PRELIMINARY DETERMINATION

PERMIT RENEWAL

Monroe County Commission
P.O. Box 8
Monroeville, Alabama 36460

Monroe County Construction and Demolition Landfill
Permit No. 50-04

July 19, 2024

The Monroe County Commission applied to the Alabama Department of Environmental Management (ADEM) for renewal of the Solid Waste Disposal Facility Permit for the Monroe County Construction and Demolition Landfill (Permit No. 50-04). The landfill is described as being located in a part of the Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama. The permitted facility consists of approximately 35 acres with 24 acres for disposal operations. All previously approved variances have been requested and shall remain in the permit.

The waste stream for the Monroe County Construction and Demolition Landfill would remain non-putrescible and non-hazardous construction and demolition waste and rubbish as defined by ADEM Rule 335-13-1-.03 and discarded tires. The service area for the Monroe County Construction and Demolition Landfill would remain Monroe County, Alabama. The maximum average daily volume of waste disposed at the Monroe County Construction and Demolition Landfill would remain 200 cubic yards per day.

The Land Division has determined that the application complies with the requirements of ADEM's Administrative Codes Division 13 regulations for a construction and demolition waste landfill.

Technical Contact:

Mr. Blake Holden
Solid Waste Engineering Section
Land Division
(334) 274-4248

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

SOLID WASTE DISPOSAL FACILITY *PERMIT*

PERMITTEE:	**Monroe County Commission**
FACILITY NAME:	**Monroe County Construction and Demolition Landfill**
FACILITY LOCATION:	**Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama. The total permitted area consists of approximately 35 acres with a disposal area of approximately 24 acres.**
PERMIT NUMBER:	**50-04**
PERMIT TYPE:	**Construction/Demolition**
WASTE APPROVED FOR DISPOSAL:	**Non-putrescible and non-hazardous construction and demolition waste and rubbish as defined by ADEM Admin. Code r. 335-13-1-.03. This facility has also been approved to accept discarded tires.**
APPROVED WASTE VOLUME:	**Maximum Average Daily Volume of waste is 200 cubic yards per day**
APPROVED SERVICE AREA:	**Monroe County, Alabama**

In accordance with and subject to the provisions of the Alabama Solid Wastes & Recyclable Materials Management Act, as amended, Code of Alabama 1975, §§ 22-27-1 to 22-27-27 ("SWRMMA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to dispose of the above-described solid wastes at the above-described facility location.

ISSUANCE DATE:	**XXXXXXXXX**
EFFECTIVE DATE:	**XXXXXXXXX**
EXPIRATION DATE:	**XXXXXXXXX**

_____
Alabama Department of Environmental Management

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE PERMIT

Permittee:	Monroe County Commission Post Office Box 8 Monroeville, AL 36460
Landfill Name:	Monroe County Construction and Demolition Landfill
Landfill Location:	A part of Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama.
Permit Number:	50-04
Landfill Type:	Construction/Demolition Landfill

Pursuant to the Alabama Solid Wastes & Recyclable Materials Management Act, Code of Alabama 1975, §§ 22-27-1, *et seq*., as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM), this permit is issued to Monroe County Commission (hereinafter called the Permittee), to operate a solid waste disposal facility, known as the Monroe County Construction and Demolition Landfill.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions set forth herein (including those in any attachments), and the applicable regulations contained in Chapters 335-13-1 through 335-13-16 of the ADEM Administrative Code (hereinafter referred to as the "ADEM Admin. Code"). Rules cited are set forth in this document for the purpose of Permittee reference. Any Rule that is cited incorrectly in this document does not constitute grounds for noncompliance on the part of the Permittee. Applicable ADEM Administrative Codes are those that are in effect on the date of issuance of this permit or any revisions approved after permit issuance.

This permit is based on the information submitted to the Department on July 12, 2024, for permit renewal, known as the Permit Application, and as amended (hereby incorporated by reference and hereinafter referred to as the Application). Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action. The Permittee must inform the Department of any deviation from or changes in the information in the Application that would affect the Permittee's ability to comply with the applicable ADEM Admin. Code or permit conditions.

This permit is effective as of XXXXXXXXXXX, and shall remain in effect until XXXXXXXXXXX, unless suspended or revoked.

_____ _____

Alabama Department of Environmental Management Date Signed

SECTION I. STANDARD CONDITIONS

A. Effect of Permit

The Permittee is allowed to dispose of nonhazardous solid waste in accordance with the conditions of this permit and ADEM Admin. Code 335-13. Issuance of this permit does not convey property rights of any sort or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Except for actions brought under Code of Alabama 1975, §§ 22-27-1, *et seq*., as amended, compliance with the conditions of this permit shall be deemed to be compliance with applicable requirements in effect as of the date of issuance of this permit and any future revisions.

B. Permit Actions

This permit may be suspended, revoked or modified for cause. The filing of a request for a permit modification or the notification of planned changes or anticipated noncompliance on the part of the Permittee, and the suspension or revocation does not stay the applicability or enforceability of any permit condition.

C. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

D. Definitions

For the purpose of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code 335-13, unless this permit specifically provides otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

1. "EPA" for purposes of this permit means the United States Environmental Protection Agency.

2. "Permit Application" for the purposes of this permit, means all permit application forms, design plans, operational plans, closure plans, technical data, reports, specifications, plats, geological and hydrological reports, and other materials which are submitted to the Department in pursuit of a solid waste disposal permit.

E. Duties and Requirements

1. Duty to Comply

The Permittee must comply with all conditions of this permit except to the extent and for the duration such noncompliance is authorized by a variance granted by the Department. Any permit noncompliance constitutes a violation of Code of Alabama 1975, §§ 22-27-1 *et seq*., as amended, and is grounds for enforcement action, permit suspension, revocation, modification, and/or denial of a permit renewal application.

2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The renewal application must be submitted to the Department at least 180 days before this permit expires.

3. Permit Expiration

This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application as required by Section I.E.2., and, through no fault of the Permittee, the Department has not made a final decision regarding the renewal application.

4. Need to Halt or Reduce Activity Not A Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.

5. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit.

7. Duty to Provide Information

If requested, the Permittee shall furnish to the Department, within a reasonable time, any information that the Department may reasonably need to determine whether cause exists for denying, suspending, revoking, or modifying this permit, or to determine compliance with this permit. If requested, the Permittee shall also furnish the Department with copies of records kept as a requirement of this permit.

8. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the employees of the Department or their authorized representative to:

a. Enter at reasonable times the Permittee's premises where the regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

d. Sample or monitor, at reasonable times, any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by Code of Alabama 1975, §§ 22-27-1 *et seq*.

9. Monitoring, Corrective Actions, and Records

a. Samples and measurements taken for the purpose of monitoring or corrective action shall be representative of the monitored activity. The methods used to obtain representative samples to be analyzed must be the appropriate method from ADEM Admin. Code 335-13-4 or the methods as specified in the Application attached hereto and incorporated by reference. Laboratory methods must be those specified in Standard Methods for the Examination of Water and Wastewater (American Public Health Association, latest edition), Methods for Chemical

Analysis of Water and Wastes (EPA-600/4-79-020), Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA Publication SW-846, latest edition), other appropriate EPA methods, or as specified in the Application. All field tests must be conducted using approved EPA test kits and procedures.

b. The Permittee shall retain records, at the location specified in Section I.I., of all monitoring, or corrective action information, including all calibration and maintenance records, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or record or for periods elsewhere specified in this permit. These periods may be extended by the request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

c. Records of monitoring and corrective action information shall include.

i. The exact place, date, and time of sampling or measurement.

ii. The individual(s) and company who performed the sampling or measurements.

iii. The date(s) analyses were performed.

iv. The individual(s) and company who performed the analyses.

v. The analytical techniques or methods used.

vi. The results of such analyses.

d. The Permittee shall submit all monitoring and corrective action results at the interval specified elsewhere in this permit.

10. Reporting Planned Changes

The Permittee shall notify the Department, in the form of a request for permit modification, at least 120 days prior to any change in the permitted service area, increase in the waste received, or change in the design or operating procedure as described in this permit, including any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

11. Transfer of Permit

This permit may be transferred to a new owner or operator. All requests for transfer of permits shall be in writing and shall be submitted on forms provided by the Department. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of this permit.

12. Certification of Construction

Before the Permittee may commence disposal of waste in any new cell or phase:

a. The Permittee must submit a letter to the Department signed by both the Permittee and a professional engineer stating that the facility has been constructed in compliance with the permit.

b. The Department must inspect the new cells or phases unless the Permittee is notified that the Department will waive the inspection.

c. The Permittee may not commence disposal activities in any new cells or phases until approval of

the new cells or phases is granted by the Department.

13. Noncompliance

The Permittee shall report all instances of noncompliance with the permit at the time noncompliance is discovered.

14. Other Information

If the Permittee becomes aware that information required by the Application was not submitted or was incorrect in the Application or in any report to the Department, the Permittee shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Department, within a reasonable time, information related to compliance with the permit.

F. Design and Operation of Facility

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of contaminants (including leachate and explosive gases) to air, soil, groundwater, or surface water, which could threaten human health or the environment.

G. Inspection Requirements

1. The Permittee shall comply with all requirements of ADEM Admin. Code r. 335-13-4-.21(1)(b).

2. The Permittee shall conduct random inspections of incoming loads.

3. Records of all inspections shall be included in the operating record.

H. Recordkeeping and Reporting

1. The Permittee shall maintain a written operating record at the location specified in Section I.I. The operating record shall include:

a. Documentation of inspections and maintenance activities.

b. Daily Volume reports.

c. Personnel training documents and records.

d. Solid/Hazardous Waste Determination Forms for Industrial Wastes, and the associated Department disposal approved correspondence for industrial waste and special waste.

e. Groundwater monitoring records if required.

f. Explosive gas monitoring records if required.

g. Copies of this Permit and the Application.

h. Copies of all variances granted by the Department, including copies of all approvals of special operating conditions.

2. Quarterly Volume Report

Beginning with the effective date of this permit, the Permittee shall submit, within thirty (30) days after the end of each calendar quarter, a report summarizing the daily waste receipts for the previous (just ended) quarter. Copies of the quarterly reports shall be maintained in the operating record.

3. Monitoring and Corrective Action Reports

The Permittee shall submit reports on all monitoring and corrective action activities conducted pursuant to the requirements of this permit, including, but not limited to, groundwater, surface water, explosive gas and leachate monitoring. The groundwater monitoring shall be conducted in March and September of each year, or as directed by the Department, and the reports shall be submitted at least semi-annually, or as directed by the Department. The reports should contain all monitoring results and conclusions from samples and measurements conducted during the sampling period. Groundwater monitoring is not required at this time. Explosive gas monitoring must be submitted on an annual basis, and the reports should be submitted to the Department and placed in the operating record within 30 days of the monitoring event. Copies of the groundwater and explosive gas monitoring reports shall be maintained in the operating record.

4. Availability, Retention, and Disposition of Records

a. All records, including plans, required under this permit or ADEM Admin. Code 335-13 must be furnished upon request, and made available at reasonable times for inspection by any officer, employee, or representative of the Department.

b. All records, including plans, required under this permit or ADEM Admin. Code 335-13 shall be retained by the Permittee for a period of at least three years. The retention period for all records is extended automatically during the course of any unresolved enforcement action regarding the facility, or as requested by the Department.

c. A copy of records of waste disposal locations and quantities must be submitted to the Department and local land authority upon closure of the facility.

I. Documents to be maintained by the Permittee

The Permittee shall maintain, at the Monroe County Construction and Demolition Landfill office, the following documents and amendments, revisions and modifications to these documents until an engineer certifies closure.

1. Operating record.

2. Closure Plan.

J. Mailing Location

All reports, notifications, or other submissions which are required by this permit should be sent via signed mail (i.e. certified mail, express mail delivery service, etc.) or hand delivered to:

Mailing Address:
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

Physical Address:
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, Alabama 36110-2400

K. Signatory Requirement

All applications, reports or information required by this permit, or otherwise submitted to the Department, shall be signed and certified by the owner as follows:

1. If an individual, by the applicant.

2. If a city, county, or other municipality or governmental entity, by the ranking elected official, or by a duly authorized representative of that person.

3. If a corporation, organization, or other legal entity, by a principal executive officer, of at least the level of Vice President, or by a duly authorized representative of that person.

L. Confidential Information

The Permittee may claim information submitted as confidential if the information is protected under Code of Alabama 1975, §§ 22-39-18, as amended.

M. State Laws and Regulations

Nothing in this permit shall be construed to preclude the initiation of any legal action or to relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

SECTION II. GENERAL OPERATING CONDITIONS

A. Operation of Facility

The Permittee shall operate and maintain the disposal facility consistent with the Application, this permit, and ADEM Admin. Code 335-13.

B. Open Burning

The Permittee shall not allow open burning without prior written approval from the Department and other appropriate agencies. A burn request should be submitted in writing to the Department outlining why that burn request should be granted. This request should include, but not be limited to, specifically what areas will be utilized, types of waste to be burned, the projected starting and completion dates for the project, and the projected days and hours of operation. The approval, if granted, shall be included in the operating record.

C. Prevention of Unauthorized Disposal

The Permittee shall follow the approved procedures, as provided in the Application, for detecting and preventing the disposal of free liquids, regulated hazardous waste, PCB's, medical waste, and other unauthorized waste streams at the facility.

D. Unauthorized Discharge

The Permittee shall operate the disposal facility in such a manner that there will be no water pollution or unauthorized discharge. Any discharge from the disposal facility or practice thereof may require a National Pollutant Discharge Elimination System permit under the Alabama Water Pollution Control Act.

E. Industrial Waste Disposal

The Permittee shall not dispose of industrial process waste at this landfill. Only those wastes shown in Section III.B. are allowed for disposal in this landfill.

F. Boundary Markers

The Permittee shall ensure that the facility is identified with a sufficient number of permanent boundary markers that are at least visible from one marker to the next.

G. Certified Operator

The Permittee shall be required to have an operator certified by the Department on-site during hours of operation, in accordance with the requirements of ADEM Admin. Code 335-13-12.

SECTION III. SPECIFIC REQUIREMENTS FOR C/D LANDFILLS

A. Waste Identification and Management

1. Subject to the terms of this permit, the Permittee may dispose of the nonhazardous solid wastes listed in III.B. Disposal of any other wastes is prohibited, except waste granted a temporary or one time waiver by the Director.

2. The total permitted area for the Monroe County Construction and Demolition Landfill is approximately 35 acres, with approximately 24 acres permitted for disposal operations.

3. The maximum average daily volume of waste disposed at the facility shall not exceed 200 cubic yards per day, except as provided under ADEM Admin. Code r. 335-13-5-.06(2)(b)2. The average daily volume shall be computed as specified by ADEM Admin. Code r. 335-13-4-.23(2)(f).

B. Waste Streams

The Permittee may accept for disposal non-putrescible and non-hazardous construction and demolition wastes and rubbish as defined by ADEM Admin. Code r. 335-13-1-.03. This facility has also been approved to accept discarded tires.

C. Service Area:

The Permittee is allowed to receive for disposal waste from Monroe County, Alabama.

D. Waste Placement, Compaction, and Cover

All waste shall be confined to an area as small as possible within a single working face and placed onto an appropriate slope not to exceed 3 to 1 (33%). (See Section VIII.2.) All waste shall be spread in layers two feet or less in thickness and thoroughly compacted weekly with adequate landfill equipment prior to placing additional layers of waste or placing the weekly cover. A minimum of six inches of compacted earth or other alternative cover material approved by the Department and listed in Section VIII shall be added at the conclusion of each week's operation. These are the minimum requirements for waste placement, compaction and cover unless a variance is granted in Section VIII.

E. Liner Requirements

The Permittee shall not be required to install a composite liner system at this time. The bottom of the construction and demolition waste shall be a minimum of five (5) feet above the highest measured groundwater level as determined by ADEM Admin. Code r. 335-13-4-.11(2)(a).

F. Security

The Permittee shall provide artificial and/or natural barriers, which prevent entry of unauthorized vehicular traffic to the facility.

G. All Weather Access Roads

The Permittee shall provide an all-weather access road to the dumping face that is wide enough to allow passage of collection vehicles.

H. Adverse Weather Disposal

The Permittee shall provide for disposal activities in adverse weather conditions.

I. Personnel

The Permittee shall maintain adequate personnel to ensure continued and smooth operation of the facility.

J. Environmental Monitoring and Treatment Structures

The Permittee shall provide protection and proper maintenance of environmental monitoring and treatment structures.

K. Vector Control

The Permittee shall provide for vector control as required by ADEM Admin. Code 335-13.

L. Bulk or Noncontainerized Liquid Waste

The Permittee shall not dispose of bulk or noncontainerized liquid waste, or containers capable of holding liquids, unless the conditions of ADEM Admin. Code r. 335-13-4-.23(1)(j) are met.

M. Empty Containers

Empty containers larger than 10 gallons in size must be rendered unsuitable for holding liquids prior to disposal in the landfill unless otherwise approved by the Department.

N. Other Requirements

The Department may enhance or reduce any requirements for operating and maintaining the landfill as deemed necessary by the Land Division.

O. Other Permits

The Permittee shall operate the landfill according to this and any other applicable permits.

P. Scavenging and Salvaging Operations

The Permittee shall prevent scavenging and salvaging operations, except as part of a controlled recycling effort. Any recycling operation must be in accordance with plans submitted and approved by the Department.

Q. Signs

If the landfill is available to the public or commercial haulers, the Permittee shall provide a sign outlining instructions for use of the site. The sign shall be posted and have the information required by ADEM Admin. Code r. 335-13-4-.23(1)(f).

R. Litter Control

The Permittee shall control litter.

S. Fire Control

The Permittee shall provide fire control measures.

SECTION IV. GROUNDWATER MONITORING REQUIREMENTS:

Groundwater monitoring is not required at this landfill provided that the waste stream is in accordance with Section III.B. Should any waste be disposed other than the waste streams indicated in Section III.B., the Department may require that groundwater monitoring wells be installed.

SECTION V. GAS MONITORING REQUIREMENTS

The permittee must install and maintain an explosive gas monitoring system in accordance with ADEM Admin. Code 335-13

SECTION VI. SURFACE WATER MANAGEMENT

The Permittee shall construct and maintain run-on and run-off control structures to control the discharge of pollutants in stormwater. Any discharges from drainage control structures shall be permitted through a discharge permit issued by the ADEM Water Division.

SECTION VII. CLOSURE AND POST-CLOSURE REQUIREMENTS

The Permittee shall close the landfill and perform post-closure care of the landfill in accordance with ADEM Admin. Code 335-13.

A. Final Cover

The Permittee shall grade final soil cover such that surface water does not pond over the permitted area as specified in the Application. The final cover system shall comply with ADEM Admin. Code 335-13. Final cover shall be placed on an appropriate slope not to exceed 3 to 1 (33%). (See Section VIII.1.)

B. Vegetative Cover

The Permittee shall establish a vegetative or other appropriate cover within 90 days after completion of final grading requirements in the Application. Preparation of a vegetative cover shall include, but not be limited to, the placement of seed, fertilizer, mulch, and water.

C. Notice of Intent

The Permittee shall place in the operating record and notify the Department of their intent to close the landfill prior to beginning closure.

D. Completion of Closure Activities

The Permittee must complete closure activities of each landfill unit in accordance with the Closure Plan within 180 days of the last known receipt of waste.

E. Certification of Closure

Following closure of each unit, the Permittee must submit to the Department a certification, signed by an registered professional engineer, verifying the closure has been completed according to the Closure Plan.

F. Post-Closure Care Period

Post-closure care activities shall be conducted after closure of each unit throughout the life of this permit and continuing for a period of a minimum of thirty (30) years following closure of the facility. The Department may shorten or extend the post-closure care period applicable to the solid waste disposal facility.

G. Post-Closure Maintenance

The Permittee shall provide post closure maintenance of the facility to include regularly scheduled inspections. This shall include maintenance of the cover, vegetation, monitoring devices and pollution control equipment and correction of other deficiencies that may be observed by the Department. Monitoring requirements shall continue throughout the post closure period as determined by the Department unless all waste is removed and no unpermitted discharge to waters of the State has occurred.

H. Post-Closure Use of Property

The Permittee shall ensure that post closure use of the property never be allowed to disturb the integrity of the final cover, liner, or any other component of the containment system. This shall preclude the growing of deep-rooted vegetation on the closed area.

I. Certification of Post-Closure

Following post-closure of each unit, the Permittee must submit to the Department a certification, signed by a registered professional engineer, verifying the post-closure has been completed according to the Post-Closure Plan.

J. Recording Instrument

The Permittee must provide documentation of compliance with the requirements of the Uniform Environmental Covenants Program in ADEM Admin. Code 335-5 and shall execute the following:

1. Record a notation onto the land deed within 90 days from the certification of closure. This notation shall state that the land has been used as a solid waste disposal facility, the name of the Permittee, type of disposal activity, location of the disposal facility, and beginning and closure dates of the disposal activity.

2. File the covenant at the courthouse where the land deed is held thirty (30) days of receipt of the covenant signed by ADEM's Land Division Chief.

3. The Permittee shall submit a certified copy of the recording instrument to the Department within 120 days after permit expiration, revocation, or as directed by the Department as described in the Application.

K. Removal of Waste

If the Permittee, or any other person(s), wishes to remove waste, waste residues, or any liner or contaminated soils, the owner must request and receive prior approval from the Department.

SECTION VIII. VARIANCES

1. The Permittee is granted a variance allowing the maximum final slopes not to exceed 3 to 1 (33%). (See Section VII.A.)

2. The Permittee is granted a variance from ADEM Admin. Code r. 335-13-4-.23(1)(c) requiring operating slopes not to exceed 4 to 1 (25%). The Permittee is approved to operate slopes on the working face not to exceed 3 to 1 (33%). (See Section III.D.)

Any variance granted by the Department may be terminated by the Department whenever the Department finds, after notice and opportunity for hearing, that the petitioner is in violation of any requirement, condition, schedule, limitation or any other provision of the variance, or that operation under the variance does not meet the minimum requirements established by state and federal laws and regulations or is unreasonably threatening the public health.

APPLICATION

Monroe County Engineering Department
P.O. Box 692
301 West Claiborne
Monroeville, AL 36461
(251) 743-3672

~~May 6, 2024~~
REVISED JULY 11, 2024

C. Blake Holden
Alabama Department of Environmental Management
Land Division – Solid Waste Branch
Senior Environmental Engineering Specialist
P.O. Box 301463
Montgomery, AL 36461

RE: Monroe County C&D Landfill
Permit No. 50-04

Dear Mr. Holden:

I respectfully request renewal of our Solid Waste Disposal Facility Permit No. 50-04 for the Monroe County Construction and Demolition Landfill. Along with the renewal, I request to retain the modification issued on August 22, 2017 to utilize 3:1 operating and final slopes.

Please find the following attached or previously submitted information:

1. Application Form 439 w/ USGS map
2. Application Fee of $5400.00.
3. Original Application Submittal w/Permit Drawings and Boundary Survey
4. 3:1 (33%) Operating & Final Slope Variance Approval
5. Existing Sedimentation Pond Calculations.
6. ~~Waste Screening Procedures~~ INCLUDED IN REVISED OPERATIONAL PLAN
7. ~~Operations Plan~~ REVISED OPERATIONAL PLAN
8. ~~Gas Monitoring Report (October 10, 2023); Gas Monitoring Plan~~ INCLUDED IN REVISED OPERATIONAL PLAN
9. ~~Cell 5 Partial Certification w/Groundwater Cutoff Trench Quality Assurance Report for Cell 5~~ INCLUDED IN REVISED OPERATIONAL PLAN
10. Final Closure Plan Drawing
11. Current Abutting Property Owner Information

I certify that the above referenced information is true and correct. If you should have any additional questions or require any additional information, please contact this office.

Sincerely,

Jeff Griffin, P.E.
Monroe County Engineer

Attachment No. 1

Application Form 439 w/USGS Map

SOLID WASTE DISPOSAL FACILITY

PERMIT APPLICATION PACKAGE

January 16, 2018

MEMORANDUM

TO: Applicants Seeking a Permit for Solid Waste Facilities

FROM: Stephen A. Cobb, Chief
Land Division
Alabama Department of Environmental Management

RE: Processing Solid Waste Permits by ADEM

Any permit issued by ADEM must be in accordance with §22-27-48 and §22-27-48.1 Code of Alabama. This section indicates that ADEM may not consider an application for a new or modified permit unless such application has received approval by the affected unit of local government having an approved plan. ADEM, therefore, will require the following before it can process a new or modified permit application:

1. The local government having jurisdiction must approve the permit application in accordance with §22-27-48 and §22-27-48.1 Code of Alabama.

2. Local governments should follow the procedures outlined in §22-27-48 and §22-27-48.1 Code of Alabama and the siting standards included in the local approved plan in considering approval of a facility.

This procedure applies to applications for new or modified permits. ADEM cannot review an application unless it includes approval from the affected local government. This procedure shall not apply to exempted industrial landfills receiving waste generated on site only by the permittee.

Please contact the Solid Waste Branch of ADEM at (334) 274-4201 if there are any questions.

SAC/sss/abj

PERMIT APPLICATION
SOLID WASTE DISPOSAL FACILITY
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
(Submit in Triplicate)

1. **Facility type:**
   - _____ Municipal Solid Waste Landfill (MSWLF)
   - _____ Industrial Landfill (ILF)
   - ✓ Construction and Demolition Landfill (C/DLF)
   - _____ CCR Landfill (CCRLF)
   - _____ CCR Surface Impoundment (CCRSI)
   - _____ Other (explain)_____

2. **Facility Name** MONROE COUNTY C&D LANDFILL

3. **Applicant/Permittee:**

   Name: MONROE COUNTY COMMISSION

   Address: P.O. BOX 8
   MONROEVILLE, AL 36461

   Telephone: 251-743-4107

   If applicant/permittee is a Corporation, please list officers:
   N/A

4. **Location: (include county highway map or USGS map)**

   Township 7N **Range** 7E
   Section 1 **County** MONROE

5. **Land Owner:**

   Name: MONROE COUNTY COMMISSION

   Address: P.O. BOX 8
   MONROEVILLE, AL 36461

   Telephone: 251-743-4107

   (Attach copy of agreement from landowner if applicable.)

6. Contact Person:

Name JEFF GRIFFIN

Position or Affiliation MONROE COUNTY ENGINEER

Address: P.O. BOX 692
MONROEVILLE, AL 36461

Telephone: OFFICE: 251-743-3672 ; MOBILE: 251-714-4277

7. Size of Facility: 35 Acres

Size of Disposal Area(s): 24 Acres

8. Identify proposed service area or specific industry that waste will be received from:

MONROE COUNTY, ALABAMA

9. Proposed maximum average daily volume to be received at landfill (choose one):

_____ Tons/Day 200 Cubic Yards/Day

10. List all waste streams to be accepted at the facility (i.e., household solid waste, wood boiler ash, tires, trees, limbs, stumps, etc.):

NON-PUTRESCIBLE AND NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE AND RUBBISH AS DEFINED BY RULE 335-13-1-.03 AND DISCARDED TIRES

SIGNATURE (Responsible official of permit applicant): Sonya Stinson TITLE: Chairman

Sonya Stinson DATE: 5-7-24
(please print or type name)

ADDITIONAL REQUIRED INFORMATION

Applicants seeking to obtain a permit to construct and/or continue to operate a municipal solid waste (MSW) landfill, industrial landfill, construction and demolition (C/D) landfill, coal combustion residuals (CCR) landfill, or CCR surface impoundment are required to submit additional information as part of the Solid Waste Disposal Facility Permit Application. These additional information requirements vary depending on the facility type.

For new and existing landfill units, refer to ADEM Admin Code 335-13-5-.02 for a list of additional information to be submitted in the permit application. Some requirements apply only to MSW landfills and CCR landfills, while other requirements apply to industrial landfills and C/D landfills. You need only to address the requirements that pertain to your type landfill. For new and existing CCR surface impoundments, refer to ADEM Admin Code 335-13-15-.09 for additional information to be submitted in the permit application.

Each rule that is applicable to your type landfill or surface impoundment must be addressed in detail in the operational narrative and/or engineering drawings before the review process can be completed. All operational narratives, engineering drawings, survey maps and legal descriptions are to be prepared by licensed engineers or surveyors registered in the State of Alabama and with their stamp or seal on each drawing/map and cover of the narrative.

Act No. 89-824 Section 9(a) states "The department may not consider an application for a new or modified permit for a facility unless such application has received approval by the affected unit of local government having an approved plan." This document must be received by the Department prior to processing the application.

The referenced rules are covered in greater detail in ADEM's Administrative Code, Division 13. Clarification can be obtained by reviewing the regulations. Copies of the ADEM Administrative Code, Division 13 regulations, can be obtained for a fee by contacting ADEM's Permits and Services Division. If the Department can answer any questions, please contact the Solid Waste Branch at (334) 274-4201.

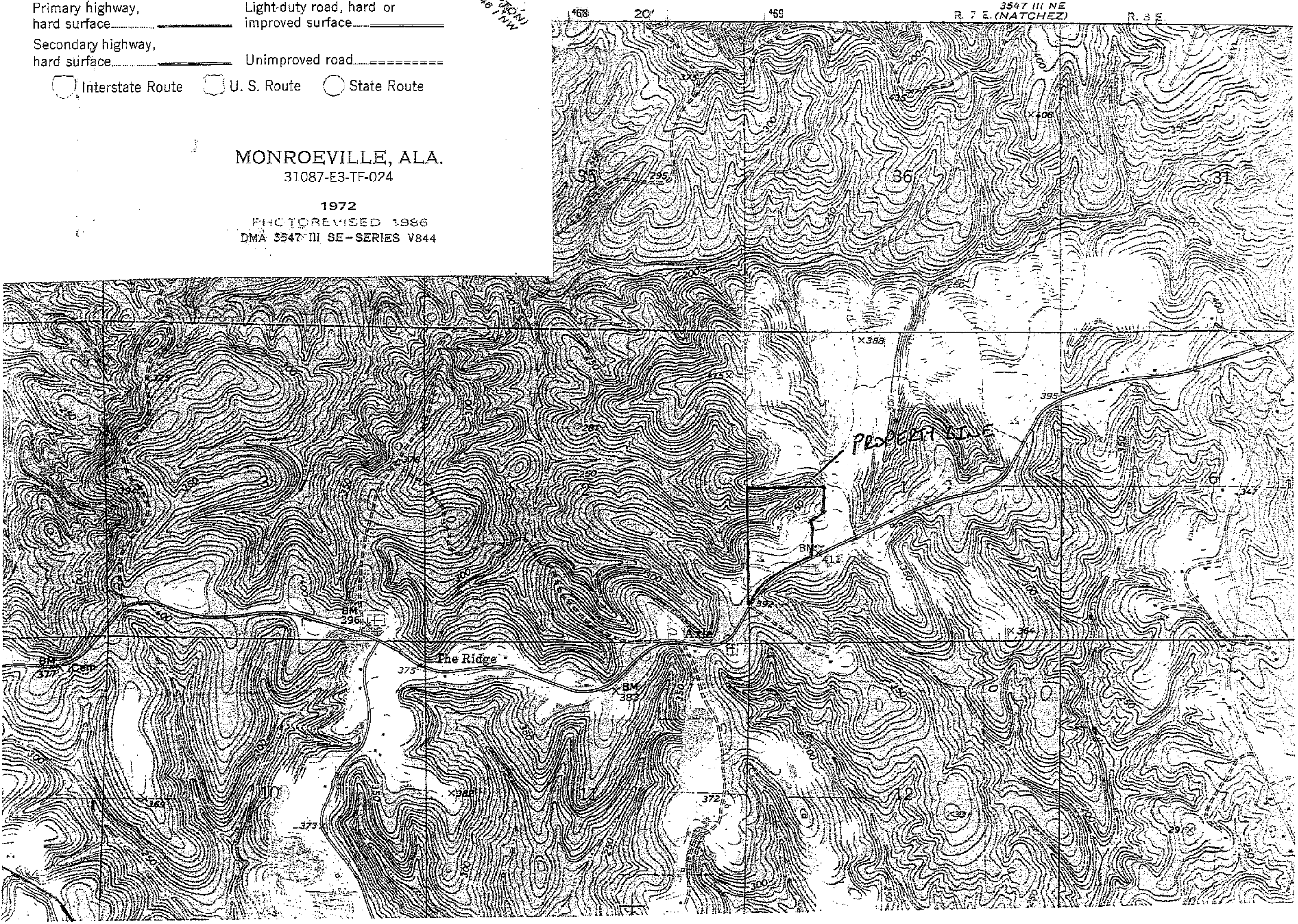
474 INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1986

ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route / State Route

MONROEVILLE, ALA.
31087-E3-TF-024

1972
PHOTOREVISED 1986
DMA 3547 III SE–SERIES V844



Attachment No. 2

$5400 Application Fee

CHECK DATE	CHECK NUMBER	PAGE
04/11/2024	61675	1 OF 1

VENDOR (3165) ADEM

INVOICE NUMBER	INVOICE DATE	PO NUMBER	ACCOUNT NUMBER	DESCRIPTION	INVOICE AMOUNT
LANDFILL PERMIT FEE	04/10/24		001-54350-151-0000711		5,400.00

5,400.00

THIS CHECK HAS A COLORED BACKGROUND AND CONTAINS MULTIPLE SECURITY FEATURES - SEE BACK FOR DETAILS

MONROE COUNTY COMMISSION
P O Box 8
MONROEVILLE, AL 36461
(251) 743-4107

TRUSTMARK
MONROEVILLE, AL 36460
065300279

61675

DATE	AMOUNT
04/11/2024	*******5,400.00

PAY FIVE THOUSAND FOUR HUNDRED AND XX / 100

TO THE ORDER OF ADEM

HEAT SENSITIVE RUB AREA TO VERIFY

CONTINUED ON OVERFLOW PAGE(S)

Attachment No. 3

Original Application Submittal w/Permit Drawings

ADEM
ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

April 24, 1997

Mr. John McAnulty
Monroe County Engineer
P.O. Box 8
Monroeville, Al 36461

Dear Mr. McAnulty:

RE: Monroe County Construction and Demolition Landfill
Permit Number 50-04

Enclosed is a Solid Waste Disposal Facility Permit which is issued to Monroe County Commission for the construction and operation of the Monroe County Construction and Demolition Landfill, permit number 50-04. The permit will be effective April 24, 1997 and will expire April 23, 2002.

Prior to disposal in the new landfill, an independent registered engineer in the State of Alabama should certify the first cell.

Should you have any comments or questions, please contact Gary Hawkins of the Solid Waste Branch of the Land Division at (334) 270-5644.

Sincerely,

Russell Kelly, Chief
Solid Waste Branch
Land Division

File: Monroe County Construction and Demolition Landfill Permit No. 50-04
Monroe County

Fob James, Jr.
Governor

James W. Warr
Director

1751 Cong. W.L.
Dickinson Dr.
Montgomery, AL
36109-2608
(334) 271-7700

Mailing Address:
PO Box 301463
Montgomery, AL
36130-1463

Fax: (334)
Admin: 271-7950
Backup: 270-5612
Air: 279-3044
Land: 279-3050
Water: 279-3051
Gndwtr: 270-5631
OEO: 213-4399
Field Ops: 272-8131

Field Offices:

110 Vulcan Road
Birmingham, AL
35209-4702
(205) 942-6168
Fax: 941-1603

400 Well St., N.E.
PO Box 953
Decatur, AL
35602-0953
(205) 353-1713
Fax: 340-9359

2204 Perimeter Rd.
Mobile, AL
36615-1131
(334) 450-3400
Fax: 479-2593

FINAL DETERMINATION

New Permit Application

Monroe County Construction and Demolition Landfill
Monroe County Commission
Monroeville, Alabama 36461

April 24, 1997

The Monroe County Commission has submitted to the Alabama Department of Environmental Management (ADEM) an application for a permit to construct and operate a landfill known as the Monroe County Construction and Demolition Landfill. The applicant requests a permit to accept for disposal non-hazardous wastes including bricks, concrete, and other masonry materials, soil, rocks, scrap metal, paving materials, glass, crockery, stumps, limbs, yard clippings, wood products, approved industrial wastes, and other miscellaneous non-household waste that is generated in Monroe County, Alabama. The original permit allowed the permittee to accept municipal solid waste for disposal.

The Permit Application was initially submitted on August 11, 1994. The facility's disposal area comprises approximately 35 acres located in Section 1, Township 7 North, Range 7 East, comprising approximately 35 acres in Monroe County. The average daily volume of non-hazardous waste will be 200 cubic yards/week.

During the comment period which was published between February 13, 1997 and March 19, 1997 and displayed at the Alabama Department of Environmental Management in Montgomery, Alabama and at the Monroe County Courthouse in Monroeville, Alabama, there were no comments (written or verbal) received by the Land Division.

With there being no comments received at the ADEM main office, the Land Division of ADEM has determined that the proposed landfill design and operational plan will comply with the requirements of ADEM's Administrative Code Division 13.

The Land Division hereby recommends that the renewed permit be issued to Monroe County Commission with the effective date being April 24, 1997 and expiring April 23, 2002.

Technical Contact:

Stephen J. Williams
Solid Waste Branch
Land Division
(334) 270-5646

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

SOLID WASTE DISPOSAL FACILITY PERMIT

PERMITTEE:	**Monroe County Commission**
FACILITY NAME:	**Monroe County Construction and Demolition Landfill**
FACILITY LOCATION:	**Section 1, Township 7 North, Range 7 East, Monroe County, Alabama comprising approximately 35 acres as designated in the engineering drawings and Section VIII of this Permit.**
PERMIT NUMBER:	**50-04**
WASTE APPROVED FOR DISPOSAL:	**Non-hazardous construction and demolition wastes inclucing bricks, concrete, and other masonry materials, soil, rocks, scrap metal, paving materials, glass, crockery, stumps, limbs, yard clippings, tires, wood products, approved industrial wastes, and other miscellaneous non-household waste that**
APPROVED WASTE VOLUME:	**200 cubic yards/day**
APPROVED SERVICE AREA:	**Monroe County, Alabama.**

In accordance with and subject to the provisions of the Solid Waste Disposal Act, as amended, Code of Alabama 1975, §§ 22-27-1 to 22-27-27 ("SWDA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to dispose of the above-described solid wastes at the above-described facility location.

ISSUANCE DATE: April 24, 1997

EFFECTIVE DATE: April 24, 1997

EXPIRATION DATE: April 23, 2002

Alabama Department of Environmental Management

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE DISPOSAL FACILITY PERMIT

Permittee: **Monroe County Commission**
Monroeville, Alabama
Monroe County

Permit Number: 50-04

Pursuant to the Solid Wastes Disposal Act, Code of Ala. 1975, Section 22-27-1, et. seq., as amended, and attendant regulations promulgated thereunder by The Alabama Department of Environmental Management (ADEM), a permit is issued to Monroe County Commission (hereinafter called the Permittee) located in Monroeville, Monroe County, Alabama, to operate a solid waste disposal facility, known as the Monroe County Construction and Demolition Landfill, at the location described as Section 1, Township 7 North, Range 7 East, comprising approximately 35 acres in Monroe County.

The landfill is located on Monroe County property. As requested in the permit application submitted on October 3, 1997, the landfill will be utilized for disposal of non-hazardous construction and demolition wastes including bricks, concrete and other masonry materials, soil, rocks, scrap metal, paving materials, glass, crockery, stumps, limbs, tires, yard clippings, wood products, approved non-processed industrial wastes, and other miscellaneous non-household waste that is generated in Monroe County, Alabama. The approved average daily volume is 200 cubic yards per day.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions set forth herein (including those in any attachments), and the applicable regulations contained in Chapters 335-13-1 through 335-13-8 of the Alabama Department of Environmental Management Administrative Code (hereinafter referred to as the "ADEM Administrative Code"). Applicable ADEM Administrative Codes are those which are in effect on the date of issuance of this permit.

This permit is based on the information submitted in the Permit Application received by the Department on October 3, 1997 (hereby incorporated by reference and hereinafter referred to as the Application). Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action (Chapter 335-13-5 of the ADEM Admin. Code). The Permittee must inform ADEM of any deviation from or changes in the information in the Application which would affect the Permittee's ability to comply with the applicable ADEM Admin. Code or permit conditions.

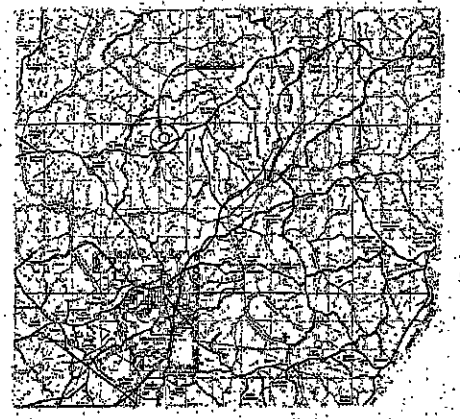
This permit is effective as of April 24, 1997 and shall remain in effect until April 23, 2002, unless suspended or revoked (See Rule 335-13-5-.05).

Alabama Department of Environmental Management

4/24/97
Date Signed

MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

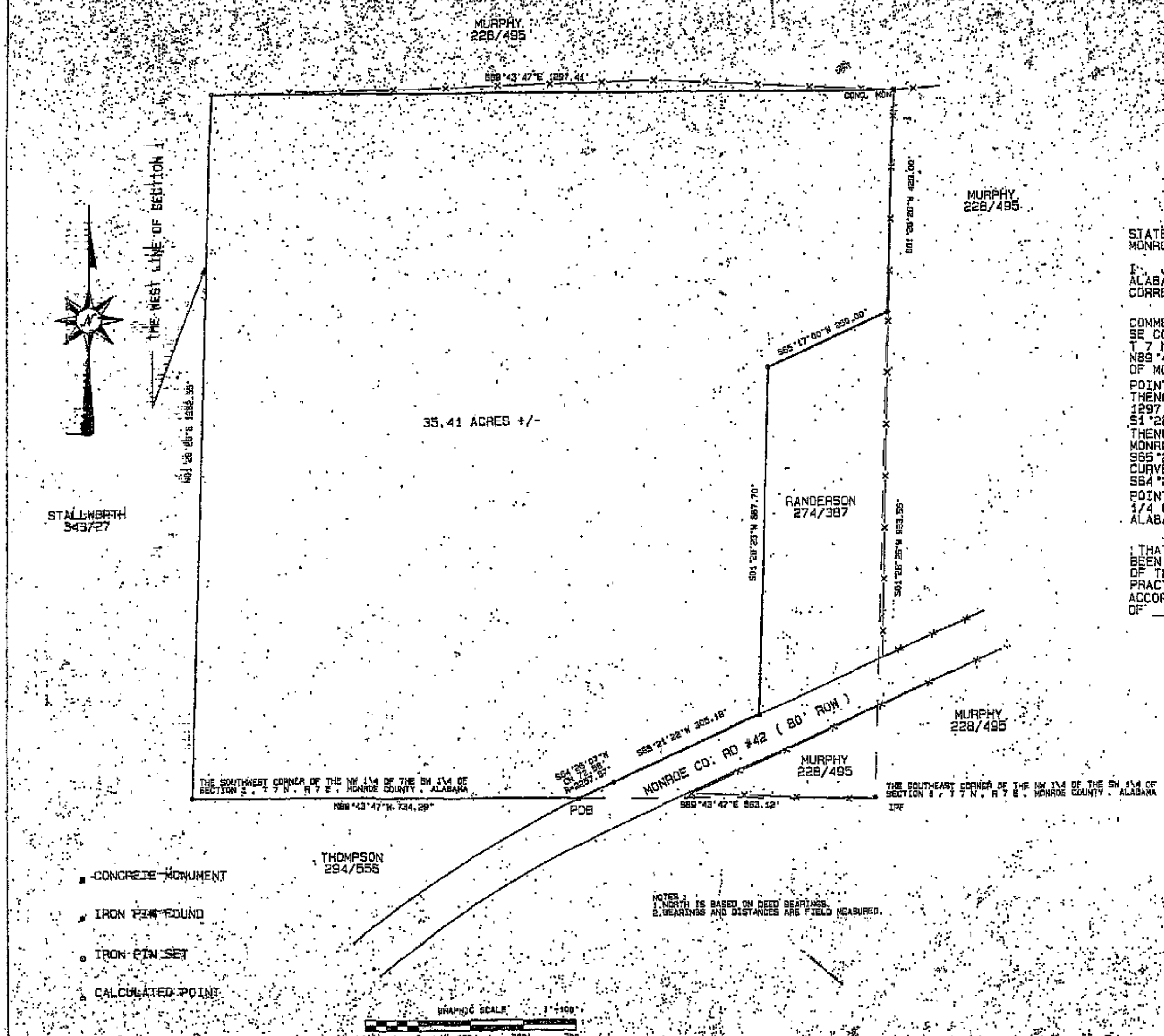
SOLID WASTE DISPOSAL FACILITY
PERMIT APPLICATION



ENVIRONMENTAL CONSULTING & ENGINEERING, INC.

INDEX TO SHEETS:

1996



STATE OF ALABAMA
MONROE COUNTY

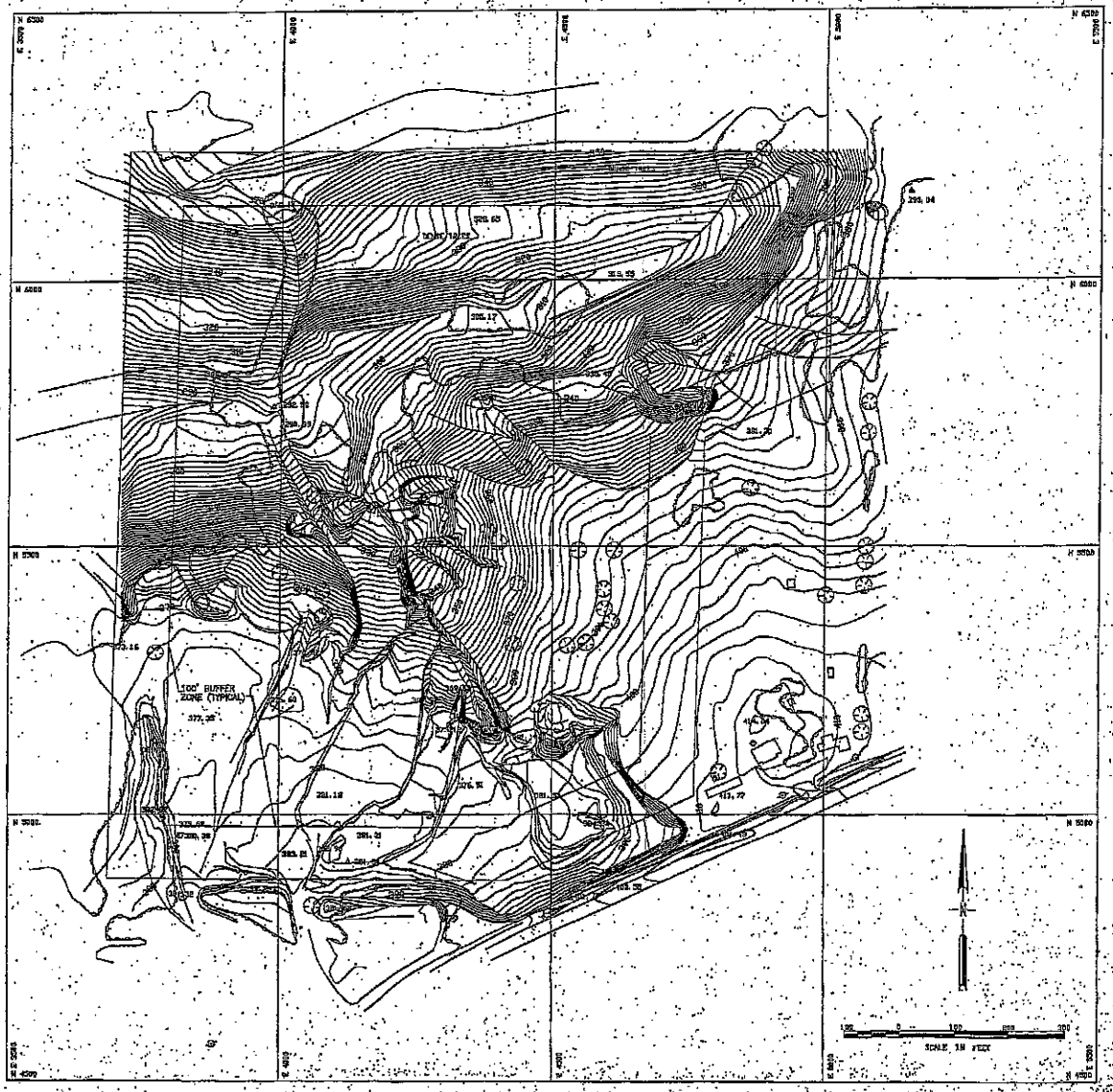
I, JOHN WILSON, A REGISTERED LAND SURVEYOR IN ALABAMA HEREBY CERTIFY THE FOREGOING IS A TRUE AND CORRECT MAP OF THE FOLLOWING DESCRIBED PROPERTY :

COMMENCE AT AN IRON PIN BEING KNOWN AS THE SE CORNER OF THE NW 1/4 OF SW 1/4 OF SECTION 1 T 7 N, R 7 E, MONROE COUNTY, ALABAMA ; THENCE N89°43'47"W 563.12' TO A POINT ON THE NORTH ROW OF MONROE COUNTY ROAD #42 AND ALSO BEING THE POINT OF BEGINNING ; THENCE N89°43'47"W 734.29' ; THENCE N1°28'26"E 1362.55' ; THENCE S89°43'47"E 1297.41' TO A CONCRETE MONUMENT ; THENCE S1°28'26"W 429.00' ; THENCE S65°17'00"W 250.00' ; THENCE S1°28'26"W 567.70' TO THE NORTH ROW OF MONROE COUNTY ROAD #42 ; THENCE ALONG SAID ROW S65°21'22"W 305.18' ; THENCE ALONG SAID ROW IN A CURVE WITH A RADIUS OF 2257.87' AND CHORD BEARING S64°26'07"W WITH A DISTANCE OF 72.58' TO THE POINT OF BEGINNING ; LYING IN THE NW 1/4 OF THE SW 1/4 OF SECTION 1, T 7 N, R 7 E, MONROE COUNTY, ALABAMA AND CONTAINING 35.41 ACRES MORE OR LESS.

THAT ALL PARTS OF THIS SURVEY AND DRAWING HAVE BEEN COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE STATE OF ALABAMA. ACCORDING TO MY SURVEY THIS THE 12TH DAY OF AUG. 1998.

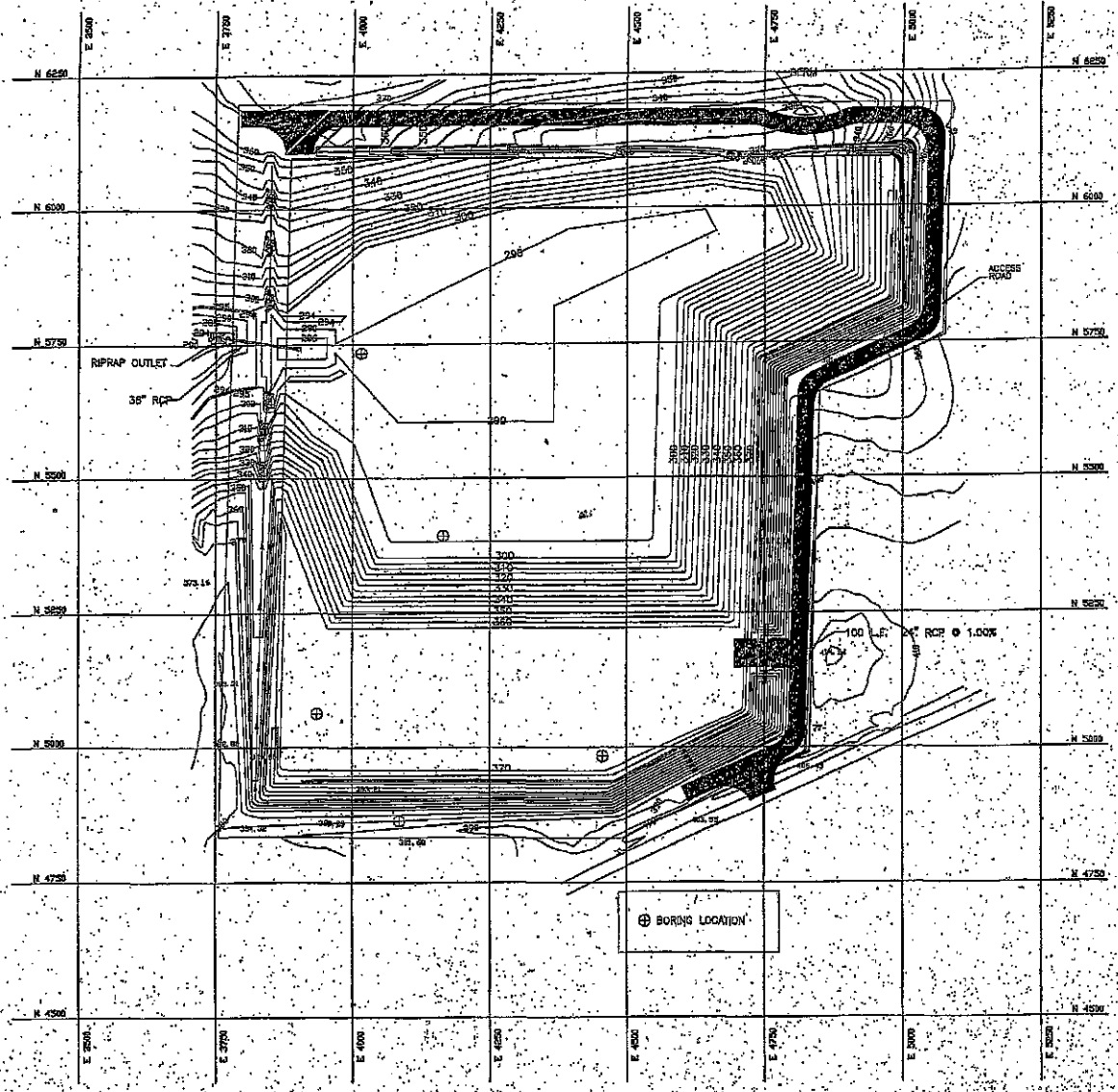
JOHN WILSON AL. REG. #17929

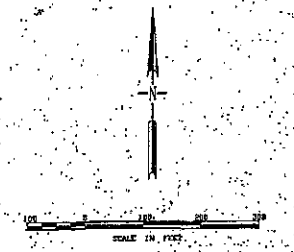
WILSON & SMITH ENGINEERING CO., INC. MONTGOMERY, AL. BOUNDARY SURVEY MONROE COUNTY LANDFILL	MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL BOUNDARY SURVEY	SCALE: DATE: SEPT. 1998 DRAWN BY: CHECKED BY: SHEET 2 OF



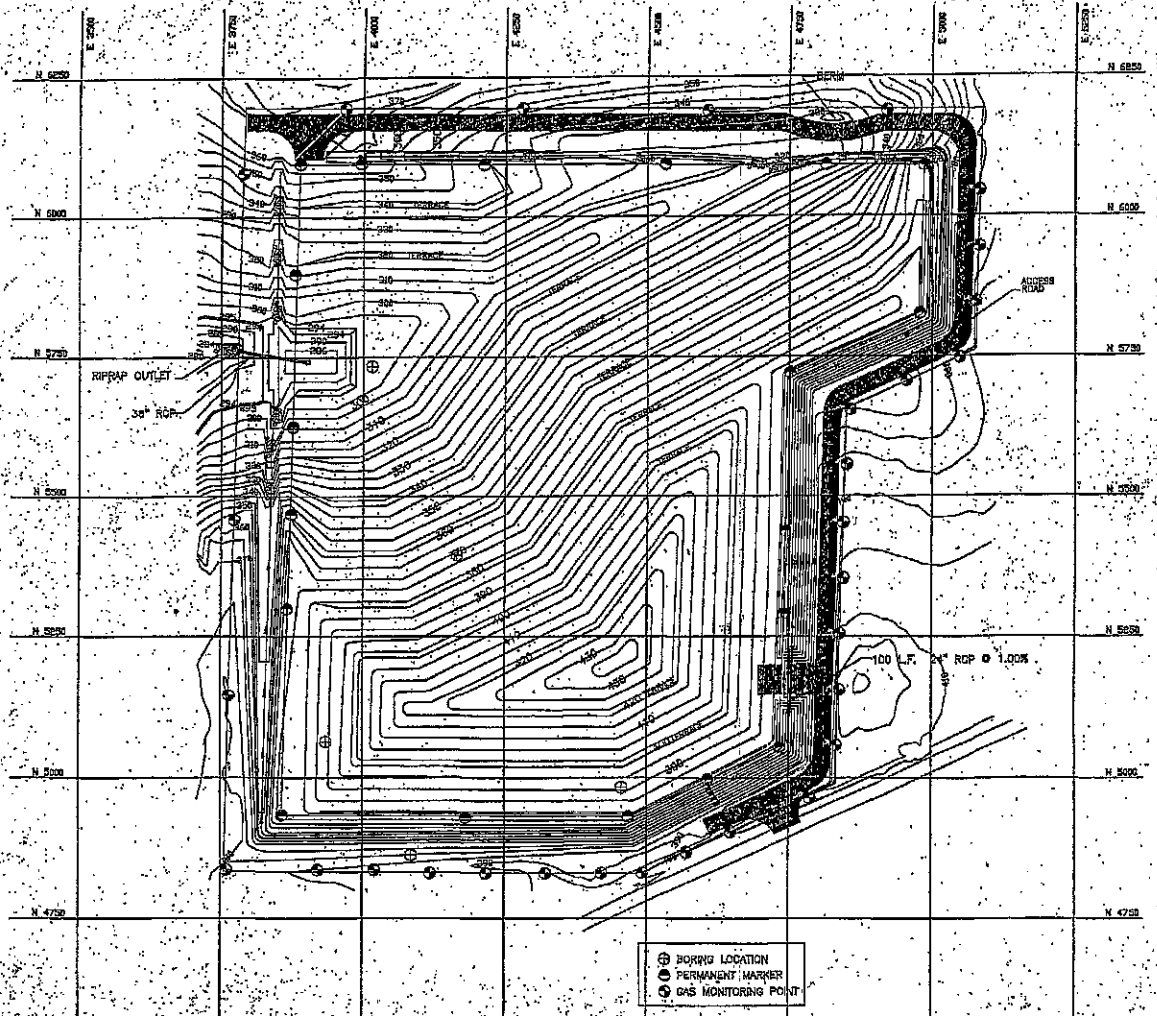
NOTE
TOPOGRAPHIC SURVEY DONE
BY SOUTHEAST DIGITAL SURVEY
SEPTEMBER 18,1996

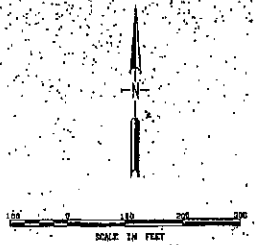
MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL	SCALE:
	DATE: SEPT 1996
Existing Contours	DRAWN BY: SAH
	CHECKED BY: GDS
	SHEET 2 OF 13





MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL	SCALE 1"=100'
	DATE SEPT 1996
EXCAVATION GRADES	DRAWN BY SAH
	CHECKED BY GBS
	SHEET 4 OF 13

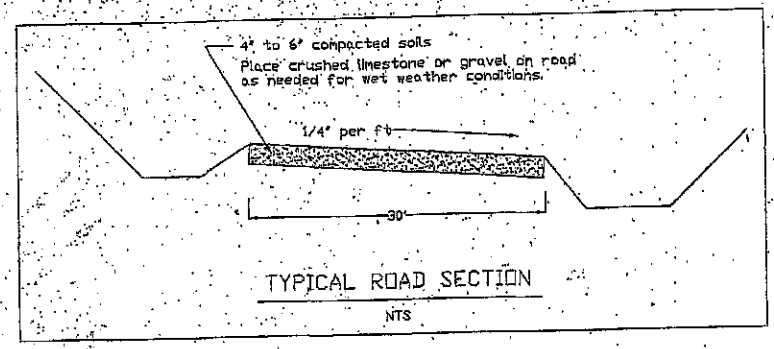




MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

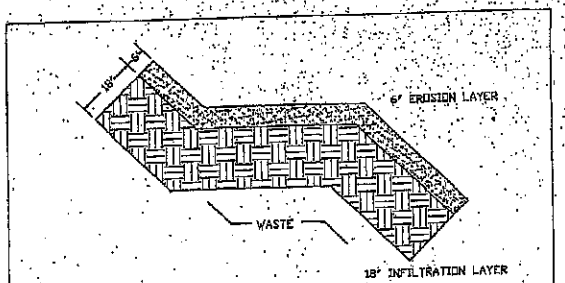
FINAL GRADING &
DRAINAGE PLAN

SCALE 1"=100'
DATE: SEPT 1996
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 5 OF 13



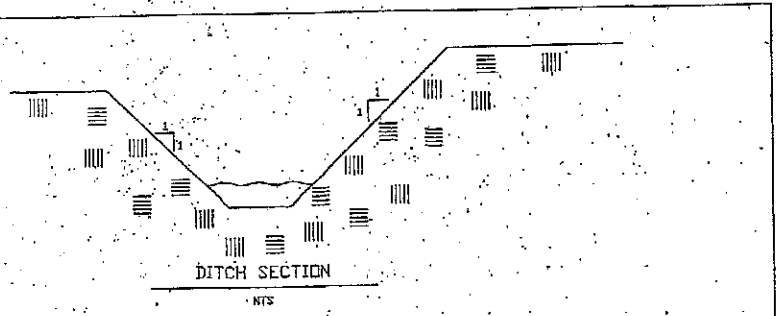
TYPICAL ROAD SECTION

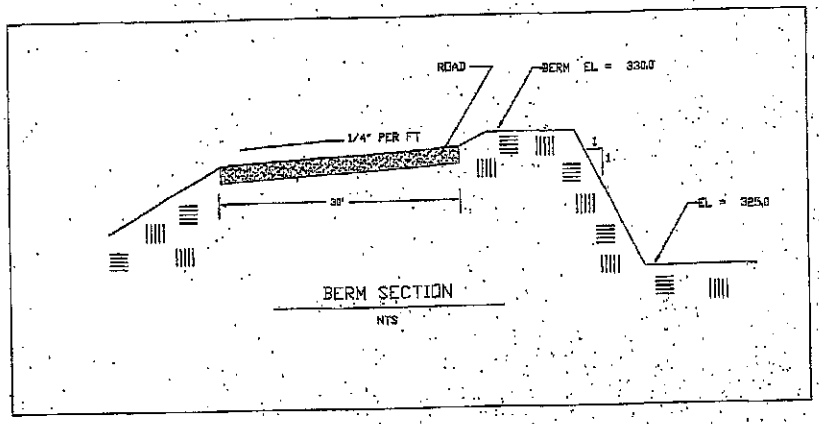
NTS



TYPICAL FINAL COVER DETAIL

NTS





BERM SECTION

NTS

MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL

CONSTRUCTION DETAILS

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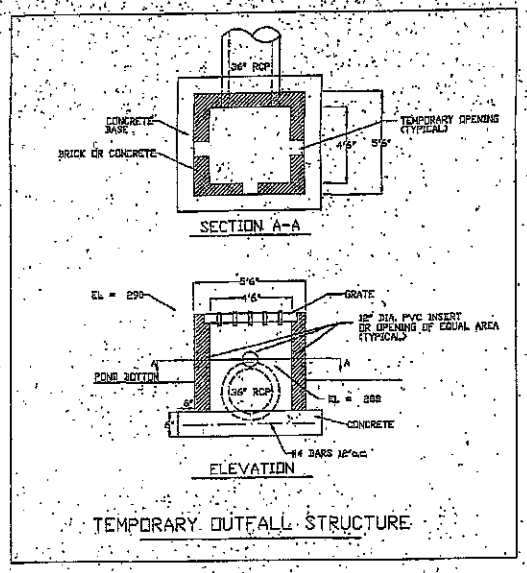
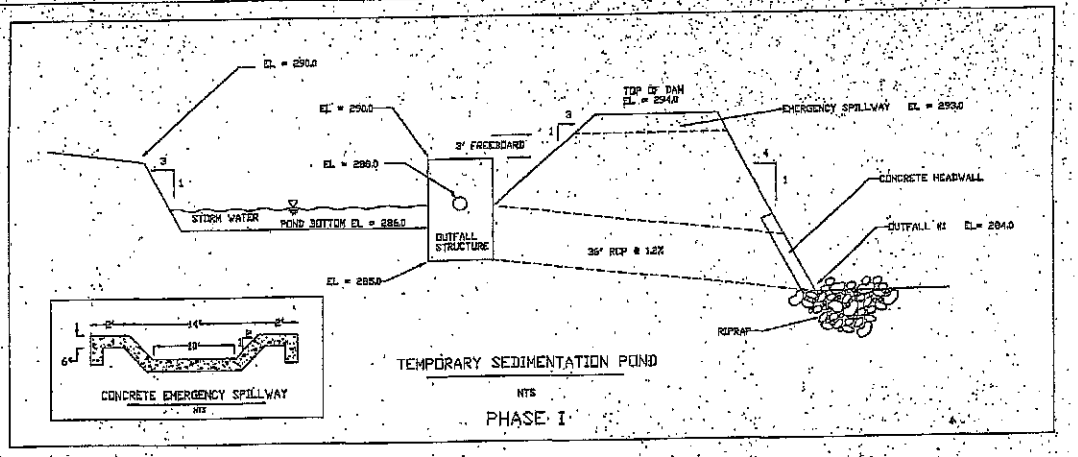
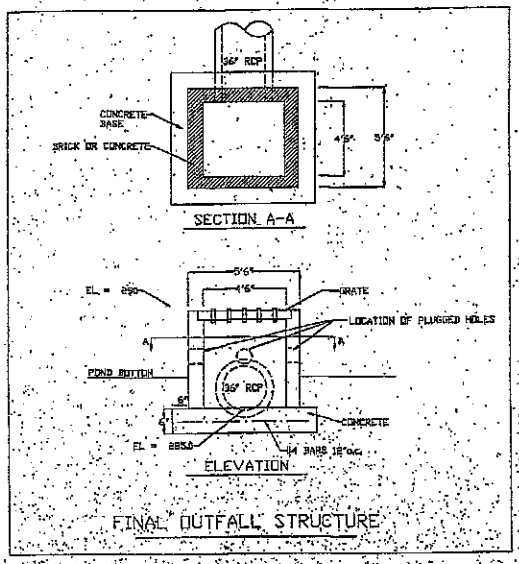
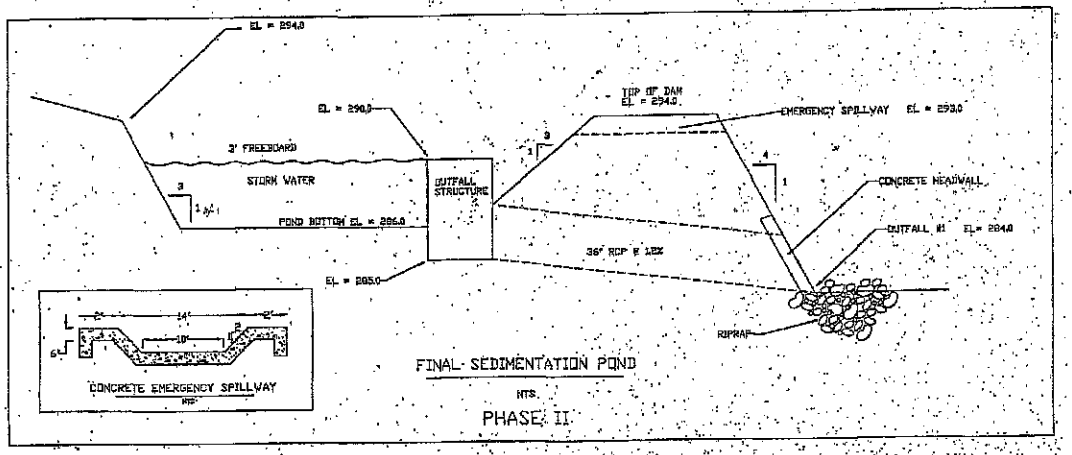
DATE: SEPT 1996
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 6 OF 12





THE SEDIMENTATION POND WILL BE CONSTRUCTED IN TWO PHASES. (1) DURING INITIAL OPERATIONS, THE NORTH, SOUTH, AND WEST SIDES OF THE POND WILL BE CONSTRUCTED AND DISCHARGE WILL TAKE PLACE THROUGH TEMPORARY HOLES IN THE OUTFALL STRUCTURE. (2) AS WASTE DISPOSAL PROGRESSES, THE EAST DIKE WILL BE CONSTRUCTED, THE LOWER OPENINGS IN THE OUTFALL STRUCTURE WILL BE PLUGGED, AND STORMWATER WILL BE DISCHARGED THROUGH THE THROAT OF THE OUTFALL STRUCTURE.





MONROE COUNTY
CONSTRUCTION AND DEMOLITION LANDFILL

SEDIMENTATION POND DETAILS

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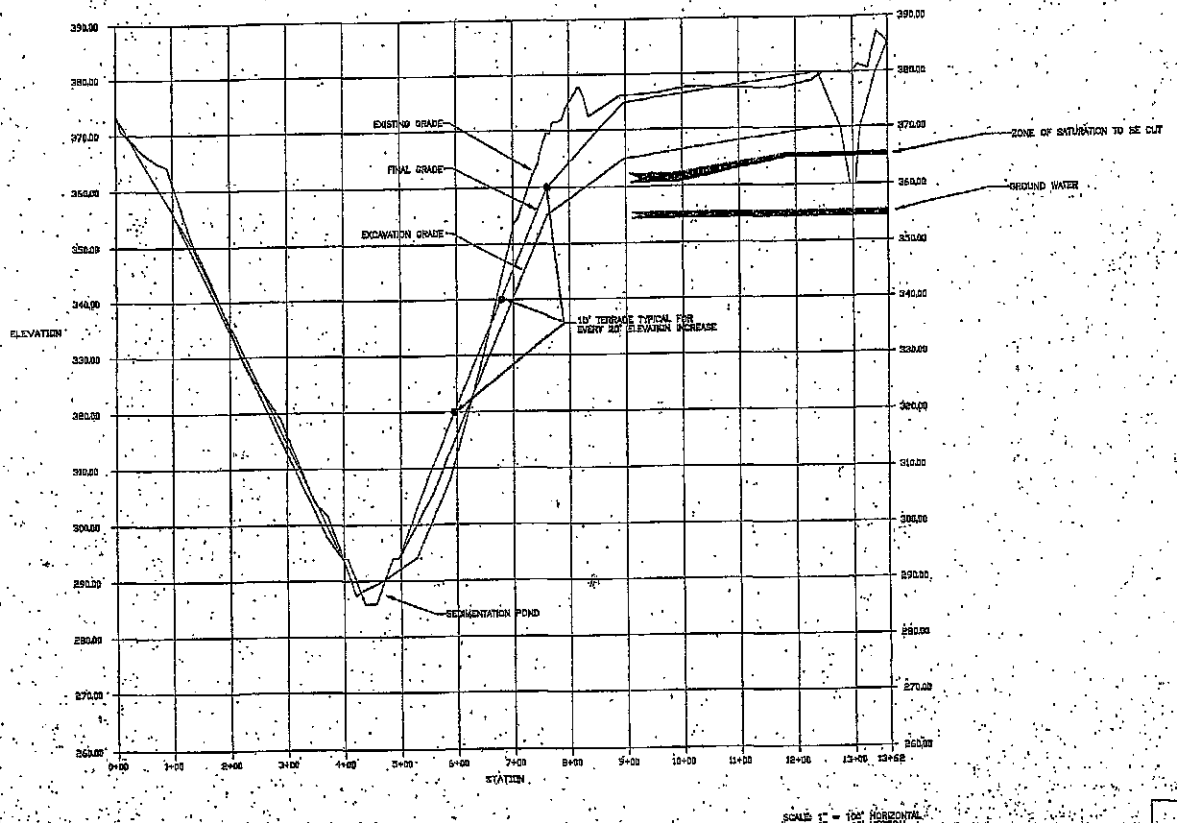
CHECKED BY: GBS
SHEET 7 OF 13

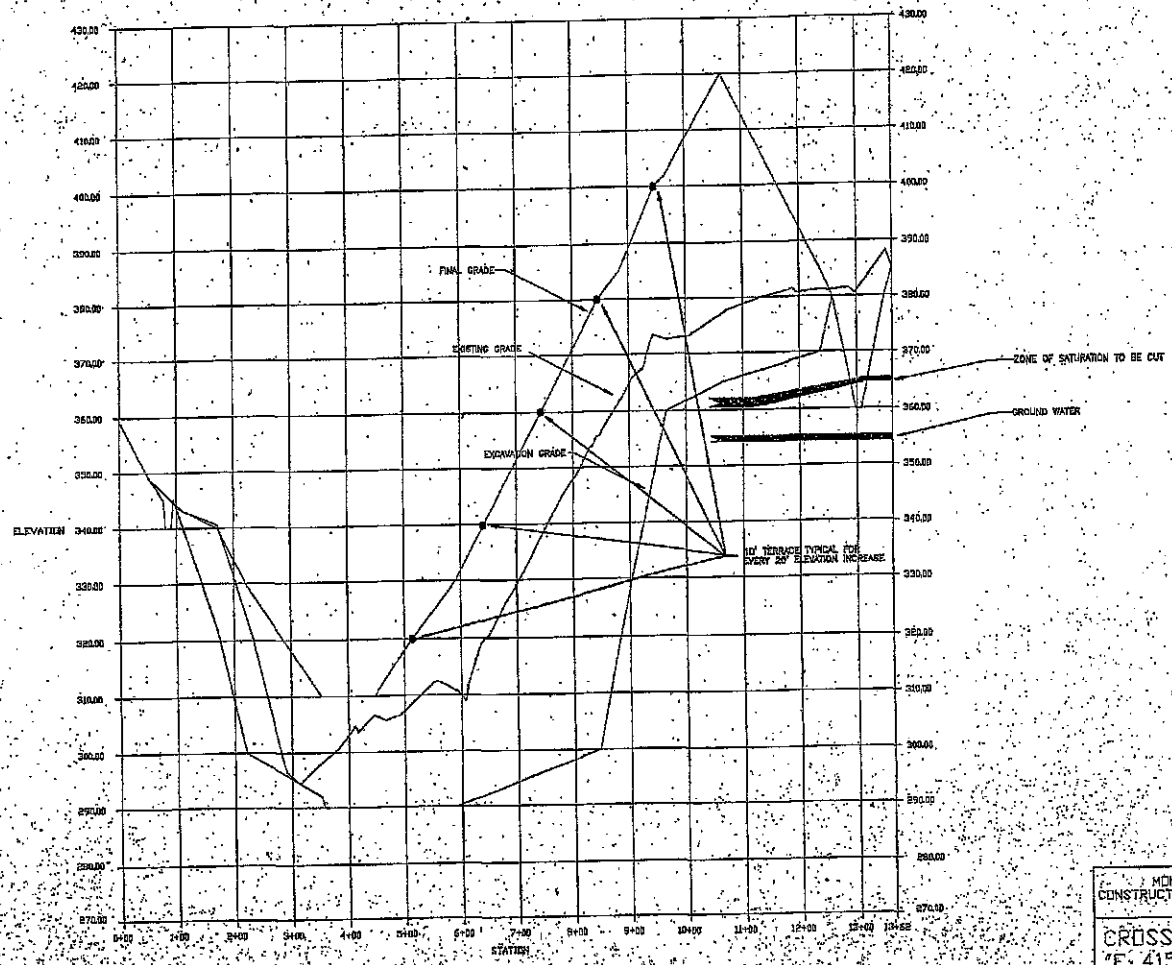


SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

CROSS SECTION
"E 3900"

SCALE:
DATE: SEPT 1996
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 8 OF 13

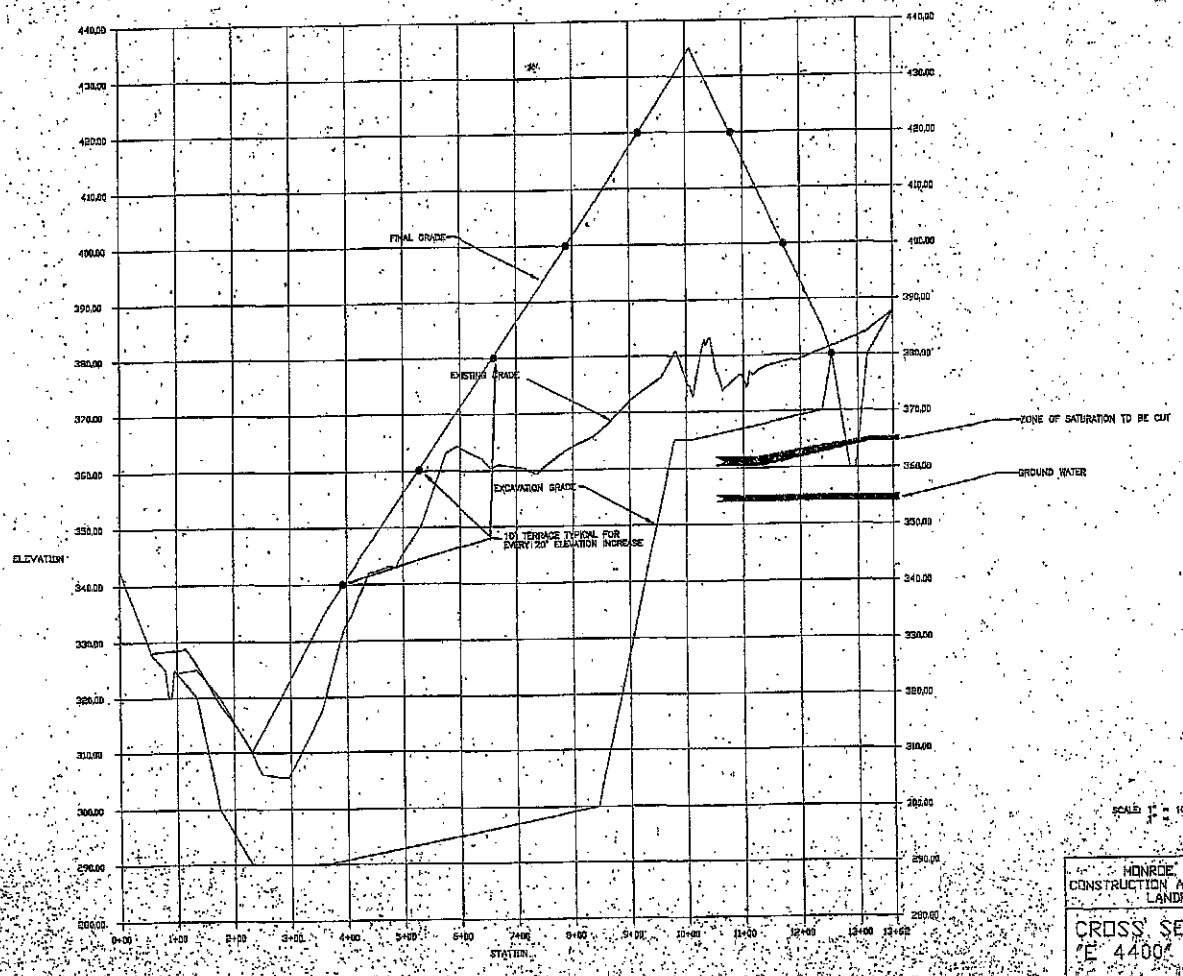


SCALE 1" = 100' HORIZONTAL
1" = 10' VERTICAL

MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

CROSS SECTION
"E" 4150'

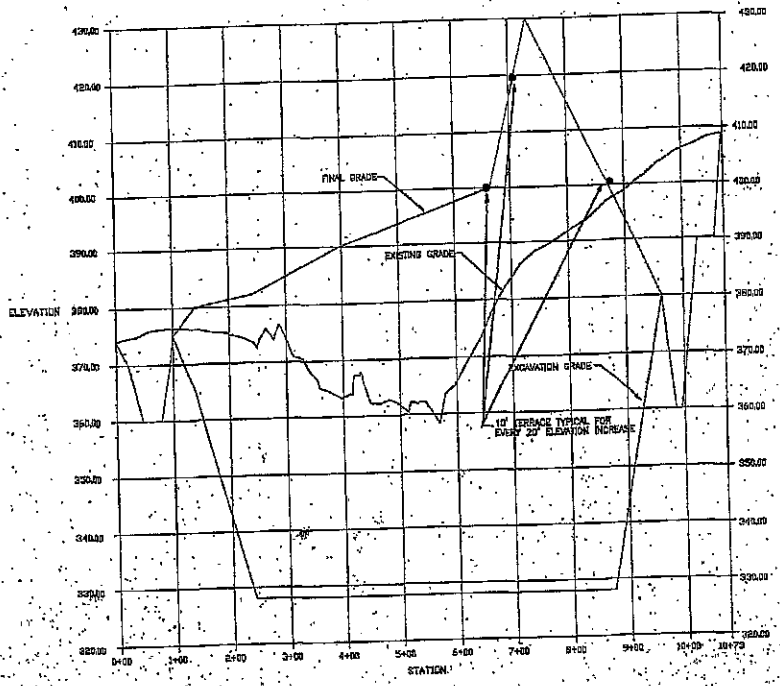
SCALE:
DATE: SEPT 1996
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 3 OF 19



MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL

CROSS SECTION "E 4400'

SCALE:
DATE: SEPT 1996
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 10 OF 15



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1" = 10' VERTICAL

MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

CROSS SECTION
"N 5300"

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DATE: SEPT 1996
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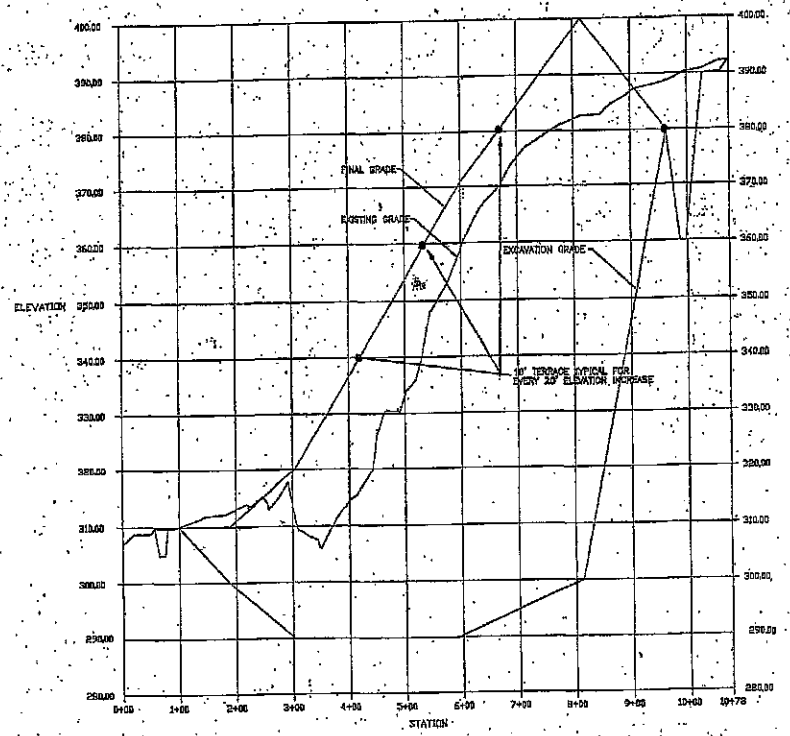
CHECKED BY: GBS
SHEET 11 OF 13



SCALE: 1" = 100' HORIZONTAL
10' VERTICAL

MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL	SCALE:
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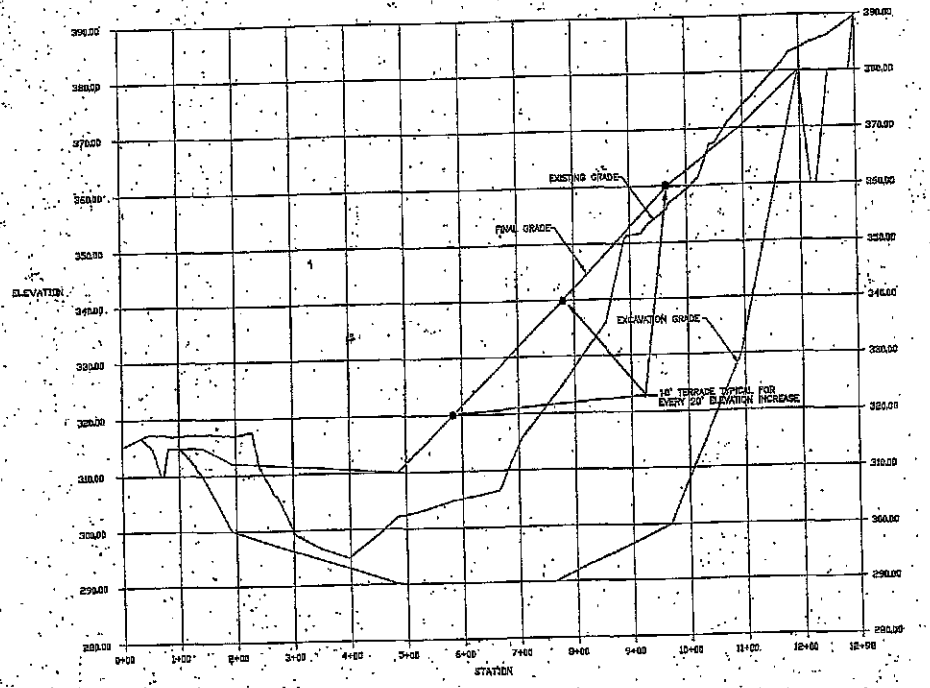
	SHEET 12 OF 13



SCALE 1" = 100' HORIZONTAL
1" = 10' VERTICAL

MONROE COUNTY
CONSTRUCTION AND DEMOLITION
LANDFILL

CROSS SECTION
N 5900

SCALE: 1"=100'
DATE: SEPT 1998
DRAWN BY: SAH
CHECKED BY: GBS
SHEET 13 OF 19

Attachment No. 4

3:1 (33%) Operating & Final Slope Variance Approval

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

ADEM
Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ▪ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

August 22, 2017

The Honorable Judge Greg Norris
Monroe County Commission
P. O. Box 8
Monroeville, Alabama 36461

RE: Permit Modification
Monroe County Construction and Demolition Landfill
Permit No. 50-04
Monroe County, Alabama

Dear Judge Norris:

Enclosed is the Solid Waste Disposal Facility Permit for the Construction and Demolition Waste Landfill known as Monroe County Construction and Demolition Landfill. The modified language can be seen in Section III, Section VII, and Section VIII of this permit. The permit is effective August 22, 2017 and the expiration date will remain April 10, 2019.

If you have any questions on this matter, please contact Mr. Blake Holden of the Solid Waste Engineering Section at (334) 274-4248.

Sincerely,

S. Scott Story, Chief
Solid Waste Engineering Section
Land Division

SSS/bh

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

SOLID WASTE DISPOSAL
FACILITY *PERMIT*

PERMITTEE:	**Monroe County Commission**
FACILITY NAME:	**Monroe County Construction and Demolition Landfill**
FACILITY LOCATION:	**Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama. The total permitted area consists of approximately 35 acres with a disposal area of approximately 24 acres.**
PERMIT NUMBER:	**50-04**
PERMIT TYPE:	**Construction/Demolition**
WASTE APPROVED FOR DISPOSAL:	**Non-putrescible and non-hazardous construction and demolition waste and rubbish as defined by Rule 335-13-1-.03. This facility has also been approved to accept discarded tires.**
APPROVED WASTE VOLUME:	**Maximum Average Daily Volume of waste is 200 cubic yards per day**
APPROVED SERVICE AREA:	**Monroe County, Alabama**

In accordance with and subject to the provisions of the Alabama Solid Wastes & Recyclable Materials Management Act, as amended, Code of Alabama 1975, §§ 22-27-1 to 22-27-27 ("SWRMMA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§ 22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to dispose of the above-described solid wastes at the above-described facility location.

ISSUANCE DATE:	**April 11, 2014**
EFFECTIVE DATE:	**April 11, 2014**
MODIFICATION DATE:	**August 22, 2017**
EXPIRATION DATE:	**April 10, 2019**

Alabama Department of Environmental Management

FINAL DETERMINATION

PERMIT MINOR MODIFICATION & VARIANCE

Monroe County Commission
P.O. Box 8
Monroeville, Alabama 36461

Monroe County Construction and Demolition Landfill
Permit No. 50-04

August 22, 2017

The Monroe County Commission applied to the Alabama Department of Environmental Management (ADEM) for modification of the Solid Waste Disposal Facility Permit for the Monroe County Construction and Demolition Landfill (Permit No. 50-04). The modification requests variances for 3 to 1 (33%) operating slopes and final slopes. Additionally, per the application, a modification is requested to the bottom and side slope contours to allow for corrective measures to control water run-on in the waste disposal area. The landfill is described as being located in a part of the Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama. The permitted facility consists of approximately 35 acres with 24 acres for disposal operations. There are no previously approved variances.

The waste stream for the Monroe County Construction and Demolition Landfill would remain non-hazardous construction and demolition waste as defined by ADEM Rule 335-13-1-.03 and discarded tires. The service area for the Monroe County Construction and Demolition Landfill would remain Monroe County, Alabama. The maximum average daily volume of waste disposed at the Monroe County Construction and Demolition Landfill would remain 200 cubic yards per day.

The Solid Waste Branch has determined that the application for permit modification complies with the requirements of ADEM's Administrative Codes Division 13 regulations for a construction and demolition waste landfill.

Technical Contact:

Mr. Blake Holden
Solid Waste Engineering Section
Land Division
(334) 274-4248

THE HONORABLE JUDGE GREG NORRIS

MONROE COUNTY COMMISSION

P O BOX 8

MONROEVILLE, AL 36461

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID WASTE PERMIT

Permittee:	Monroe County Commission Post Office Box 8 Monroeville, AL 36460
Landfill Name:	Monroe County Construction and Demolition Landfill
Landfill Location:	A part of Southwest ¼ of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama.
Permit Number:	50-04
Landfill Type:	Construction/Demolition Landfill

Pursuant to the Alabama Solid Wastes & Recyclable Materials Management Act, Code of Alabama 1975, §§ 22-27-1, *et seq.*, as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM), this permit is issued to Monroe County Commission (hereinafter called the Permittee), to operate a solid waste disposal facility, known as the Monroe County Construction and Demolition Landfill.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions set forth herein (including those in any attachments), and the applicable regulations contained in Chapters 335-13-1 through 335-13-14 of the ADEM Administrative Code (hereinafter referred to as the "ADEM Admin. Code"). Rules cited are set forth in this document for the purpose of Permittee reference. Any Rule that is cited incorrectly in this document does not constitute grounds for noncompliance on the part of the Permittee. Applicable ADEM Administrative Codes are those that are in effect on the date of issuance of this permit or any revisions approved after permit issuance.

This permit is based on the information submitted to the Department on January 21, 2014, October 29, 2014, August 11, 2016, and September 12, 2016, for permit renewal and modification, known as the Permit Application, and as amended (hereby incorporated by reference and hereinafter referred to as the Application). Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement action. The Permittee must inform the Department of any deviation from or changes in the information in the Application that would affect the Permittee's ability to comply with the applicable ADEM Admin. Code or permit conditions.

This permit is effective as of April 11, 2014, **modified on August 22, 2017,** and shall remain in effect until April 10, 2019, unless suspended or revoked.

Alabama Department of Environmental Management

8/22/17
Date Signed

SECTION I. STANDARD CONDITIONS

A. Effect of Permit

The Permittee is allowed to dispose of nonhazardous solid waste in accordance with the conditions of this permit and ADEM Admin. Code Div. 13. Issuance of this permit does not convey property rights of any sort or any exclusive privilege, nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Except for actions brought under Code of Alabama 1975, §§ 22-27-1, *et seq.*, as amended, compliance with the conditions of this permit shall be deemed to be compliance with applicable requirements in effect as of the date of issuance of this permit and any future revisions.

B. Permit Actions

This permit may be suspended, revoked or modified for cause. The filing of a request for a permit modification or the notification of planned changes or anticipated noncompliance on the part of the Permittee, and the suspension or revocation does not stay the applicability or enforceability of any permit condition.

C. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

D. Definitions

For the purpose of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code Division 13, unless this permit specifically provides otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

1. "EPA" for purposes of this permit means the United States Environmental Protection Agency.

2. "Permit Application" for the purposes of this permit, means all permit application forms, design plans, operational plans, closure plans, technical data, reports, specifications, plats, geological and hydrological reports, and other materials which are submitted to the Department in pursuit of a solid waste disposal permit.

E. Duties and Requirements

1. Duty to Comply

The Permittee must comply with all conditions of this permit except to the extent and for the duration such noncompliance is authorized by a variance granted by the Department. Any permit noncompliance, other than noncompliance authorized by a variance, constitutes a violation of Code of Alabama 1975, §§ 22-27-1 *et seq.*, as amended, and is grounds for enforcement action, permit suspension, revocation, modification, and/or denial of a permit renewal application.

2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The renewal application must be submitted to the Department at least 180 days before this permit expires.

3. Permit Expiration

This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application as required by Section I.E.2., and, through no fault of the Permittee, the Department has not made a final decision regarding the renewal application.

4. Need to Halt or Reduce Activity Not A Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.

5. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit.

7. Duty to Provide Information

If requested, the Permittee shall furnish to the Department, within a reasonable time, any information that the Department may reasonably need to determine whether cause exists for denying, suspending, revoking, or modifying this permit, or to determine compliance with this permit. If requested, the Permittee shall also furnish the Department with copies of records kept as a requirement of this permit.

8. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the employees of the Department or their authorized representative to:

a. Enter at reasonable times the Permittee's premises where the regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

d. Sample or monitor, at reasonable times, any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by Code of Alabama 1975, §§ 22-27-1 *et seq.*

9. Monitoring, Corrective Actions, and Records

a. Samples and measurements taken for the purpose of monitoring or corrective action shall be representative of the monitored activity. The methods used to obtain representative samples to be analyzed must be the appropriate method from Chapter 335-13-4 or the methods as specified in the Application attached hereto and incorporated by reference. Laboratory methods must be those specified in Standard Methods for the Examination of Water and Wastewater (American Public Health Association, latest edition), Methods for Chemical Analysis of Water and Wastes

(EPA-600/4-79-020), Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA Publication SW-846, latest edition), other appropriate EPA methods, or as specified in the Application. All field tests must be conducted using approved EPA test kits and procedures.

b. The Permittee shall retain records, at the location specified in Section I.I., of all monitoring, or corrective action information, including all calibration and maintenance records, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report or record or for periods elsewhere specified in this permit. These periods may be extended by the request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

c. Records of monitoring and corrective action information shall include.

i. The exact place, date, and time of sampling or measurement.

ii. The individual(s) and company who performed the sampling or measurements.

iii. The date(s) analyses were performed.

iv. The individual(s) and company who performed the analyses.

v. The analytical techniques or methods used.

vi. The results of such analyses.

d. The Permittee shall submit all monitoring and corrective action results at the interval specified elsewhere in this permit.

10. Reporting Planned Changes

The Permittee shall notify the Department, in the form of a request for permit modification, at least 90 days prior to any change in the permitted service area, increase in the waste received, or change in the design or operating procedure as described in this permit, including any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

11. Transfer of Permit

This permit may be transferred to a new owner or operator. All requests for transfer of permits shall be in writing and shall be submitted on forms provided by the Department. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of this permit.

12. Certification of Construction

The Permittee may not commence disposal of waste in any new cell or phase until the Permittee has submitted to the Department, by certified mail or hand delivery, a letter signed by both the Permittee and a professional engineer stating that the facility has been constructed in compliance with the permit.

The Department must inspect the constructed cells or phases before the owner or operator can commence waste disposal unless the Permittee is notified that the Department will waive the inspection.

13. Compliance Schedules

Reports of compliance or noncompliance with or any progress reports on interim and final requirements contained in any compliance schedule required and approved by the Department shall be submitted no later than 14 days following each schedule date.

14. Other Noncompliance

The Permittee shall report all instances of noncompliance with the permit at the time monitoring reports are submitted.

15. Other Information

If the Permittee becomes aware that information required by the Application was not submitted or was incorrect in the Application or in any report to the Department, the Permittee shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Department, within a reasonable time, information related to compliance with the permit.

F. Design and Operation of Facility

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of contaminants (including leachate and explosive gases) to air, soil, groundwater, or surface water, which could threaten human health or the environment.

G. Inspection Requirements

1. The Permittee shall comply with all requirements of ADEM Admin. Code Division 13.

2. The Permittee shall conduct random inspections of incoming loads.

3. Records of all inspections shall be included in the operating record.

H. Recordkeeping and Reporting

1. The Permittee shall maintain a written operating record at the location specified in Section I.I. The operating record shall include:

   a. Documentation of inspections and maintenance activities.

   b. Daily Volume reports.

   c. Personnel training documents and records.

   d. Solid/Hazardous Waste Determination Forms for Industrial Wastes, and the associated Department disposal approved correspondence for industrial waste and special waste.

   e. Groundwater monitoring records if required.

   f. Explosive gas monitoring records if required.

   g. Copies of this Permit and the Application.

   h. Copies of all variances granted by the Department, including copies of all approvals of special operating conditions.

2. Quarterly Volume Report

Beginning with the effective date of this permit, the Permittee shall submit, within thirty (30) days after the end of each calendar quarter, a report summarizing the daily waste receipts for the previous (just ended) quarter. Copies of the quarterly reports shall be maintained in the operating record.

3. Monitoring and Corrective Action Reports

The Permittee shall submit reports on all monitoring and corrective activities conducted pursuant to the requirements of this permit, including, but not limited to, groundwater, surface water, explosive gas and leachate monitoring. The groundwater monitoring shall be conducted in March and September of each year, or as directed by the Department, and the reports shall be submitted at least semi-annually, or as directed by the Department. The reports should contain all monitoring results and conclusions from samples and measurements conducted during the sampling period. **Groundwater monitoring is not required at this time.** Explosive gas monitoring must be submitted on an annual basis, and the reports should be submitted to the department and placed in the operating record within 30 days of the monitoring event. Copies of the groundwater and explosive gas monitoring reports shall be maintained in the operating record.

4. Availability, Retention, and Disposition of Records

a. All records, including plans, required under this permit or Division 13 must be furnished upon request, and made available at reasonable times for inspection by any officer, employee, or representative of the Department.

b. All records, including plans, required under this permit or Division 13 shall be retained by the Permittee for a period of at least three years. The retention period for all records is extended automatically during the course of any unresolved enforcement action regarding the facility, or as requested by the Department.

c. A copy of records of waste disposal locations and quantities must be submitted to the Department and local land authority upon closure of the facility.

I. Documents to be maintained by the Permittee

The Permittee shall maintain, at the Monroe County Construction and Demolition Landfill office, the following documents and amendments, revisions and modifications to these documents until an engineer certifies closure.

1. Operating record.

2. Closure Plan.

J. Mailing Location

All reports, notifications, or other submissions which are required by this permit should be sent via signed mail (i.e. certified mail, express mail delivery service, etc.) or hand delivered to:

Mailing Address:
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

Physical Address:
Chief, Solid Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, Alabama 36110-2059

K. Signatory Requirement

All applications, reports or information required by this permit, or otherwise submitted to the Department, shall be signed and certified by the owner as follows:

1. If an individual, by the applicant.

2. If a city, county, or other municipality or governmental entity, by the ranking elected official, or by a duly authorized representative of that person.

3. If a corporation, organization, or other legal entity, by a principal executive officer, of at least the level of Vice President, or by a duly authorized representative of that person.

L. Confidential Information

The Permittee may claim information submitted as confidential if the information is protected under Code of Alabama 1975, §§ 22-39-18, as amended.

M. State Laws and Regulations

Nothing in this permit shall be construed to preclude the initiation of any legal action or to relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

SECTION II. GENERAL OPERATING CONDITIONS

A. Operation of Facility

The Permittee shall operate and maintain the disposal facility consistent with the Application, this permit, and ADEM Admin. Code Division 13.

B. Open Burning

The Permittee shall not allow open burning without prior written approval from the Department and other appropriate agencies. A burn request should be submitted in writing to the Department outlining why that burn request should be granted. This request should include, but not be limited to, specifically what areas will be utilized, types of waste to be burned, the projected starting and completion dates for the project, and the projected days and hours of operation. The approval, if granted, shall be included in the operating record.

C. Prevention of Unauthorized Disposal

The Permittee shall follow the approved procedures for the detecting and preventing the disposal of free liquids, regulated hazardous waste, PCB's, and medical waste at the facility.

D. Unauthorized Discharge

The Permittee shall operate the disposal facility in such a manner that there will be no water pollution or unauthorized discharge. Any discharge from the disposal facility or practice thereof may require a National Pollutant Discharge Elimination System permit under the Alabama Water Pollution Control Act.

E. Industrial Waste Disposal

The Permittee shall not dispose of industrial process waste at this landfill. Only those wastes shown in Section III.B. are allowed for disposal in this landfill.

F. Boundary Markers

The Permittee shall ensure that the facility is identified with a sufficient number of permanent boundary markers that are at least visible from one marker to the next.

G. Certified Operator

The Permittee shall be required to have an operator certified by the Department on-site during hours of operation, in accordance with the requirements of ADEM Admin. Code 335-13-12.

SECTION III. SPECIFIC REQUIREMENTS FOR C/D LANDFILLS

A. Waste Identification and Management

1. Subject to the terms of this permit, the Permittee may dispose of the nonhazardous solid wastes listed in III.B. Disposal of any other wastes is prohibited, except waste granted a temporary or one time waiver by the Director.

2. The total permitted area for the Monroe County Construction and Demolition Landfill is approximately 35 acres, with approximately 24 acres permitted for disposal operations.

3. The maximum average daily volume of waste disposed at the facility shall not exceed 200 cubic yards per day, except as provided under Rule 335-13-5-.06(2)(a)5. The average daily volume shall be computed as specified by Rule 335-13-5-.06(2)(a)5.(i).

B. Waste Streams

The Permittee may accept for disposal non-putrescible and non-hazardous construction and demolition wastes and rubbish as defined by Rule 335-13-1-.03. This facility has also been approved to accept discarded tires.

C. Service Area:

The Permittee is allowed to receive for disposal waste from Monroe County, Alabama.

D. Waste Placement, Compaction, and Cover

All waste shall be confined to an area as small as possible and placed onto an appropriate slope not to exceed 3 to 1 (33%). (See Section VIII.2.) All waste shall be spread in layers two feet or less in thickness and thoroughly compacted weekly with adequate landfill equipment prior to placing additional layers of waste or placing the weekly cover. A minimum of six inches of compacted earth or other alternative cover material approved by the Department shall be added at the conclusion of each week's operation unless a variance is granted in Section VIII.

E. Security

The Permittee shall provide artificial and/or natural barriers, which prevent entry of unauthorized vehicular traffic to the facility.

F. All Weather Access Roads

The Permittee shall provide an all-weather access road to the dumping face that is wide enough to allow passage of collection vehicles.

G. Adverse Weather Disposal

The Permittee shall provide for disposal activities in adverse weather conditions.

H. Personnel

The Permittee shall maintain adequate personnel to ensure continued and smooth operation of the facility.

I. Environmental Monitoring and Treatment Structures

The Permittee shall provide protection and proper maintenance of environmental monitoring and treatment structures.

J. Vector Control

The Permittee shall provide for vector control as required by ADEM Admin. Code Division 13.

K. Bulk or Noncontainerized Liquid Waste

The Permittee shall not dispose of bulk or noncontainerized liquid waste, or containers capable of holding liquids, unless the conditions of Rule 335-13-4-.23(1)(j) are met.

L. Empty Containers

Empty containers larger than 10 gallons in size must be rendered unsuitable for holding liquids prior to disposal in the landfill unless otherwise approved by the Department.

M. Other Requirements

The Department may enhance or reduce any requirements for operating and maintaining the landfill as deemed necessary by the Land Division.

N. Other Permits

The Permittee shall operate the landfill according to this and any other applicable permits.

O. Scavenging and Salvaging Operations

The Permittee shall prevent scavenging and salvaging operations, except as part of a controlled recycling effort. Any recycling operation must be in accordance with plans submitted and approved by the Department.

P. Signs

If the landfill is available to the public or commercial haulers, the Permittee shall provide a sign outlining instructions for use of the site. The sign shall be posted and have the information required by Rule 335-13-4-.23(1)(f).

Q. Litter Control

The Permittee shall control litter.

R. Fire Control

The Permittee shall provide fire control measures.

SECTION IV. GROUNDWATER MONITORING REQUIREMENTS:

Groundwater monitoring is not required at this landfill provided that the waste stream is in accordance with Section III.B. Should any waste be disposed other than the waste streams indicated in Section III.B., the Department may require that groundwater monitoring wells be installed.

SECTION V. GAS MONITORING REQUIREMENTS

A. The permittee shall design, construct, and operate the facility so as to control and monitor the generation and emission of explosive gases (such as methane), and so as to prevent said gases from collecting in, or around structures at concentrations exceeding the limits imposed by this permit.

B. Systems and Equipment.

The Permittee shall provide, install, and maintain gas monitoring and/or recovery systems and equipment.

C. Concentration Limits

The Permittee shall prevent explosive gases from exceeding:

1. The lower explosive limit at the facility boundary.

2. Twenty-five percent (25%) of the lower explosive limit in any facility structure other than those that are components of the gas control and/or recovery system.

D. Gas Monitoring Program

1. The Permittee shall monitor explosive gases at the facility. The gas monitoring program shall monitor explosive gas concentrations in the atmosphere, in the soil, and inside all structures at the facility, including but not limited to buildings, under bridges, and at other locations which are conducive to gas accumulation. Gas monitoring data shall be included in the operating record and be made available to the Department during inspections and at other times upon request.

2. The Permittee shall conduct the gas monitoring at least once in each calendar year. The Permittee shall submit a report to the Department within thirty (30) days after each monitoring event documenting the levels of explosive gases measured at the facility.

3. In the event that explosive gas levels exceed, at any time, the limits specified in this permit, the Permittee shall:

   a. Immediately take all necessary steps to ensure immediate protection of human health and property.

   b. Immediately notify the Department of the explosive gas levels detected and the immediate steps taken to protect human health and property.

   c. Within twenty (20) days, submit to the Department for approval a remedial plan for the explosive gas releases. This plan shall describe the nature and extent of the problem and the proposed remedy. The plan shall be implemented upon approval by the Department, but within sixty (60) days of detection. Within the sixty (60) days the plan shall be placed in the operating record of the facility and the Department notified that the plan has been implemented.

4. Monitoring points for the measurement of explosive gas concentrations in the soil and/or atmosphere shall be located along the landfill boundaries and shall be spaced no more than 300 feet apart. In areas where the landfill boundary is within 1000 feet of a structure, the monitoring points shall be not more than 100 feet apart.

SECTION VI. SURFACE WATER MANAGEMENT

The Permittee shall construct and maintain run-on and run-off control structures to control the discharge of pollutants in stormwater. Any discharges from drainage control structures shall be permitted through a discharge permit issued by the ADEM Water Division.

SECTION VII. CLOSURE AND POST-CLOSURE REQUIREMENTS

The Permittee shall close the landfill and perform post-closure care of the landfill in accordance with Division 13.

A. Final Cover

The Permittee shall grade final soil cover such that surface water does not pond over the permitted area as specified in the Application. The final cover system shall comply with ADEM Admin. Code Division 13. **Final cover shall be placed on an appropriate slope not to exceed 3 to 1 (33%). (See Section VIII.1.)**

B. Vegetative Cover

The Permittee shall establish a vegetative or other appropriate cover within 90 days after completion of final grading requirements in the Application. Preparation of a vegetative cover shall include, but not be limited to, the placement of seed, fertilizer, mulch, and water.

C. Notice of Intent

The Permittee shall place in the operating record and notify the Department of their intent to close the landfill prior to beginning closure.

D. Completion of Closure Activities

The Permittee must complete closure activities of each landfill unit in accordance with the Closure Plan within 180 days of the last known receipt of waste.

E. Certification of Closure

Following closure of each unit, the Permittee must submit to the Department a certification, signed by an engineer, verifying the closure has been completed according to the Closure Plan.

F. Post-Closure Care Period

Post-closure care activities shall be conducted after closure of each unit throughout the life of this permit and continuing for a period of thirty (30) years following closure of the facility. The Department may shorten or extend the post-closure care period applicable to the solid waste disposal facility. The Permittee shall reapply in order to fulfill the post-closure care requirements of this permit.

G. Post-Closure Maintenance

The Permittee shall provide post closure maintenance of the facility to include regularly scheduled inspections. This shall include maintenance of the cover, vegetation, monitoring devices and pollution control equipment and correction of other deficiencies that may be observed by the Department. Monitoring

requirements shall continue throughout the post closure period as determined by the Department unless all waste is removed and no unpermitted discharge to waters of the State has occurred.

H. Post-Closure Use of Property

The Permittee shall ensure that post closure use of the property never be allowed to disturb the integrity of the final cover, liner, or any other component of the containment system. This shall preclude the growing of deep-rooted vegetation on the closed area.

I. Certification of Post-Closure

Following post-closure of each unit, the Permittee must submit to the Department a certification, signed by an engineer, verifying the post-closure has been completed according to the Post-Closure Plan.

J. Notice in Deed to Property

The Permittee shall record a notation onto the land deed containing the property utilized for disposal within 90 days after permit expiration, revocation or when closure requirements are achieved as determined by the Department as stated in the Application. This notation shall state that the land has been used as a solid waste disposal facility, the name of the Permittee, type of disposal activity, location of the disposal facility and beginning and closure dates of the disposal activity.

K. Recording Instrument

The Permittee shall submit a certified copy of the recording instrument to the Department within 120 days after permit expiration, revocation, or as directed by the Department as described in the Application.

L. Removal of Waste

If the Permittee, or any other person(s), wishes to remove waste, waste residues, or any liner or contaminated soils, the owner must request and receive prior approval from the Department.

SECTION VIII. VARIANCES

1. **The Permittee is granted a variance allowing the maximum final slopes not to exceed 3 to 1 (33%). (See Section VII.A.)**

2. **The Permittee is granted a variance from Rule 335-13-4-.23(1)(c) requiring operating slopes not to exceed 4 to 1 (25%). The Permittee is approved to operate slopes on the working face not to exceed 3 to 1 (33%). (See Section III.D.)**

Any variance granted by the Department may be terminated by the Department whenever the Department finds, after notice and opportunity for hearing, that the petitioner is in violation of any requirement, condition, schedule, limitation or any other provision of the variance, or that operation under the variance does not meet the minimum requirements established by state and federal laws and regulations or is unreasonably threatening the public health.

Attachment No. 5

Existing Sedimentation Pond Calculations

PRE-DEVELOPMENT

- DRAINAGE AREA = 24.54 ACRES
- PRE-DEVELOPMENT CONDITIONS ASSUMED TO BE TIMBER/HILLY; RATIONAL COEFFICINT => 0.21
- TIME OF CONCENTRATION = 5 min
- $INTENSITY_{25\ YEAR}$ = 9.10 in/hr (MOBILE, AL)

$$Q_{25} = C i_{25} A$$
$$= 0.21(9.10)(24.54)$$

$$\boxed{Q_{25} = 46.9 \text{ cfs}}$$

POST DEVELOPMENT

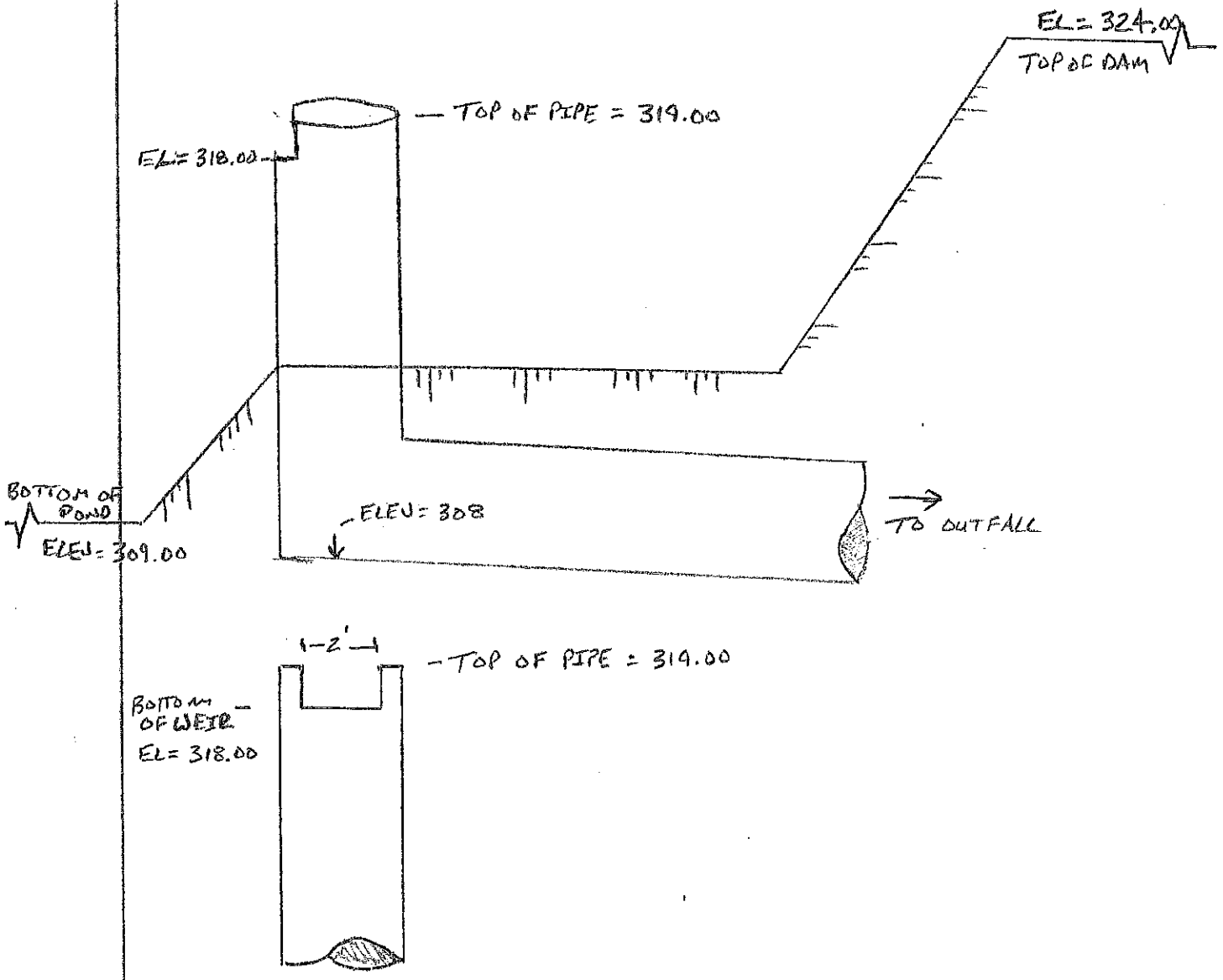
- DRAINAGE AREA = 24.54 ACRES
- POST DEVELOPMENT CONDITIONS ASSUMED IMPERVIOUS SOIL (HEAVY); RATIONAL COEFFICIENT = 0.6
- TIME OF CONCENTRATION = 5 min
- $INTENSITY_{25\ YEAR}$ = 9.10 in/hr (MOBILE, AL)

$$Q_{25} = C i_{25} A$$
$$= 0.6(9.10)(24.54)$$

$$\boxed{Q_{25_{POST}} = 134 \text{ cfs}}$$

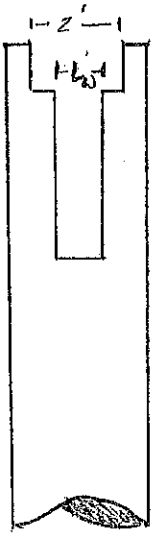
POND OUT FALL STRUCTURE

EXISTING CONFIGURATION (NOT TO SCALE)



POND OUTFALL STRUCTURE

PROPOSED CONFIGURATION



WEIR CALCULATIONS:

$$L_W = Q / [C_W (H)^{1.5}]$$

L_W = WEIR LENGTH

Q = DESIRED OUTFLOW (CFS)

C_W = 3.1 (WEIR CONSTANT)

H = WEIR HEIGHT

- PRE-DEVELOPMENT Q_{25} = 46.9 CFS, I CHOSE TO REDUCE THE POST DEVELOPMENT TO 20 CFS (WHICH IS MORE THAN HALF LESS THAN THE PRE-DEVELOPMENT FLOW) TO CALCULATE THE REQUIRED WEIR LENGTH.

$$L_W = 20 cfs / [3.1 (3.5)^{1.5}]$$

$$L_W = 0.96' \approx 1' \text{ WIDE}$$

EXISTING SEDIMENT POND CAPACITY

POND SURFACE AREAS @ VARYING ELEVATIONS (EXISTING TOPO SURVEY)

ELEVATION (FEET)		SURFACE AREA (SF)		SURFACE AREA (ACRE)	
319		40,946		0.94	
318		39,047		0.90	
317		37,148		0.85	
316		35,249		0.81	
315		33,351		0.77	
314.50		32,402		0.74	
314		31,452		0.72	
313		29,253		0.67	
312		27,055		0.62	
311		24,949		0.57	
310		22,905		0.53	
309		20,926		0.48	

- THE VOLUME OF STORAGE FROM THE BOTTOM ELEVATION OF 309.00 TO THE CREST OF THE PROPOSED WEIR = 314.5 WAS CALCULATED AS FOLLOWS

$$V = \left[\frac{\text{AREA @ EL} = 314.5 + \text{AREA @ EL} = 309.0}{2}\right] \times \left[314.5 - 309.00\right]$$

$$= \left[\frac{32{,}402\ \text{SF} + 20{,}926\ \text{SF}}{2}\right] \times \left[314.50\ \text{FT} - 309.00\ \text{FT}\right]$$

$$\boxed{V_{314.5} = 146{,}652\ \text{CF}}$$

- THE VOLUME OF STORAGE FROM THE CREST OF THE WEIR ELEV = 314.5 TO ELEV = 318.00 IS

$$V = \left[\frac{\text{AREA @ EL} = 318.00 + \text{AREA @ EL} = 314.5}{2}\right] \times \left[318.0 - 314.5\right]$$

$$= \left[\frac{39{,}047\ \text{SF} + 32{,}402\ \text{SF}}{2}\right] \times \left[318.00 - 314.5\right]$$

$$\boxed{V_{318} = 125{,}036\ \text{CF}}$$

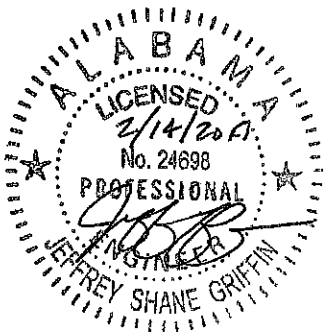
- STORAGE PROVIDED WITH PROPOSED WEIR CONFIGURATION ALLOWING A DISCHARGE OF 20 CFS @ WATER ELEVATION = 318 IS 108,995 CF (SEE ATTACHED SPREAD SHEET FOR CALCULATIONS)

CONCLUSIONS:

I DID NOT TAKE INTO ACCOUNT THE STORAGE CAPACITY FROM EL = 309.00 TO EL = 314.50 OF 146,652 CF. MY REASONING FOR THIS IS THAT AT SOMETIMES DURING THE YEAR, THE POND IS FILLED WITH WATER TO THE 314.50 ELEVATION.

I CALCULATED THE REQUIRED STORAGE CAPACITY OF THE POND WITH A 20 CFS DISCHARGE RATE (WHICH IS LESS THAN CALCULATED PRE-DEVELOPMENT RATE OF 46.9 CFS) TO BE 108,995 CF. THE STORAGE PROVIDED IN THE POND FROM ELEV = 314.50 TO ELEV. = 318.00 IS 125,036 CF. THIS PROVIDES 16,041 CF MORE THAN REQUIRED AT THE 20 CFS DISCHARGE RATE.

PAGES 1-6



Monroe County C&D Landfill
Silt Pond Calculations
Prepared By: Jeff Griffin
Date: February 12, 2019

DRAINAGE CALCULATIONS (25 yr. design storm)

Calculated Release Rate= 20.0000 cfs

POST DEVELOPED SITE CONDITIONS (25 YEAR STORM)

	S.F.	Acres	C Factor
		0.00	0.00
		0.00	
		0.00	
Landfil	1,068,962	24.54	0.60
Total Area	1,068,962	24.54	
Weighted C=			0.60

REQUIRED STORAGE FOR 25 YR. STORM (CF)= 108995

TOTAL STORAGE PROVIDED (CF)= 125036

Tc (min.)	i25 (in/hr)	Qin=ciA	Volume= Tc*60*Qin	Qout= Qpre*Tc*60	Required Storage (cf)
5	9.10	133.99	40197	6000	34,197
6	9.00	132.52	47706	7200	40,506
7	8.85	130.31	54729	8400	46,329
8	8.50	125.15	60074	9600	50,474
9	8.35	122.95	66390	10800	55,590
10	8.00	117.79	70675	12000	58,675
11	7.90	116.32	76771	13200	63,571
12	7.75	114.11	82160	14400	67,760
13	7.60	111.90	87284	15600	71,684
14	7.40	108.96	91524	16800	74,724
15	7.10	104.54	94086	18000	76,086
20	6.35	93.50	112197	24000	88,197
25	5.60	82.45	123682	30000	93,682
30	5.10	75.09	135166	36000	99,166
35	4.75	69.94	146872	42000	104,872
40	4.40	64.79	155485	48000	107,485
45	4.10	60.37	162995	54000	108,995 ←
50	3.80	55.95	167854	60000	107,854
55	3.60	53.01	174921	66000	108,921
60	3.40	50.06	180222	72000	108,222
120	1.85	27.24	196124	144000	52,124
180	1.45	21.35	230578	216000	14,578

Attachment No. 7

Operations Plan

Monroe County C&D Landfill
Operational Plan

Index

APPENDICES

APPENDIX A	Site Suitability Application
APPENDIX B	Groundwater Cutoff Trench Quality Assurance Report
APPENDIX C	Final Cover QA/QC Plan
APPENDIX D	Gas Monitoring Plan
APPENDIX E	Typical Waste Inspection Report

1.0 Introduction

1.1 Purpose & Scope

The Monroe County Commission is currently operating the Monroe County C&D Landfill for the disposal of non-putrescible and non-hazardous construction and demolition waste and rubbish. The facility is also approved to accept discarded tires. This plan has been developed to provide guidelines for operation and maintenance of the facility in a consistent manner while also ensuring protection of the environment.

The landfill is managed by landfill staff under the supervision of the Monroe County Engineer. The landfill staff has the experience, training and equipment available with help as required from the road department for this purpose.

This plan has been developed to provide a standard to achieve the operational objectives as set forth in the Solid Waste Disposal Facility Permit for the Monroe County C&D Landfill and the Alabama Department of Environmental Management Land Division – Solid Waste Management Program Chapter 335-13-4. Responsible personnel should be familiar with this operational plan and accompanying documents.

2.0 General Information

2.1 General Site Description

The Monroe County C&D Landfill site is located at 7034 The Ridge Rd, Monroeville, AL 36460 – Southwest ¼ of Section 1, Township 7 North, Range 7 East in the unincorporated area of the county. The total permitted area is approximately 35 acres with a disposal area of approximately 24 acres.

The site was previously used as a borrow pit and converted to the existing C&D landfill in 1997.

2.2 Average Daily Volume

The facility is permitted to dispose of a maximum average daily volume of 200 cubic yards.

2.3 Service Area

The service area of the Monroe County C&D Landfill is limited to Monroe County, Alabama, including municipalities located within the

county. The County reserves the sole right to specify what waste from within the service will be accepted at the landfill.

2.4 Waste Stream

The waste stream is specified in the permit as "non-putrescible and non-hazardous construction and rubbish as defined in ADEM Admin. Code r.335-13-1-.03. This facility has also been approved to accept discarded tires".

2.5 Contact Person

Monroe County Engineer
P.O. Box 692
Monroeville, AL 36461
(251) 743-3672

3.0 Siting Standards

3.1 Floodplain

The site is located in an area designated as Zone X – areas determined to be outside the 0.2% annual chance floodplain.

3.2 Endangered or Threatened Species or Habitat

See Appendix A for Site Suitability Application

3.3 Airports

The landfill does not accept any putrescible waste that would attract birds and therefore will not pose a threat to air traffic. The nearest airport is the Monroe County Aeroplex is located approximately 9 miles southeast of the landfill site.

3.4 Unstable Areas

The site is not located in a zone of active faults, seismic impact zones, sink holes or karst terrain.

3.5 Archeological or Historical Significance

See Appendix A for Site Suitability Application

3.6 Surface Water

Stormwater is managed by the use of permanent and temporary drainage structures such as berms, terraces and ditches which flow to the sedimentation pond. These facilities are designed to intercept stormwater from disturbed areas and directed to the sedimentation pond for treatment before discharge from the site. Surface water is diverted away from the working face of the landfill.

3.7 Wetlands

There are no wetlands located on the site.

3.8 Groundwater

See Appendix A for Site Suitability Application

4.0 Plans Required

4.1 On-site Control Points

On-site vertical and horizontal control points are provided to ensure proper operation, closure and post closure activities.

4.2 Boundary Plat and Legal Property Description

The boundary plat and legal description for the site are included in the original permit drawings.

4.3 Initial and Final Topographies

The initial and proposed final topographic map is included in the original permit drawings. An updated final topographic map was generated in 2017 to better utilize available air space and is included in the permit submittal package.

4.4 Existing and Proposed Surface Drainage

The pattern for surface drainage control is provided in the original permit design drawings.

4.5 Buffer Zone

A one hundred foot (100') buffer zone has been established around the perimeter of the landfill. It is clearing marked with yellow hazard panels

and each panel is visible one to the next. No waste will be placed with the designated buffer zone.

Roads, drainage structures, personnel facilities, equipment facilities and landfill appurtenances may be located within this buffer zone.

4.6 Access Roads

The landfill site is bounded on the south side by The Ridge Rd (C.R. 42) and serves as the access to the site. There is a gated entrance leading to The Ridge Rd with an all-weather access road to the working face. The roadway is regularly maintained by the Monroe County Road Department. There is also a roadway maintained along the remaining perimeter which allows access to the sedimentation pond.

4.7 Summary of Siting Standards

See Section 3 of this report.

4.8 Disposal Areas

Areas of the facility which have been used and are to be used for future disposal are shown in the original permit drawings.

4.9 Special Engineering Features

In 2018 a groundwater cutoff trench was installed by county forces in the south face of Cell #5 to alleviate groundwater seepage into the cell. Appendix B contains a Groundwater Cutoff Trench Quality Assurance Report by Engineering Service Associates, Inc. along with Highland Technical Services, Inc.

4.10 QA/QC

The final cover layer will be constructed in accordance with the QA/QC plan located in Appendix B.

4.11 Explosive Gas Monitoring Wells

Explosive gas monitoring well locations and details are shown in the Explosive Gas Monitoring Plan located in Appendix C.

5.0 Cover

5.1 Weekly Cover

Waste will be covered a minimum of once a week (Saturdays) to control disease vectors, odors, fires, blown litter and scavenging. The facility uses a minimum of 6" of compacted earth taken from an adjacent borrow pit.

5.2 Final Cover

The QA/QC plan located in Appendix B addresses final cover operations.

6.0 Explosive Gas Monitoring Plan

6.1 General

A comprehensive gas monitoring plan was generated by CDG and it included as Appendix D.

7.0 Drainage Control

Stormwater control at the facility is necessary to prevent erosion and sedimentation. Details of the stormwater drainage plan and discharge area are shown on the original permit drawings.

7.1 Run-on Control

The landfill will maintain a run-on control system using berms, terraces and diversion ditches to prevent flow onto the active or closed portions of the landfill during the peak discharge from a 25 year, 24-hour storm event.

7.2 Run-off Control

The landfill will maintain a run-off control system using berms, terraces, ditches and a sedimentation basin w/control structure to collect and control at a minimum the water volume from a 25 year, 24-hour storm event. Temporary sediment control will be employed as needed to control sediment transport.

8.0 Access

All waste will enter on an entrance road off The Ridge Rd (C.R. 42). The landfill office is located on the access road to the working face. All vehicles are stopped at the office before proceeding to the working face.

8.1 Authorized Personnel

Only persons authorized by the Landfill Manager will be permitted access to the site. No access will be permitted except when a certified landfill attendant is on duty.

8.2 Haul Roads

The main access road provides access to the working face. It is clearly delineated and is regularly maintained by the Monroe County Road Department.

8.3 Public Accommodation

Every effort is employed to maintain access by the public to the working face. Certain wet conditions do not allow for safe access to the working face and at these times no one is allowed to dump. A sign is placed at the entrance gate indicating that conditions are too wet to allow dumping.

9.0 Closure Plan

9.1 General

The closure plan describes the steps that will be taken to properly close upon reaching the final elevations or at any point during the active life of the facility. The purpose of properly closing the landfill is to stop the infiltration of rain water in the waste and to stop any further impacts the landfill may have on the environment.

9.2 Final Cover System

A final cover system will be installed which is designed to minimize infiltration and erosion. The final cover system will be comprised of an erosion layer underlain by an infiltration layer. The erosion layer will be a minimum of 6 inches of earthen material that is capable of sustaining native plant growth. The infiltration layer will consist of 18 inches of compacted earthen material.

The county engineer will select a source of material that will be compacted to meet the requirements for the infiltration layer. The infiltration layer will be place in 4 to 6 inch lifts and compacted. This will be repeated until the required 18 inches has been achieved. The topsoil

will then be placed in 6 inch layer that is suitable for growing a vegetative cover. The final QA/QC plan is located in Appendix B.

9.3 Description of Disposal Area

The estimated area of the landfill that will require a final cover is 24 acres.

9.4 Final Soil Cover Grading

The final soil cover will be graded to that surface water does not pond over the facility. A variance was granted in August, 2017 to use 3to1 (33%) operating and final slopes. The minimum final grade will not be less than 5% to eliminate ponding. Slopes longer that 25' will have minimum 12' terraces for every 20' rise in elevation. Final grading will be completed within 90 days after the landfill has received the last waste.

9.5 Vegetative Cover

A vegetative cover will be established to reduce erosion and maximize evapotranspiration. Preparation of the final cover will be done in accordance with the Alabama Department of Transportation Standard Specifications for establishment of vegetation. There will be no use of deep-rooted vegetation.

9.6 Notice of Intent

Prior to beginning closure of the landfill, the permittee will submit a "Notice of Intent to Close" to ADEM.

9.7 Schedule for Closure

The permittee will begin closure activities no later than 30 days after the last known receipt of waste. The permittee will complete closure activities in accordance with this plan within 180 days after last known receipt of waste.

9.8 Closure Certification

Following the closure of the landfill, the permittee will submit a certification to ADEM that verifies that the landfill closure has been completed in accordance with the closure plan. A copy of this certification will be placed in the operating record. This certification will be signed by a registered professional engineer.

9.9 Deed Notation

Within 90 days after the closure requirements are complete, the permittee will record a notation onto the facility's land deed or other legal instrument that is normally examined during a title search. This will notify any potential buyer of the property that:

1. The land has been used as a solid waste disposal facility.
2. The use of the property will never be allowed to disturb the integrity of the final cover or the function of the monitoring systems, unless ADEM determines that the activities will not increase the potential threat to human health or the environment; or the activities are necessary to reduce the threat to human health or the environment.
3. The locations and dimensions of the facility with respect to permanently surveyed benchmarks and section corners will be on a plat prepared and sealed by a land surveyor.
4. The name of the permittee or the operating agency, the type of landfill unit and the beginning and closure dates of the disposal activity.
5. Certification has been made by an engineer or land surveyor that all closure requirements have been completed.

9.10 Recording Instrument

The permittee will submit a certified copy of the recording instrument to ADEM and place a copy in the facility's operating record within 120 days after permit expiration, revocation or as directed by ADEM.

9.11 Final Contour and Drainage Plan

An updated final topographic map was generated in 2017 to better utilize available air space and is included in the permit submittal package.

10.0 Post-Closure Plan

10.1 General

Post-closure of the landfill begins when closure has taken place according to the approved closure plan and certified by a registered professional engineer. The primary purpose of the post-closure monitoring to maintain the integrity of the final cover and to monitor any groundwater or gas wells.

10.2 Maintenance

The closed landfill will be inspected monthly to ensure the integrity of the final cover and monitoring equipment. Eroded areas and areas that allow

ponding of surface water will be filled with suitable soil cover, compacted, graded and re-seeded to establish vegetative cover. Access to the facility will be restricted by access control structures. If the access control structures become ineffective, new structures will be erected. Signs will be posted stating that the facility is closed and indicate the location of the nearest permitted facility. Any waste dumped at the closed facility will be removed and disposed in an approved facility. Monitoring devices and pollution control equipment will be maintained. Other problems such as vector control will be corrected.

10.3 Length of Post-Closure Care Period

The length of post-closure monitoring and maintenance will be a minimum of 30 years.

10.4 Post-Closure Contact Person

Monroe County Engineer
P.O. Box 692
Monroeville, AL 36461
(251) 743-3672

10.5 Post-Closure Use of Property

There is no planned use of the closed facility. However, if a different use of the property is proposed, the use will not be allowed to disturb the integrity of the final cover, any other component of the containment system, or the function of any monitoring systems unless approved by ADEM

10.6 Post-Closure Certification

Following the completion of the post closure care period, the permittee will submit a certification to ADEM that verifies that the landfill's post closure care period has been completed in accordance with the post closure plan. A copy of this certification will be placed in the operating record. This certification will be signed by a registered professional engineer.

11.0 General Operational Standards

11.1 Acceptable Waste

See Section 2.4 of this report.

11.2 Hazardous and Infectious Wastes Inspection Plan

Only waste stipulated on the permit or otherwise approved by ADEM will be accepted at the facility. Any unapproved waste coming to the site for disposal will be rejected. The facility operator will perform inspections of suspicious load as well as random inspections of incoming loads to ensure that these load do not contain free liquids, hazardous wastes, medical wastes, or PCP wastes. Records of these inspections will be kept on file in the facility's operating record. These records will include origin of the waste, the transporter, any transfer stations or handlers of the waste enroute to the facility and any certifications from generators provided to the facility personnel.

Personnel will be trained to inspect waste in a safe and orderly manner and to recognize any unacceptable waste such as free liquids, regulated hazardous wastes, medical wastes, regulate PCB wastes, or unapproved industrial users. If any load is suspected of containing hazardous or regulated waste, ADEM will be notified immediately.

11.3 Industrial Waste Disposal

This facility will not accept industrial waste as defined by ADEM.

11.4 Water Pollution

Any surface water discharges from the facility will be from stormwater runoff. All stormwater runoff is channeled into the sedimentation pond for treatment before discharge from the site. No discharge of pollutants to groundwater is anticipated at the site.

11.5 Boundary Markers

A one hundred foot (100') buffer zone has been established around the perimeter of the landfill. It is clearing marked with yellow hazard panels and each panel is visible one to the next. No waste will be placed with the designated buffer zone.

11.6 Waste Quantity Calculation

Waste is measured as cubic yards at the landfill. Landfill personnel measures the size of the container for each load of waste brought into the landfill and is recorded on the daily volume sheet.

11.7 Open Burning

No open burning will occur at the facility unless approved by ADEM.

12.0 Specific Requirements

Operation

12.1 Cover

The facility will use a minimum of six inches of compacted earth for weekly cover operations. The material is taken from an adjacent borrow pit.

Final cover will be done in accordance with Section 9 of this report and ADEM Administrative Code Division 13.

12.2 Unloading and Compaction

All waste will be unloaded and thoroughly compacted in layers of two feet or less. Waste will be confined to as small an area as practical and placed on a slope not exceeding 33% (variance granted 2017).

12.3 Access

Access will be managed in accordance with Section 9 of this plan.

12.4 Signage

A sign will be posted at the facility entrance stating the name of the permittee, the facility owner/operator, name of the facility, days and hours of operation, waste types accepted and disposal fees.

12.5 Adverse Weather Operation

No waste will be accepted during adverse weather conditions.

12.6 Personnel

Adequate personnel will be available at all times to insure smooth operation of the facility. These personnel with be familiar with all operating procedures.

12.7 Equipment

Adequate equipment will be maintained on site to ensure the proper operations. Additional equipment is available from the Road Department when required.

12.8 Liquid Waste

Bulk or non-containerized liquid waste or containers capable of holding liquids will not be accepted at the facility.

12.9 Empty Containers

Empty containers will be rendered unsuitable of holding liquids prior to disposal in the landfill.

12.10 Scavenging and Salvaging

Scavenging will not be permitted at the facility. Any salvaging operations will be controlled.

12.11 Litter

Litter will be controlled in the landfill and adjoining property by landfill personnel.

12.12 All-Weather Access Rd

An all-weather access road will be provided and maintained.

12.13 Monitoring Equipment

Any required monitoring or treatment equipment will be protected and maintained.

12.14 Daily Volume Records

Daily volumes and scrap tire quantities are recorded on daily volume reports. A quarterly report is submitted to ADEM to summarize daily volumes and a scrap tire totals. The reports are placed in the facility's operating record.

12.15 Vector Control

An exterminator will be contracted on as needed basis for vector control.

13.0 Special Waste

The facility does not accept any special waste as defined by ADEM Administrative Code, Division 13.

14.0 Recordkeeping

The facility will keep an operating record which will maintain at a minimum the permit, a copy of this report, daily volumes, quarterly volume reports and rainfall amounts.

The operating record will be furnished upon request to ADEM.

Appendix A

Site Suitability Application

MONROE COUNTY CONSTRUCTION AND DEMOLITION LANDFILL

MONROEVILLE, ALABAMA

SOLID WASTE DISPOSAL FACILITY

SITE SUITABILITY APPLICATION

JULY 1996

Prepared by:
ENVIRONMENTAL CONSULTING & ENGINEERING, INC.
28250 Hwy. 98
P.O. Box 1993
Daphne, AL 36526

Prepared for:

MONROE COUNTY COMMISSION
65 North Alabama Ave.
Monroeville, AL 36461

Prepared by:

ENVIRONMENTAL CONSULTING & ENGINEERING, INC.
28250 Hwy 98
P.O. Box 1993
Daphne, AL 36526

SOLID WASTE APPLICATION

PERMIT APPLICATION
SOLID WASTE DISPOSAL FACILITY
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

1. Facility Type:

- Municipal Solid Waste Landfill (MSWLF)
- X Construction/Demolition Landfill (C/DLF)
- Industrial Landfill (ILF)
- Other (explain)_____

2. Facility Name: Monroe County Construction and Demolition Landfill

3. Applicant:

Name: Monroe County Commission
Address: P.O. Box 8
Monroeville, AL 36461
Telephone: (334)743-4107

4. Location: (include county highway map or USGS map)

Township: 7 North Range: 7 East Section: 1
County: Monroe

5. Land Owner:

Name: Monroe County Commission
Address: P.O. Box 8
Monroeville, AL 36461
Telephone: (334)743-4107

(Attach copy of agreement from landowner if applicable)

6. Contact Person:

Name: Mr. John McAnulty
Monroe County Engineer
Address: P.O. Box 8
Monroeville, AL 36461
Telephone: (334)743-3672

7. **Size of Disposal Facility:**

   34 acres

8. **Identify proposed service area or specific industry that waste will be received from:**

   Monroe County

9. **Proposed average daily volume to be received at landfill:**

   200 cubic yards/day

10. **List all waste streams to be accepted at the facility (i.e., household solid waste, wood boiler ash, tires, trees, limbs, stumps, etc):**

    1. Waste building materials, packaging, and rubble resulting from construction, remodeling, repair, or demolition operations on pavements, houses, commercial buildings, and other structures. Such wastes include, but are not limited to, masonry materials, sheet rock, roofing waste, insulation, rebar, scrap metal, paving materials, and wood products.

    2. Clearing, landscaping, and storm debris.

    3. Solid waste generated by manufacturing processes that is not a hazardous waste and is not classified as industrial waste. No manufacturing waste will be disposed of at this facility without prior written approval from ADEM.

Dina Lee Riggs — 7/23/96

Signature **Date**

PROOF OF ADVERTISEMENT
&
CERTIFICATE OF LOCAL APPROVAL

PUBLISHER'S AFFIDAVIT

STATE OF ALABAMA
Monroe County

Before me, Sandra E. Dunn, a Notary Public in and for said County in said state, personally appeared Kermit P. Bolton, Publisher, who is known to me, and who, being duly sworn, deposes and says:

That he is Publisher of The Monroe Journal, a newspaper published weekly at Monroeville, in Monroe County, Alabama, and that the following notice, to-wit:

NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD

Pursuant to Alabama Act 89-824, the Monroe County Commission hereby issues public notification of the intent to consider approval of the Monroe County Construction and Demolition Landfill project at its regularly scheduled Commission meeting on the 9th day of July, 1996, 10:00 a.m. local time, in the Monroe County Commission Meeting Room at the Monroe County Courthouse. The proposed project will provide a facility to dispose of construction and demolition debris as well as solid waste generated by manufacturing processes that is not a hazardous waste and is not classified as industrial waste. This facility will not accept household garbage for disposal. The facility is proposing to accept an average daily volume of 200 cubic yards/day of waste with the proposed service area being Monroe County. The site is located approximately four miles north of the City of Monroeville in the northwest quarter of the southwest quarter of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama, consisting of approximately 34.39 acres. It will be owned and operated by the Monroe County Commission. The development of this facility is consistent with the Monroe County Solid Waste Management Plan, as approved February 8, 1991. Information concerning this project will be available at the Monroe County Commission office from June 6, 1996 until July 9, 1996. The Monroe County Commission solicits public comments and invites all interested local citizens to attend the meeting at which this project will be addressed. Written comments will be received until the 9th day of July, 1996, and should be addressed to:

Judge Otha Lee Biggs, President
Monroe County Commission
RE: Proposed Construction and Demolition Landfill
P.O. Box B
Monroeville, AL 36461

23-1tpc

was published in said newspaper once a week for 1 successive weeks, said notice appearing in the following issues: June 6, 19 96, to June 6, 19 96 inclusive.

Kermit P. Bolton

Sworn to and subscribed before me this day of June 6, 19 96

Sandra E. Dunn
Notary Public, Monroe County, Ala.

CERTIFICATE OF LOCAL APPROVAL

FOR

SOLID WASTE MANAGEMENT FACILITY

On July 9, 1996, the Monroe County Construction and Demolition Landfill applied to Monroe County Commission for:

A new solid waste management facility (to be located approximately four miles north of the City of Monroeville in the northwest quarter of the southwest quarter of Section 1, Township 7 North Range 7 East in Monroe County, Alabama,) will provide a facility to dispose of construction and demolition debris as well as solid waste generated by manufacturing processes that is not a hazardous waste and is not classified as industrial waste.

On June 6, 1996, the Monroe County Commission did caused to be published in a newspaper of general circulation in the municipality (copy enclosed) and in the official gazette of the jurisdiction a notice of a public hearing on whether Monroe County Commission should deny or approve the proposal made by Monroe County Construction and Demolition Landfill.

Furthermore, the notice was given at least 30 days, but not more than 45 days, prior to the published date of said hearing.

The notice contained the following information:

1. A description of the proposed action to be considered.

2. The relevancy and consistency of the proposed action on the solid waste management facility with the Solid Waste Management Plan.

3. The notice identified a contact person from whom interested parties could obtain additional information and can review copies of both the local Solid Waste Management Plan and the application or proposal of Monroe County Construction and Demolition Landfill.

All pertinent documents relating to the application or proposal made by Monroe County Construction and Demolition Landfill were made available for public inspection at Monroe County Commission Office location readily accessible to the public, during normal business hours of 8:00 a.m. to 5:00 p.m.

The public hearing was held in accordance with the published notice. Following the public hearing, the local government body approved the proposal by affirmative action of the governing body as indicated below.

In determining to recommend approval of the proposed issuance of the new solid waste management site, Monroe County Commission did consider as a minimum each of the following:

1. The consistency of the proposal with the jurisdiction's solid waste management need as identified in its plan;

2. The relationship of the proposal to local planned or existing development or the absence thereof to major transportation arteries and to existing state primary and secondary roads;

3. The location of a proposed facility in relationship to existing industries in the state that generate large volumes of solid waste, or the relationship to the areas projected for development of industries that will generate solid waste;

4. Costs and availability of public services, facilities, and improvements required to support a proposed facility and protect public health, safety, and the environment;

5. The impact of a proposed facility on public safety and provisions made to minimize the impact on public health and safety; and

6. The social and economic impacts of a proposed facility on the affected community, including changes in property values, and social or community perception.

On July 9, 1996, at a public meeting Monroe County Commission did approve the proposed issuance of a permit for Monroe County Construction and Demolition Landfill located approximately four miles north of the City of Monroeville in the northwest quarter of the southwest quarter of Section 1, Township 7 North, Range 7 East in Monroe County, Alabama.

1. The facility will provide for the disposal of construction and demolition debris as well as solid waste generated by manufacturing processes that is not a hazardous waste and is not classified as industrial waste.

2. Service area- Monroe County.

3. Volume of waste to be accepted-200 cubic yards/day

4. Types of wastes to be accepted-construction and demolition debris as well as solid waste generated by manufacturing processes that is not a hazardous waste and is not classified as industrial waste.

5. Life of facility- approximately 20 Years

I hereby certify that the above information is a true and accurate version of the events as they occurred.

Ditha Lee Biggs
Signature of Authorized Official
of Local Governing Body

July 9, 1996
Date

Gloria Maddux
Signature of Notary

July 9, 1996
Date

STATEMENT OF CONSISTENCY

ALABAMA-TOMBIGBEE REGIONAL COMMISSION
12 Water Street, Suite 200 Courthouse Annex
Camden, Alabama 36726

(334) 682-4234
Fax
(334) 682-4205

GEORGE F. ALFORD, JR.
Executive Director

STATEMENT OF CONSISTENCY

The Alabama-Tombigbee Regional Commission received a request for a statement of consistency from Environmental Consulting & Engineering, Inc., on July 22, 1996. Local approval for this approval was given by the Monroe County Commission on July 9, 1996.

The Alabama-Tombigbee Regional Commission has evaluated the proposal using the provisions of the current regional solid waste management needs assessment in particular the available existing capacity within the region and projected lifetime of such capacity. The commission has identified that the proposed capacity is not in excess of the expected regional needs.

Based upon our evaluation of the proposal using the above criteria, the undersigned has determined that this proposal is consistent with the Region 6 Solid Waste Needs Assessment.

George F. Alford, Jr.
Executive Director

7/22/96
Date

Notary Public

7-22-96
Date

U.S. ARMY CORPS OF ENGINEERS APPROVAL

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

June 21, 1996

Regulatory Branch
Operations Division

SUBJECT: No Permit Required to Construct a Construction and Demolition Landfill - Jurisdictional Number ALJ96-01632-M

ECE, Inc.
Attention: Mr. Scott A. Hutchinson
28250 Highway 98
Post Office Box 1993
Daphne, Alabama 36526

Dear Mr. Hutchinson:

Reference is made to your letter requesting a jurisdictional determination at your property in conjunction with your proposed plans to construct a 35-acre landfill for receipt of construction and demolition materials. Specifically, the property is located in Section 1, Township 7 North, Range 7 East, on County Road 42, north of Monroeville, Monroe County, Alabama.

An office review conducted on June 20, 1996, revealed that a Department of the Army permit pursuant to Section 404 of the Clean Water Act will not be required to develop the proposed landfill property. The property is a nonwetland/ upland area based upon the U.S. Army Corps of Engineers' 1987 Wetland Delineation Manual.

Please be advised that this jurisdictional determination reflects current policy and regulation and is valid for a period of 5 years from the date of this letter. If after the 5-year period, this jurisdictional determination has not been specifically revalidated by the U.S. Army Corps of Engineers, it shall automatically expire.

The statements contained herein do not convey any property rights, or any exclusive privileges, and do not authorize any injury to property or obviate the requirements to obtain other local, State, or Federal assent required by law for the activities discussed above.

If the scope of work or project location changes, you are urged to contact this office for a verification of this determination. Thank you for your cooperation with our permit program. If you have any questions concerning this matter, please contact Mr. Bradley J. Flott of the Enforcement Section at (334) 694-4611.

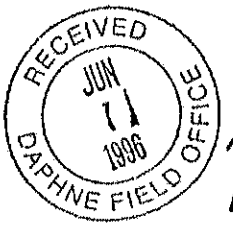
Sincerely,

Ronald A. Krizman
Chief, Regulatory Branch
Operations Division

U.S. FISH & WILDLIFE APPROVAL

ECE

Environmental Consulting & Engineering, Inc.



PH

June 5, 1996

Mr. Larry E. Goldman
U.S. Fish and Wildlife Service
P.O. Drawer 1190
Daphne, Al 36526

RE: Proposed Monroe County C/D Landfill
Monroe County, Alabama

Dear Mr. Goldman:

The Monroe County Commission is proposing to construct a new landfill for the disposal of construction and demolition material. The proposed site is located in Monroe County north of County Road 42 approximately 4 miles north of Monroeville, Alabama in the northwest quarter of the southwest quarter of Section 1, Township 7 North, Range 7 East comprising approximately 34 acres.

ECE, Inc. has been retained by Monroe County to design and submit an application for a Solid Waste Disposal Facility Permit. We are currently pursuing this action through the Alabama Department of Environmental Management (ADEM).

On behalf of the Monroe County Commission, we respectfully request your comments on this project. I have enclosed a USGS 7.5 Minute Series Topographical Map showing the location of the facility.

Should you have any questions or need additional information, please contact me at (334)621-1203.

Sincerely,

Scott A. Hutchinson

Scott A. Hutchinson

file: sah/wp:monro008

H4396313a

☒ No Wetlands Impacted
☒ No listed, proposed or candidate species present

U.S. Fish & Wildlife Service Field Supervisor

6-10-96
Date

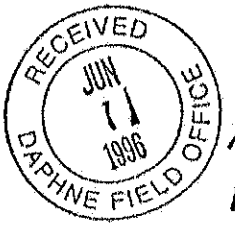
28250 Hwy. 98 • P.O. Box 1993 • Daphne, AL 36526 • Tel: (334) 621-1203 • Fax: (334) 621-1203
4131 Carmichael Rd. • Suite 22 • Montgomery, AL 36106 • Tel: (334) 260-7128 • Fax: (334) 244-1466

ALABAMA HISTORICAL COMMISSION APPROVAL

HYDROGEOLOGIC EVALUATION

ECE

Environmental Consulting & Engineering, Inc.



PH

June 5, 1996

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P.O. Drawer 1190
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☒ No Wetlands Impacted
☐ No listed, proposed or candidate species present

U.S. Fish & Wildlife Service Field Supervisor

6-10-96
Date

28250 Hwy. 98 • P.O. Box 1993 • Daphne, AL 36526 • Tel: (334) 621-1203 • Fax: (334) 621-1203
4131 Carmichael Rd. • Suite 22 • Montgomery, AL 36106 • Tel: (334) 260-7128 • Fax: (334) 244-1466

MONROEVILLE C & D LANDFILL PROPOSAL
MONROE COUNTY, ALABAMA
HYDROGEOLOGIC EVALUATION

SES PROJECT NO: A-96-004

PREPARED FOR

ECE, INC.
P.O. BOX 1993
DAPHNE, AL 36526

PREPARED BY

SOUTHERN EARTH SCIENCES, INC.
2835 ZELDA ROAD
MONTGOMERY, AL 36106

JULY 23, 1996

TABLE OF CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

Monroe County has proposed the development of a construction and demolition (C & D) landfill. A hydrogeologic evaluation was performed on June 19, and July 17, 1996. The evaluation consists of drilling 6 boreholes at the site to determine the depth to groundwater and evaluate geologic materials at the site.

2.0 LOCATION

The property under consideration is located in the southwest one-quarter of Section 1 of Township 7N, Range 7E in Monroe County, Alabama consists of approximately 35 acres.

3.0 TOPOGRAPHY

The site has been mined for road materials and a depth of approximately 15 to 20 feet of sand and gravel have been excavated at the top of the ridge. The area of excavation covers approximately 10 to 15 acres of the site. A review of the USGS topographic Map for the area indicate that original elevations range from 280 feet to 410 feet above sea level. Total relief at the site is approximately 130 feet with a slope of approximately 8.7%. The site's topography can be described as gently to moderately rolling. Surface water drains to the west and northwest from the proposed site into tributaries of Bear Creek.

4.0 SOILS

The soils at the proposed site are the Greenville and Saffel with the Greenville being the most predominant. However, previous mining of gravel at the site has stripped away most overlying soils (via personal communication with Charlie Ramsey, NRCS-Monroe County).

5.0 GEOLOGY

Monroe County, Alabama is underlain by sedimentary rocks of Tertiary Age. The proposed C & D Landfill site is located within the Tuscahoma Sand of Paleocene age which overlies the Nanafalia Formation. The upper zone of the Tuscahoma Sand generally consists of very fine- to coarse-grained fossiliferous sand and

laminated to massive micacious carbonaceous clay (MacNeil, 1946). The lower zone of the Tuscahoma Sand consists of medium- to coarse-grained massive to laminated sand (MacNeil, 1946).

Six boreholes were drilled at the proposed site to a depth ranging from 10 feet to 31.5 feet. The site can be characterized as having mottled clay ranging in color from tan to brown to black, red, and green with thin bedded clayey sands. Clays range in thickness from 4 to 25 feet. The sands are thinly bedded and range from 2 to 4 feet in thickness.

Geology at the site to the south is predominately micaceous and carbonaceous clays that are tan, green and black. Interbedded with the clays are two distinct clayey sands that range from 2 to 4 feet in thickness. These sands pinch out to the north and were only found in boreholes 1, 2 and 3. The northern portion of the site is predominately clays and sandy clay with intermixed gravels.

6.0 HYDROGEOLOGY

Regionally the site is located above the Nanafalia-Clayton aquifer. Potentiometric surface of the aquifer range from 50 to 200 feet above mean sea level(MSL) with groundwater flowing south to southwest.

Based on borehole data the site is located in the confining layer between the Nanafalila-Clayton aquifer and the Lisbon aquifer. Groundwater at the proposed site was only encountered in three boreholes. Boreholes 1 and 2 were drilled to a depth of 16.5 feet and 21.5 feet respectively. A thin water bearing sand was encountered at 13 feet and 15 feet below ground surface (BGS). Water levels rose to 4.5 feet and 11.91 feet BGS. Borehole #3 drilled the thin sand at 12 feet BGS and was advanced to 31.5 feet. Another thin water bearing sand was encountered at approximately 28 feet BGS. Below both sands, dry massive impermeable clays were encountered.

Depth to groundwater ranges from 12 to 15 feet below the ground surface (BGS); however rises to 4.25 feet to 11.91 feet from the upper sand zone in boreholes 1 and 2. The lower sand was encountered at 28 feet BGS and groundwater level rose to 20.15 BGS in borehole #3.

Based on these data groundwater at the site has limited lateral extent and is under confined conditions. Recharge to these thin sands is considered to be extremely slow through the very low permeability clays. These sands do not represent the first zone of saturation and could be easily dewatered for landfill development. The first zone of saturation was not encountered at the site and is considered to be at a depth of greater than fifty feet based on regional geologic data.

7.0 CONCLUSIONS

1. The site is located within the confining unit between the Nanafalia- Clayton aquifer and the Lisbon aquifer.

2. Geology at the proposed site consists of massive impermeable clays and thin permeable sand lenses.

3. Groundwater at the site is under confined conditions and is of limited areal extent across the site. Minor permeable sands at the southern portion of the site range from 2 to 4 feet in thickness.

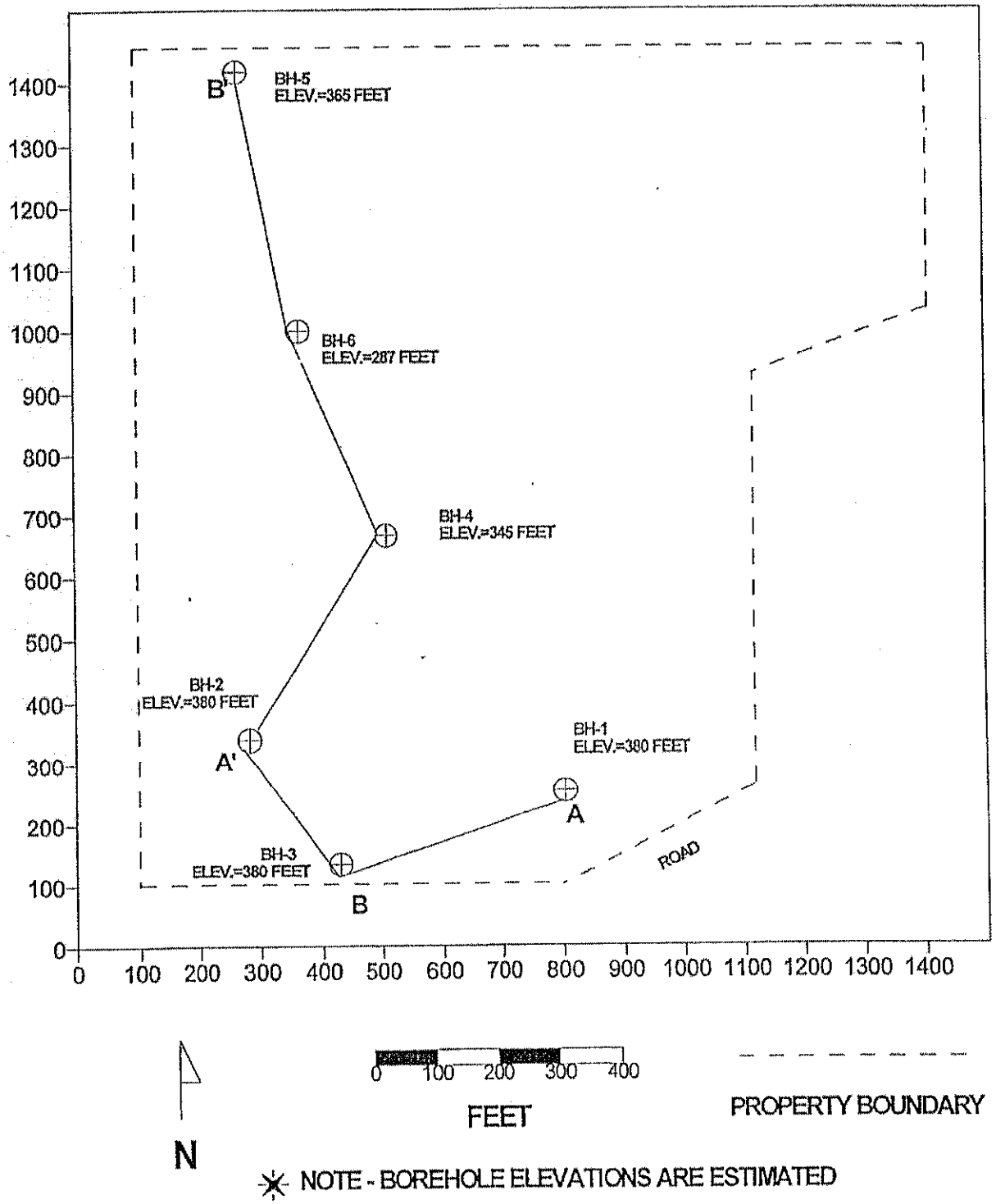
4. Based on these data groundwater at the site has limited lateral extent and is under confined conditions. Recharge to these thin sands is considered to be extremely slow through the very low permeability clays. These sands do not represent the first zone of saturation and could be easily dewatered for landfill development.

5. The first zone of saturation was not encountered at the site and is considered to be at a depth of greater than fifty feet based on regional geologic data.


FIGURE #1
PROPOSED
SITE
3547 III NE
R. 7 E. (NATCHEZ)
R. 8 E.
20'
The Ridge
Axle
BM 396
BM 883
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
N

FIGURE #2

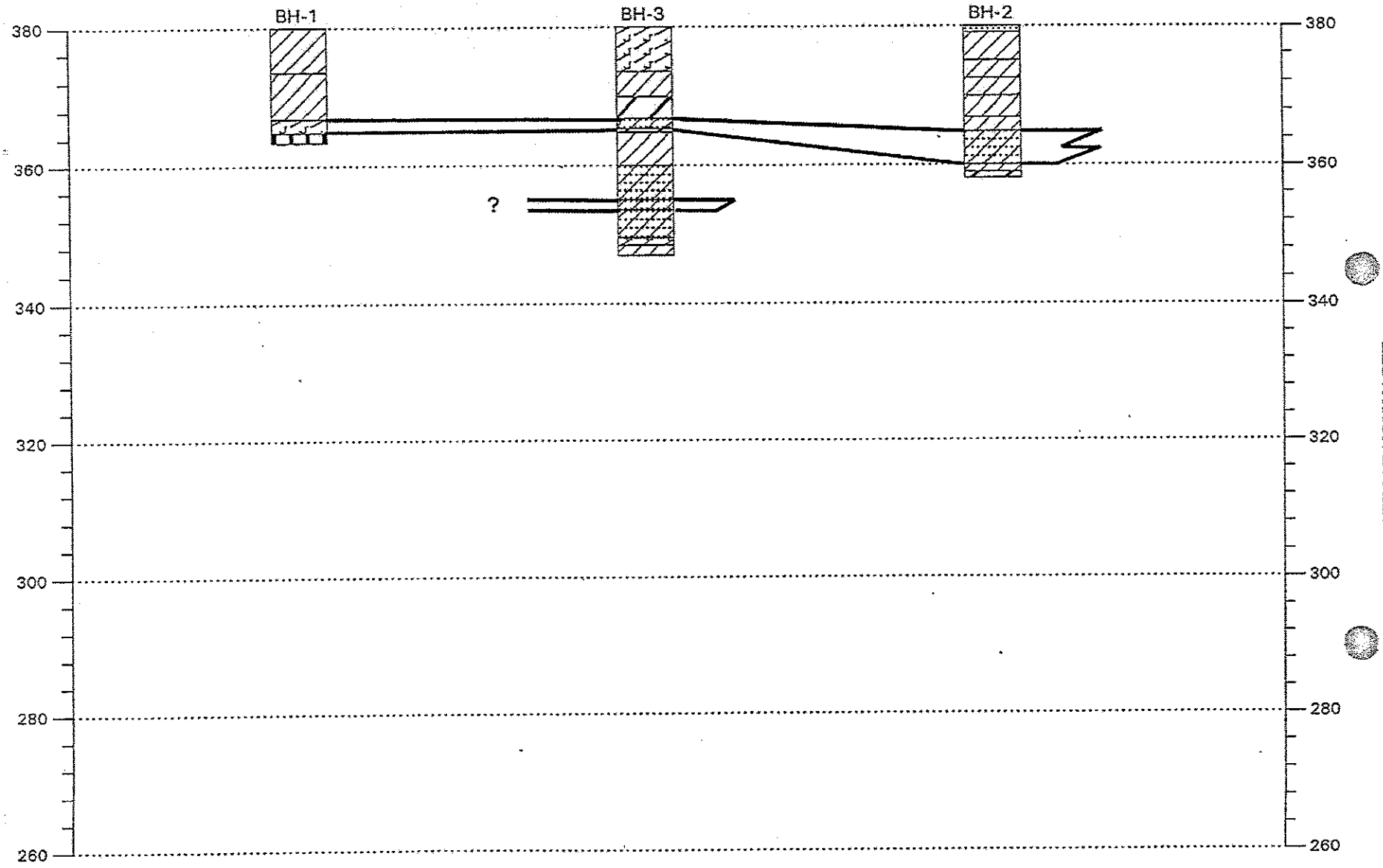
BOREHOLE LOCATIONS
MONROEVILLE C & D LANDFILL



✳ NOTE - BOREHOLE ELEVATIONS ARE ESTIMATED

SOIL BORING CROSS SECTION

A ——— A'



Strata symbols

- Low plasticity clay
- Silty sand
- Elastic silt
- High plasticity clay
- Clayey sand
- Well graded sand

FIGURE #3

SOUTHERN EARTH SCIENCES, INC.

SOIL BORING CROSS SECTION

B ——— B'

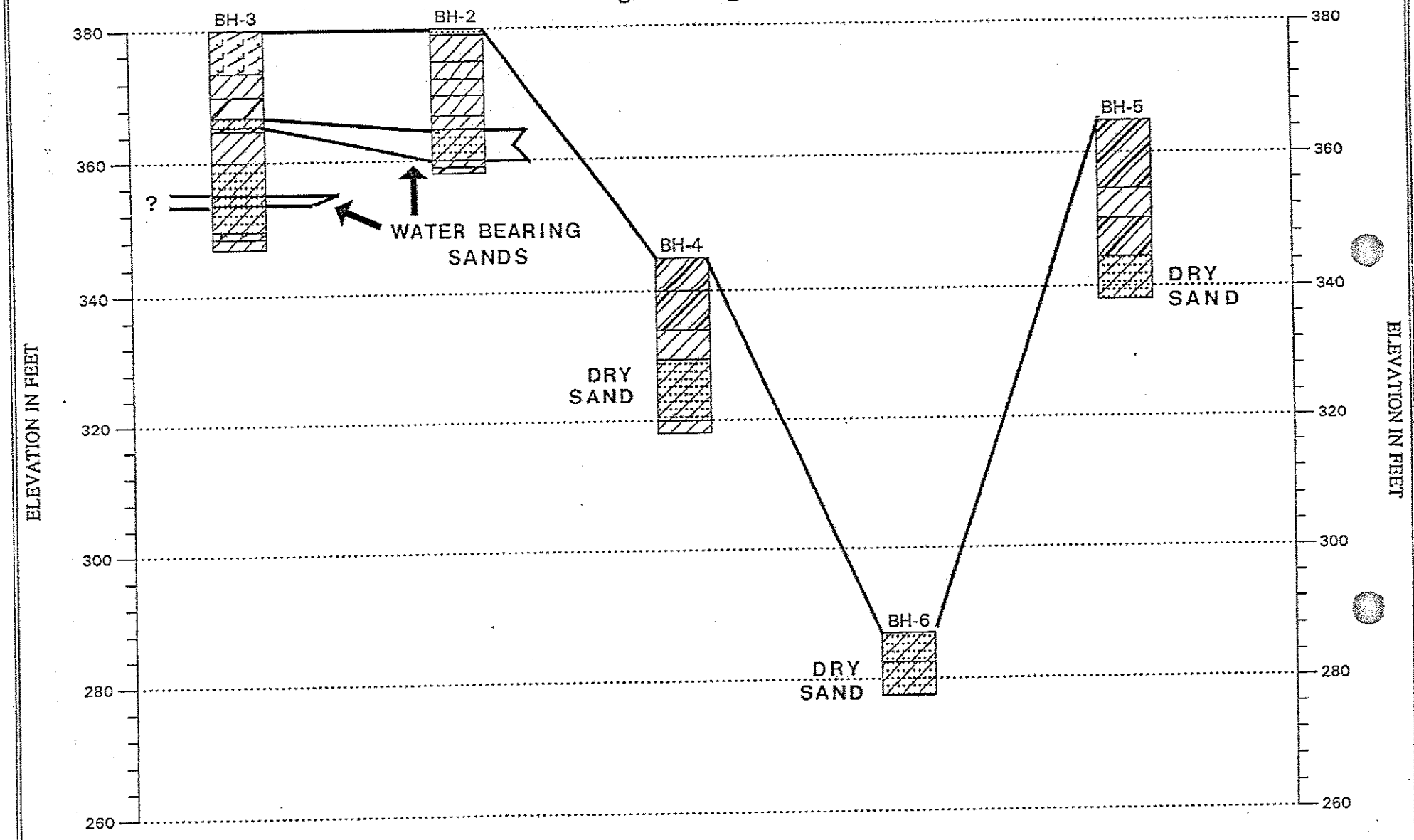


FIGURE #4

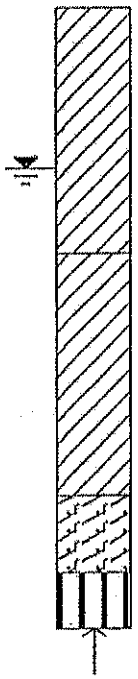
SOUTHERN EARTH SCIENCES, INC.

APPENDIX #1

SOIL BORING LOG

BORING BH-1

PROJECT: MONROEVILLE C&D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 6-20-96
WATER LEVEL: 4.25 FEET
JOB NO: NA
METHOD: AUGER
ELEVATION: 380 FEET
DRILLER: SES, INC

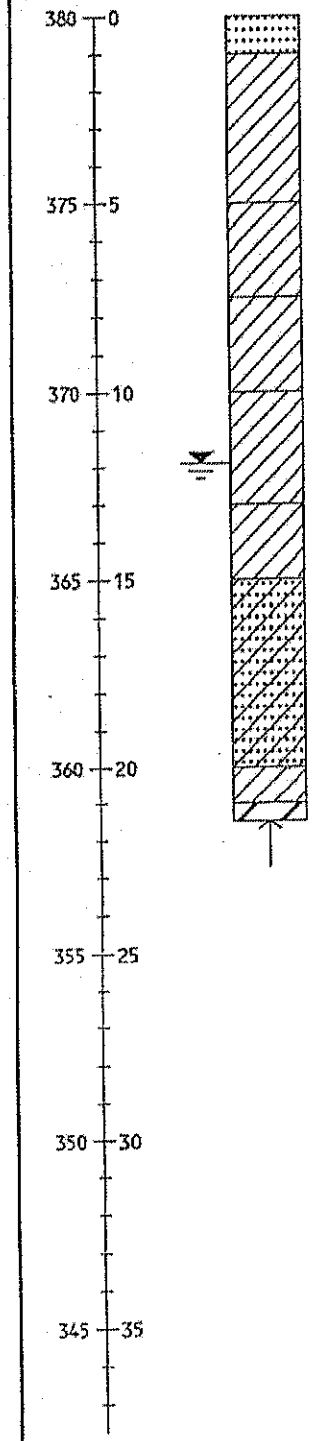
ELEVATION/ DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	NM	LL	PI	%-200
380 — 0		CL	BROWN TO BLACK MOTTLED CLAY				
375 — 5		CL	BROWN CLAY, SANDY IN SOME PARTS WITH GRAVEL STRINGERS				
370 — 10		SM	WATER BEARING SILTY SAND				
365 — 15		MH	CHALK				
360 — 20							
355 — 25							
350 — 30							
345 — 35							

SOIL BORING LOG

BORING BH-2

PROJECT: MONROEVILLE C&D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 6-20-96
WATER LEVEL: 11.91 FEET

JOB NO: NA
METHOD: AUGER
ELEVATION: 380 FEET
DRILLER: SES, INC.

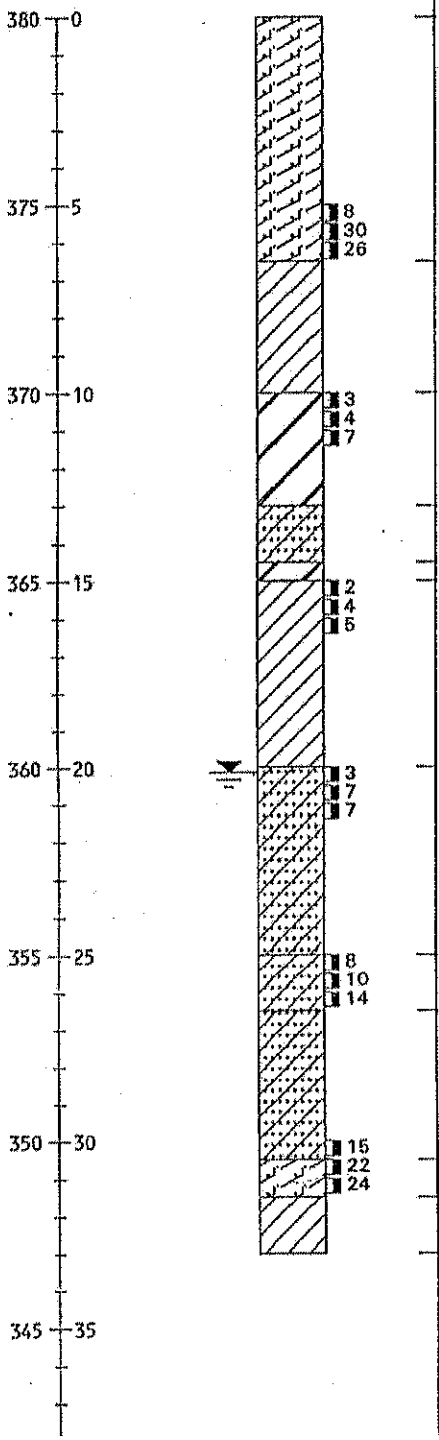


ELEVATION/ DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	NM	LL	PI	%-200
		SW	BROWN GRAVELLY SAND				
		CL	TAN TO BLACK MOTTLED CLAY				
		CL	GREEN AND BROWN TO RED MOTTLED CLAY WITH BLACK INCLUSIONS				
		CL	BLACK CLAY				
		CL	GREEN, BLACK, AND TAN LAYERED SILTY CLAY				
		CL	TAN SILTY CLAY				
		SC	FINE-GRAINED TAN CLAYEY SAND				
		CL	TAN TO BROWN MOTTLED CLAY				
		CH	GRAY TO OLIVE BLOCKY CLAY				

SOIL BORING LOG

BORING BH-3

PROJECT: MONROEVILLE C & D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 7-16-96
WATER LEVEL: 20.15
JOB No: NA
METHOD: AUGER
ELEVATION: 380 FEET
DRILLER: SES, INC.



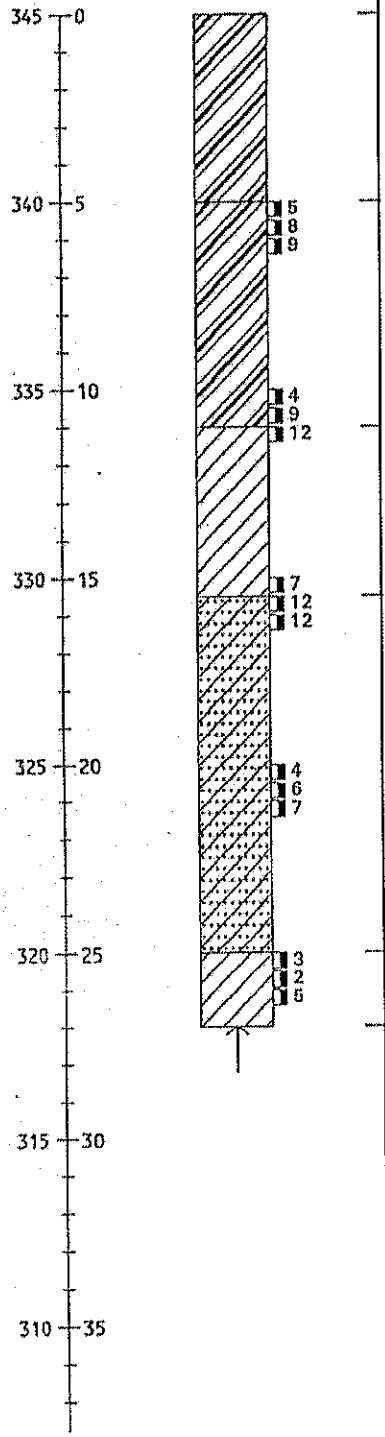
ELEVATION/ DEPTH	WELL DETAIL	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	OVA DATA ppm	PERM. (K) cm/sec
			SM	RED TO ORANGE, MEDIUM-GRAINED SILTY SAND WITH PEA SIZE GRAVEL		
			CL	MOIST BROWN SANDY CLAY WITH MINOR AMOUNTS OF PEA SIZE GRAVEL		
			CH	BROWN, GRAY, TO OLIVE GREEN MOTTLED CLAY		
			SC	LIGHT BROWN SATURATED CLAYEY SAND		
			CH	BLACK, WHITE, AND BROWN MOTTLED MICACIOUS CLAY		
			CL	ORANGE, BLACK, YELLOW, AND BROWN MOTTLED MICACIOUS SANDY CLAY		
			SC	TAN TO ORANGE DRY CLAYEY SAND		
			SC	TAN TO ORANGE FOSSILIFEROUS CLAYEY SAND		
			SC	GRAY TO OLIVE GREEN FOSSILIFEROUS CLAYEY SAND		
			SM	BROWN SILTY SAND		
			CL	ORANGE TO BROWN FOSSILIFEROUS CLAY		

SOIL BORING LOG

BORING BH-4

PROJECT: MONROEVILLE C&D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 7-17-96
WATER LEVEL: NA

JOB NO: NA
METHOD: AUGER
ELEVATION: 345 FEET
DRILLER: SES, INC.



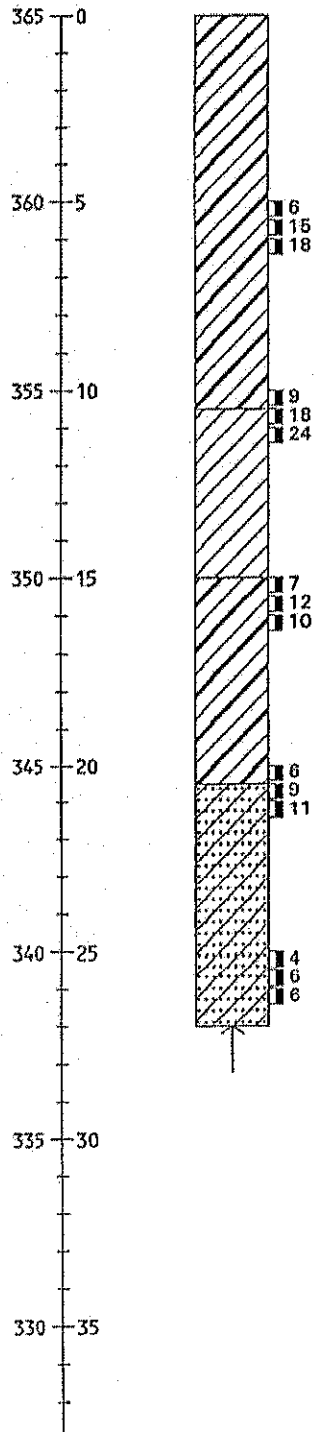
ELEVATION/ DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	NM	LL	PI	%-200
		CL-CH	RED SANDY CLAY				
		CL-CH	RED SANDY CLAY WITH PEA SIZE GRAVEL				
		CL	ORANGE AND GRAY MOTTLED SANDY CLAY				
		SC	TAN AND ORANGE MOTTLED CLAYEY SAND				
		CL	BROWN AND ORANGE MOTTLED SANDY CLAY WITH BLACK AND GREEN INCLUSIONS				

SOIL BORING LOG

BORING BH-5

PROJECT: MONROEVILLE C&D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 7-17-96
WATER LEVEL: NA

JOB NO: NA
METHOD: AUGER
ELEVATION: 365 FEET
DRILLER: SES, INC



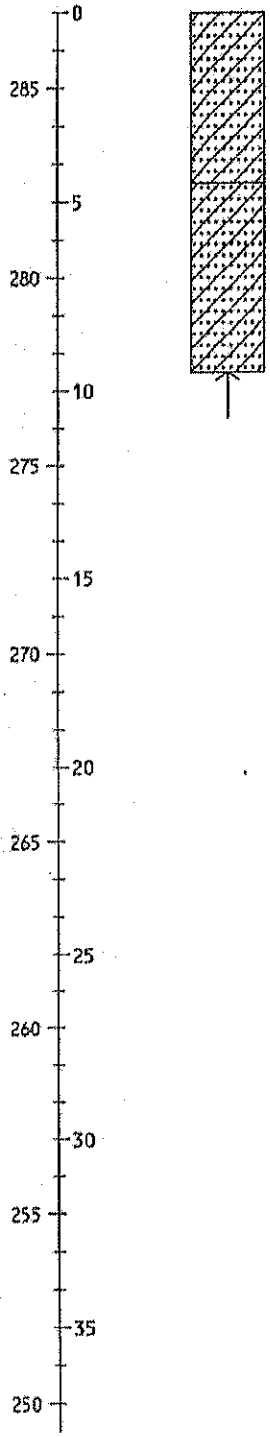
ELEVATION/ DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	NM	LL	PI	%-200
		CL-CH	RED SANDY CLAY				
		CL	ORANGE SANDY CLAY				
		CL-CH	ORANGE, RED, AND GRAY MOTTLED SANDY CLAY				
		SC	ORANGE AND BORWN MOTTLED CLAYEY SAND				

SOIL BORING LOG

BORING BH-6

PROJECT: MONROEVILLE C&D LANDFILL
PROJECT LOCATION: MONROEVILLE, ALA
DATE DRILLED: 7-17-96
WATER LEVEL: NA

JOB NO: NA
METHOD: HAND AUGER
ELEVATION: 287 FEET
DRILLER: SES, INC



ELEVATION/ DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND "N" VALUE	USCS	DESCRIPTION	NM	LL	PI	%-200
		SC	BROWN CLAYEY SAND WITH GRAVEL				
		SC	TAN CLAYEY SAND WITH GRAVEL				
			MOISTURE LEVEL INCREASING AT 9.5 FEET				

Appendix B

Groundwater Cutoff Trench Quality Assurance Report

Monroe County Engineering Department
P.O. Box 692
301 West Claiborne
Monroeville, AL 36461

June 3, 2015

Mr. C. Blake Holden
Alabama Department of Environmental Management
Land Division- Solid Waste Branch
PO Box 301463
Montgomery, AL 36110

Re: Monroe County Landfill
Groundwater Remediation

Dear Sir:

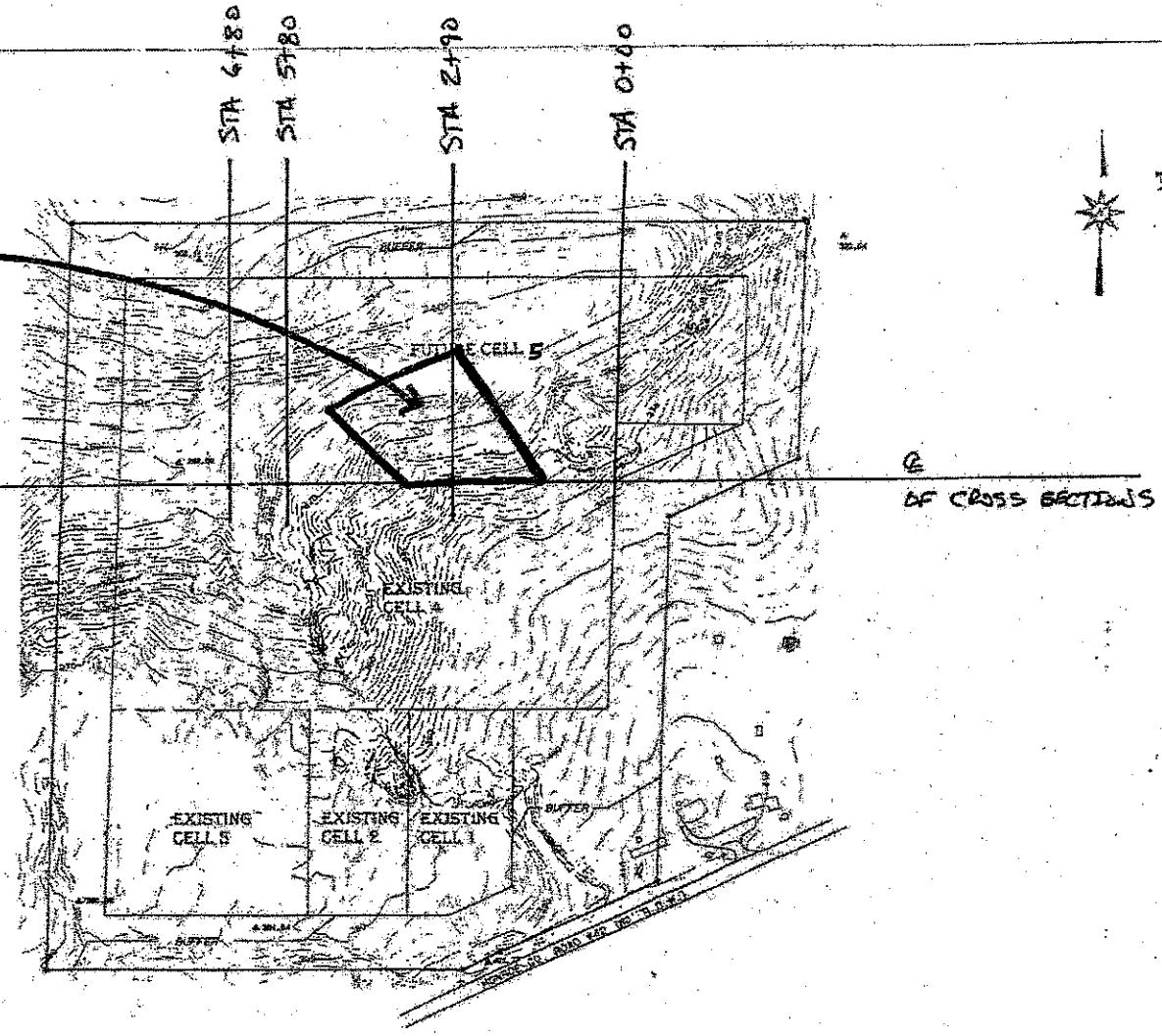
Monroe County respectfully requests a partial cell approval for the area represented in the attached drawings at the Monroe County C/D Landfill. Let me assure you that we will be diligent in our efforts to avoid impacts to the adjacent area containing perched groundwater. We are currently developing a topographic survey and Mr. Dale Story with Engineering Service Associates, Inc. is in the process of preparing a groundwater remediation plan that will be submitted to your office for your review and approval. In the meantime we are requesting this partial cell approval in order for Monroe County to continue to provide this essential public service to its residents.

Please contact this office if additional information is required.

Sincerely,

Steven Fitzgerald
Assistant Engineer
Monroe County
251-743-3672

Requested Partial Approval Cell #5 Approx. 1.3 Ac±



TOPOGRAPHIC SURVEY
CONTOUR INTERVAL = 2'

MONROE COUNTY ENGINEERING

MONROE COUNTY
C & D LANDFILL
CELL LOCATIONS

LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

June 5, 2014

The Honorable Judge Greg Norris
Monroe County Commission
P. O. Box 8
Monroeville, Alabama 36461

RE: Pre-Disposal Approval
Monroe County Construction and Demolition Landfill
Permit 50-04
Monroe County, Alabama

Dear Judge Norris:

On June 3, 2015, the Alabama Department of Environmental Management received a application regarding the partial cell certification for Cell 5 at the referenced landfill. The partial area of Cell 5 consists of approximately 1.3 acres as described in the cell certification application. Based on the engineer certification and the review of the file, the Department has determined that the partial area of Cell 5 is in compliance with all requirements and conditions of the permit and disposal activities may commence.

If you have any questions regarding this matter, please contact Mr. Blake Holden of the Solid Waste Engineering Section at (334) 274-4248.

Sincerely,

S. Scott Story, Chief
Solid Waste Engineering Section
Land Division

SSS/bh

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

Engineering Service Associates, Inc.
5300 Cahaba River Road
Suite 250
Birmingham, AL 35243
PHONE 205 970-0772
FAX 205 970-0773

September 14, 2018

Mr. C. Blake Holden
Sr. Environmental Engineering Specialist
Land Division - Solid Waste Branch
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

Re: Monroe County C/D Landfill
Groundwater Cutoff Trench Quality Assurance Report

Dear Mr. Holden:

This report is intended to detail the quality assurance for the Groundwater Cutoff Trench Installation for the referenced facility (Permit No. 50-04). This trench will alleviate groundwater seepage in the remaining unused waste disposal area. Alleviating the groundwater seepage allows the future use of this disposal area for C/D waste disposal when needed by the County. A Minor Permit Modification was requested in August of 2016 to accommodate the installation of this trench. The report certifies that the installation of this trench satisfies the requirements of the requested Minor Permit Modification.

Background:

The Monroe County C/D Landfill is a 35.41 acre landfill owned and operated by Monroe County. The landfill is located on Monroe County Road #42 north of the Town of Monroeville.

For several years groundwater outcroppings and seepage has been observed by Monroe County C/D Landfill employees in the proposed final disposal area of the landfill. This seepage has occurred in 2 locations on the southern sideslope, about midway up the slope. The eastern seepage area (approximately 1,993 s.f.) begins approximately 31 feet above the toe of the slope, while the western seepage area (approximately 2,074 s.f.) begins approximately 21 feet above the toe. These groundwater out-croppings, if not corrected, would prevent the County from utilizing this airspace, severely shortening the remaining life of the landfill.

Monroe County Commission engaged Engineering Service Associates, Inc. and Highland Technical Services, Inc. in May of 2015 to investigate the seepages and provide recommended corrective actions. The recommended corrective actions were to alleviate the seepages by capturing the groundwater and directing it the storm water detention basin at the western boundary of the landfill. It was also intended to isolate the groundwater from the disposal area so that the remaining airspace could still be utilized for waste disposal.

Installation of the Corrective Measures:

The proposed corrective action was to excavate the seepage areas sufficiently and install a crushed stone French drain from the seepage area down the sideslope to the toe where a 12" perforated collector pipe and crushed stone trench collects the seepage and carry it to the detention pond. The installation crew, after consulting with ESA, modified the original plan somewhat by installing the collector pipe and crushed stone trench at the low end of both seepage areas instead of the toe. The pipe and trench were then installed between the seepage areas, and then extended at both ends. At the west seepage area, the trench was extended as originally planned down slope to the stormwater pond, entering from the southeast. At the east seepage area, the trench was extended to the north, down slope to stormwater ditch beyond the limits of waste which drains into the pond from the northeast. This arrangement takes advantage of the existing terrain and drainage features in a more efficient manner than the original design. It also has the advantage that the east seep area can drain in two directions instead of only one. This area is higher in elevation than the west area, so it can be collected and drained to either the west or the north. Both the extensions of the perforated pipe trench are at a much greater slope than was possible if they had been installed at the toe as originally planned, so they convey the groundwater much faster with higher capacity.

The crushed stone French drains and trench were wrapped with a medium weight non-woven geotextile filter fabric to inhibit clogging. After installation, a minimum of 5' of compacted (to 10^{-7} permeability) clayey soil was installed above all the French drains and collector trench to provide the required separation between the waste and the groundwater. Please refer to the enclosed drawings for the locations of the modified corrective action. The top of the French drain at the east seepage area runs from 356 to 340 elevations, while the cover runs from 365 to 347 elevations. The top of the French drain at the west seepage area runs from 345 to 335 elevations, while the cover runs from 350 to 343 elevations.

The collector trench between the seep areas runs from 340 to 335 top elevations while the cover runs from 350 to 345 elevations. The collector trench running north from the east seepage area runs from 340 to 324 top elevations while the cover runs from 347 to 329 at the discharge outside the limits of waste. The collector trench running northwest from the west seepage area has top elevations of 335 to 317 while the cover runs from343 to 323 at the pond entrance.

The French drains and collector trenches were installed by County forces. ESA and HTSI provided construction review services to ensure the installation is acceptable to ADEM. HTSI's Trench Drain Report (attached) documents that the cover material permeability was 1 X 10^{-7} or better. ESA certifies that the cover was a minimum of 5 feet above the top of the French Drains at the seepage areas and 5 feet above the top collector trenches. Attachment A of HTSI's report shows the existing elevations and seepage areas. Attachment B shows the final elevations and French Drain and Collector Trench locations.

Conclusion:

The above described corrective action allows the majority of the design airspace to be used as intended for waste disposal. The French Drain and Collector Trenches will effectively capture and transport the groundwater from the seepage areas to beyond the limits of waste. The soil

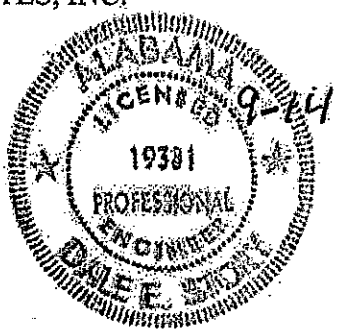
cover material was installed so that the required permeabilities and depth of cover were attained thus providing the required buffer between groundwater and solid waste placed in the cell. This will prevent groundwater contamination and allow the use of the disposal cell as intended.

ESA trusts that this report along with HTSI's report is useful to ADEM in its evaluation of the Monroe County C/D Landfill. If you need any additional information or have questions, please do not hesitate to contact us.

Sincerely,
ENGINEERING SERVICE ASSOCIATES, INC.

Dale E. Story

Dale E. Story, PE
Chief Engineer



9-14-2018

c: Jeff Griffin, Monroe County
Billy Cooch, HTSI
File 799-1

Highland Technical Services, Inc.

September 12, 2018

Solid Waste Branch
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

Attention: Mr. Blake Holden

RE: Groundwater Cut-off Trench Installation
Monroe County Landfill
Monroeville, Monroe County, Alabama
Permit Number 50-04

Dear Mr. Holden:

On behalf of the Monroe County Commission, Highland Technical Services, Inc. (HTSI) is submitting this report to document the successful installation of a cut off trench constructed within the landfill cell to provide five-foot separation from groundwater seeps entering the south slope at the above-referenced landfill. A summary of the field activities completed as part of this project is presented below.

TRENCH DRAIN CONSTRUCTION

Contractors, under the direction of Monroe County personnel, installed the trench drain in accordance with the engineering plans prepared by Engineering Services Associates (ESA) and previously approved by the Department. The drain was installed to provide a drainage pathway for groundwater seeping from two locations along the south slope of the landfill cell. Drawing C1 Sheet 3 dated May 9, 2016 prepared by ESA shows two areas of seepage from the slope of the landfill cell labeled as Groundwater Area A and Groundwater Area B (Attachment A). The trench was constructed along the length of the landfill cell such that water entering the drain would be routed either to the north or to the south dependent on site topography. The groundwater discharging from the trench is routed to the stormwater detention pond located along the western boundary of the landfill. The location of the trench drain is illustrated on Drawing C-1 Sheet 01 dated February 2, 2018 and prepared by ESA (Attachment B).

Following construction of the trench drain, fill material was placed and compacted along the length of the trench drain until a minimum of five feet of fill was achieved. The placement and testing of the fill material is described below.

FILL PLACEMENT AND CONSTRUCTION TESTING

Initially, three borrow sources were evaluated for use as engineered fill to provide the five-foot of separation from groundwater emanating from the seep. The bulks samples of borrow sources were submitted to Southern Earth Sciences to establish the necessary compaction requirements to achieve a permeability of $1x10^{-7}$ cm/sec or less. The borrow samples were remolded in the laboratory and then subjected to a falling head permeability analysis. The results of each of the

samples and copies of the laboratory reports are included in Attachment C.

Monroe County personnel began construction in mid-2016, installing the cut-off trench in accordance with the engineering specifications developed by ESA that were submitted to the Department for review and approval. Monroe County opted to suspend construction activities in late 2016 and early 2017 due to periods of heavy rainfall during the winter and spring. Completion of the placement of fill occurred on or around December 2017. Following installation and compaction of the cover material, Contour Engineering, Inc. (CEI) of Birmingham, Alabama was retained to conduct quality assurance/quality control (QA/QC) testing of the fill material.

DECEMBER 4, 2017

The QA/QC site visit was conducted on December 4, 2017 at which time CEI personnel collected field density measurements along the length of the drain.

According to field reports, the CEI representative performed field density tests at locations that had been backfilled per to the technician's arrival. The CEI representative observed the above-mentioned locations visually and performed field density testing. In addition, the CEI representative collected Shelby tube soil samples in close proximity to the location of each of the density tests. A summary table of the density testing location and results is provided below. Copies of the field reports are included in Attachment D.

SAMPLE ID	% COMPACTION	LOCATION
1	96.5	Station 1+50
2	95.2	Station 3+00
3	96.8	Station 4+50
4	96.7	Station 6+00

PERMEABILITY TEST RESULTS

CEI conducted permeability tests on a total of five Shelby Tube samples collected along the length of the drain. A summary table of the results is provided below.

SAMPLE ID	PERMEABILITY	LOCATION
26449/ #1	1.0×10^{-7}	Station 7+50
26450/ #2	1.0×10^{-7}	Station 3+00
26451/ #3	1.0×10^{-7}	Station 4+50
26452/ #4	6.5×10^{-8}	Station 1+50
26453/ #5	8.0×10^{-8}	Station 6+00

Copies of the laboratory reports for the permeability tests are included as Attachment E.

CONCLUSIONS

Based on review of the pre- and post-construction topography, ESA is of the opinion that five feet or more of material is present over the length of the trench drain indicating that Monroe County was successful in achieving the five foot of separation from groundwater collected in the trench.

Based on the findings of the field measurements and permeability tests conducted on the minimum engineered fill material placed over the trench drain along the south slope of the landfill, HTSI is of the opinion that the cover meets or exceeds the permeability specification required by the Department.

Highland Technical Services, Inc. appreciates your consideration in the matter. If you have any question concerning this submittal or require additional information, please contact our office at (205) 985-4874.

Sincerely,

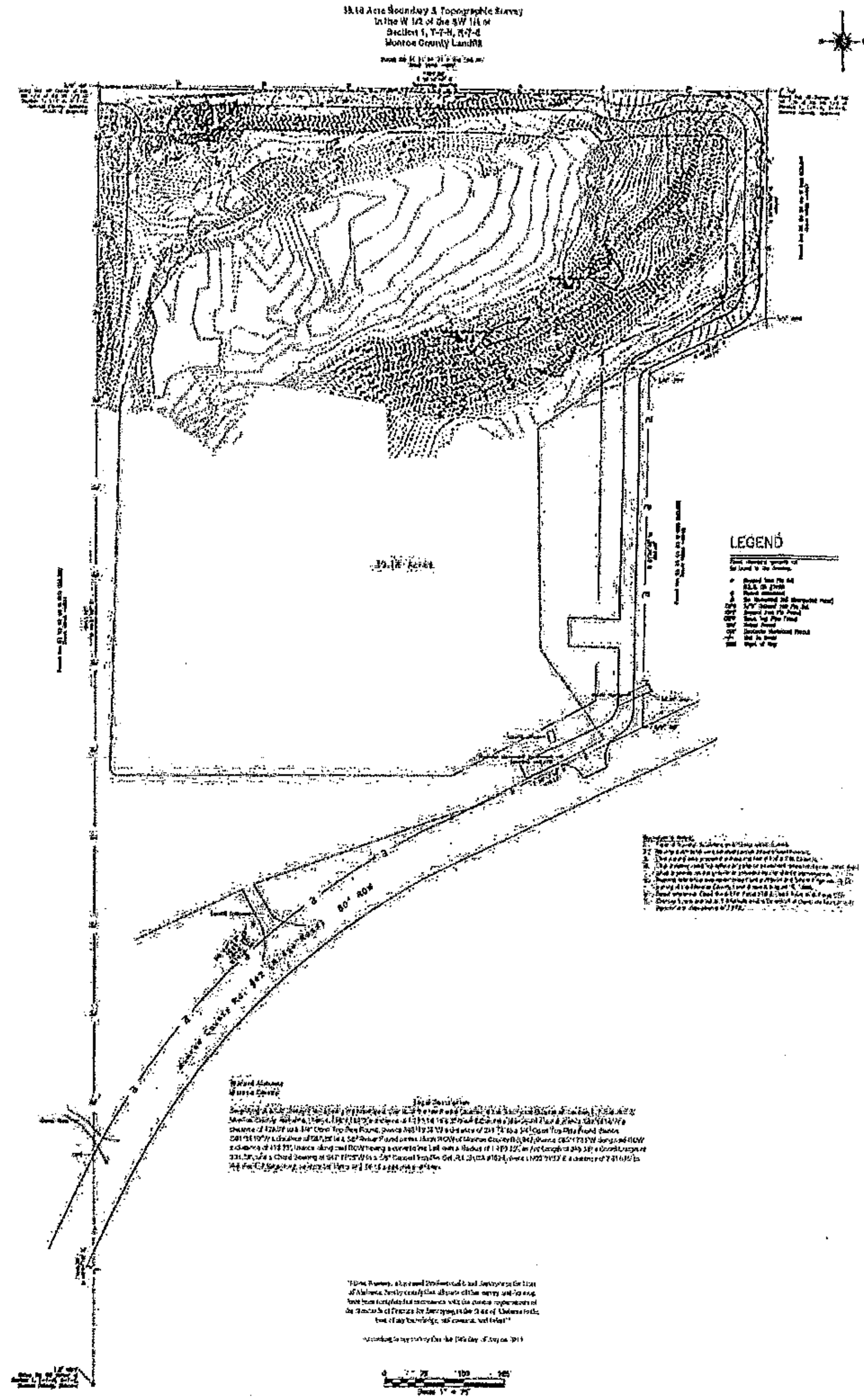
HIGHLAND TECHNICAL SERVICES, INC.

William W. Cooch, P.G.
Highland Technical Services, Inc.
Principal Geologist

Dale E. Story, P.E.
Engineering Service Associates, Inc.
AL Reg. No. 19381

Attachment A – Pre-Construction Site Plan
Attachment B – Post-Construction Site Plan
Attachment C – Borrow Pit Sample Analysis
Attachment D – Field Test Reports
Attachment E – Permeability Test Results

ATTACHMENT A



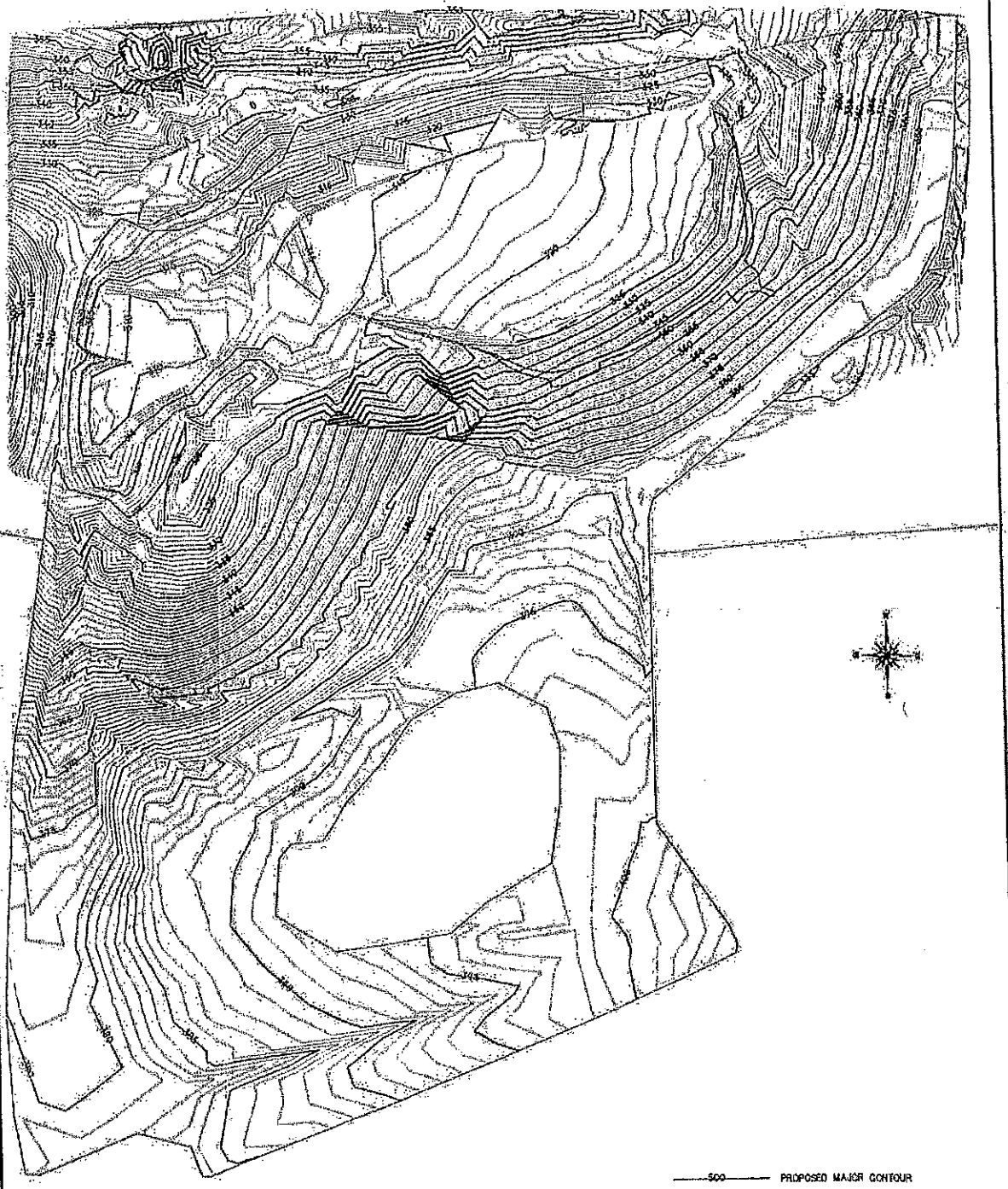
ENGINEERING SERVICE ASSOCIATES, INC. CONSULTING ENGINEERS	MONROE COUNTY C & D LANDFILL GROUNDWATER CUTOFF TRENCH SPECIFICATIONS MONROE COUNTY, ALABAMA	NO. / DATE / DESCRIPTION / DRAFT / APPR.
	EXISTING SITE PLAN	

C1

1–557

3

ATTACHMENT B



ENGINEERING SERVICE ASSOCIATES, INC.
CONSULTING ENGINEERS

MONROE COUNTY, ALABAMA
CONSTRUCTION AND DEMOLITION LANDFILL
FINAL GRADING AND DRAINAGE PLAN

ATTACHMENT C

COMPACTION TEST REPORT

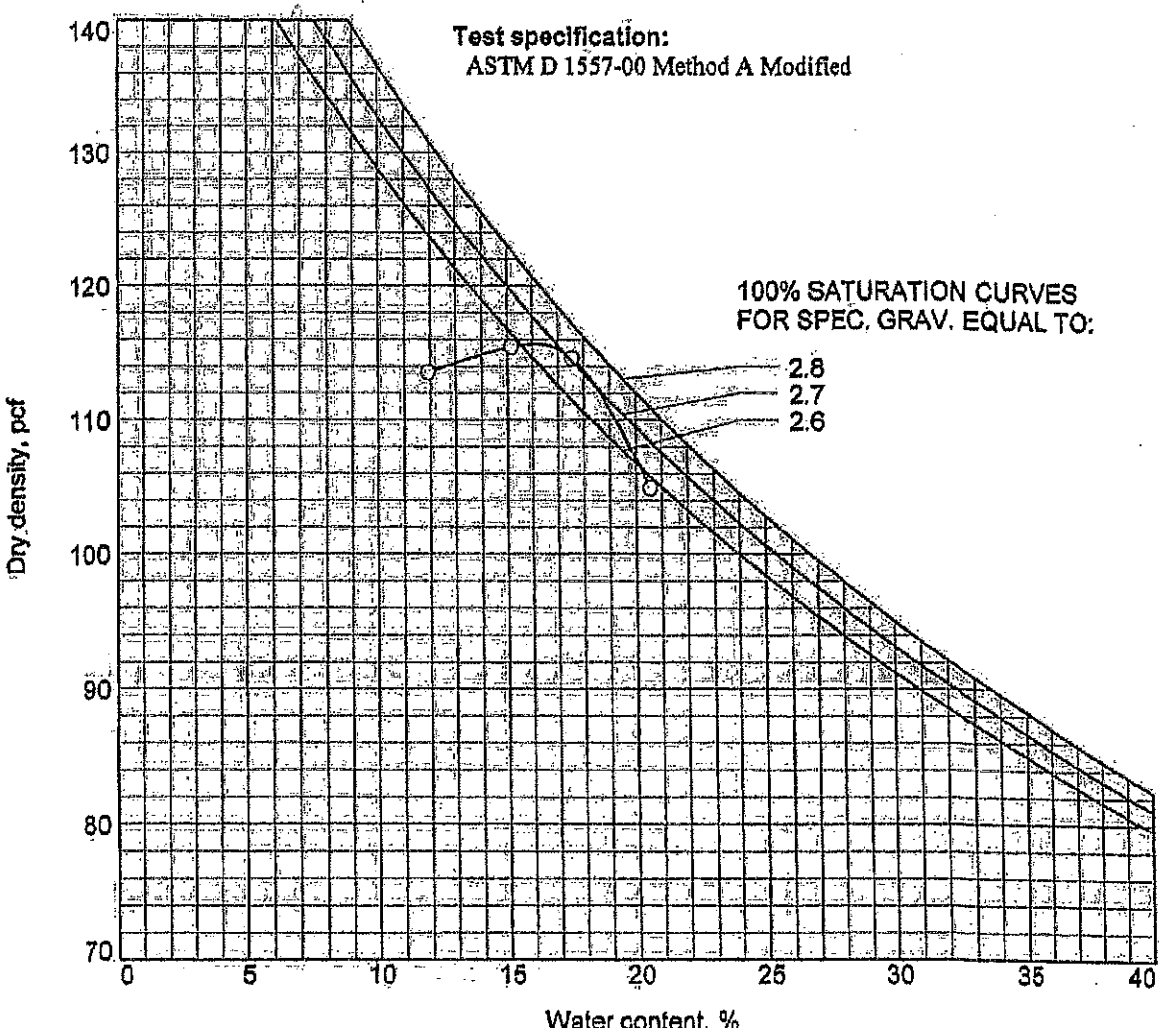
Project No.: 16-452 **Date:** 11-1-16
Project: HIGHLAND TECHNICAL SERVICES
Client: HIGHLAND TECHNICAL SERVICES
Location: SAMPLE 1
Sample Number: 2620
Remarks:

MATERIAL DESCRIPTION

Description: BROWN SILTY CLAY

Classifications - **USCS:** **AASHTO:**
Nat. Moist. = **Sp.G. =**
Liquid Limit = **Plasticity Index =**
% < No.200 =

TEST RESULTS
Maximum dry density = 115.7 pcf
Optimum moisture = 16.1 %



Figure

COMPACTION TEST REPORT

Project No.: 16-452 **Date:** 11-1-16
Project: HIGHLAND TECHNICAL SERVICES
Client: HIGHLAND TECHNICAL SERVICES
Location: SAMPLE 2
Sample Number: 2621
Remarks:

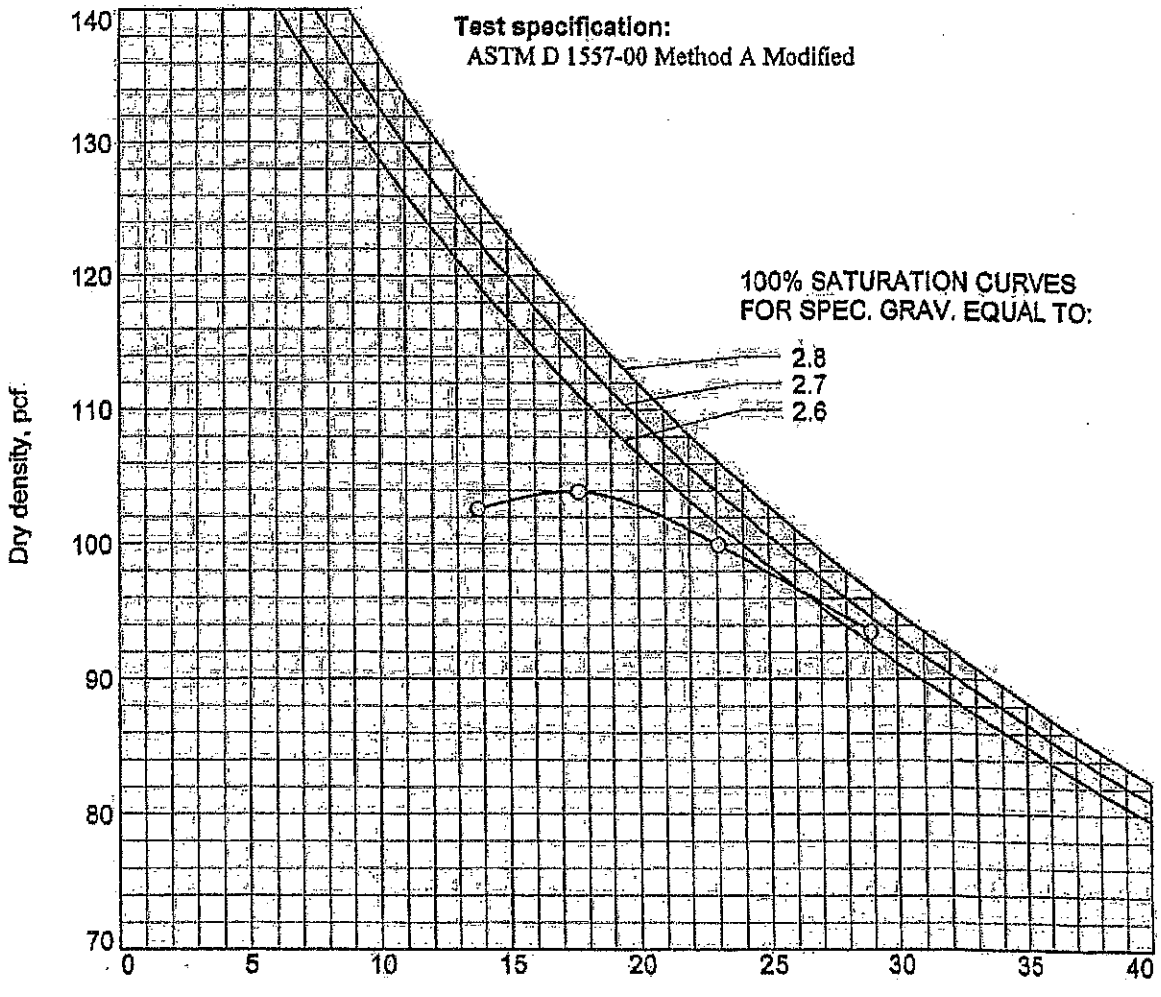
MATERIAL DESCRIPTION

Description: YELLOW SILTY CLAY

Classifications - **USCS:** **AASHTO:**
Nat. Moist. = **Sp.G. =**
Liquid Limit = **Plasticity Index =**
% < No.200 =

TEST RESULTS
Maximum dry density = 103.9 pcf
Optimum moisture = 17.4 %

Test specification:
ASTM D 1557-00 Method A Modified



Figure

SOUTHERN EARTH SCIENCES

COMPACTION TEST REPORT

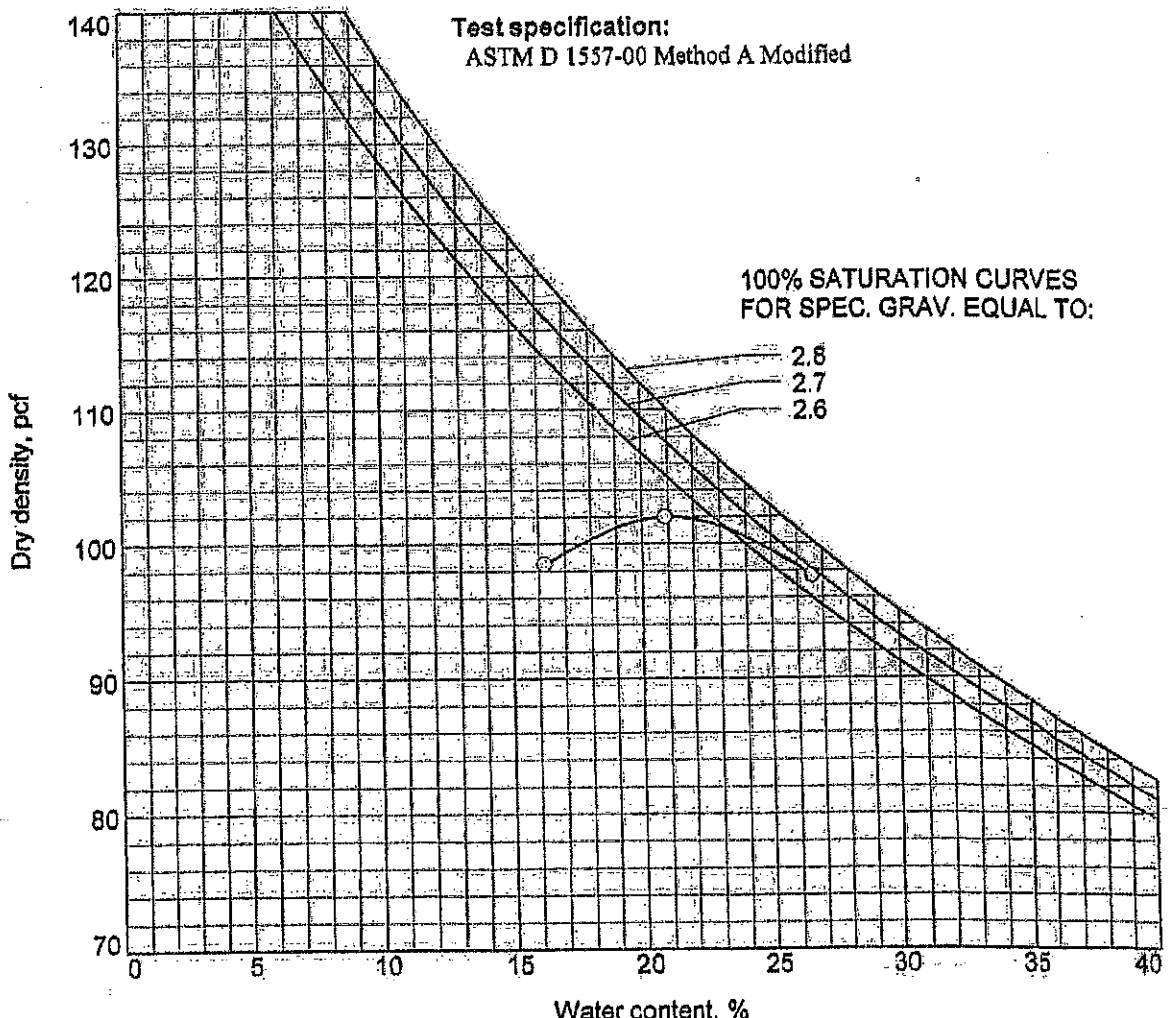
Project No.: 16-452 **Date:** 11-1-16
Project: HIGHLAND TECHNICAL SERVICES
Client: HIGHLAND TECHNICAL SERVICES
Location: SAMPLE 3
Sample Number: 2622
Remarks:

MATERIAL DESCRIPTION

Description: TAN SILTY CLAY

Classifications - **USCS:** **AASHTO:**
Nat. Moist. = **Sp.G. =**
Liquid Limit = **Plasticity Index =**
% < No.200 =

TEST RESULTS
Maximum dry density = 102.0 pcf
Optimum moisture = 21.0 %



Figure

SOUTHERN EARTH SCIENCES

SOUTHERN EARTH SCIENCES, INC.

Geotechnical, Environmental & Construction Materials Testing

Laboratory Test Results

Project: **Highland Technical Services** Technical Responsibility: Quality Assurance Officer

Client: Project No.: **M16-452** PM: Date of Issue: 11/14/2016

Sample No.	Depth (in)	Classification	ASTM DESIGNATION														USCS	D5084 Method F cm/sec
			D2216	D4318 Atterberg Limits			D2166		D2166 Cohesion	D2850 Cohesion	D422, C136 or C117 Grain Size (% Passing)					D2434		
			ω %	LL	PL	PI	γ_{wet} pcf	γ_{dry} pcf	U psf	UU psf	Gravel	Sand	Silt	Clay	#200	Fxd. Wall Perm.		
1		Tan and Red Clayey SILT with sand	21.0				122.1	100.9									(ML)	4.8×10^{-7}
2		Tan and Red Clayey SILT with fine sand	43.1				106.6	74.5									(MH)	2.0×10^{-7}
3		Tan and Red Clayey SILT with fine sand	40.1				109.0	77.8									(MH)	4.9×10^{-8}

Southern Earth Sciences, Inc.
11638 Sun Belt Ct. Baton Rouge, LA 70809

The results presented only relate to those samples tested

Southern Earth Sciences, Inc.

11638 Sun Belt Court
Baton Rouge, Louisiana 70809

Hydraulic Conductivity Triaxial Test

Data Summary Sheet
(ASTM D5084)

Project No.:	M16-452	Project Name:	Highland Technical Services		
Project Manager:	MJ	Date Completed:	11/13/2016	Technician:	MP / AD
Boring No.:		Depth:		Sample No.:	#1
CK'd by:	RLJ	Date CK'd:	11/14/2016		

SAMPLE PREPARATION:	Reconstituted In Lab
METHOD OF COMPACTION:	N/A
TESTING METHOD:	METHOD F
TYPE SOIL & USCS:	Tan and Red Clayey SILT with fine sand (ML)

FIELD MOISTURE (%):	N/A	LAB MOISTURE (%):	20.96
INITIAL DIAMETER (cm):	7.259	FINAL DIAMETER** (cm):	7.216
INITIAL LENGTH (cm):	8.766	FINAL LENGTH** (cm):	8.715
INITIAL MOISTURE CONTENT (%):	21.0	FINAL MOISTURE CONTENT (%):	25.5
INITIAL WET WT.:	709.2	FINAL WET WT.:	734.1
CONSOLIDATED (Y/N):	Y	BACK PRESSURE (psi):	75.0
CELL PRESSURE (psi):	85.0	EFFECTIVE PRESSURE (psi):	10.0
INITIAL DRY DENSITY (lbs/ft^3):	100.9	ASSUMED G_S:	2.85
% COMPACTION:	87.2	FINAL SATURATION (%):	98.9
FINAL DRY DENSITY (lbs/ft^3):	102.6		

B PARAMETER CK.:	Yes
AVERAGE K_{sat}* (cm/s):	4.8×10^{-7}
MAXIMUM GRADIENT USED:	21.8
MINIMUM GRADIENT USED:	10.5

- This data applies only to specimen tested.

* Corrected to 20 °C

** All final sample dimensions are subject to sample deformation caused by exsolution of air in pore water and/or consolidation.

Southern Earth Sciences, Inc.
11638 Sun Belt Court
Baton Rouge, Louisiana 70809

Hydraulic Conductivity Triaxial Test

Data Summary Sheet
(ASTM D5084)

Project No.:	M16-452	Project Name:	Highland Technical Services		
Project Manager:	MJ	Date Completed:	11/13/2016	Technician:	MP / AD
Boring No.:		Depth:		Sample No.:	#2
CK'd by:	RLJ	Date CK'd:	11/14/2016		

SAMPLE PREPARATION:	Reconstituted In Lab
METHOD OF COMPACTION:	N/A
TESTING METHOD:	METHOD F
TYPE SOIL & USCS:	Tan and Red Clayey SILT with fine sand (MH)

FIELD MOISTURE (%):	N/A	LAB MOISTURE (%):	43.09
INITIAL DIAMETER (cm):	7.320	FINAL DIAMETER** (cm):	7.269
INITIAL LENGTH (cm):	9.075	FINAL LENGTH** (cm):	9.012
INITIAL MOISTURE CONTENT (%):	43.1	FINAL MOISTURE CONTENT (%):	44.5
INITIAL WET WT.:	652.3	FINAL WET WT.:	657.2
CONSOLIDATED (Y/N):	Y	BACK PRESSURE (psi):	75.0
CELL PRESSURE (psi):	85.0	EFFECTIVE PRESSURE (psi):	10.0
INITIAL DRY DENSITY (lbs/ft^3):	74.5	ASSUMED G_S:	2.70
% COMPACTION:	71.7	FINAL SATURATION (%):	98.7
FINAL DRY DENSITY (lbs/ft^3):	76.0		

B PARAMETER CK.:	Yes
AVERAGE K_{sat}* (cm/s):	2.0×10^{-7}
MAXIMUM GRADIENT USED:	18.8
MINIMUM GRADIENT USED:	10.6

- This data applies only to specimen tested.

* Corrected to 20 °C

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Southern Earth Sciences, Inc.

11638 Sun Belt Court
Baton Rouge, Louisiana 70809

Hydraulic Conductivity Triaxial Test

Data Summary Sheet
(ASTM D5084)

Project No.:	M16-452	Project Name:	Highland Technical Services		
Project Manager:	MJ	Date Completed:	11/13/2016	Technician:	MP / AD
Boring No.:		Depth:		Sample No.:	#3
CK'd by:	RLJ	Date CK'd:	11/14/2016		

SAMPLE PREPARATION:	Reconstituted in Lab
METHOD OF COMPACTION:	N/A
TESTING METHOD:	METHOD F
TYPE SOIL & USCS:	Tan and Red Clayey SILT with fine sand (MH)

FIELD MOISTURE (%):	N/A	LAB MOISTURE (%):	40.12
INITIAL DIAMETER (cm):	7.310	FINAL DIAMETER** (cm):	7.348
INITIAL LENGTH (cm):	9.124	FINAL LENGTH** (cm):	9.047
INITIAL MOISTURE CONTENT (%):	40.1	FINAL MOISTURE CONTENT (%):	45.2
INITIAL WET WT.:	668.4	FINAL WET WT.:	684.4
CONSOLIDATED (Y/N):	Y	BACK PRESSURE (psi):	75.0
CELL PRESSURE (psi):	85.0	EFFECTIVE PRESSURE (psi):	10.0
INITIAL DRY DENSITY (lbs/ft^3):	77.8	ASSUMED G_S:	2.95
% COMPACTION:	76	FINAL SATURATION (%):	99.9
FINAL DRY DENSITY (lbs/ft^3):	78.8		

B PARAMETER CK.:	Yes
AVERAGE K_{sat}* (cm/s):	4.9×10^{-8}
MAXIMUM GRADIENT USED:	22.0
MINIMUM GRADIENT USED:	15.2

- This data applies only to specimen tested.

* Corrected to 20 °C

** All final sample dimensions are subject to sample deformation caused by exsolution of air in pore water and/or consolidation.

ATTACHMENT D

CONTOUR ENGINEERING, LLC

Geotechnical Services • Materials Testing Services • Environmental Services

PROJECT REPORT

Project Name: Monroe County Landfill
Contour Project No: AT16HIG02
Contour Representative: Jon Comini

Date: December 4, 2017
Client: Highland Technical Services
General Contractor: Monroe County

BRIEF RESUME OF WORK ACCOMPLISHED ON THIS DATE:

The Contour representative, Jon Comini, arrived on site as requested for site observations and materials testing at the Monroe County Landfill project located in Monroeville, Alabama. Testing services performed on this date are as follows:

Earthwork Observations & Field Density Testing:

The Contour representative performed field density tests where contractor had backfilled prior to our site visit. The Contour representative observed the above mentioned locations visually and performed field density testing. (see accompanying report of field density tests) In addition, the Contour representative obtained Shelby tube soil samples within the locations of the field density test locations. The Contour representative transported the Shelby tube soil samples to the Contour laboratory for testing. There were no additional testing services requested by the contractor on this dates site visit.

The weather on site this date, 11-21-16, was clear and 45 degrees

Recommendations made by Contour do not constitute authorization to perform any additional work without owner's authorization. Contour is not responsible for the supervision or direction of the actual work of the contractor, or for site safety. Services provided by Contour do not relieve the contractor of his responsibilities for performing the work in accordance with the plans and specifications.

CONTOUR ENGINEERING, LLC

Geotechnical Services • Materials Testing Services • Environmental Services

Report of Field Density Tests

Project:	Monroe County Landfill	**Project # AT16HIG02**
Location:	Monroeville, Alabama	**Date: 12-4-2017**
Client:	Highland Technical Services	

REMARKS: As requested, Contour arrived on site to perform field density testing. Field density testing was performed on a full-time basis at the locations/elevations noted.

RESULTS AND LOCATION OF DENSITY TESTS

Test #	DRY DENSITY	% MOIST. CONTENT	PD ID	% COMP	REQUIRED % COMP.	Elevation&Location
1	98.5	20.0	1	96.5	95	French Drain Backfill, Sta. 1+50 FG
2	97.2	19.1	1	95.2	95	French Drain Backfill, Sta. 3+00 FG
3	98.8	21.5	1	96.8	95	French Drain Backfill, Sta. 4+50 FG
4	98.2	21.3	1	96.7	95	French Drain Backfill, Sta. 6+00 FG

PD ID	Max Dry Density	% OMC	Soil Desciption
1	102	21	

REMARKS: Density tests taken are representative of the estimated location & elevation stated and cannot be inferred to be representative of any other location/elevation. Contractor should employ a system on site to insure all required tests are taken, and any retests are taken prior to a failing area being covered.

CONTOUR REP. Jon Comini

TIMELY ENGINEERING SOIL TESTS, LLC
1874 Forge Street Tucker, GA 30084
Phone: 770-938-8233
Fax: 770-923-8973
Web: www.test-llc.com

AASHTO ACCREDITED

Tested By	AV
Date	12/15/17
Checked By	

Client Pr. #	AT16H1G02	Lab. PR. #	1724-08-1
Pr. Name	Monroe County Landfill	S. Type	Mold
Sample ID	26451/#3	Depth/Elev.	-
Location	STA 4+50	Add. Info	-

ASTM D 5084; Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter (Method D, Constant Rate of Flow)

Initial Sample Data (Before Test)

Height	4.755	in	12.08	cm
Diameter	3.827	in	9.72	cm
Area	11.50	in^2	74.21	cm^2
Volume	896.31	cm^3	0.0317	ft^3
Mass	1762.30	g	3.89	lb
Specific Gravity	2.700	(Assumed)		
Dry Density	98.5	pcf		

Moisture Content

Mass of wet sample & tare	1762.30	g
Mass of dry sample & tare	1414.30	g
Mass of tare	0.00	g
% Moisture	24.6	

Test Data

Speed	11	
Board Number	6	
Cell Number	24	
Flow Pump Number	2B	
Flow Pump Rate	1.12E-04	cm^3/sec
B - Value	0.95	
Cell Pressure	83.0	psi
Back Pressure	80.0	psi
Confining (Effective) Pressure	3.0	psi
Max Head	190.62	cm
Min Head	187.10	cm
Maximum Gradient	15.78	
Minimum Gradient	15.49	

Final Data (After Test)

Average Height of Sample			4.755	in	12.08 cm
Average Diameter of Sample			3.830	in	9.73 cm
Area	11.52	in^2	74.33	cm^2	
Volume	897.72	cm^3	0.0317	ft^3	
Mass	1776.30	g	3.92	lb	

Dry Density	98.4	pcf
Vol. of Voids	373.22	cm^3
Vol. of Solids	524.49	cm^3
Void Ratio	0.71	
Saturation	96.5	%

Moisture Content

Mass of wet sample & tare	2133.70	g
Mass of dry sample & tare	1774.00	g
Mass of tare	359.70	g
% Moisture	25.4	

TIME FUNCTION			Δ t	READING	Head	Gradient	Temp.	PERMEABILITY (cm/sec)			
DATE	HOUR	MIN	(sec)	(psi)	(cm)		T_x(°C)	@ T_x	R_T	@ 20 °C	
12/15/17	13	0	-	2.70	189.92	15.72	17.6	-	-	-	
12/15/17	13	5	300	2.68	188.51	15.61	17.6	9.62E-08	1.062	1.02E-07	
12/15/17	13	10	300	2.66	187.10	15.49	17.6	9.69E-08	1.062	1.03E-07	
12/15/17	13	15	300	2.69	189.21	15.67	17.6	9.67E-08	1.062	1.03E-07	*
12/15/17	13	20	300	2.71	190.62	15.78	17.6	9.58E-08	1.062	1.02E-07	*
12/15/17	13	25	300	2.67	187.81	15.55	17.6	9.62E-08	1.062	1.02E-07	*
12/15/17	13	30	300	2.70	189.92	15.72	17.6	9.64E-08	1.062	1.02E-07	*

Reported Average Hydraulic Conductivity* 1.0E-07 cm/sec

Note: Deaired Water Used for Permeability Test.

DESCRIPTION: NA

USCS (ASTM D2487;2488): NA

REMARKS:

Flow pump ID #	244	Balance ID #	1/6/7	Differential Pressure Transducer ID #	263
Thermometer ID #	63	Oven ID #	14/15	Board Pressure Transducer ID #	216
Syringe ID #	246			Pore Pressure Transducer ID #	28

TIMELY ENGINEERING SOIL TESTS, LLC
1874 Forge Street Tucker, GA 30084
Phone: 770-938-8233
Fax: 770-923-8973
Web: www.test-llc.com

AASHTO ACCREDITED

Tested By	AV
Date	12/16/17
Checked By	

Client Pr. #	AT16H1G02	Lab. PR.#	1724-08-1
Pr. Name	Monroe County Landfill	S. Type	Mold
Sample ID	26453/ #5	Depth/Elev.	-
Location	STA 6+00	Add. Info	-

ASTM D 5084; Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter (Method D, Constant Rate of Flow)

Initial Sample Data (Before Test)

Height	5.000	in	12.70	cm
Diameter	3.831	in	9.73	cm
Area	11.53	in^2	74.37	cm^2
Volume	944.46	cm^3	0.0334	ft^3
Mass	1859.00	g	4.10	lb
Specific Gravity	2.700	(Assumed)		
Dry Density	96.7	pcf		

Moisture Content

Mass of wet sample & tare	1859.00	g
Mass of dry sample & tare	1464.20	g
Mass of tare	0.00	g
% Moisture	27.0	

Test Data

Speed	12	
Board Number	6	
Cell Number	24	
Flow Pump Number	2A	
Flow Pump Rate	5.60E-05	cm^3/sec
B - Value	0.95	
Cell Pressure	83.0	psi
Back Pressure	80.0	psi
Confining (Effective) Pressure	3.0	psi
Max Head	126.61	cm
Min Head	125.91	cm
Maximum Gradient	9.96	
Minimum Gradient	9.91	

Final Data (After Test)

Average Height of Sample			5.004	in	12.71 cm
Average Diameter of Sample			3.844	in	9.76 cm
Area	11.61	in^2	74.87	cm^2	
Volume	951.64	cm^3	0.0336	ft^3	
Mass	1860.70	g	4.10	lb	

Dry Density	96.2	pcf
Vol. of Voids	408.47	cm^3
Vol. of Solids	543.17	cm^3
Void Ratio	0.75	
Saturation	96.5	%

Moisture Content

Mass of wet sample & tare	2047.60	g
Mass of dry sample & tare	1654.10	g
Mass of tare	189.90	g
% Moisture	26.9	

TIME FUNCTION			Δt	READING	Head	Gradient	Temp.	PERMEABILITY (cm/sec)			
DATE	HOUR	MIN	(sec)	(psi)	(cm)		T_x(°C)	@ T_x	R_T	@ 20 °C	
12/16/17	16	0	-	1.80	126.61	9.96	17.5	-	-	-	
12/16/17	16	5	300	1.79	125.91	9.91	17.5	7.53E-08	1.065	8.02E-08	
12/16/17	16	10	300	1.80	126.61	9.96	17.5	7.53E-08	1.065	8.02E-08	
12/16/17	16	15	300	1.79	125.91	9.91	17.5	7.53E-08	1.065	8.02E-08	*
12/16/17	16	20	300	1.80	126.61	9.96	17.5	7.53E-08	1.065	8.02E-08	*
12/16/17	16	25	300	1.79	125.91	9.91	17.5	7.53E-08	1.065	8.02E-08	*
12/16/17	16	30	300	1.80	126.61	9.96	17.5	7.53E-08	1.065	8.02E-08	*

Reported Average Hydraulic Conductivity* 8.0E-08 cm/sec

Note: Deaired Water Used for Permeability Test.

DESCRIPTION: NA

USCS (ASTM D2487;2488): NA

REMARKS:

Flow pump ID #	244	Balance ID #	1/6/7	Differential Pressure Transducer ID #	262
Thermometer ID #	63	Oven ID #	14/15	Board Pressure Transducer ID #	216
Syringe ID #	245			Pore Pressure Transducer ID #	28

TIMELY ENGINEERING SOIL TESTS, LLC
1874 Forge Street Tucker, GA 30084
Phone: 770-938-8233
Fax: 770-923-8973
Web: www.test-llc.com

AASHTO ACCREDITED

Tested By	AV
Date	12/16/17
Checked By	

Client Pr. #	AT16H1G02
Pr. Name	Monroe County Landfill
Sample ID	26452/ #4
Location	STA 1+50

Lab. PR. #	1724-08-1
S. Type	Mold
Depth/Elev.	-
Add. Info	-

ASTM D 5084; Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter (Method D, Constant Rate of Flow)

Initial Sample Data (Before Test)

Height	4.974	in	12.63	cm
Diameter	3.842	in	9.76	cm
Area	11.59	in^2	74.79	cm^2
Volume	944.96	cm^3	0.0334	ft^3
Mass	1826.70	g	4.03	lb
Specific Gravity	2.700	(Assumed)		
Dry Density	94.3	pcf		

Moisture Content

Mass of wet sample & tare	1826.70	g
Mass of dry sample & tare	1427.80	g
Mass of tare	0.00	g
% Moisture	27.9	

Test Data

Speed	12	
Board Number	5	
Cell Number	21	
Flow Pump Number	2B	
Flow Pump Rate	5.60E-05	cm^3/sec
B - Value	0.95	
Cell Pressure	83.0	psi
Back Pressure	80.0	psi
Confining (Effective) Pressure	3.0	psi
Max Head	156.15	cm
Min Head	152.64	cm
Maximum Gradient	12.46	
Minimum Gradient	12.18	

Final Data (After Test)

Average Height of Sample			4.934	in	12.53 cm
Average Diameter of Sample			3.833	in	9.74 cm
Area	11.54	in^2	74.44	cm^2	
Volume	932.97	cm^3	0.0329	ft^3	
Mass	1828.50	g	4.03	lb	

Dry Density	95.6	pcf
Vol. of Voids	403.55	cm^3
Vol. of Solids	529.42	cm^3
Void Ratio	0.76	
Saturation	98.9	%

Moisture Content

Mass of wet sample & tare	2123.60	g
Mass of dry sample & tare	1725.00	g
Mass of tare	297.20	g
% Moisture	27.9	

TIME FUNCTION			Δt	READING	Head	Gradient	Temp.	PERMEABILITY (cm/sec)			
DATE	HOUR	MIN	(sec)	(psi)	(cm)		T_x(°C)	@ T_x	R_T	@ 20 °C	
12/16/17	16	0	-	2.20	154.75	12.35	17.5	-	-	-	
12/16/17	16	5	300	2.22	156.15	12.46	17.5	6.06E-08	1.065	6.46E-08	
12/16/17	16	10	300	2.17	152.64	12.18	17.5	6.11E-08	1.065	6.50E-08	
12/16/17	16	15	300	2.19	154.04	12.29	17.5	6.15E-08	1.065	6.55E-08	*
12/16/17	16	20	300	2.21	155.45	12.40	17.5	6.09E-08	1.065	6.49E-08	*
12/16/17	16	25	300	2.22	156.15	12.46	17.5	6.05E-08	1.065	6.44E-08	*
12/16/17	16	30	300	2.19	154.04	12.29	17.5	6.08E-08	1.065	6.47E-08	*

Reported Average Hydraulic Conductivity* 6.5E-08 cm/sec

Note: Deaired Water Used for Permeability Test.

DESCRIPTION: NA

USCS (ASTM D2487;2488): NA

REMARKS:

Flow pump ID #	244	Balance ID #	1/6/7
Thermometer ID #	63	Oven ID #	14/15
Syringe ID #	246		

Differential Pressure Transducer ID #	263
Board Pressure Transducer ID #	216
Pore Pressure Transducer ID #	28

Appendix C

Final Cover QA/QC Plan

Final Cover QA/QC

The final cover system of the landfill is an integral part of the closure requirements which will ensure future protection of the environment. It will consist of a 18" infiltration layer composed of onsite or imported earthen material free of sands. The upper 6" layer will be a topsoil layer conducive to the growth of vegetation. Any materials used in construction of the will require prior approval by a registered professional engineer prior to use in construction.

The following construction procedure shall be followed during construction of the final cover system:

- The approved material for the infiltration layer will be placed in a loose lift of sufficient thickness to be compacted to a maximum thickness of 6".
- The previous placed lift will be lightly scarified to encourage adhesion of the next layer.
- Water will be incorporated as need to achieve required compaction.
- At the end of each day's operations the material will be sealed with a smooth drum roller or other method to ensure protection for adverse weather.
- Upon completion of the 18" infiltration layer, the topsoil will be place in a 6" layer.
- ADEM will be notified prior to placement of seed and mulch.

Appendix D

Gas Monitoring Plan

EXPLOSIVE GAS MONITORING PLAN

MONROE COUNTY LANDFILL

7034 RIDGE ROAD
MONROEVILLE, MONROE COUNTY, ALABAMA

Prepared for:
Monroe County Commission
PO Box 8
Monroeville, Alabama 36461

Prepared by:
CDG, Inc.
11 Court Square
Andalusia, Alabama 36420

CDG Project Number: R128024002

May 17, 2024

Engineering. Environmental. Answers.

1.0 Purpose of Explosive Gas Monitoring Plan

In accordance with the requirements of ADEM Admin. Code 335-15-335-13-4-.16 and Solid Waste Disposal Permit Number 50-04, the following Explosive Gas Monitoring Plan has been prepared to provide the procedures that will be followed during the operation of the Monroe County Construction/ Demolition Landfill. The generation of explosive gases, especially methane (CH_4) can occur when organic wastes at the landfill decompose. Landfill gas migration can result in vegetation damage (i.e. landfill cover vegetation) and can even result in explosive conditions if methane concentrations exceed 5% by volume in enclosed spaces. Explosive gas monitoring stations are located at the facility boundary as required by ADEM. Gas monitoring stations are passive points that rely on natural processes to vent the gases into the atmosphere.

If changes are necessary to the gas monitoring network, this plan will be updated to reflect those changes. If no changes have occurred, then the plan shall be reviewed and recertified every **five (5)** years. This plan will be made a part of the operations manual for the landfill and a copy will be available for review at the landfill office.

2.0 FACILITY OWNER AND OPERATIOR INFORMATION

2.1 Facility Owner

Monroe County Commission
PO Box 8
Monroeville, Alabama 36461
Office: (251) 743-3672
Jeff Griffin – County Engineer

2.2 Name and Location of Facility

Monroe County C/D Landfill
7034 Ridge Road
Monroeville, AL 36460

2.3 Designated Person Responsible for Spill Prevention

Mr. Jeff Griffin – County Engineer
Office: (251) 743-3672
E-mail: jsg123@frontiernet.net

3.0 FACILITY DESCRIPTION

Monroe County Landfill is located in a rural area at 7034 Ridge Road in Monroeville, Monroe County, Alabama. The site is comprised of approximately 35 acres of land, with 24 acres designated for disposal operations. The landfill is bordered by residential properties and undeveloped land. The site includes multiple office and maintenance buildings, which are utilized in the daily operations of the Monroe County Landfill. The property was formerly undeveloped land.

The waste stream for the Monroe County Landfill is permitted for non-hazardous construction and demolition wastes. The designated service area is Monroe County, Alabama only and the landfill is permitted to receive 200 cubic yards of waste per day.

4.0 Landfill Explosive Gas Monitoring

As required under ADEM Admin. Code 335-13-4-.16, the Monroe County Landfill shall conduct annual monitoring of the concentration of explosive gases along the waste boundary. Explosive gas monitoring stations installed along the facility boundary shall be monitored for methane gas levels in accordance with ADEM requirements and this Explosive Gas Monitoring Plan.

4.1. Explosive Gas Monitoring Procedures

Permanent explosive gas monitoring stations are located along the landfill property boundary as shown in **Figure 1.** The monitoring stations were installed no more than 300 feet apart, and no more than 100 feet apart in areas where a dwelling is within 1000 feet of the landfill property boundary. In addition to the monitoring stations, other monitoring locations shall include on-site structures, culverts, drop inlets, and other locations which are conducive to gas accumulation. Bar hole punch locations will be completed in areas where the permanent gas monitoring stations have been compromised or where delineation of gas concentrations are necessary beyond the permanent network. A minimum depth of six feet must be obtained for permanent monitoring structures and four feet when using the bar hole punch method.

Monitoring will be conducted at the facility on an annual basis in accordance with the ADEM Administrative code 335-13-4-.16 and Solid Waste Disposal Permit Number 50-04. The collection of explosive gas measurements will be recorded

using a Landtec GEM™5000 gas analyzer (or similar portable gas detection instrument) at each permanent explosive gas monitoring station and bar hole punch location. The instrument will be used in accordance with the manufacturer's recommendations, to detect the methane gas concentrations in each monitoring station at the facility. The instrument will be allowed to remain in the gas monitoring port for approximately 45-seconds to obtain a reading for the percent Lower Explosive Limit (LEL) and the percent gas. The instrument will be calibrated prior to use at the landfill.

4.2 Explosive Gas Reporting Plan and Interpretation of Data

The levels of gas detected in each well and any other monitoring stations shall be expressed in percent methane by volume and percent of Lower Explosive Limit (LEL) on the Explosive Gas Monitoring Report. Copies of the monitoring report shall be submitted to ADEM and placed in the Operating Record of the facility within 30 days of the monitoring event.

The Lower Explosive Limit (LEL) of methane is 5% by volume. Explosive gas levels should not exceed the lower explosive limit at the facility boundary and should not exceed 25 percent of the lower explosive limit in facility structures.

If the explosive gas levels at the facility exceed the respective limits, the Landfill Operator shall immediately take necessary steps to ensure the protection of human health and property and shall immediately notify ADEM of the exceeded limits.

4.3 Remediation Plan

Should explosive gas levels exceed the Lower Explosive Limit at any point along the property boundary or twenty five percent around or inside any facility structure, the interval of testing shall be increased to monthly. Should concentrations continue above the established limits, then testing should be increased to weekly or daily to detect dangerous levels of combustible gas. Within 7 days of detection, the Landfill Operator shall place in the Operating Record, the explosive gas levels detected, and the immediate steps taken to protect human health and property.

Within 20 days of detection, the Landfill Operator shall submit to ADEM for approval a remedial plan for the explosive gas releases. This plan shall describe the nature and extent of the problem and the proposed remedy. The plan shall be

implemented upon approval by ADEM within 60 days of detection. Within this 60-day period, a copy of the plan shall be placed in the Operating Record and ADEM shall be notified of the plan's implementation.

If the explosive gas levels at the facility exceed the respective limits, the Landfill Operator shall immediately take necessary steps to ensure the protection of human health and property. Specifically, the Landfill Operator shall:

1. Notify ADEM's Solid Waste Branch of the excessive levels and follow any procedures deemed necessary by the Department,

2. Immediately perform explosive gas monitoring in and around nearby residences, and structures which are conducive to gas accumulation,

3. Notify the Monroeville Fire Department of the excessive levels

5.0 DOCUMENT REVISION STATUS AND DISTRIBUTION

5.1 REVISON HISTORY LOG

Review Date	Description of Amendments to the Plan

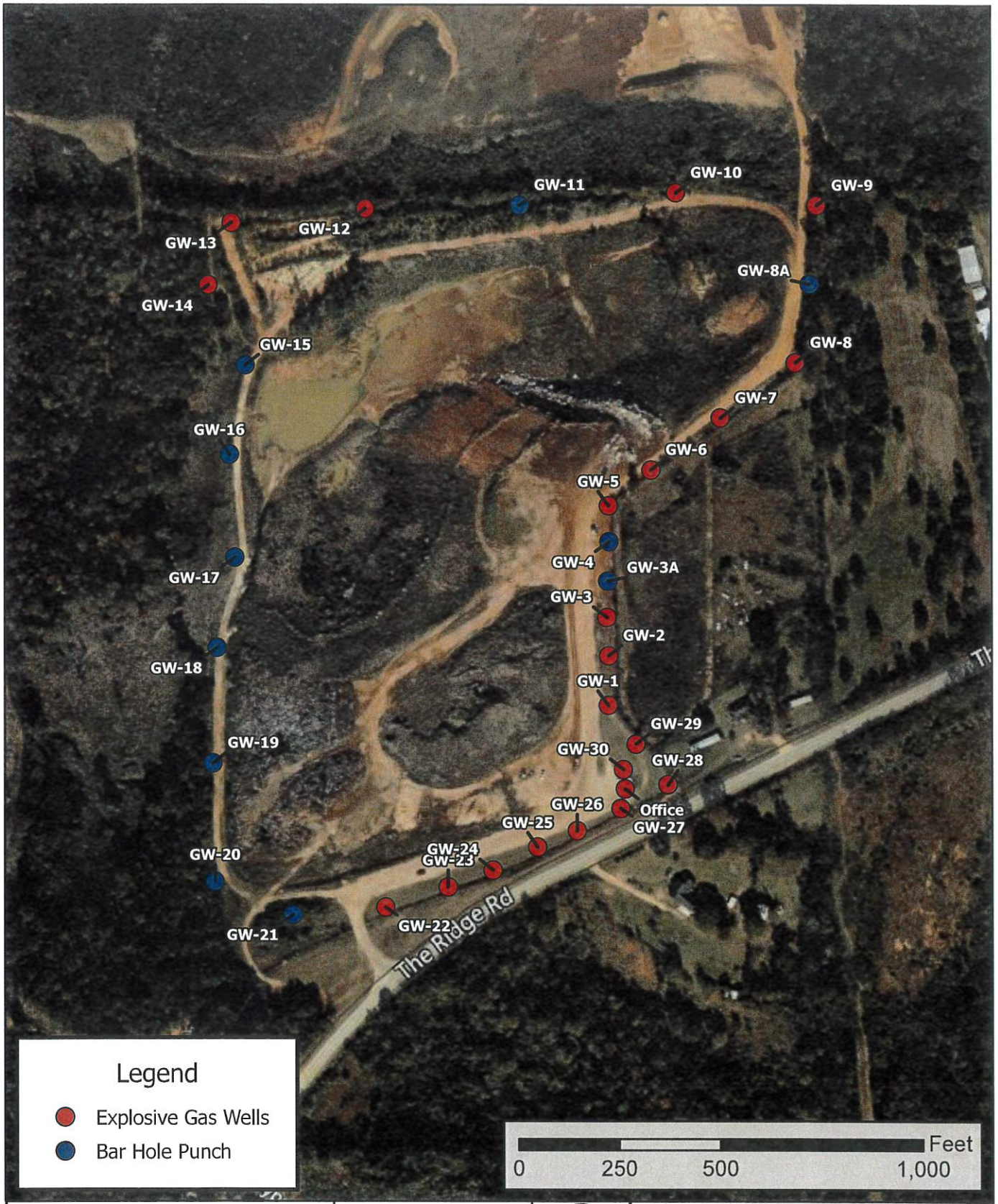


Figure 1
Explosive Gas Monitoring
Monroe County C/D Landfill

CDG

Sheet No. 1

Drawn By: GAM
Checked By: JAB
Date: September 2023

EXPLOSIVE GAS MONITORING FORM

Monroe County C/D Landfill
Explosive Gas Monitoring

Monitoring Date:		Sampler Name: _____		Signature:	
MONITORING POINT	**SAMPLE ID**	**MONITORING POINT TYPE**	**TIME**	**% LOWER EXPLOSIVE LIMIT**	**% GAS**
1	GW-1	Permanent			
2	GW-2	Permanent			
3	GW-3	Permanent			
3A	GW-3A	Bar Hole Punch			
4	GW-4	Bar Hole Punch			
5	GW-5	Permanent			
6	GW-6	Permanent			
7	GW-7	Permanent			
8	GW-8	Permanent			
8A	GW-8A	Bar Hole Punch			
9	GW-9	Permanent			
10	GW-10	Permanent			
11	GW-11	Bar Hole Punch			
12	GW-12	Permanent			
13	GW-13	Permanent			
14	GW-14	Permanent			
15	GW-15	Bar Hole Punch			
16	GW-16	Bar Hole Punch			
17	GW-17	Bar Hole Punch			
18	GW-18	Bar Hole Punch			
19	GW-19	Bar Hole Punch			
20	GW-20	Bar Hole Punch			
21	GW-21	Bar Hole Punch			
22	GW-22	Permanent			
23	GW-23	Permanent			
24	GW-24	Permanent			
25	GW-25	Permanent			
26	GW-26	Permanent			
27	GW-27	Permanent			
28	GW-28	Permanent			
29	GW-29	Permanent			
30	GW-30	Permanent (Septic Tank)			
Office	Office	Office Building			

Appendix E

Typical Waste Inspection Report

RANDOM LOAD INSPECTION TEMPLATE

ADEM Admin. Code r. 335-13-4-.21(1)(b)

Facility Name & Permit Number _____ **Inspection Time & Date** _____

WASTE HAULER INFORMATION

Company Name	
Driver Name	
Vehicle Description/Container Type	

GENERATOR & WASTE INFORMATION

Waste Generator Name & Address	
Method of Shipment: ☐ Bulk ☐ Drum ☐ Bagged ☐ Other:	
Quantity Generated: Amount: _____ ☐ Tons ☐ Cubic Yards ☐ Other	
Per: ☐ Weekly ☐ Monthly ☐ Yearly ☐ Other	
Special Waste Approval Number, if applicable:	

WASTE CHARACTERISTICS

Waste Description (C/D, MSW, Ind.):
Typical Color(s):
Strong Odor: ☐ Yes ☐ No Describe:
Physical State: ☐ Solid ☐ Liquid ☐ Powder ☐ Semi-Solid or Sludge ☐ Other:
pH Range: ☐ ≤ 2 ☐ 2.1-12.4 ☐ ≥ 12.5 ☐ N/A (Solid) ☐ Actual:

Does the load contain unauthorized waste? ☐ Yes ☐ No _____

If yes, identify which waste: ☐ Free Liquids ☐ Hazardous Waste ☐ Medical Waste ☐ PCB Waste

If the load contains any of the waste listed above, the load is unacceptable for disposal and should be rejected. Indicate reasons for rejection below and attach any additional documentation:

_____

_____

_____

_____

**If load is rejected by the facility, please see the facility's plan for procedures for notifying the proper authorities per ADEM Admin. Code r. 335-13-4-.21(1)(b)5.*

Approval Decision: ☐ Approved ☐ Rejected

By signing this Inspection Form, I hereby certify that all information in this form and all attached documents contain true and accurate descriptions of the waste material.

_____

Inspector Signature **Date**

Attachment No. 10

Final Closure Plan Drawing

DRAWN BY	AJ
DESIGNED BY	DES
CHECKED BY	DES
APPROVED BY	DES
DWG. SCALE	1"=60'
PLOT SCALE	1=60
CAD FILE	799-FINAL CON
DATE	01-30-17 3:04PM
PROJECT NO.	799-1
DWG NO.	C-1
SHEET	01

ENGINEERING SERVICE ASSOCIATES, INC.
CONSULTING ENGINEERS
5300 CAHABA RIVER ROAD
SUITE 250
BIRMINGHAM, ALABAMA 35243
www.esaengineering.com
PHONE (205) 970-0772 FAX (205) 970-0773

MONROE COUNTY, ALABAMA
CONSTRUCTION AND DEMOLITION LANDFILL
FINAL GRADING AND DRAINAGE PLAN

NO.	DATE	DESCRIPTION	DRAFT	APPD.

REVISIONS

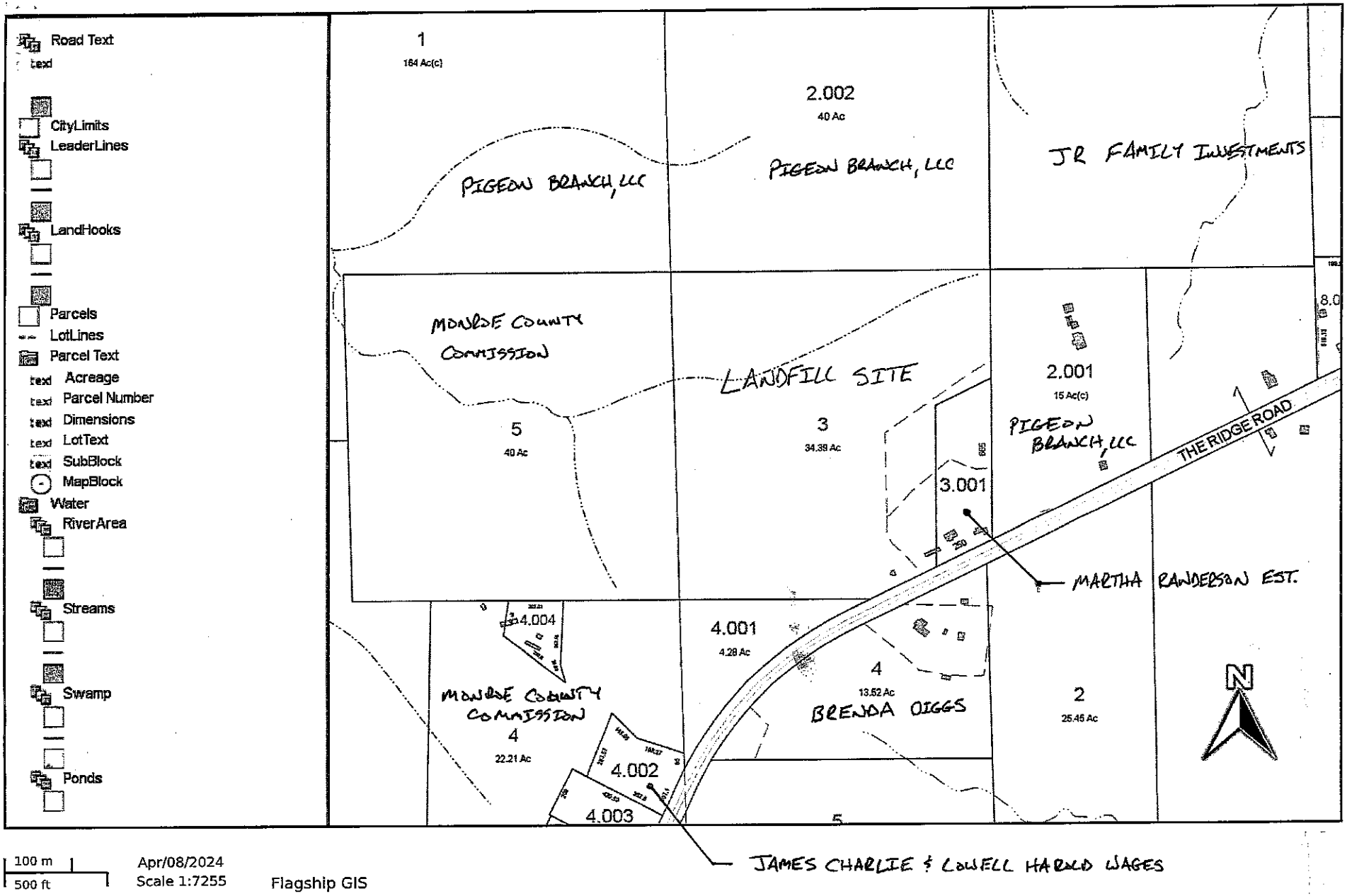
LAST SHADED BOX INDICATES CURRENT DRAWING STATUS
☐ PRELIMINARY ☐ BID SET ☐ ISSUED FOR CONSTRUCTION ☐ RECORD DRAWING

Attachment No. 11

Current Abutting Property Owner Information

Monroe County C&D Landfill

Adjacent Property Owner Information



100 m
500 ft

Apr/08/2024
Scale 1:7255

Flagship GIS

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-01-0-000-001.000			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	01-07N-07E	225	0 X 0	B/P 0713 -0068 D 07/29/2002
Legal	N1/2 OF N1/2, SE1/4 OF NE1/4, SE1/4 OF NW1/4 LESS & EXC 80 ROW ALSO LESS & EXC BEG AT NE COR OF SW1/4 OF NE1/4 THS 970(S) TO POB TH E 460(S) TH SW'LY ALG NW ROW OF 80 ROW 620(S) TH N 390(S) TO POB				

Owner			
Name	GCO, JR FAMILY INVESTMENTS LP ATTN: JEAN OUTLAW SHERMAN		
Mailing Addr	23 MIDTOWN PARK W MOBILE, AL 36606	**Physical Addr**	COUNTY

Values	
Land Total:	**$312,710.00**
Building Total:	**$0.00**
Appraised Value:	**$312,710.00**
Annual Taxes:	**$382.72**

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-01-0-000-002.002			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	0-07N-07E	40	0 X 0	B/P 855/174 D 02/15/2017
Legal	40 AC SW1/4 OF NW1/4				

Owner			
Name	PIGEON BRANCH LLC		
Mailing Addr	3 WEST CLAIBORNE ST MONROEVILLE, AL 36460	**Physical Addr**	

Values	
Land Total:	**$57,780.00**
Building Total:	**$0.00**
Appraised Value:	**$57,780.00**
Annual Taxes:	**$79.02**

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-02-0-000-001.000			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	02-07N-07E	0	0 X 0	B/P 879-91 D 06/23/2020
Legal	NE1/4 OF NE1/4, E1/2 OF NW1/4 OF NE1/4, S1/2 OF NE1/4, N1/2 OF NW1/4 OF SE1/4				

Owner			
Name	PIGEON BRANCH LLC		
Malling Addr	3 WEST CLAIBORNE ST MONROEVILLE, AL 36460	**Physical Addr**	

Values	
Land Total:	**$254,450.00**
Building Total:	**$0.00**
Appraised Value:	**$254,450.00**
Annual Taxes:	**$805.04**

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-01-0-000-002.001			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	01-07N-07E	15	0 X 0	B/P 879-91 D 06/23/2020
Legal	15 AC(c) THAT PART OF W 1/2 OF NE 1/4 OF SW 1/4 LYING N OF HWY 42				

Owner			
Name	PIGEON BRANCH LLC		
Mailing Addr	3 WEST CLAIBORNE ST MONROEVILLE, AL 36460	**Physical Addr**	ALG THE RIDGE RD

Values	
Land Total:	**$26,930.00**
Building Total:	**$11,730.00**
Appraised Value:	**$38,660.00**
Annual Taxes:	**$178.10**

Misc Improvements		
Code	Desc	Value
24WCBFL	**GARAGE WOOD OR C.B. FLOOR LOW COST**	$11,730.00

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-02-0-000-004.002			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	02-07N-07E	2	0 X 0	B/P 0756 0462 D 01/03/2007
Legal	BEG AT N R/W HWY 42, 619.66' N OF SE SEC COR; N 65.05'; W'LY 198.27'; NW'LY 145.05'; SW'LY 283.57; SE'LY 352.6'; NE'LY 207.1' ALG R/W TO POB. 2.00 AC+				

Owner			
Name	WAGES, CHARLIE JAMES & LOWELL HAROLD WAGES JR C/O CHARLIE WAGES		
Mailing Addr	1885 FRED JORDAN RD MONROEVILLE, AL 36460	**Physical Addr**	ALG THE RIDGE RD

Values	
Land Total:	**$12,490.00**
Building Total:	**$0.00**
Appraised Value:	**$12,490.00**
Annual Taxes:	**$77.50**

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-01-0-000-004.000			--	03	
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	01-07N-07E	14	0 X 0	B/P 863-591 D 04/11/2018
Legal	13.52 AC N1/2 OF SW1/4 OF SW1/4, S & E OF HWY 42 & AND THAT PART OF NW 1/4 OF SW 1/4 LYING S OF HWY 42				

Owner			
Name	DIGGS, BRENDA R (LE)		
Mailing Addr	7035 THE RIDGE ROAD MONROEVILLE, AL 36460	**Physical Addr**	6914 THE RIDGE RD

Values	
Land Total:	**$53,760.00**
Building Total:	**$104,580.00**
Appraised Value:	**$158,340.00**
Annual Taxes:	**$0.00**

Building							
	Bldg No	Use Type	Yr Built	Base Area	TAA Area	Story	Appr Value
Detail	**1**	**111**	2000	1612	2154	1.0	**$104,580.00**

Monroe County Alabama - 2023					
Property Record Card					Print Close
Parcel Info					
Parcel Number			**ACCOUNT#**	**Exempt**	**AMENTITES** **ROAD** **TOPO** **SEWER** **WATER** **GAS**
51-21-01-01-0-000-003.001			--		
Subdivision					
Neighborhood	MONROVIL				
District	**City**	**S-T-R**	**Acreage**	**Lot Size**	**Deed B/P**
1	COUNTY	01-07N-07E	3	0 X 0	B/P 892-66 D 03/02/2022
Legal	3.40AC BEG 429' S OF NE COR OF NW1/4 OF SW1/4; SW 250'; S 665'; NE 250' ALG N R/W HWY 42; N 665' TO POB.				

Owner			
Name	RANDERSON, MARTHA R EST C/O BRENDA DIGGS		
Mailing Addr	6936 THE RIDGE ROAD MONROEVILLE, AL 36460	**Physical Addr**	6936 THE RIDGE RD

Values	
Land Total:	**$23,550.00**
Building Total:	**$41,630.00**
Appraised Value:	**$65,180.00**
Annual Taxes:	**$404.24**

Building							
	Bldg No	Use Type	Yr Built	Base Area	TAA Area	Story	Appr Value
Detail	1	**111**	1979	1175	1204	1.0	**$41,630.00**