front end loader, 4WD 1.75 2 CY (\$616.21/day)
- (Reference #7) Total summation of maximum quantities of material removed (\$16,650).

Cost Estimate Information and Assumptions – Long-Term Care:

Item 1: Groundwater Monitoring

This line item is based on total annual costs for two semi-annual monitoring events (sampling, analysis and reporting) of \$31,040 (proposed work by Locklear & Associates).

Item 2: Surface Water Monitoring

Surface water sampling is required in the event that stormwater discharges from the property. We have included the cost associated with sampling and analysis of one stormwater location during each semi-annual event. This cost is included in the total groundwater monitoring cost in Item 1 (proposed work by Locklear & Associates).

Item 3: Gas Monitoring

This item includes third-party costs for field work and reporting associated with quarterly off-site gas migration monitoring. The estimate is based on quarterly sampling of 16 monitoring points and is work provided by Locklear & Associates.

Item 4: Leachate Monitoring

This item is not applicable.

<u>Item 5: Leachate Collection/Treatment Systems/Maintenance</u>

Approximately 380 LF of will be jet-cleaned and inspected every 5 years. See Reference 9 for the revised estimate pertaining to jet-cleaning and video inspection.

<u>Item 6: Maintenance of Groundwater Monitoring Wells</u>

It is assumed that a lump sum cost of \$3,500 per year will be needed maintenance of groundwater monitoring wells; this will allow the facility to replace approximately 1 groundwater monitoring well every 5 years.

Item 7: Gas System Maintenance

It is assumed that the above ground part of one gas vent will need to be replaced annually at a lump sum cost of \$2,500.

Item 8: Landscape Maintenance

Mowing:

Mowing was assumed for 81.4 acres of closure 4 times per year (total of 325.6 acres). A statewide FDOT average unit cost is provided in Reference 8.

<u>Item 9: Erosion Control and Cover Maintenance</u>

One acre per site per year is assumed to require regrading. Of that one acre per year it is assumed that approximately 100 cubic yards of the clay liner will need to be replaced.

- (RS Means 2018 312216100100) Finish grade Machine Large Area (\$0.89/SY) x (4,840 SY/AC) = \$4,307.60/AC
- (Reference 1) Material: (\$9.00/CY) x (100 CY) = \$900.00/YR

Item 10: Stormwater Management System Maintenance

It is assumed that a lump-sum cost of \$3,691 per year will be required for dressing and maintenance of the stormwater ponds, control structures and swales.

• (RS Means 2018 312316130050) Excavate common earth, 1'-4' (\$9.25/CY) x 2.66 CY/LF to get (\$17.85/LF) x 150 linear feet of storm water ditch (\$3,691/yr)

Item 11: Security System Maintenance

Fencing repair is assumed to be 75 feet per year at a rate of \$42.745/LF (\$3205.50/yr).

• (RS Means 2018 323113200920) Chain-link Fence Industrial 2-1/2 Diameter line posts.

Item 12: Utilities

It is assumed that lighting pump operating costs will be \$150 per month, or \$1,800 per year.

Item 13: Leachate Collection/Treatment Systems Operation

This item is not applicable.

<u>Item 14: Administrative</u>

It is assumed that long-term annual administrative costs associated with scheduling routine maintenance and monitoring and coordinate unscheduled maintenance will equate to 2 hours per week of administrative time (112 hours at a rate of \$75 / hour).

Other: This item includes costs associated with preparing the 5-year evaluation report on the closure. This work is proposed by Locklear & Associates.

Item 15: Contingency

Contingency costs of 10% were included with this cost estimate for long-term care.

FACE - Attachment 2 Cost References



MR. JOHN ARNOLD 1530 McDuff AVE S Jacksonville, FL 32205 David Nelson Construction Company

3483 Alternate US19
Palm Harbor, Florida 34683
Ph. 727-784-7624
Fax 727-786-8894

Visit our Web Site, www\nelson-construction.com

PHONE

352-339-1408

PROJECT

ENTERPRISE ROAD CLASS III FACILITY-CLOSURE CONSTRUCTION ESTIMATE

DATE/TIME December 21, 2018

				UNIT	
ITEM	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	MOBILIZATION	1	LS	\$ 130,000.00	\$ 130,000.00
2	ROUGH GRADING SLOPES SUBLINER	67	AC	\$ 1,200.00	\$ 80,400.00
3	18" CLAY BARRIER 1x10-8 CM/SEC	160,755	CY	\$ 9.00	\$ 1,446,795.00
4	18" VEGETATIVE SOIL INSTALLED	160,755	CY	\$ 4.25	\$ 683,209.00
5	SODDING WORK AREAS AS REQUIRED	3,000	SY	\$ 1.50	\$ 4,500.00
6	GRASSING/HYDR SEEDING	67	AC	\$ 975.00	\$ 65,325.00
7	WATERING GRASS AREAS	67	AC	\$ 500.00	\$ 33,500.00
8	REGRADING OF ERODED AREAS	AS REQUIRED	SY	\$ 0.25	
9	DITCH 15' WIDEx2' DEEP WITH 3:1 SLOPES	AS REQUIRED	LF	\$ 2.00	
10	MISC. EARTHWORK	AS REQUIRED	CY	\$ 3.90	

CONSTRUCTION DURATION WOULD BE 14 WEEKS DOES NOT INCLUDE ANY PERMITS FEES

IF YOU SHOULD HAVE ANY QUESTIONS CONCERNING THIS PROPOSAL, PLEASE CONTACT ME AT OUR OFFICE.

BOB CLARK

NELSON CONSTRUCTION CO

PHONE 727-784-7624 FAX 727-786-8894

E-MAIL BCLARK@NELSON-CONSTRUCTION.COM

Cost Estimate Report

Angelos Recycled Materials

Date: 03/27/2020

Dade City, Florida, 33525 41111 Enterprise Road

Enterprise Operations Modification RAI 2

Year 2020

Unit Detail Report

Prepared By: John Locklear

Locklear & Associates, Inc.

Ext. Total Incl. O&	Total Incl. O&P	Unit	Quantity	Description	ber	LineNumber
)1 General Requ	Division 01
\$616.21	\$616.21	Day	1.00	Rent front end loader, 4WD, art. frame, diesel, 1.75 - 2 CY 130 HP, Incl. Hourly Oper. Cost.	4650	015433204650
\$616.21				ubtotal)1 General Requ	Division 01
					31 Earthwork	Division 31
\$1.08	\$1,08	S.Y.	1.00	Fine grading, for roadway, base or leveling course, large area, 6,000 S.Y. or more	0100	312216100100
\$8.27	\$8.27	B.C.Y.	1.00	Excavating, trench or continuous footing, common earth, 3/8 C.Y. excavator, 1' to 4' deep, excludes sheeting or dewatering	0050	312316130050
\$42.51	\$42.51	L.C.Y.	1.00	Fill by borrow and utility bedding, for pipe and conduit, crushed or screened bank run gravel, excludes compaction	0050	312323160050
\$51.86					B1 Earthwork S	Division 31
					32 Exterior Impi	Division 32
\$43.17	\$43.17	L.F.	1.00	Fence, chain link industrial, galvanized steel, 6 ga. wire, 2-1/2" posts @ 10' OC, 8' high, includes excavation, in concrete, excludes barbed wire	0920	323113200920
\$43.17				Subtotal	32 Exterior Impr	Division 32
					33 Utilities	Division 33
\$19 . 53	\$19.53	L.F.	1.00	Public sanitary utility sewerage piping, piping HDPE Corrugated Type S with watertight gaskets, 18" diameter, excludes excavation or backfill	3120	333111203120
\$0.00	\$15.11	L.F.	0.00	Subdrainage piping, vitrified clay, foundation drain, perforated, 5' lengths, 8" diameter, C700, excludes excavation and backfill	3040	334116103040
\$19.53					33 Utilities Subt	Division 33



CESPO05 03/23/2020-07.00.01 Page:

Florida Department of Transportation Item Average Unit Cost From 2019/03/01 to 2020/02/29

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Item		No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
- T Celli		Concs	Average	Allouite				Description ————————————————————————————————————
0425	1451	23	\$7,513.84	\$563,537.96	75.000	EA	N	INLETS, CURB, TYPE J-5, <10'
	1452	10	\$9,680.08	\$590,484.93	61.000	EA	N	INLETS, CURB, TYPE J-5, >10'
	1455	3	\$3,525.50	\$35,255.00	10.000	EA	N	INLETS, CURB, TYPE J-5, PARTIAL
	1461	17	\$7,782.46	\$544,772.51	70.000	EA	N	INLETS, CURB, TYPE J-6, <10'
	1462	6	\$9,194.41	\$211,471.43	23.000	EA	N	INLETS, CURB, TYPE J-6, >10'
0425	1465	2	\$4,325.00	\$21,625.00	5.000	EA	N	INLETS, CURB, TYPE J-6, PARTIAL
0425	1469	2	\$6,200.00	\$24,800.00	4.000	EA	N	INLETS, CURB, TYPE J-6, MODIFY
0425	1471	9	\$5,298.83	\$243,746.00	46.000	EA	N	INLETS, CURB, TYPE 7, <10'
0425	1472	1	\$6,370.00	\$6,370.00	1.000	EA	N	INLETS, CURB, TYPE 7, >10'
0425	1473	2	\$8,100.00	\$72,900.00	9.000	EA	N	INLETS, CURB, TYPE 7, J BOT , <10'
0425	1474	1	\$6,600.00	\$6,600.00	1.000	EA	N	INLETS, CURB, TYPE 7, J BOT , >10'
0425	1475	1	\$6,000.00	\$6,000.00	1.000	EA	N	INLETS, CURB, TYPE 7, PARTIAL
0425	1481	8	\$4,990.68	\$129,757.64	26.000	EA	N	INLETS, CURB, TYPE 8, <10'
0425	1482	1	\$6,500.00	\$13,000.00	2.000	EA	N	INLETS, CURB, TYPE 8, >10'
0425	1483	1	\$7,100.00	\$28,400.00	4.000	EA	N	INLETS, CURB, TYPE 8, J BOT , <10'
0425	1485	3	\$5,194.76	\$31,168.56	6.000	EA	N	INLETS, CURB, TYPE 8, PARTIAL
0425	1501	4	\$3,912.19	\$125,190.00	32.000	EA	N	INLETS, DT BOT, TYPE A, <10'
0425	1502	1	\$4,800.00	\$4,800.00	1.000	EA	N	INLETS, DT BOT, TYPE A, >10'
0425	1505	4	\$3,394.64	\$23,762.45	7.000	EA	N	INLETS, DT BOT, TYPE A, PARTIAL
0425	1511	9	\$4,926.90	\$295,613.97	60.000	EA	N	INLETS, DT BOT, TYPE B, <10'
0425	1513	2	\$6,711.16	\$597,293.00	89.000	EA	N	INLETS, DT BOT, TYPE B, J BOT, <10'
0425	1515	1	\$4,100.00	\$4,100.00	1.000	EA	N	INLETS, DT BOT, TYPE B, PARTIAL
0425	1521	52	\$3 , 296.59	\$1,635,106.79	496.000	EA	N	INLETS, DT BOT, TYPE C, <10'
	1522	1	\$3,500.00	\$10,500.00	3.000	EA	N	INLETS, DT BOT, TYPE C, >10'
	1523	12	\$5 , 582.88	\$251,229.79	45.000	EA	N	INLETS, DT BOT, TYPE C, J BOT, <10'
	1524	2	\$10,127.06	\$121,524.74	12.000	EA	N	INLETS, DT BOT, TYPE C, J BOT, >10'
	1525	9	\$5 , 371.65	\$102,061.43	19.000	EA	N	INLETS, DT BOT, TYPE C, PARTIAL
	1529	13	\$3,355.08	\$120,782.71	36.000	EA	N	INLETS, DT BOT, TYPE C, MODIFY
	1531	8	\$3,571.62	\$114,291.97	32.000	EA	N	INLETS, DT BOT, TYPE C MOD- BACK, <10'
	1535	1	\$3,649.44	\$3,649.44	1.000	EA	N	INLETS, DT BOT, TYPE C, MOD, PARTIAL
	1541	40	\$4,057.68	\$1,566,263.45	386.000	EA	N	INLETS, DT BOT, TYPE D, <10'
	1542	2	\$5,355.33	\$16,066.00	3.000	EA	N	INLETS, DT BOT, TYPE D, >10'
	1543	10	\$6,876.71	\$295,698.61	43.000	EA	N	INLETS, DT BOT, TYPE D, J BOT, <10'
	1544	1	\$12,065.00	\$96,520.00	8.000	EA	N	INLETS, DT BOT, TYPE D, J BOT, >10'
	1545	5	\$4,188.74	\$20,943.70	5.000	EA	N	INLETS, DT BOT, TYPE D, PARTIAL
	1549	17	\$6,640.12	\$637,451.90	96.000	EA	N	INLETS, DT BOT, TYPE D, MODIFY
	1551	16	\$4,815.92	\$423,800.60	88.000	EA	N	INLETS, DT BOT, TYPE E, <10'
	1553	5	\$6,924.19	\$117,711.28	17.000	EA	N	INLETS, DT BOT, TYPE E, J BOT, <10'
	1554	3	\$9,775.52	\$39,102.08	4.000	EA	N	INLETS, DT BOT, TYPE E, J BOT, >10'
0425	1555	5	\$4,024.77	\$32,198.14	8.000	EA	N	INLETS, DT BOT, TYPE E, PARTIAL

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Florida Department of Transportation Item Average Unit Cost From 2019/03/01 to 2020/02/29

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

Description		No. of	Weighted	Total	Total	Unit		
043015372 1 81,220.00 89,760.00 8.000 LF N DIER CULV, OF PARTL, OTHER, 72"S/CD	Item	Conts	Average	Amount	Quantity	Meas	Obs?	Description
043015372								
0430185124 5 \$446.06 \$2,711,408.35 5,442.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 24" 0430185130 5 \$577.19 \$574,306.90 995.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 24" 0430185130 5 \$577.19 \$574,306.90 995.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 30" 0430185136 3 \$747.80 \$1,478.402.40 1,977.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 30" 0430185136 3 \$747.80 \$1,478.402.40 1,977.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 30" 0430185136 4 \$972.91 \$702,438.50 722.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 42" 0430185136 4 \$972.91 \$702,438.50 722.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 42" 0430200 25 1 \$2,700.00 \$86,400.00 32.000 EA N PILARED END SECTION, CONCRETE, 18" 0430200 29 1 \$2,900.00 \$5,800.00 2.000 EA N PILARED END SECTION, CONCRETE, 18" 0430602125 1 \$2,950.24 \$12,751.20 5.000 EA N U-ENDWALL, NIGE 260/430-010, 1:4 SLP, 18" 0430602125 1 \$2,950.24 \$12,751.20 5.000 EA N U-ENDWALL, NIGE 260/430-010, 1:4 SLP, 18" 0430610225 1 \$3,950.00 \$7,950.00 2.000 EA N U-ENDWALL, NIGE 260/430-010, 1:4 SLP, 18" 0430610225 1 \$3,7310.00 \$7,310.00 1.000 EA N U-ENDWALL, NIGE 260/430-010, 1:4 SLP, 18" 0430610225 1 \$4,811.00 \$4,711.00 1.000 EA N U-ENDWALL, NIGE 260/430-011, 1:4 SLP, 18" 0430610225 1 \$4,833.85 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:4 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 1 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430610225 2 \$4,831.89 \$9,787.70 2.000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 043061123 1 \$5,505.00 \$9,000.00 \$1,000 EA N U-ENDWALL, NIGE 261/430-011, 1:3 SLP, 18" 0430611225 2 \$7,288.89 \$9,889.79 \$9,000.00 \$1,000 E	0430175260	1	\$236.35	\$34,034.40	144.000	LF	N	PIPE CULV, OPT MATL, OTHER, 60"S/CD
0430185124 5 \$ \$446.06 \$2,073,965.00 4,663.000 LF N PIPE CULV,OPT MATL, BOUND, JACKABORE, 24" 0430185130 5 \$577.19 \$2574,306.30 995.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 36" 0430185136 3 \$747.80 \$1,478,402.40 1,977.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 36" 0430185148 4 \$972.91 \$702,438.50 722.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 36" 0430185148 4 \$972.91 \$702,438.50 722.000 LF N PIPE CULV,OPT MATL, ROUND, JACKABORE, 36" 0430200 25 1 \$2,700.00 \$86,400.00 32.000 EA N FILARED END SECTION, CONCRETE, 18" 0430600125 1 \$2,900.00 \$5,900.00 2.000 EA N FILARED END SECTION, CONCRETE, 14" 0430600125 1 \$2,900.00 \$5,900.00 2.000 EA N U-ENDMALL, NOR 260/430-010, 114 SEP, 18" 0430602133 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDMALL, NOR 260/430-010, 114 SEP, 18" 0430610225 1 \$7,310.00 \$7,900.00 2.000 EA N U-ENDMALL, NOR 260/430-010, 114 SEP, 18" 043061025 1 \$7,310.00 \$7,300.00 1.000 EA N U-ENDMALL, NOR 260/430-011, 116 SEP, 18" 043061025 1 \$84,711.00 \$4,711.00 1.000 EA N U-ENDMALL, NOR 260/430-011, 116 SEP, 18" 0430610225 1 \$4,691.00 \$4,681.00 1.000 EA N U-ENDMALL, NIDEX 261/430-011, 116 SEP, 18" 0430610225 1 \$4,691.00 \$4,681.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 116 SEP, 18" 0430610225 1 \$4,691.00 \$2,060.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 116 SEP, 18" 0430611223 1 \$2,781.86 \$2,781.86 1.000 EA N U-ENDMALL, INDEX 261/430-011, 113 SEP, 18" 0430611223 1 \$2,891.86 \$2,891.86 1.000 EA N U-ENDMALL, RIDEX 261/430-011, 114 SEP, 18" 0430611229 4 \$3,693.24 \$4,411.93 12.000 EA N U-ENDMALL, RIDEX 261/430-011, 114 SEP, 18" 0430611229 4 \$3,693.24 \$4,411.93 12.000 EA N U-ENDMALL, RIDEX 261/430-011, 114 SEP, 18" 0430611229 4 \$3,693.24 \$4,141.91 \$1.000 EA N U-ENDMALL, BAFF, 261/430-011, 114 SEP, 18" 0430611323 1 \$2,781.86 \$2,781.86 \$2,881.80 \$1.000 EA N U-ENDMALL, BAFF, 261/430-011, 114 SEP, 18" 0430611323 1 \$2,781.80 \$2,881.80 \$2,881.80 \$3.000 EA N U-ENDMALL, BAFF, 261/430-011, 114 SEP, 18" 0430611323 1 \$2,781.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,981.80 \$2,	0430175272	1	\$1,220.00	\$9,760.00	8.000	LF	N	PIPE CULV, OPT MATL, OTHER, 72"S/CD
0430185136 5 \$577.19 \$574,366.90	0430185118	5	\$406.36	\$2,211,408.35	5,442.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 18"
0430185136 3 8747.80 \$1,478,402.40 1,977.000 LF N PIER CULV,OPT MATL, ROUND, JACKBBORE, 36° (430185148 4 8972.91 \$702,438.50 722.000 LF N PIER CULV,OPT MATL, ROUND, JACKBBORE, 36° (430185148 4 8972.91 \$702,438.50 722.000 LF N PIER CULV,OPT MATL, ROUND, JACKBBORE, 48° (430185148 4 8972.91 \$702,438.50 722.000 LF N PIER CULV,OPT MATL, ROUND, JACKBBORE, 48° (430200 25 1 \$2,900.00 \$86,400.00 32.000 EA N PLARED END SECTION, CONCRETE, 18° (430600125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010,1:4 SLP, 18° (430602133 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, NOV RO 260/430-010,1:4 SLP, 18° (430602133 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDWALL, NOV RO 260/430-010,1:4 SLP, 18° (430602135 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL, NEEX 261/430-011,1:4 SLP, 18° (43061025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061025 1 \$4,4711.00 \$4,711.00 \$1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061025 1 \$4,481.00 \$4,481.00 \$1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061025 1 \$4,481.00 \$4,681.00 \$1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061125 1 \$2,060.00 \$2,060.00 \$1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061125 1 \$2,381.66 \$2,581.66 \$1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18° (43061125 1 \$2,381.66 \$2,581.66 \$1.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$3,483.23 \$21,811.77 \$5.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,353.86 \$2,581.66 \$1.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,353.86 \$2,581.60 \$1.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,565.50 \$5,131.00 \$2.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,565.50 \$5,131.00 \$2.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,565.50 \$5,131.00 \$2.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,565.50 \$5,131.00 \$2.000 EA N U-ENDWALL, EAPP, 261/430-011,1:4 SLP, 18° (43061125 1 \$2,565.50 \$5,131.00 \$2.000 EA N U-ENDWALL, EAPP, 2	0430185124	5	\$446.06	\$2,079,965.00	4,663.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 24"
0430185142 3 \$847.23 \$816.728.50 \$64.000 LF N PIPE CLLV.OPT MATL, ROUND, JACKBORE, 42" 0430185148 4 \$972.91 \$702.438.50 722.000 LF N PIPE CLLV.OPT MATL, ROUND, JACKBORE, 42" 0430200 25 1 \$2,700.00 \$86,400.00 22.000 EA N FLARED END SECTION, CONCRETE, 18" 0430200 29 1 \$2,900.00 \$5,800.00 2.000 EA N FLARED END SECTION, CONCRETE, 18" 043060125 1 \$2,550.24 \$12,751.20 5.000 EA N U-ENDWALL, IND 260/430-010,14 \$LF, 18" 043060125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010,14 \$LF, 18" 043060125 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDWALL, NOR 260/430-010,14 \$LF, 18" 043061025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL, NOR 260/430-010,14 \$LF, 18" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 0430610125 1 \$4,693.00 \$3,807.70 2.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 0430610125 1 \$4,693.00 \$4,693.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 043061025 1 \$4,693.00 \$4,693.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 043061025 1 \$2,600.00 \$2,600.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 043061125 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261/430-011,14 \$LF, 18" 043061125 8 \$3,515.74 \$288.293.18 82.000 EA N U-ENDWALL, BAFF, 261/430-011,14 \$LF, 18" 043061125 4 \$2,351.86 \$289.293.18 82.000 EA N U-ENDWALL, BAFF, 261/430-011,14 \$LF, 18" 043061125 4 \$2,353.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011,14 \$LF, 18" 043061125 4 \$2,353.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011,12 \$LF, 18" 043061133 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,13 \$LF, 18" 043061133 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,12 \$LF, 18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,13 \$LF, 18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,13 \$LF, 18" 043061333 1 \$5,500.00 \$1,000.00 \$2,000.00 EA N U-ENDWALL, BAFF, 261/430-011,13 \$LF, 18" 043061333 1 \$5,500.00 \$1,000.00 \$2,000.00 EA N U-ENDWALL, BAFF, 261/430-011,13 \$LF, 18" 043061333 1 \$5,500.0	0430185130	5	\$577.19	\$574,306.90	995.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 30"
0430185148 4 \$972.91 \$702.438.50 722.000 LF N PIPE CULV.OPT MATL ROUND, JACKBONE, 48" 0430200 25 1 \$2,700.00 \$86,400.00 32.000 EA N FLARED END SECTION, CONCRETE, 18" 0430600125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010, 1:4 \$LP, 18" 0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010, 1:4 \$LP, 18" 0430602125 1 \$3,950.00 \$5,800.00 2.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 \$LP, 18" 043060125 1 \$3,350.00 \$7,300.00 1.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 \$LP, 18" 043061025 1 \$4,711.00 \$7,310.00 1.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 \$LP, 18" 043061025 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$LP, 18" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$LP, 18" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$LP, 18" 043061025 1 \$2,660.00 \$2,660.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$LP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061125 8 \$3,515.74 \$288,290.38 \$20.00 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061125 1 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061125 4 \$2,953.86 \$2,953.86 10.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061133 1 \$2,555.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061323 1 \$2,555.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$LP, 18" 043061323 1 \$2,555.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$LP, 15" 043061323 1 \$5,500.00 \$5,000.00 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$LP, 15" 043061323 1 \$5,500.00 \$5,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$LP, 15" 043061325 2 \$5,288.82 \$99,400.00 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$LP, 15" 043061333 1 \$5,000.00 \$5,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,	0430185136	3	\$747.80	\$1,478,402.40	1,977.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 36"
0430200 25 1 \$2,700.00 \$86,400.00 32.000 EA N FLARED END SECTION, CONCRETE, 18" 0430600125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010, 1:4 SLP, 18" 0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, IND 260/430-010, 1:4 SLP, 18" 0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 SLP, 18" 0430602125 1 \$2,900.00 \$7,900.00 2.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 SLP, 18" 043061025 1 \$7,310.00 \$7,700.00 1.000 EA N U-ENDWALL, WGR 260/430-010, 1:4 SLP, 18" 043061025 1 \$7,310.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:6 SLP, 18" 043061025 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 SLP, 18" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 SLP, 24" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 SLP, 24" 043061025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:3 SLP, 18" 043061125 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 SLP, 18" 043061125 8 \$3,515.74 \$288,290.38 B2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 18" 043061125 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 18" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 24" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430611325 5 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430611325 1 \$5,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430611325 1 \$5,665.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430611325 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:3 SLP, 18" 0430611325 1 \$5,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:3 SLP, 18" 0430611325 2 \$5,258.82 S89,400.00 17.000 EA N U-ENDWALL, BAFF, E81/430-011, 1:2 SLP, 18" 0430611333 1 \$5,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,	0430185142	3	\$847.23	\$816,728.50	964.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 42"
0430200 29 1 \$2,900.00 \$5,800.00 2.000 EA N FLARED END SECTION, CONCRETE, 24" 0430600125 1 \$2,550.24 \$12,751.20 5.000 EA N U-ENDWALL, NIN 260/430-010, 1:4 \$12,18" 0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, W \GR 260/430-010, 1:4 \$12,18" 0430602133 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDWALL, W \GR 260/430-010, 1:4 \$12,30" 0430610025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:6 \$12,18" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$12,18" 0430610125 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$12,18" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$12,18" 0430611025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:3 \$12,18" 0430611025 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261/430-011, 1:4 \$12,18" 0430611123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$12,18" 0430611125 B \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$12,18" 0430611125 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$12,18" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$12,18" 043061133 4 \$4,368.23 \$21,841.17 \$.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 \$12,18" 043061133 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:3 \$12,18" 043061325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$12,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$12,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$12,18" 043061325 5 \$5,1414.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 \$12,18" 043061325 1 \$5,000.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF ENTAL,	0430185148	4	\$972.91	\$702,438.50	722.000	LF	N	PIPE CULV, OPT MATL, ROUND, JACK&BORE, 48"
0430600125 1 \$2,550.24 \$12,751.20 5.000 EA N U-ENDMALL, IND 260/430-010, 1:4 \$LP, 18" 0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDMALL, W \GR 260/430-010, 1:4 \$LP, 18" 0430602133 1 \$3,950.00 \$7,900.00 1.000 EA N U-ENDMALL, W \GR 260/430-010, 1:4 \$LP, 18" 043061025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 18" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 18" 0430610129 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 18" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 24" 043061025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 24" 0430611125 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDMALL, INDEX 261/430-011, 1:4 \$LP, 18" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 24" 0430611123 4 \$4,368.23 \$21,841.17 \$5.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 24" 043061133 4 \$4,368.23 \$21,841.17 \$5.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 24" 0430611325 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:4 \$LP, 18" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$3,083.33 \$9,250.00 \$3.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$3,083.33 \$9,250.00 \$3.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$3,083.33 \$9,250.00 \$10,000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$5,288.82 \$89,400.00 17.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$5,288.83 \$9,400.00 10.000 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$5,288.83 \$89,400.00 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611329 2 \$5,288.85 \$89,400.00 EA N U-ENDMALL, BAFF, 261/430-011, 1:3 \$LP, 18" 0430611333 1 \$5,500.00 \$1,000.00 EA N	0430200 25	1	\$2,700.00	\$86,400.00	32.000	EA	N	FLARED END SECTION, CONCRETE, 18"
0430602125 1 \$2,900.00 \$5,800.00 2.000 EA N U-ENDWALL, W\GR 260/430-010,1:4 SLP,18" 0430602133 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDWALL, W\GR 260/430-010,1:4 SLP,30" 0430610025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL, INDEX 261/400-011,1:6 SLP, 18" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/400-011,1:4 SLP, 18" 0430610125 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430610225 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18" 0430610225 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261,430-011,1:3 SLP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611123 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611323 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430613225 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 043061323 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 043061323 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 043061323 1 \$5,500	0430200 29	1	\$2,900.00	\$5,800.00	2.000	EA	N	FLARED END SECTION, CONCRETE, 24"
0430602133 1 \$3,950.00 \$7,900.00 2.000 EA N U-ENDWALL, NDEX 261/430-010,1:4 SLP,30" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:6 SLP, 18" 0430610129 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430610125 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430610125 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 043061125 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430611123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF, 261/430-011,1:4 SLP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011,1:4 SLP, 18" 043061123 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF, 261/430-011,1:4 SLP, 18" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011,1:4 SLP, 18" 043061123 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:4 SLP, 18" 043061323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061323 1 \$2,565.00 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,24" 043061333 1 \$5,500.00 \$11,000.00 12.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061333 1 \$5,500.00 \$11,000.00 12.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:6 SLP,18" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:6 SLP,18" 04306303 2 \$6,650.00 \$1,000.00 \$1,000.00 \$1,000.00	0430600125	1	\$2,550.24	\$12,751.20	5.000	EA	N	U-ENDWALL, IND 260/430-010, 1:4 SLP, 18"
0430610025 1 \$7,310.00 \$7,310.00 1.000 EA N U-ENDWALL,INDEX 261/430-011,1:6 SLP, 18" 0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL,INDEX 261/430-011,1:4 SLP, 18" 0430610125 1 \$4,893.85 59,787.70 2.000 EA N U-ENDWALL,INDEX 261/430-011,1:4 SLP, 24" 0430610225 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL,INDEX 261/430-011,1:3 SLP, 18" 043061025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL,INDEX 261/430-011,1:3 SLP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 15" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611123 4 \$4,368.23 \$21,641.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 043061123 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 043061123 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 043061323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 043061323 1 \$4,441.6 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 043061323 1 \$5,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,24" 043061333 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,24" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,24" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,24" 043061303 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061303 1 \$5,500.00 \$1,000.00 C.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061303 1 \$5,500.00 \$1,000.00 C.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430812 25 1 \$5,000.00 \$1,000.00 C.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430813 25 1 \$5,000.00 \$1,000.00 C.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430813 25 1 \$5,000.00 \$1,000.00 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP,24" SLP,24" SLP,24" SLP,24" SLP,24	0430602125	1	\$2,900.00	\$5,800.00	2.000	EA	N	U-ENDWALL,W \GR 260/430-010,1:4 SLP,18"
0430610125 1 \$4,711.00 \$4,711.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 18" 0430610129 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 24" 043061025 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18" 043061025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18" 043061123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, INDEX 261,BAFFLES,1:6 SLP, 18" 043061125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 043061129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 043061133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 043061325 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061323 1 \$2,565.50 \$9,000.00 3.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,81,182 SLP,30" 043061225 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, BAFF,81,182 SLP,30" 043061233 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF,81,182 SLP,30" 04308120 2 \$1 \$5,000.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF,81,182 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF,81,182 SLP,30" 0430821 23 1 \$5500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 \$20,000 EA N CLEANING & SEALING EXIST PIPE JNT,14" SS 0430821 25 1 \$5,000.00 \$1,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430821 25 1 \$5,000.00 \$1,000.00 EA N CLEANING & SEALING EXIST PIPE	0430602133	1	\$3,950.00	\$7,900.00	2.000	EA	N	U-ENDWALL,W \GR 260/430-010,1:4 SLP,30"
0430610129 1 \$4,893.85 \$9,787.70 2.000 EA N U-ENDWALL, INDEX 261/430-011,1:4 SLP, 24" 0430610225 1 \$4,691.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18" 043061025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261,BAFFLES,1:6 SLP, 18" 0430611123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFFLES,1:6 SLP, 18" 0430611125 8 \$3,591.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 21" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 21" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 20" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611323 1 \$2,565.00 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,11:2 SLP,30" 043061333 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,11:2 SLP,30" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,11:5 SLP,30" 043061333 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES,11:5 SLP,30" 043061225 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 CA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 CA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$1,000.00 CA N U-ENDWALL, BAFF SEALING EXIST PIPE JNT,54" SO 0430830 28 \$245.54 \$743,742.15 \$3,000.00 CY N PIPE FILLING AND PLUGGING 0430885 36 1 \$1,341.00 \$6,705.00 \$1,000 EA N	0430610025	1	\$7,310.00	\$7,310.00	1.000	EA	N	U-ENDWALL, INDEX 261/430-011,1:6 SLP, 18"
0430610225 1 \$4,681.00 \$4,681.00 1.000 EA N U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18" 0430611025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261,BAFFLES,1:6 SLP, 18" 0430611023 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 043061133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611325 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061333 1 \$5,550.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,24" 0430613033 1 \$5,550.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,112 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF GRATE,1:6 SLP,30" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF GRATE,1:6 SLP,30" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF GRATE,1:6 SLP,30" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF GRATE,1:6 SLP,30" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 27 \$1,000.00 \$20,000.00 \$20,000.00 \$20,000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 27 \$2,188.48 \$1,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 28 \$5,255.88 \$8,990.00 \$1,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 27 \$1,000.00 \$20,000.00 \$20,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 27 \$1,000.00 \$2,000.00 \$2,000.0	0430610125	1	\$4,711.00	\$4,711.00	1.000	EA	N	U-ENDWALL, INDEX261/430-011, 1:4 SLP, 18"
0430611025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261,BAFFLES,1:6 SLP, 18" 0430611123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 15" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,24" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,30" 0430612025 2 \$5,258.82 \$89,400.00 17,000 EA N U-ENDWALL, BAFFLES, IS SLP,30" 0430612025 2 \$5,258.00 \$10,000 \$2,000 EA N U-ENDWALL, BAFFLES, INDEX 261,1:2 SLP,30" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES, IS SLP,30" 0430612025 2 \$5,258.82 \$89,400.00 17,000 EA N U-ENDWALL, BAFFLES, IS SLP,30" 0430613033 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES, IS SLP,30" 0430820 25 1 \$5,500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFFLES, INDEX 261,1:2 SLP,30" 0430821 25 1 \$5,000.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$5,000.00 \$2,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 25 1 \$5,000.00 \$20,000.00 EA N CLEANING & SEALING EXIST PIPE JNT,54" CD 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N CLEANING & SEALING EXIST PIPE JNT,54" CD 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430886 24 1 \$5,000.00 \$5,000.00 5.000 EA N MANATEE GATE FOR 24" PIPE	0430610129	1	\$4,893.85	\$9,787.70	2.000	EA	N	U-ENDWALL, INDEX 261/430-011,1:4 SLP, 24"
0430611025 1 \$2,060.00 \$2,060.00 1.000 EA N U-ENDWALL, INDEX 261, BAFFLES, 1:6 SLP, 18" 0430611123 1 \$2,581.86 \$2,581.86 1.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 15" 0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 24" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 24" 043061125 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 20" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 043061329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 24" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430612025 2 \$5,258.82 \$89,400.00 17,000 EA N U-ENDWALL, BAFF, 261/430-011, 1:3 SLP, 18" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:3 SLP, 18" 0430821 25 1 \$5,000.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 18" 0430821 25 1 \$5,000.00 \$1,000.00 EA N CLEANING & SEALING EXIST PIPE JNT, 15" SS 0430821 25 1 \$5,000.00 \$2,000.00 EA N CLEANING & SEALING EXIST PIPE JNT, 18" SS 0430821 25 1 \$5,000.00 \$2,000.00 EA N CLEANING & SEALING EXIST PIPE JNT, 18" SS 0430821 25 1 \$5,000.00 \$20,000.00 EA N CLEANING & SEALING EXIST PIPE JNT, 18" SS 0430821 25 1 \$5,000.00 \$20,000.00 EA N CLEANING & SEALING EXIST PIPE JNT, 54" CD 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N CLEANING & SEALING EXIST PIPE JNT, 54" CD 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 42" PIPE	0430610225	1	\$4,681.00	\$4,681.00	1.000	EA	N	U-ENDWALL, INDEX 261/430-011,1:3 SLP, 18"
0430611125 8 \$3,515.74 \$288,290.38 82.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18" 0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611225 4 \$2,953.86 \$22,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFF,ES,1NDEX 261,1:2 SLP,24" 043061333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,11:2 SLP,24" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF GRATE, 1:6 SLP,18" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N U-ENDWALL, BAFF GRATE, 1:6 SLP,18" 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430821 25 1 \$5,000.00 \$1,792.00 10.00 EA N MANATEE GRATE FOR 36" PIPE O430885 36 1 \$1,792.00	0430611025	1	\$2,060.00		1.000	EA	N	U-ENDWALL, INDEX 261, BAFFLES, 1:6 SLP, 18"
0430611129 4 \$3,693.24 \$44,318.93 12.000 EA N U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24" 0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL /BAFF,261/430-011, 1:4 SLP,30" 0430611225 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,18" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,24" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 043061205 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFF GRATE, 1:6 SLP,18" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF GRATE, 1:6 SLP,18" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 33 1 \$855.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430820 24 1 \$5,000.00 \$19,215.00 3.000 EA N CLEANING & SEALING EXIST PIPE JNT,54" CD 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GATE FOR 36" PIPE	0430611123	1	\$2,581.86	\$2,581.86	1.000	EA	N	U-ENDWALL, BAFF, 261/430-011, 1:4 SLP, 15"
0430611133 4 \$4,368.23 \$21,841.17 5.000 EA N U-ENDWALL /BAFF,261/430-011, 1:4 SLP,30" 0430611225 4 \$2,953.86 \$29,538.60 10.000 EA N U-ENDWALL, BAFF,261/430-011,1:3 SLP,18" 0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF,261/430-011,1:2 SLP,15" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,24" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,24" 0430612025 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, GRATE, 1:6 SLP,18" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,I1:2 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430820 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,54" CD 0430830 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$5,000.00 \$5,000.00 1.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GATE FOR 24" PIPE	0430611125	8	\$3,515.74	\$288,290.38	82.000	EΑ	N	U-ENDWALL, BAFF,261/430-011,1:4 SLP, 18"
0430611225	0430611129	4	\$3,693.24	\$44,318.93	12.000	EA	N	U-ENDWALL, BAFF,261/430-011,1:4 SLP, 24"
0430611323 1 \$2,565.50 \$5,131.00 2.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,15" 0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFFLES, INDEX 261,1:2 SLP,24" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430612025 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N U-ENDWALL, BAFF & GRATE, 1:6 SLP,30" 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430822 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430820 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N MANATEE GATE FOR 36" PIPE 0430885 42 1 \$5,000.00 \$5,000.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430611133	4	\$4,368.23	\$21,841.17	5.000	EA	N	U-ENDWALL /BAFF,261/430-011, 1:4 SLP,30"
0430611325 5 \$4,144.16 \$140,901.44 34.000 EA N U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18" 0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFFLES,INDEX 261,1:2 SLP,24" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430612025 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, GRATE, 1:6 SLP,18" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:6 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430822 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430820 02 8 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N FLAP GATES, 0-24" 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 42 1 \$5,000.00 \$5,000.00 5.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GATE FOR 24" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GATE FOR 24" PIPE	0430611225	4	\$2,953.86	\$29,538.60	10.000	EA	N	U-ENDWALL, BAFF, 261/430-011, 1:3 SLP, 18"
0430611329 2 \$3,083.33 \$9,250.00 3.000 EA N U-ENDWALL, BAFFLES, INDEX 261,1:2 SLP,24" 0430611333 1 \$4,500.00 \$9,000.00 2.000 EA N U-ENDWALL, BAFFLES,1:2 SLP,30" 0430612025 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, GRATE, 1:6 SLP,18" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAF& GRATE,1:6 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430822 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430830 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 36 1 \$1,792.00 \$5,000.00 1.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430611323	1	\$2,565.50	\$5,131.00	2.000	EA	N	U-ENDWALL, BAFF, 261/430-011, 1:2 SLP, 15"
0430611333	0430611325	5	\$4,144.16	\$140,901.44	34.000	EA	N	U-ENDWALL, BAFF, 261/430-011,1:2 SLP,18"
0430612025 2 \$5,258.82 \$89,400.00 17.000 EA N U-ENDWALL, GRATE, 1:6 SLP,18" 0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAF& GRATE, 1:6 SLP,30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT,18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT,24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430822 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT,30" SS 0430830 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N FLAP GATES, 0-24" 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GATE FOR 42" PIPE	0430611329	2	\$3,083.33	\$9,250.00	3.000	EΑ	N	U-ENDWALL, BAFFLES, INDEX 261,1:2 SLP,24"
0430613033 1 \$5,500.00 \$11,000.00 2.000 EA N U-ENDWALL, BAF& GRATE, 1:6 SLP, 30" 0430821 23 1 \$547.12 \$2,188.48 4.000 EA N CLEANING & SEALING EXIST PIPE JNT, 15" SS 0430821 25 1 \$500.00 \$1,000.00 2.000 EA N CLEANING & SEALING EXIST PIPE JNT, 18" SS 0430821 29 2 \$676.92 \$8,799.95 13.000 EA N CLEANING & SEALING EXIST PIPE JNT, 24" SS 0430821 33 1 \$859.77 \$859.77 1.000 EA N CLEANING & SEALING EXIST PIPE JNT, 30" SS 0430822 42 1 \$5,000.00 \$20,000.00 4.000 EA N CLEANING & SEALING EXIST PIPE JNT, 54" CD 0430830 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N FLAP GATES, 0-24" 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430611333	1	\$4,500.00	\$9,000.00	2.000	EA	N	U-ENDWALL, BAFFLES, 1:2 SLP, 30"
0430821 23	0430612025	2	\$5,258.82	\$89,400.00	17.000	EA	N	U-ENDWALL, GRATE, 1:6 SLP,18"
0430821 25	0430613033	1	\$5,500.00	\$11,000.00	2.000	EΑ	N	U-ENDWALL, BAF& GRATE, 1:6 SLP, 30"
0430821 29	0430821 23	1	\$547.12	\$2,188.48	4.000	EA	N	CLEANING & SEALING EXIST PIPE JNT, 15" SS
0430821 33	0430821 25	1	\$500.00	\$1,000.00	2.000	EA	N	CLEANING & SEALING EXIST PIPE JNT, 18" SS
0430822 42	0430821 29	2	\$676.92	\$8,799.95	13.000	EA	N	CLEANING & SEALING EXIST PIPE JNT, 24" SS
0430830 28 \$245.54 \$743,742.15 3,029.000 CY N PIPE FILLING AND PLUGGING 0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N FLAP GATES, 0-24" 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 42 1 \$5,000.00 \$5,000.00 1.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430821 33	1	\$859.77	\$859.77	1.000	EA	N	CLEANING & SEALING EXIST PIPE JNT, 30" SS
0430880 01 1 \$6,405.00 \$19,215.00 3.000 EA N FLAP GATES, 0-24" 0430885 36 1 \$1,792.00 \$1,792.00 1.000 EA N MANATEE GATE FOR 36" PIPE 0430885 42 1 \$5,000.00 \$5,000.00 1.000 EA N MANATEE GATE FOR 42" PIPE 0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430822 42	1	\$5,000.00	\$20,000.00	4.000	EA	N	CLEANING & SEALING EXIST PIPE JNT,54" CD
0430885 36	0430830	28	\$245.54	\$743,742.15	3,029.000	CY	N	PIPE FILLING AND PLUGGING
0430885 42	0430880 01	1	\$6,405.00	\$19,215.00	3.000	EA	N	FLAP GATES, 0-24"
0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430885 36	1	\$1,792.00	·	1.000	EA	N	·
0430886 24 1 \$1,341.00 \$6,705.00 5.000 EA N MANATEE GRATE FOR 24" PIPE	0430885 42	1	\$5,000.00	\$5,000.00	1.000	EA	N	MANATEE GATE FOR 42" PIPE
	0430886 24	1	\$1,341.00	\$6,705.00	5.000	EA	N	MANATEE GRATE FOR 24" PIPE
0430886 36	0430886 36	2	\$2,045.20	\$20,452.00	10.000	EA	N	MANATEE GRATE FOR 36" PIPE

EXHIBIT I

SCOPE OF WORK AND COST ESTIMATE FOR MATERIALS TESTING SERVICES

Enterprise Class III Landfill UES Proposal No.: 0810.1118.00030

UES TASK CODE	TASK DESCRIPTION	QTY	UNIT	UNIT COST	COST
1	Moisture Content ASTM D2216 (Borrow Pit)	3	test	\$10.00	\$30.00
2	Percent Fines ASTM D1140 (Borrow Pit)		test	\$30.00	\$90.00
3	Permeability Per ASTM D-5084 (Borrow Pit)		test	\$350.00	\$1,050.00
4	4 Atterberg Limits ASTM D4318 (Borrow Pit)		test	\$100.00	\$300.00
5	Moisture Content ASTM D2216 (In-place)		test	\$10.00	\$500.00
6	Percent Fines ASTM D1140 (In-Place)		test	\$30.00	\$1,500.00
7	Permeability Per ASTM D-5084 (In-Place)		test	\$350.00	\$17,500.00
8	Atterberg Limits ASTM D4318 (In-Place)		test	\$100.00	\$5,000.00
9	In-Place Thickness Check (Hand Augers) (In-Place)		each	\$45.00	\$6,750.00
10	Modified/Standard Proctor	1	each	\$80.00	\$80.00
11	In-Place Densities (In-Place)	300	each	\$18.00	\$5,400.00
12	Engineering Technician	10	trips	\$165.00	\$1,650.00
13	Signed and Sealed Completion Reports	3	each	\$35.00	\$255.00
				Total	\$40,105.00
				e Services 7%	\$2,807.35
	Total Construction Mater	ials Te	esting (Cost Estimate	\$42,912.35



PRELIMINARY

AMERICAN ENVIRONMENTAL GROUP

3600 Brecksville Road

Suite 100

Richfield, OH 44286

Phone: 330-659-5930

Project:

Description:

Bid Location:

Bid Date:

Revision Date:

Contract #:

WINFIELD-2011-02-D

Winfield - Drilling Budget

Lake City, FL

February 8, 2011

2011-D2019

Pricing Revised 12/13/17 by Jeff Enochs

			by Jeπ Enoch	S
ITEM / DESCRIPTION	BID QTY	U/M	UNIT BID	AMOUNT
MOBILIZATION MOBILIZATION	1.000	•	12,500.00 -10,000.00	\$12,500.00 \$10,000.00
DRILLING WELL DRILLING 36" DIAMETER	2,280.000	LF	43.00 —— 35.00 —	\$98,040.00 \$79,800.00
WELL COMPLETION WELL COMPLETION NO MATERIALS	2,280.000	LF	27.00 	\$61,582.00 \$50,160.00
COMPL 6" PVC WELL COMPLETION 6" PVC PIPE W/ 10'	2,280.000	LF	22.50 — 17.00 —	\$51,300.00 \$38,760.00
STICKUP CANDY CANE BENTONITE BENTONITE (4) OF DEPARTMENT	540.000	BAG	13.50 —— 10.50	\$7,290.00 -\$5,670.00
BENTONITE (1) 2' PLUGS PER WELL GRAVEL GRAVEL GRANITE #4 PROVIDED BY WM	750.000	TON	88.50 68.00	\$66,375.00 \$51,000.00
BENCHING BENCHING IF REQUIRED	45.000	EA	650.00 	\$29,250.00 \$18,000.00
MATERIAL FREIGHT MATERIAL FREIGHT	1.000	LS	\$7,500.00 -6,000.00	\$7,500.00 -\$6,000.00

\$333,837.00 \$259,390.00

Mobiliz.

Drilling

960 LF@ 35/FT= 33,600 546 LF@ 35/FT= \$19,110

960 LF@ 22/FT = #21,120

546 LF @ 22/FT = \$ 12,012

5464-@17/FT=\$19,28Z

Well Stickup

Well Comp.

960 LF@ 17/FT = \$16,320

Buntonite

288 bags @ 16.50/Bag = # 3,024 252 bags @ 10.50/Bag = # 2,646

0 320 tons@ #= /ton = # 21,740 180 tons@ [10n = # 12,240

15 @ # 400 leach = # 6,000 12 @ 400/each = # 4,800

Gravel benches

AMERICAN ENVIRONMENTAL GROUP, 600

#117,824 or (# 4,909/vent

\$ 76,090 or \$ 3,623/vent

Winfield 2017 Permit Renewal (Item 7)

Passive Gas Vents

Class I (24 vents)					Class III (21 vents)	vents)		
	Qty		Cost/ea		Qty		Cost/ea	
Mobilization	1	1 n/a	\$12,500.00	\$12,500.00 \$12,500.00	1	1 n/a	\$12,500.00	\$12,500.00 \$12,500.00
Drilling	17 096 FE	LF	\$43.00	\$41,280.00	546	LF	\$43.00	\$43.00 \$23,478.00
Well Completion	096	LF	\$27.00	\$25,920.00	546	LF	\$27.00	\$27.00 \$14,742.00
Well Stickup	17 096 FE	LF	\$22.50	\$21,600.00	546	LF	\$22.50	\$22.50 \$12,285.00
Bentonite	288	288 Bags	\$13.50	\$3,888.00		252 Bags	\$13.50	\$3,402.00
Gravel	320	320 Tons	\$88.50	\$28,320.00	180	180 Tons	\$88.50	\$88.50 \$15,930.00
Benching	15	15 na	\$650.00	\$9,750.00	12	12 na	\$650.00	\$7,800.00
Material Freight	1	1 na	\$7,500.00	\$7,500.00	1	na	\$7,500.00	\$7,500.00
Total				\$150,758.00				\$97,637.00
Price per Vent				\$6,281.58				\$4,649.38

Nathan Dodge

From: John Arnold <john.phillip.arnold@gmail.com>

Sent: Friday, December 21, 2018 3:19 PM

To: Nathan Dodge

Subject: Fwd: Enterprise Landfill FDEP Closure Cost Estimate

----- Forwarded message -----

From: Daniel Zimmerman <<u>dz@zeiosi.com</u>>

Date: Fri, Dec 21, 2018 at 3:02 PM

Subject: RE: Enterprise Landfill FDEP Closure Cost Estimate

To: John Arnold < john.phillip.arnold@gmail.com >

Good afternoon John I have review the information that you asked about and I believe that those numbers will work with us. If you need a formal proposal we can provide that for you also. Please let me know if you need anything else.

Have a great and safe holiday season.

DZ

Daniel J. Zimmermann

Zimmer Equipment, Inc.

dz@zeiosi.com

(813) 248-5944

From: John Arnold < john.phillip.arnold@gmail.com>

Sent: Friday, December 21, 2018 11:03 AM **To:** Daniel Zimmerman < dz@zeiosi.com >

Subject: Fwd: Enterprise Landfill FDEP Closure Cost Estimate

Reference #7 2 of 2

----- Forwarded message -----From: John Arnold <john.phillip.arnold@gmail.com> Date: Fri, Dec 21, 2018 at 9:19 AM Subject: Enterprise Landfill FDEP Closure Cost Estimate To: Daniel Zimmermann <dz@zeiosi.com> Daniel, The FDEP would like for us to confirm costs associated with the removal and disposal of the following materials from our landfill located at 41111 Enterprise Road, Dade City, FL 33525. I've attached the estimate that we received from Choice Environmental (12/6/12) that is in our current estimate. Please provide quotes for the removal and disposal costs. 1. Ferrous Metal (500cy): \$4,125 2. Aluminum (300cy): \$2,500 3. Stainless Steel (300cy): \$2,500 4. Copper (25cy): \$250 5. Asphalt (300cy): \$3,000 6. Consrete/Rubble: \$\$3,000 7. Electronics (8cy): \$300 8. Class I (20cy): \$325 9. Paint/Solvent/Oil/Etc. (40cy): \$650

Thanks

John Arnold, P.E. Ph. (813) 477-1719

CESPO05 03/23/2020-07.00.01 Page: 2

Florida Department of Transportation Item Average Unit Cost From 2019/03/01 to 2020/02/29

Contract Type: CC STATEWIDE
Displaying: VALID ITEMS WITH HITS
From: 0102 1 To: 9999999

	No. of	Weighted	Total	Total	Unit		
Item	Conts	Average	Amount	Quantity	Meas	Obs?	Description
							
0102150 1	52	\$4.69	\$206,511.29	44,067.000	ED	N	PORTABLE REGULATORY, SIGN
0102150 2	52	\$4.79	\$208,471.28	43,566.000	ED	N	RADAR SPEED DISPLAY UNIT
0102909	9	\$28.53	\$96,260.85	3,374.000	DA	N	TEMPORARY RAISED RUMBLE STRIPS
0102913 12	1	\$3,200.00	\$1,164.80	.364	GM	N	REMOVABLE TAPE, BLACK, SKIP
0102913 21	2	\$12,867.01	\$24,202.84	1.881	GM	N	REMOVABLE TAPE, WHITE, SOLID 6"
0102913 22	1	\$3,200.00	\$1,164.80	.364	GM	N	REMOVABLE TAPE, WHITE, SKIP
0102913 23	2	\$9.09	\$1,373.00	151.000	LF	N	REMOVABLE TAPE, WHITE, 12" STOP BAR
0102913 24	1	\$6.00	\$2,298.00	383.000	LF	N	REMOVABLE TAPE, WHITE, 12" CROSSWALK
0102913 31	2	\$12,911.67	\$22,337.19	1.730	GM	N	REMOVABLE TAPE, YELLOW, SOLID 6"
0104 1	28	\$2.96	\$165,562.39	55,986.000	SY	N	ARTIFICIAL COVERINGS / ROLL EROSION CNTL
0104 6	2	\$12.40	\$17,741.25	1,431.000	LF	N	TEMPORARY SLOPE DRAIN / RUNOFF CONT STR
0104 7	6	\$3,457.78	\$148,684.58	43.000	EA	N	SEDIMENT BASIN / CONTAINMENT SYSTEM
0104 9	7	\$1,632.53	\$89,789.30	55.000	EA	N	SEDIMENT BASIN / CONTAINMENT SY CLEANOUT
0104 10 3	186	\$1.50	\$3,206,916.90	2,140,136.000	LF	N	SEDIMENT BARRIER
0104 11	82	\$9.39	\$1,345,041.31	143,263.000	LF	N	FLOATING TURBIDITY BARRIER
0104 12	47	\$4.30	\$289,811.84	67,465.000	LF	N	STAKED TURBIDITY BARRIER- NYL REINF PVC
0104 15	56	\$1,749.65	\$645,619.70	369.000	EA	N	SOIL TRACKING PREVENTION DEVICE
0104 18	179	\$102.24	\$1,031,012.70	10,084.000	EA	N	INLET PROTECTION SYSTEM
0104 19	5	\$9.84	\$37,597.90	3,819.000	SY	N	CHEMICAL TREATMENT FOR EROSION CONTROL
0107 1	180	\$18.84	\$2,939,777.51	156,014.830	AC	N	LITTER REMOVAL
0107 2	177	\$33.00	\$3,758,129.32	113,867.110	AC	N	MOWING
0108 1	77	\$9,992.58	\$939,302.11	94.000	LS	N	MONITOR EXISTING STRUCTURES- SETTL
0108 2	54	\$10,537.15	\$716,525.86	68.000	LS	N	MONITOR EXISTING STRUCTURES- VIBRA
0108 3	2	\$13,187.00	\$26,374.00	2.000	LS	N	MONITOR EXISTING STRUCTURES- GROUN
0110 1 1	218	\$18,725.74	\$68,414,678.21	3,653.510	AC	N	CLEARING & GRUBBING
0110 2 2	39	\$19,511.83	\$631,988.04	32.390	AC	N	SELECTIVE CLEARING AND GRUBBING, TREES R
0110 2 3	4	\$10,567.58	\$101,448.75	9.600	AC	N	SELECTIVE CLEARING AND GRUB, PLANT PRES
0110 3	46	\$50.79	\$18,299,941.87	360,340.000	SF	N	REMOVAL OF EXISTING STRUCTURES/BRIDGES
0110 4 10	181	\$19.83	\$8,875,999.92	447,676.000	SY	N	REMOVAL OF EXIST CONC
0110 6	1	\$3,000.00	\$9,000.00	3.000	EA	N	PLUGGING WATER WELLS, NON-ARTESIAN
0110 7 1	40	\$169.64	\$122,991.40	725.000	EA	N	MAILBOX, F&I SINGLE
0110 71 1	4	\$404.35	\$407,584.00	1,008.000	LF	N	BRIDGE FENDER SYSTEM, REMOVAL & DISPOSAL
0110 73	5	\$55.41	\$226,914.00	4,095.000	LF	N	REMOVE EXISTING BULKHEAD
0120 1	138	\$6.52	\$37,708,462.97	5,783,585.200	CY	N	REGULAR EXCAVATION
0120 2 2	50	\$16.86	\$2,213,776.70	131,310.500	CY	N	BORROW EXCAVATION, TRUCK MEASURE
0120 3	2	\$39.30	\$64,487.00	1,641.000	CY	N	LATERAL DITCH EXCAVATION
0120 4	35	\$8.95	\$14,131,805.98	1,578,757.600	CY	N	SUBSOIL EXCAVATION
0120 5	6	\$27.35	\$934,179.00	34,154.500	CY	N	CHANNEL EXCAVATION
0120 6	125	\$9.83	\$88,888,901.09	9,044,946.700	CY	N	EMBANKMENT
0120 11	1	\$30.00	\$30,660.00	1,022.000	SY	N	EMBANKMENT- SPECIAL SELECT FOR RIGID PAV

FLORIDA JETCLEAN

.....

HIGH PRESSURE WATER JETTING – EXPLOSION PROOF INSPECTION PIPE LOCATING – NO DIG REPAIRS – VACUUM TRUCK SERVICES

......

7538 Dunbridge Drive TEL: 800-226-8013 Odessa, FL 33556 FAX: 813-926-4616

www.floridajetclean.com

PROPOSAL

DATE : 12/19/2018

TO : Nathan Dodge – Locklear & Associates FROM : Ralph Calistri (floridajetclean@yahoo.com)

SUBJECT : LCS Maintenance Proposal for Enterprise Rd Class III Recycling &

Disposal Facility

Thank you for your inquiry. We confirm our capability and interest in carrying out this work for Locklear & Associates at the Enterprise Road Class III Recycling & Disposal Facilty.

FLORIDA JETCLEAN specializes in leachate collection system maintenance and inspection, and has developed a considerable amount of specific expertise in this field over the last 30+ years. Our company has worked at an extensive number of landfills in Florida, Georgia, the Carolinas, Delaware, and westward to Arkansas. We have worked with most engineering companies active in this field, and have also fostered excellent working relationships with the regulatory authorities. We use modified jetting equipment designed to achieve extended pipe distances found in landfill environments and our explosion proof camera equipment complies with all OSHA and regulatory mandates for methane piping. Substantial references are available on request.

Based on the information provided in your email, we propose as follows:

High-pressure water-jetting and explosion-proof video-inspection of roughly 380 LF of existing 8" leachate collection piping \$3,600.00

Subject to:

- An adequate, no charge, water supply for jetcleaning.
- 2 wheel drive vehicle access within 10'-15' of each cleanout
- Continuity of access allowing work to be carried out on a single mobilization
- Exposed and opened cleanouts at ground level
- Our equipment and procedures fully meet OSHA and DEP requirements. In particular our video equipment is certified Class 1, Division 1, Gas Groups C & D (i.e. explosion proof). This is required by OSHA in methane piping.

- Current technology limitations <u>may</u> preclude the use of tractor video systems (range of 1000'+) in 8" or smaller lines restricted to cleanout access. If a push video system has to be used, we will be limited to a maximum 400' 500' from each point of entry. This may mean that sections of these pipes cannot be inspected, and successful jetcleaning will therefore have to be evidence of pipe integrity in any inaccessible segments.
- No pumping or vacuum removal is included. Throughput from jetcleaning will be flushed through to pump stations and/or sump areas.
- Pricing is unrelated to actual or achieved footages but on the number of setups required and the time we anticipate being on site.
- All pricing subject to both jetting and video work being carried out by this company.
- Pipes affected by heavy, non-routine silting, requiring more than 1 pass of the jetting nozzle, may require additional hourly billing to complete.

• Payment : Net 30 days

Regards,

Ralph Calistri – Florida Jetclean - 800-226-8013

Florida Fill & Grading, Inc. Charles Boone, Jr., General Contractor CG-C060055

P.O. Box 7044 Lake City, Fl 32055 1110 SW Sisters Welcome Road (32025) (386)755-2298

NAME / ADDRESS
SUWANNEE CO. PUBLIC WORKS DEPT.
13150 80 th TERRACE
LIVE OAK, FL 32060

Estimate

DATE	ESTIMATE#

SINCE 1987

A FULL SERVICE CONSTRUCTION CO

		P.O. NO.	PROJECT
			FLUME 5 REPLAC
DESCRIPTION	QTY	COST	TOTAL
LANDFILL EROSION CONTROL REPAIR FLUME 5 PER FRANK DARABI, P.E.			
ITEM 01 PREPARE SUBGRADE LAYER PLUS REMOVE ANY EXPOSED WASTE, PER CY	83	10.00	830.00
ITEM 02 FINAL SOIL INCLUDING TOP SOIL, PER CY	56	10.00	560.00
ITEM 03 SOD, PER SY	22	20.45	449.90
ITEM 04 FERTILIZER, PER AC	0.1	750.00	75.00
STORMWATER CONTROL SYSTEM			
ITEM 05 EARTHWORK, PER CY	33	17.00	561.00
ITEM 06 GRADING, PER SY	200	2.80	560.00
ITEM 06 PIPING, PER LF	16	9.70	155.20
ITEM 07 EROSION CONTROL MATTING, PER SF	975	3.75	3,656.25
CONTINGENCY ALLOWANCE	6,848.45	0.15	1,027.27
IF WE CAN BE OF FURTHER ASSISTANCE, PLEASE DON'T HESITATE TO CALL 386-755-2298			
THANK YOU,			
JEANETTE BOONE, PRESIDENT			
,			

CG-C060055 PRICE FIRM IF ACCEPTED BEFORE 60 DAYS. THANK YOU FOR YOUR BUSINESS! WE ACCEPT VISA/MC	(7.0%)	\$0.00
	TOTAL	\$7,874.62

SIGNATURE		

Attachment 2 Site Life Calculations

Enterprise Class III Landfill Facility Expected Life Calculations Given Parameters:

Rate increase per year = 2%

Days of Operation per year = 286 DAYS

Current Calculated Remaining Volume 5,470,405 CY

Initial Volume of Phase II and III 2002 = CY

Density of waste placement= 0.675 TONS/CY

Density of waste placement= 1350 LBS/CY

	Expected	Life Calculation	Table:
Year	Rate (tons/day)	Volume Phase I Remaining (CY)	Volume Phase II and III Remaining (CY)
2018	1500	5,470,405.30	-
2019	1530	4,822,138.63	-
2020*	2500	3,762,879.37	-
2021	2550	2,682,434.93	2,682,434.93
2022	2601	1,580,381.60	1,580,381.60
2023	2653	456,287.20	456,287.20
2024	2706	(690,289.09)	(690,289.09)
2025	2760	(1,859,796.91)	(1,859,796.91)
2026	2815	(3,052,694.88)	(3,052,694.88)
2027	2872	(4,269,450.80)	(4,269,450.80)
2028	2929	(5,510,541.85)	(5,510,541.85)
2029	2988	(6,776,454.72)	(6,776,454.72)
2030	3047	(8,067,685.85)	(8,067,685.85)
2031	3108	(9,384,741.60)	(9,384,741.60)
2032	3171	(10,728,138.46)	(10,728,138.46)
2033	3234	(12,098,403.26)	(12,098,403.26)
2034	3299	(13,496,073.36)	(13,496,073.36)
2035	3365	(14,921,696.86)	(14,921,696.86)
2036	3432	(16,375,832.83)	(16,375,832.83)
2037	3501	(17,859,051.52)	(17,859,051.52)
2038	3571	(19,371,934.58)	(19,371,934.58)
2039	3642	(20,915,075.30)	(20,915,075.30)
2040	3715	(22,489,078.84)	(22,489,078.84)
2041	3789	(24,094,562.45)	(24,094,562.45)
2042	3865	(25,732,155.73)	(25,732,155.73)
2043	3942	(27,402,500.88)	(27,402,500.88)
2044	4021	(29,106,252.93)	(29,106,252.93)
2045	4102	(30,844,080.02)	(30,844,080.02)
2046	4184	(32,616,663.65)	(32,616,663.65)
2047	4267	(34,424,698.95)	(34,424,698.95)
2048	4353	(36,268,894.96)	(36,268,894.96)
2049	4440	(38,149,974.90)	(38,149,974.90)
2050	4528	(40,068,676.42)	(40,068,676.42)
2051	4619	(42,025,751.99)	(42,025,751.99)

*Manually updated rate (tons/day)

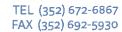
CAD VOLUME		CY CY CY	Total Volume 36" Cover Volume Based on 3D Outline Existing Waste Volume (From Survey) Remaining Volume as of September
	5,470,405.30	CY	2018 (Survey Date)

Example Calculations:

Volume Used Per Year
$$[CY] = Rate \left[\frac{tons}{day} \right] * \frac{Days \ of \ Operation \ [Days]}{Density \left[\frac{tons}{CY} \right]}$$

Attachment 3

Gas Probe Data





4140 NW 37th Place, Suite A, Gainesville, FL 32606 www.locklearconsulting.com

March 27, 2020

Justin Chamberlain, P.G.
Florida Department of Environmental Protection – Southwest District 13051 N. Telecom Parkway
Temple Terrace, Florida 33637

RE: Installation of Gas Probes GP-4 and GP-5

Angelo's Recycled Materials - Enterprise Class III Landfill

Dear Mr. Chamberlain,

Under the guidance/observation of Walker Wrenn, P.G., gas probes GP-4 and GP-5 were installed by Drill Pro d/b/a Groundwater Protection on April 30, 2019.

The probes were installed so the screened interval captures elevations relative to waste. Gas probe GP-4 is screened from 74.5 to 89.5 NGVD29 and gas probe GP-5 is screened from 74.7 to 89.7 NGVD29.

Quarterly sampling per the facility permit has performed by Ideal Tech Services, Inc. staff. Results from GP-4 and GP-5 were reported to the Department for the sampling events that occurred on 6/11/19, 9/16/19 and 12/16/19.

The Drill Pro d/b/a Groundwater Protection probe installation logs are provided in Attachment 1. The Bobby W. Simmons Land Surveyor survey is provided in Attachment 2. Figure 1, Site Map, is provided in Attachment 3. The Ideal Tech Services, Inc. landfill gas results for quarters 2, 3 and 4 of 2019 are provided in Attachment 4.

If you have any questions regarding this report, please contact me at (352) 672-6867.

Sincerely,

C. Walker Wrenn

Environmental Services Division Director

P:\P Drive Files\ANGELOS (FLORIDA)\Enterprise Class HI\COMPLIANCE MONITORING\WELL INFORMATION\Cell 17 mod\Completion Report pdfs\Gas Probe Narrative.docx

Xc:

John Arnold, P.E.

Attachment 1: Probe Installation Logs

Attachment 2: Survey

Attachment 3: Figure 1, Site Map
Attachment 4: Landfill Gas Results



ATTACHMENT 1 PROBE INSTALLATION LOGS

WELL COMPLETION LOG

Water Mgmt. Dist.: Permit Number:

Work Order:

419036

Type of Well:

Well Number:

<u>GP 4</u>

Method Used: Borehole Diaz. 6"

S/T/R:

Name:

C,S,Z:

Address:

Gas Well

Sonic

Consultant:

Client / Consultant Information

Site Information:

Locklear & Assoc.

Dade City Landfill

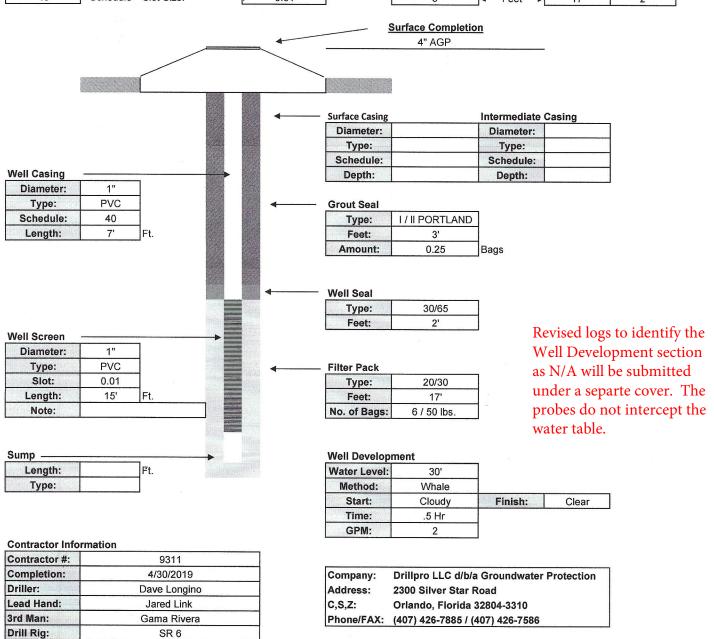
41111 Enterprise Rd

Field Rep:

Walker Wrenn

Dade City, FL

Well	Well	Well	Screen	Casing	Bags	Sand	Filter	Well
Diameter	Туре	Depth	Length	Length	Grout	Bags/Weight	Туре	Seal
1"	PVC	22'	15'	7'	0.25	6 / 50 lbs.	20/30	30/65
40 ←	Schedule	Slot Size:	0.01		3'	← Feet →	17'	2'



WELL COMPLETION LOG

Water Mgmt. Dist.: Permit Number:

Work Order:

419036

Type of Well:

Gas Well

Well Number:

<u>GP 5</u>

Method Used:

Sonic

Borehole Diaz. 6"

Site Information:

Name:

Dade City Landfill

Address:

41111 Enterprise Rd

C,S,Z:

Dade City, FL

S/T/R:

Client / Consultant Information

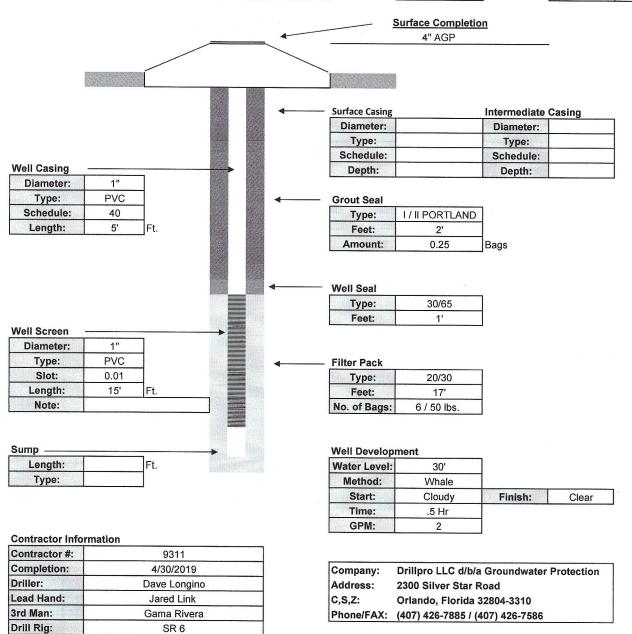
Consultant:

Locklear & Assoc.

Field Rep:

Walker Wrenn

Well	Well	Well	Screen	Casing	Bags	Sand	Filter	Well
Diameter	Туре	Depth	Length	Length	Grout	Bags/Weight	Туре	Seal
1"	PVC	20'	15'	5'	0.25	6 / 50 lbs.	20/30	30/65
40 ◀	 Schedule 	Slot Size:	0.01		2'	← Feet-	17'	1'



ATTACHMENT 2

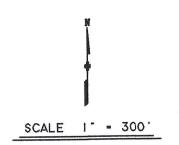
SURVEY

MW 22A N 1454709.42300 E 612808.14400 E CONCRETE BASE 93.78 TOP OF CASING 97.11 1454919.98000 N 612545.64700 E N 1454879.35200 CONCRETE BASE 96.50 E 613003.45100 CONCRETE BASE 94.73 MW 21A N 1454701.92200 E 612415.91600 CONCRETE BASE 90.75 • MW 23B N1454700.54700 E 613202.92700 TOP OF CASING 93.94 MW 22B 1 N1454704.60700 E 612807.60900 CONCRETE BASE 93.75 TOP OF CASING 96.71 CONCRETE BASE 93.07 MW 24A TOP OF CASING 96.27 N 1454408.99900 E 612411.69300 CONCRETE BASE 91.81 MW 24B 13 N 1454404.79500 E-612411.69300 CONCRETE BASE 91.87 TOP OF CASING 94.87 TOP OF CASING 95.04 15 11 ROAD ENTERPRISE ROAD FACILITIES AUTON 10 9 N 1452275.60200 BUFFER E 612810.75500 CONCRETE BASE 125.04

ENTERPRISE ROAD

SECTION 8 TOWNSHIP 25 SOUTH RANGE 22 EAST PASCO COUNTY, FLORIDA

ANGELO'S AGGREGATE MATERIALS. LTD.



THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 AND REFERENCED TO U.S.G.S. BENCHMARK # Q-56. SAID BENCHMARK BEING LOCATED ON THE NORTH SIDE OF JORDAN ROAD AND THE WEST RIGHT-OF-WAY LINE OF THE CSX RAILROAD APPROXIMATELY TWO MILES NORTH OF DADE CITY, FLORIDA.

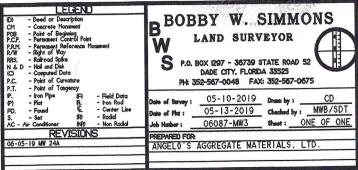
THE SITE BENCHMARK IS LOCATED ON THE NORTH SIDE OF ENTERPRISE ROAD APPROXIMATELY 75 FEET WEST OF THE ENTRANCE TO ANGELO'S RECYCLED MATERIALS LAND FILL. BEING A 5/8" IRON ROD AND CAP NO. LB6382 IN THE CENTER OF AN AERIAL PANEL WITH AN ELEVATION OF 148.94 FEET.

GRID COORDINATES SHOWN HEREON BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM. WEST ZONE.

SPECIFIC PURPOSE SURVEY OF MONITOR WELL LOCATION

BOBBY W. SIMMONS PROFESSIONAL LAND SURVEYOR FLORIDA PLS CERT. NO. 2763

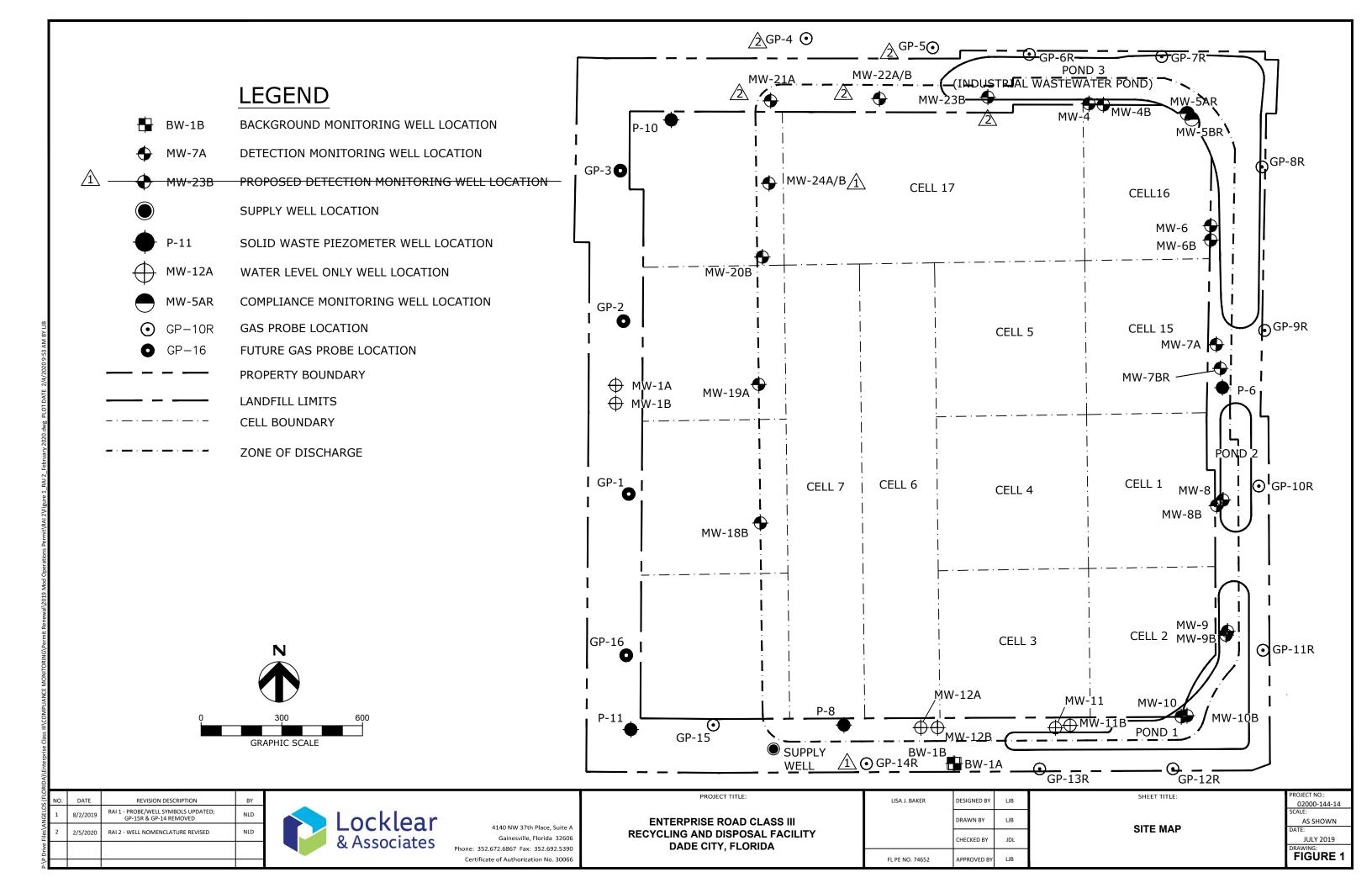
NOT VALID UNLESS IMPRINTED WITH RAISED SEAL



DWG: 06087MW3

ATTACHMENT 3

FIGURE 1, SITE MAP



ATTACHMENT 4 LANDFILL GAS RESULTS



Mr. John Arnold, P.E. Angelo's Recycled Materials 41111 Enterprise Road Dade City, Fl 33525-1539

June 13, 2019

Subject Site: Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials) Second Quarter 2019 LEL Data

Dear Mr. Arnold,

Ideal Tech services, Inc. (ITS) is pleased to present the following notes pertaining to the site of Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials). The second quarterly landfill gas monitoring event of 2019 was performed on 06/11/2019.

06/11/19 Tuesday:

ITS personnel C. Monaco completed calibration of the gas meter and entered the site to begin landfill gas monitoring. On this day, all Landfill Gas wells and the Scale House were measured for % LEL as required by the permit. The results of the measurements are presented in the table located in Attachment A. The instrument calibration was performed at the site and the calibration record for the instrument is included in Attachment B. ITS personnel logged offsite.

Please don't hesitate to contact us with any questions you may have about the enclosed documents.

Respectfully submitted,

Christopher J. Monaco Ideal Tech Services, Inc.

Enc: Attachment A, LANDFILL GAS MEASUREMENTS

Attachment B, EQUIPMENT CALIBRATION LOG

Email: Idealtechservices@earthlink.net
Web Site: http://www.groundwatersamplepro.com

Attachment A LANDFILL GAS MEASUREMENTS

LANDFILL GAS READINGS ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY SECOND QUARTER 2019

LOCATION	% LEL	REMARKS			
	VO (AAA)				
GP-1	-	not installed at this time			
GP-2		not installed at this time			
GP-3		not installed at this time			
GP-4	0%				
GP-5	0%				
GP-6R	0%				
GP-7R	0%				
GP-8R	0%				
GP-9R	0%				
GP-10R	0%				
GP-11R	0%				
GP-12A	0%				
GP-13A	0%				
GP-14R	0%				
GP-15	0%				
GP-16	-9	not installed at this time			
SCALE HOUSE	0%	staff occupied structure			
Date of measurement 06/11/19					

Attachment B EQUIPMENT CALIBRATION LOGS

LANDFILL GAS CALIBRATION RECORD ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY SECOND QUARTERLY 2019

IDEAL TECH SERVICES, INC. W.O.# ARM-EL-53								
BW Technologies Model: GasAlert Max XT II, Serial # MA212-42142								
Date: 6/11/17	STA	ART	END					
20 % LEL	20%	5	20%					
Zero Air	6.0		0.0					
Ambient Background	2	0.0						
Within Limits Yes or No	Within Limits Yes or No YES							
PRINTED NAME OF PERSON WHO PERFORMED SIGNATURE OF PERSON WHO PERFORMED								
CALIBRATION CALIBRATION								
Chris Monaco								
Calibration gases prepared by Pine Environmental. Zero Air = Lot Number BBH-1-2								
EXP 01/20/2021, 20% LEL Methane Lot Number BBH-135A-1-9 EXP 01/20/2021								



Mr. John Arnold, P.E. Angelo's Recycled Materials 41111 Enterprise Road Dade City, Fl 33525-1539

September 25, 2019

Subject Site: Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials) Third Quarter 2019 LEL Data

Dear Mr. Arnold.

Ideal Tech services, Inc. (ITS) is pleased to present the following notes pertaining to the site of Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials). The third quarterly landfill gas monitoring event of 2019 was performed on 09/16/2019.

09/16/19 Monday:

ITS personnel C. Monaco completed calibration of the gas meter and entered the site to begin landfill gas monitoring. On this day, all Landfill Gas wells, and the Scale House were measured for % LEL as required by the permit. The results of the measurements are presented in the table located in Attachment A. The instrument calibration was performed at the site and the calibration record for the instrument is included in Attachment B. ITS personnel logged offsite.

Please don't hesitate to contact us with any questions you may have about the enclosed documents.

Respectfully submitted,

Christopher J. Monaco Ideal Tech Services, Inc.

Enc: Attachment A, LANDFILL GAS MEASUREMENTS

Attachment B, EQUIPMENT CALIBRATION LOG

Email: <u>Idealtechservices@earthlink.net</u>
Web Site: <u>http://www.groundwatersamplepro.com</u>

Attachment A LANDFILL GAS MEASUREMENTS

LANDFILL GAS READINGS ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY THIRD QUARTER 2019

Yourillians						
LOCATION	% LEL	REMARKS				
GP-1	-	not installed at this time				
GP-2	-	not installed at this time				
GP-3	-	not installed at this time				
GP-4	0.0%					
GP-5	0.0%					
GP-6R	0.0%					
GP-7R	0.0%					
GP-8R	0.0%					
GP-9R	0.0%					
GP-10R	0.0%					
GP-11R	0.0%					
GP-12A	0.0%					
GP-13A	0.0%					
GP-14R	0.0%					
GP-15	0.0%					
GP-16	-	not installed at this time				
SCALE HOUSE	0.0%	staff occupied structure				
	Date of measurement 09/16/19					

Attachment B EQUIPMENT CALIBRATION LOGS

LANDFILL GAS CALIBRATION RECORD ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY THIRD QUARTERLY 2019

IDEAL TECH SERVICES, INC. W.O.# ARM-EL-56								
BW Technologies Model: GasAlert Max XT II, Serial # MA212-42142								
Date: 09/16/19	STA	ART	END					
20 % LEL	70%	To and the same of	20%					
Zero Air								
Ambient Background	C	2	0					
	Within Limits Yes or No							
PRINTED NAME OF PERSON WHO PERFORMED CALIBRATION SIGNATURE OF PERSON WHO PERFORMED CALIBRATION								
Chris Monaco								
Calibration gases prepared by Pine Environmental. Zero Air = Lot Number BBH-1-2								
EXP 01/20/2021, 20% LEL Methane Lot Number BBH-135A-1-9 EXP 01/20/2021								



Mr. John Arnold, P.E. Angelo's Recycled Materials 41111 Enterprise Road Dade City, Fl 33525-1539 December 18, 2019

Subject Site: Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials) Fourth Quarter 2019 LEL Data

Dear Mr. Arnold,

Ideal Tech services, Inc. (ITS) is pleased to present the following notes pertaining to the site of Enterprise Class III Landfill and Recycling Facility (Angelo's Recycled Materials). The Fourth quarterly landfill gas monitoring event of 2019 was performed on 12/16/2019.

12/16/19 Monday:

ITS personnel C. Monaco completed calibration of the gas meter and entered the site to begin landfill gas monitoring. On this day, all Landfill Gas wells, and the Scale House were measured for % LEL as required by the permit. The results of the measurements are presented in the table located in Attachment A. The instrument calibration was performed at the site and the calibration record for the instrument is included in Attachment B. ITS personnel logged offsite.

Please don't hesitate to contact us with any questions you may have about the enclosed documents.

Respectfully submitted,

Christopher J. Monaco Ideal Tech Services, Inc.

Enc: Attachment A, LANDFILL GAS MEASUREMENTS

Attachment B, EQUIPMENT CALIBRATION LOG

Attachment A LANDFILL GAS MEASUREMENTS

LANDFILL GAS READINGS ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY FOURTH QUARTER 2019

LOCATION	% LEL	REMARKS				
GP-1	-	not installed at this time				
GP-2	-	not installed at this time				
GP-3	-	not installed at this time				
GP-4	0.0%					
GP-5	0.0%					
GP-6R	0.0%					
GP-7R	0.0%					
GP-8R	0.0%					
GP-9R	0.0%					
GP-10R	0.0%					
GP-11R	4.0%					
GP-12A	0.0%					
GP-13A	0.0%					
GP-14R	4.0%					
GP-15	0.0%					
GP-16	-	not installed at this time				
SCALE HOUSE 0.0% staff occupied structure		staff occupied structure				
	Date of measurement 12/16/19					

Attachment B EQUIPMENT CALIBRATION LOGS

LANDFILL GAS CALIBRATION RECORD ENTERPRISE CLASS III LANDFILL AND RECYCLING FACILITY FOURTH QUARTERLY 2019

IDEAL TECH SERVICES, INC. W.O.# ARM-EL-58X							
BW Technologies Model: GasAlert Max XT II, Serial # MA212-42142							
Date: 12/16/19		ART	END				
20 % LEL	20	1%	20%				
Zero Air	()	0				
Ambient Background)	0				
Within Limits Yes or No			Yes				
PRINTED NAME OF PERSON WH CALIBRATION	O PERFORMED	SIGNATURE OF PERSON WHO PERFORMED CALIBRATION					
Chris Monaco							
Calibration gases prepared by Pine Environmental. Zero Air = Lot Number BBH-1-2 EXP 01/20/2021 20% LEL Methane Lot Number BBH-135A-1-9 EXP 01/20/2021							

Attachment 4 Re-Grading Photographs



