



2311 North Main Street  
PO Box 1529  
Tarboro, North Carolina 27886  
252-823-1021 Fax: 252-823-0137

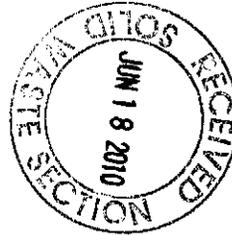
[www.barnhillcontracting.com](http://www.barnhillcontracting.com)

June 17, 2010

Ms. Donna Wilson  
NCDENR Solid Waste Section  
401 Oberlin Road—Fleet 150  
Raleigh, NC 27605

Permit/Co ID #	Date	Doc ID#
33-F	7/26/10	DIN #229 DW

11231



RE: Barnhill LCID Landfill NC97  
Permit #33-F Edgecombe Co.  
5 Year Renewal

Dear Ms. Wilson:

I am respectfully submitting to you the Section 1—General Information and an updated Operations Plan which follows the guidelines set forth in the LCID Application Guide. Also included in this submittal is an updated cross-section showing the groundwater distance from the landfill elevation and the report from Soil Horizons, Inc.

Should you require any additional information, please do not hesitate to contact us.

Yours very truly,  
Barnhill Contracting Co.

Jonathan Proctor  
Estimator/Project Manager

Enclosures

**APPROVED**  
**DIVISION OF WASTE MANAGEMENT**  
**SOLID WASTE SECTION**  
DATE 7-27-10 BY D. Wilson  
PTO 33-F, Atch 1, Part II, Doc 2  
DOC ID 11231  
Permit Doc ID 11232

## Section 1—General Information

Barnhill Contracting Company owns and operates the Barnhill Contracting Company LCID Landfill on Highway 97 in Rocky Mount, NC. Below is the contact information of all parties involved in the operation of the Landfill. Barnhill Contracting is the Owner of the facility and land in which the facility operates.

All permit fee invoices and annual fee invoices should be sent to the following location:

Barnhill Contracting Company  
PO Box 1529  
2311 N Main Street  
Tarboro, NC 27886  
(252) 823-1021  
Contact: Jonathan Proctor

Daily operations of the site are managed by:

Barnhill Contracting Company  
PO Box 1529  
2311 N Main Street  
Tarboro, NC 27886  
(252) 823-1021  
Contact: Buddy Rose

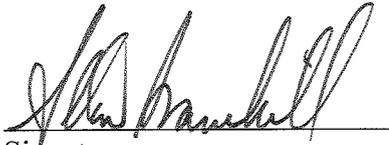
Consulting Engineer  
Appian Consulting & Engineers, PA  
PO Box 7966  
Rocky Mount, NC 27804  
(252) 972-7703

**Applicant Signature Page**

Name of facility BARNHILL LCID LANDFILL

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that the information provided in this application is true, accurate, and complete to the best of my knowledge.

I understand that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars (\$15,000.00) per day per each violation of the Solid Waste Management Rules. I further understand that the Solid Waste Management Rules may be revised or amended in the future and that the facility siting and operations of this solid waste management facility will be required to comply with all such revisions or amendments.

  
Signature

ALLEN BARNHILL  
Print Name

6-17-10  
Date

VICE PRESIDENT  
Title

BARNHILL CONTRACTING COMPANY  
Business or organization name

# Rocky Mount LCID Operations Plan

1. Obtain copy of the final approved plans and erosion control permit prior to land disturbance activity exceeding one acre. Retain copy of approved permits on-site.
2. Currently there are 123,020+/- CY of completed LCID fill. There is a proposed 72,708+/- CY fill in Phase II, and a proposed 78,545+/- CY in Phase III. This is a total of 274,273+/- CY of fill proposed for the complete life of the LCID Landfill.
3. All waste materials will originate in Nash, Edgecombe, and Halifax counties in North Carolina.
4. The operation of the facility shall utilize a tracked dozer, dump truck, and motor grader.
5. An existing sign at the entrance to the Barnhill LCID site shall be maintained at the entrance to show the contact name and number in case of emergencies. The permit number for the LCID landfill is written on the entrance sign and shall be updated, if necessary.
6. The existing access gate at the entrance sign to the Barnhill LCID site is to be locked during non-operating hours. Operating hours shall be from 6:30 am to 6:30 pm for Barnhill Contracting operation. The landfill site is a private site and will only be used by Barnhill Contracting Company. It should also be noted that no unacceptable waste is anticipated to be brought to this site and that none will be stored on site.
7. Begin fill operations for Phase as shown on plans. The landfill shall accept only land clearing waste, inert debris, untreated wood, and yard trash. Solid waste shall be compacted as densely practical into cells. Adequate soil cover shall be applied monthly, or when the active area reaches one acre in size, whichever occurs first. Cover material is to be provided off-site from the Hanson Mining Pit (across the street) as needed by Barnhill Contracting Company.
8. Install temporary diversion ditches and slope drains during fill as necessary and in the locations shown on the erosion control plans. As the landfill is built up, extend the slope drains to match the top grade of the fill area. Place the slope drains at the inverts shown on the plans and per the slope drain detail.
9. If area of Phase is close to being filled prior to the expiration of the permit for that phase or if the permit expires, permission from NCDENR, Division of Waste Management, Solid Waste Section must be obtained and a new permit in hand prior to continuing fill into a new phase. Once permission has been obtained, continue with filling operations for the next phase. Repeat the approval process for each phase completed prior to beginning a new phase of operation.
10. Inspect all erosion control devices weekly and after each rainfall event. Make repairs immediately as necessary.
11. 120 calendar days after completion of any phase of disposal operations, or upon revocation of a permit, the disposal area shall be covered with a minimum of one foot of suitable soil cover sloped to allow surface water runoff in a controlled

# Rocky Mount LCID Operations Plan

manner. The site shall be left in a condition, which is safe to the public and the community.

12. The operator is to complete a yearly inspection of the perimeter of the site to check for any indications of methane or other gas disturbances due to the landfill. The concentration of explosive gases generated by the facility shall not exceed twenty five (25) percent of the lower explosive limit for the gases in facility structures nor shall it exceed the lower explosive limit for the gases at the property boundary.
13. No surface water is to be impounded over the waste area. All surface runoff is to be diverted to flow to its original course.
14. Ensure that no waste is disposed into existing waters. The Division of Waste Management, Solid Waste Section reserves the right to require ground water or surface water monitoring, or both may be required as provided for under Rules .0601 and .0602 of Solid Waste Management Rules.
15. Open burning of solid waste is prohibited.
16. Access roads shall be of all-weather construction and properly maintained.
17. Permanently seed all disturbed areas once at grade and soil cover is placed. Do not remove protection devices until an adequate ground cover is achieved.
18. After the site is stabilized and the project complete, remove all temporary measures and permanently seed the disturbed areas. Notify the Project Engineer prior to removing any temporary erosion control measure.
19. The projected land use after completion of the landfill is pasture land.
20. All recordkeeping documents, including all permits, operation plan, inspections, correspondence, and site drawings, shall be kept on site at all times. In addition, copies of all the above listed will be kept on file at the Tarboro office and with Buddy Rose, who is the contact person for this LCID landfill.
21. Barnhill Contracting Company is in the construction business and will employ the equipment and labor to properly close the facility. Barnhill has several borrow sites within five miles of the LCID, which can be used to supply final cover soil and ground cover.
22. Emergency Contingency Plan: Edgecombe County Fire Departments will respond to any emergencies associated with the LCID. Operators or the public will report emergencies through the use of 911 or based on contact information maintained at the site at the entrance on NC Hwy 97.

# LCID LANDFILL SITE

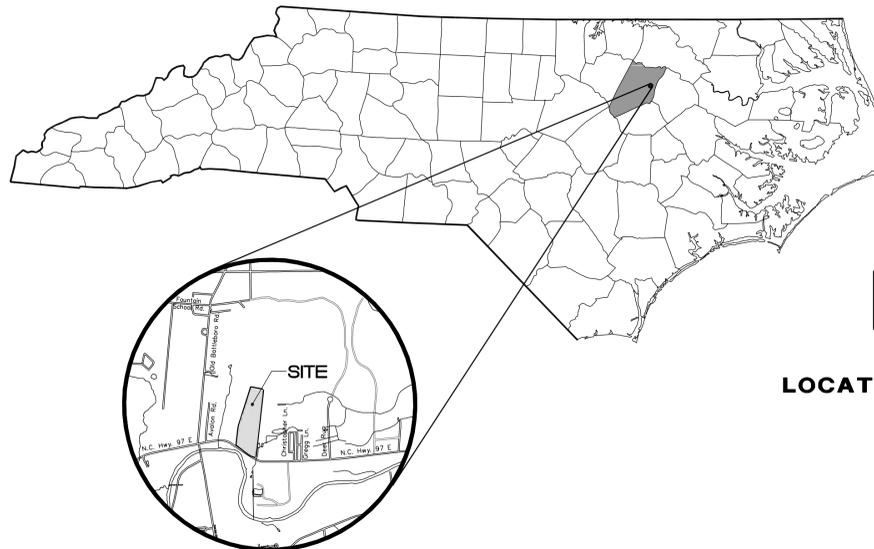
## BARNHILL CONTRACTING COMPANY ASPHALT PLANT

### GENERAL NOTES

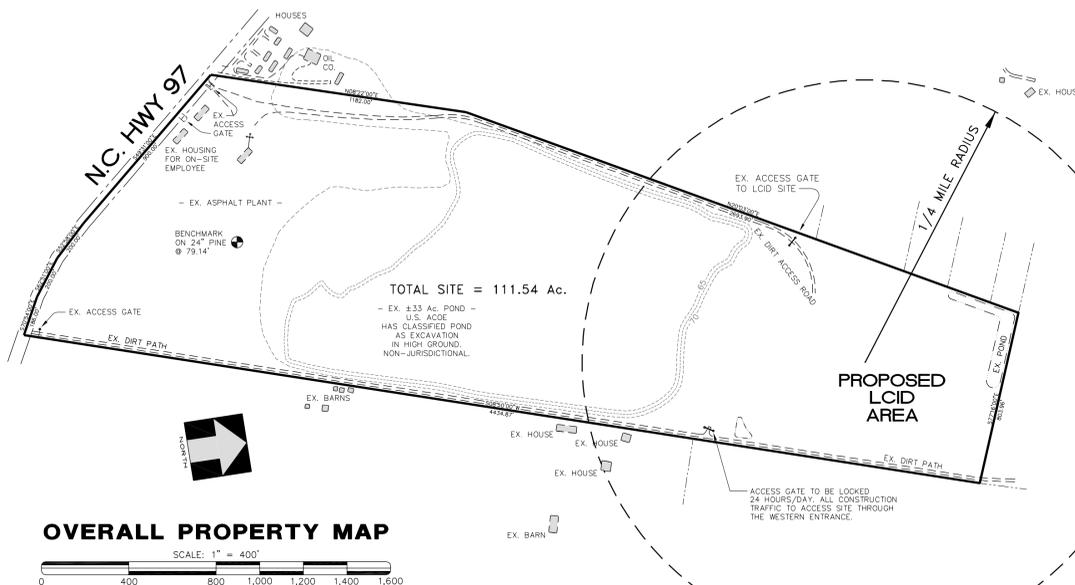
1. Location and topographical information was taken from an actual field survey performed by Joyner, Keeny & Associates dated August 24 2009. Reference Datum is MSL.
2. All concrete is to be minimum 3000 psi at 28 days, air entrained except dumpster pad to be 4500 psi, unless otherwise noted on the plans.
3. All signs, traffic control devices shall conform to the Manual on Uniform Traffic Control Devices, latest edition as amended, and are the Contractor's responsibility.
4. Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of America, Inc., and the Safety and Health Regulations for Construction issued by the U.S. Department of Labor.
5. Existing utility locations shown, if any, are approximate and shall be verified in the field prior to beginning work. Contractor shall contact NC One Call Center at 1-800-632-4949 for locations of existing utilities prior to beginning construction.
6. All disturbed areas shall be landscaped and seeded within 15 days of completion of construction.
7. Any relocation of existing electrical facilities will be at the developer's expense.
8. Property is located in a FEMA mapped flood area or Flood Hazard zone. See FEMA panels #3720386100J & 3720387100J. Additional 100-year flood plain will not be disturbed by the landfill construction.
9. Owner is responsible for determination or discovery of existing underground storage tanks (UST), septic tanks, abandoned utility lines, graves or cemeteries that may exist on the site.
10. Contractor shall exercise extreme caution when working under, around, and/or adjacent to existing power lines.
11. Do not pour any concrete before forms are inspected and approved by the project engineer. Failure to do so may constitute removal of work performed at Contractor's cost until made satisfactory by the Engineer.
12. Site disturbance is more than 1 acre therefore an erosion control permit is necessary. Maintain the existing erosion control permit onsite as required.
13. This site is not located within a Watershed Protected Zone.
14. Boundary information is shown for reference only. Consult Professional Land Surveyor for boundary data.
15. Unless noted otherwise, all trees not marked to be removed are not to be disturbed. They are to be protected from damage by equipment during construction.
16. The contractor shall be responsible for the repair of any pavement or existing utilities that may be damaged due to construction activity. Exercise caution.
17. It is common for revisions to occur to the sealed drawings during the permitting and bidding phase. As a result, only plans signed and dated by the Engineer of Record in the "Approved for Construction" certificate (in addition to the signature and date over the seal) and, if applicable, also bearing the signature and date of the applicable local government authority reviewing and approving the plans, will be considered the Approved Construction Drawings. These plans only are to be used for construction. Work either staked or constructed from plans stamped "Preliminary" or with the signature missing from the "Approved for Construction" certificate will be considered unacceptable for construction. The contractor shall be responsible for remediating and correcting all conflicts created by him, at his own expense, which may be at variance with the Approved Construction Drawings.
18. Owner to be responsible for sign permit and sign placement.
19. The location of the onsite topsoil stockpile (if any) shall be coordinated with Developer.

### 5-Year Renewal Notes

1. The purpose of this plan is for the renewal of the existing LCID Permit No. 33F. The original permit was issued in 1998 and renewed in 2004. An audit was completed by Ben Barnes, NCDENR Solid Waste Section, on 2.9.09.
2. No additional land disturbance is proposed beyond the original scope.
3. Operator to continue to conduct annual inspections of the site.
4. Operator to make sure all erosion control devices are inspected weekly.
5. Operator to make sure that the annual inspection is conducted on the perimeter of the site for any indication of methane disturbances.
6. Operator to make sure that there is no impounded water on the top of the site and that the top is graded at all times to provide positive drainage.
7. Operator to make sure that all waste including side slopes is covered every 30 days.



LOCATION SKETCH



OVERALL PROPERTY MAP

### DEVELOPED BY:

**BARNHILL CONTRACTING COMPANY**  
**P.O. BOX 1529**  
**TARBORO, N.C. 27886**

### CONSULTANTS:

**SURVEYING:**  
**JOYNER, KEENY, & ASSOCIATES**  
**209 NORTH PEARL STREET**  
**ROCKY MOUNT, N.C. 27804**



### INDEX

- CE-1 GRADING / LCID / EROSION PLAN (PHASE I)
- CE-2 GRADING / LCID / EROSION PLAN (PHASE II)
- CE-3 GRADING / LCID / EROSION PLAN (PHASE III)
- CE-4 CROSS SECTIONS
- CE-5 CONSTRUCTION NOTES & DETAILS

### SITE PLAN LEGEND

	EX. PATH
	EX. AREA LIGHT
	PROPOSED AREA LIGHT
	CONCRETE
	EX. ELEC. LINE
	PRO. UNDER-GROUND ELECTRIC
	EX. SANITARY SEWER
	EX. WATER MAIN
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING GRADE
	PROPOSED FINISHED GRADE

### SITE INFO.

TRACT ACREAGE: 11.54 Ac.  
 ZONE: I-2 (HEAVY INDUSTRIAL)  
 LOCATION: ROCKY MOUNT  
 STREET ADDRESS: \_\_\_\_\_  
 NC HWY 97 E  
 COUNTY: EDGECOMBE  
 STATE: NORTH CAROLINA  
 LOCATION:  
 NORTH: 35.98618  
 EAST: 77.74920

### FACILITY CONTACT:

BUDDY ROSE  
 252-824-8235 O  
 252-813-6200 C  
 252-824-8276 F  
 brose@arnhillcontracting.com



REVISIONS				
NO.	DATE	DESCRIPTION	BY	CAD



**APPIAN**  
 CONSULTING ENGINEERS, PA  
 CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
 COMPREHENSIVE ENVIRONMENTAL SERVICES



**SPECIFIC LCID NOTES**

- The Barnhill Rocky Mount LCID Landfill shall comply fully with all requirements set forth under rule .0564 applied by the North Carolina Department of Environment, and Natural Resources, Solid Waste Management Division, Solid Waste Section.
- The facility shall be operated for the disposal of land clearing waste, inert debris, untreated wood, and yard trash. All materials shall be inspected for compliance with acceptance regulations before being placed in the landfill.
- No endangered or threatened species nor any habitat of an endangered or threatened species will be destroyed nor modified by the operation of this landfill.
- There are no archeological or historical sites within the property.
- The property is currently zoned I-2 (Heavy Industrial). The operation of the LCID Landfill will be in compliance with the local zoning ordinance. The local unit of government with zoning authority is the City of Rocky Mount, North Carolina.
- Proposed LCID material shall not be placed closer than 50 feet from all surface waters as defined in G.S. 143-212.
- Proposed LCID material shall not be placed closer than 100 feet from property lines, residential dwellings, commercial or public buildings, and wells.
- Proposed LCID material shall be placed outside of the 100-year floodplain as shown.
- No location for stockpiling topsoil cover has been shown because cover material is to be provided off-site from the Hanson Mining Pit (across the street) as needed by the Barnhill Contracting Company.
- The Barnhill Contracting Company is to maintain the existing entrance path as required.
- There is an existing entrance gate, lock, and sign at the entrance to the LCID landfill. The existing access gate serving the property shall be locked during non-operating hours.
- The estimated volume of existing fill prior to construction of Phase I: 69,097 Cy.

**LCID CONSTRUCTION SEQUENCE AND OPERATIONAL REQUIREMENTS**

- Obtain copy of the final approved plans and erosion control permit prior to land disturbance activity exceeding one acre. Retain copy of approved permits on-site.
- An existing sign at the entrance to the Barnhill LCID site shall be maintained at the entrance to show the contact name and number in case of emergencies. The permit number for the LCID landfill is written on the entrance sign and shall be updated if necessary.
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- If area of Phase is close to being filled prior to the expiration of the permit for that phase or if the permit expires, permission from NCDENR, Division of Waste Management, Solid Waste Section must be obtained and a new permit in hand prior to continuing fill into a new phase. Once approval has been obtained, continue with filling operations for the next phase. Repeat the approval process for each phase completed prior to beginning a new phase of operation.
- Inspect all erosion control devices weekly and after each rainfall event. Make repairs immediately as necessary.
- 120 calendar days after completion of any phase of disposal operations, or upon revocation of a permit, the disposal area shall be covered with a minimum of one foot of suitable soil cover sloped to allow surface water runoff in a controlled manner. The site shall be left in a condition, which is safe to the public and the community.
- The operator is to complete a yearly inspection of the perimeter of the site to check for any indications of methane or other gas disturbances due to the landfill. The concentration of explosive gases generated by the facility shall not exceed twenty five (25) percent of the lower explosive limit for the gases in facility structures nor shall it exceed the lower explosive limit for the gases at the property boundary.
- No surface water is to be impounded over the waste area. All surface runoff is to be diverted to flow to its original course.
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- Open burning of solid waste is prohibited.
- Access roads shall be of all-weather construction and properly maintained.
- Permanently seed all disturbed areas once at grade and soil cover is placed. Do not remove protection devices until an adequate ground cover is achieved.
- After the site is stabilized and the project complete, remove all temporary measures and permanently seed the disturbed areas. Notify the Project Engineer prior to removing any temporary erosion control measure.
- The projected land use after completion of the landfill is pasture land.
- Emergency Contingency Plan: Edgecombe County Fire Departments will respond to any emergencies associated with the LCID. Operators or the public will report emergencies through the use of 911 or based on contact information maintained at the site at the entrance on NC Hwy 97.



These plans are for bidding purposes only and are not to be used as Construction drawings unless initiated and dated as approved for Construction below by the Engineer.

Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

**BOUNDARY DESCRIPTION SHOWN IS NOT FOR RECORDATION.**

**RECORD DRAWINGS:**  
These drawings are believed to be a correct representation of actual field conditions but are not warranted as such.

By: \_\_\_\_\_ Date: \_\_\_\_\_

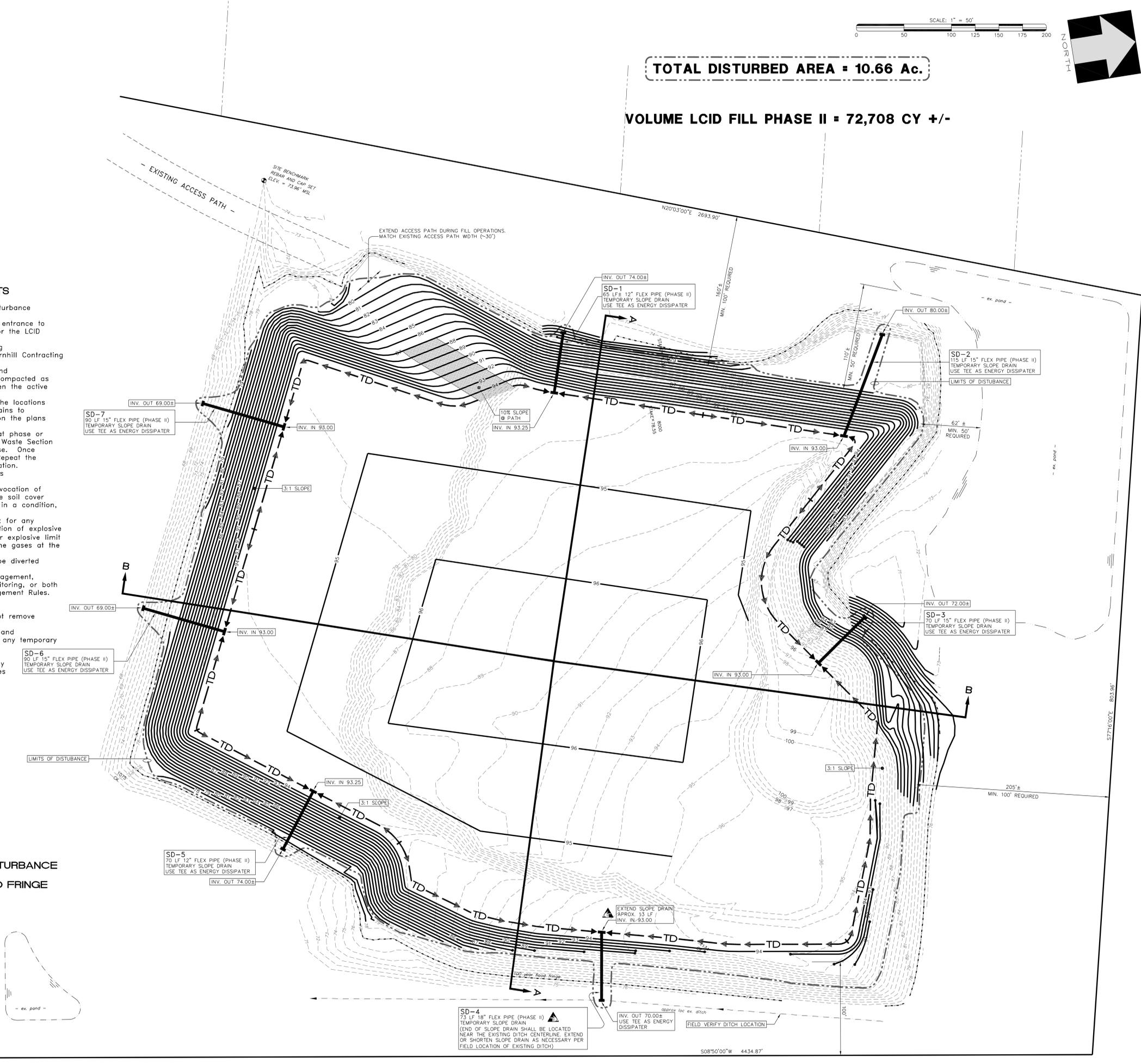
**CONSTRUCTION SAFETY**  
These drawings do not contain the requirements for job safety. All provisions for safety shall be the sole responsibility of the contractor.

**EXISTING CONDITIONS**  
The contractor shall be responsible for reviewing all existing job conditions. Any adverse existing conditions affecting work shown on these drawings shall be brought to the attention of the engineer for possible clarification or reconciliation.

**ADA AND LEGAL DISCLAIMER**  
This document is not represented to comply with all requirements contained in the ADA or other laws. Engineers are not licensed to interpret laws or give advice concerning laws, the owner should have this document reviewed by his attorney to determine legal compliance.

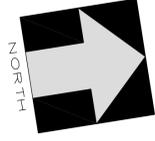
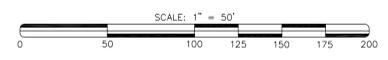
**LEGEND**

- TD → 103.07
- 108.01
- LIMITS OF DISTURBANCE
- 100 YR. FLOOD FRINGE



**TOTAL DISTURBED AREA = 10.66 Ac.**

**VOLUME LCID FILL PHASE II = 72,708 CY +/-**



DATE: September 14, 2009	REVISIONS
DRAWN BY: Kevin Harrell	NO. Δ
CHECKED BY: David Revor	DESCRIPTION
DATE:	BY:

**APPIAN**  
CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
COMPREHENSIVE ENVIRONMENTAL SERVICES  
BLN: C-0562  
- ROCKY MOUNT, NC -  
154 ROUNDABOUT CT.  
ROCKY MOUNT, N.C. 27804  
PHONE: (252) 972-7703  
FAX: (252) 972-7638  
- WORLD WIDE WEB: -  
www.appianengineers.com  
admin@appianengineers.com

*David Revor*  
Professional Engineer  
SEAL 26959  
DAVID C. REVOR  
09/15/09  
Final Drawings  
Review Purposes ONLY

**GRADING / LCID / EROSION PLAN (PHASE II)**  
**BARNHILL CONTRACTING COMPANY**  
Rocky Mount, North Carolina

09-087  
D-0000  
CE-2

**SPECIFIC LCID NOTES**

- The Barnhill Rocky Mount LCID Landfill shall comply fully with all requirements set forth under rule .0564 applied by the North Carolina Department of Environment, and Natural Resources, Solid Waste Management Division, Solid Waste Section.
- The facility shall be operated for the disposal of land clearing waste, inert debris, untreated wood, and yard trash. All materials shall be inspected for compliance with acceptance regulations before being placed in the landfill.
- No endangered or threatened species nor any habitat of an endangered or threatened species will be destroyed nor modified by the operation of this landfill.
- There are no archeological or historical sites within the property.
- The property is currently zoned I-2 (Heavy Industrial). The operation of the LCID Landfill will be in compliance with the local zoning ordinance. The local unit of government with zoning authority is the City of Rocky Mount, North Carolina.
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- The Barnhill Contracting Company is to maintain the existing entrance path as required.
- There is an existing entrance gate, lock, and sign at the entrance to the LCID landfill. The existing access gate serving the property shall be locked during non-operating hours.
- The estimated volume of existing fill prior to construction of Phase I: 89,097 Cy.

**LCID CONSTRUCTION SEQUENCE AND OPERATIONAL REQUIREMENTS**

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Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

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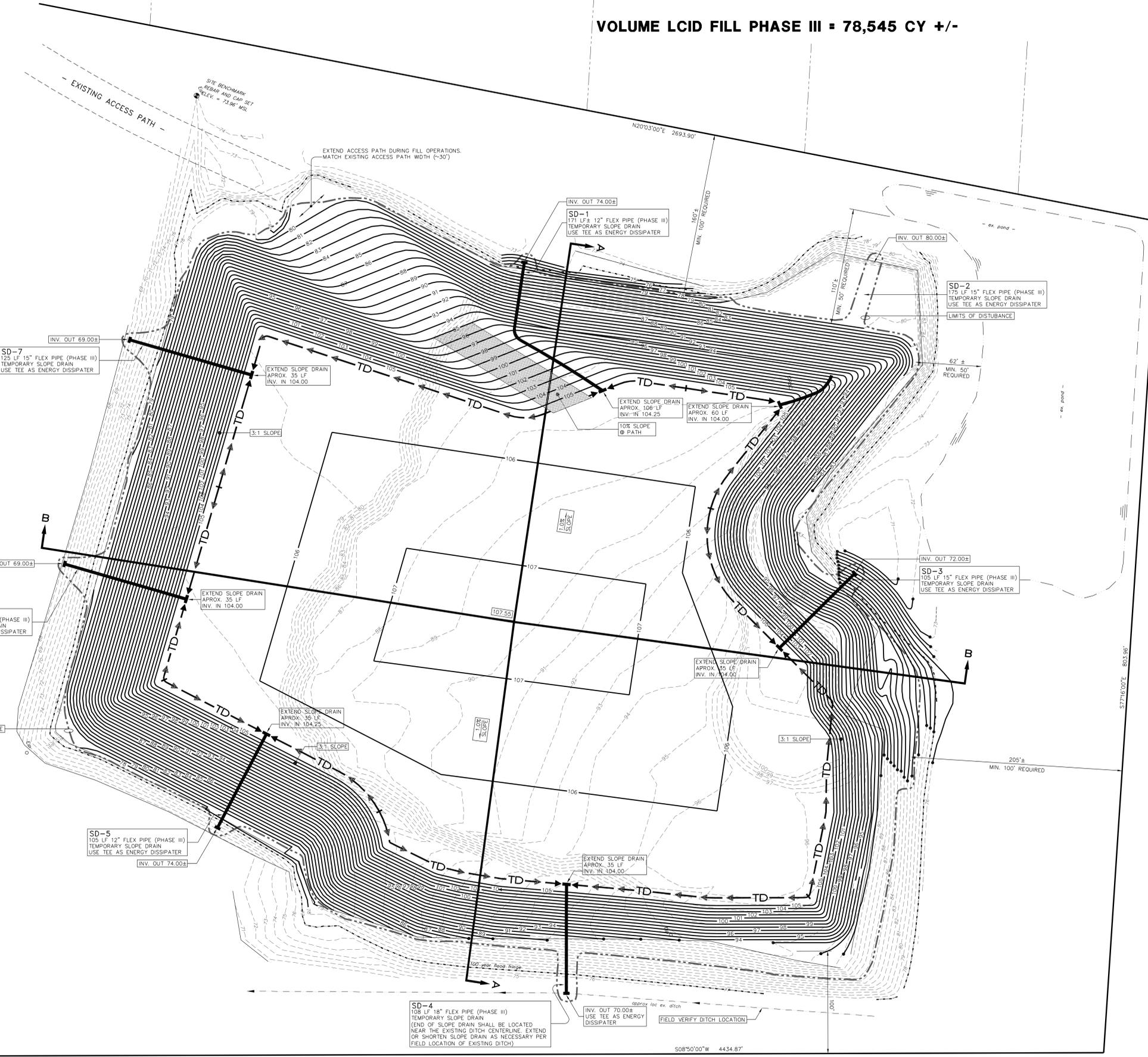
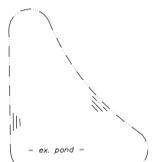
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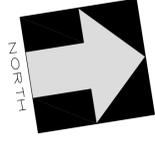
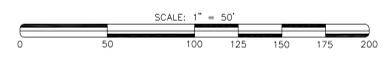
**LEGEND**

- TD— 103.07
- 108.01
- LIMITS OF DISTURBANCE
- 100 YR. FLOOD FRINGE



**TOTAL DISTURBED AREA = 10.66 Ac.**

**VOLUME LCID FILL PHASE III = 78,545 CY +/-**



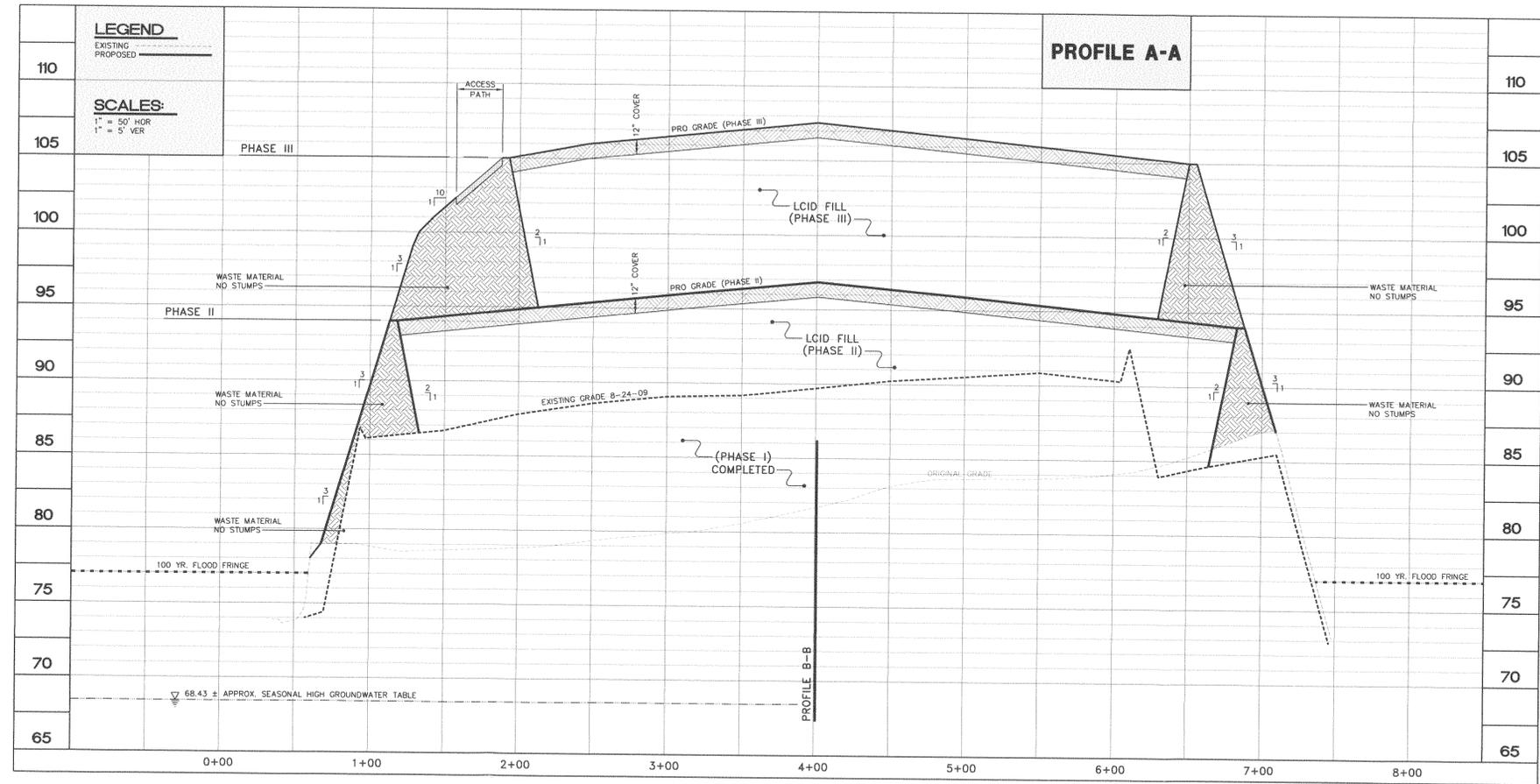
DATE: September 14, 2009	REVISIONS
NO. Δ	DESCRIPTION
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**APPIAN**  
CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
COMPREHENSIVE ENVIRONMENTAL SERVICES  
BLN: C-0562  
— ROCKY MOUNT: —  
154 ROUNDABOUT CT.  
ROCKY MOUNT, N.C. 27804  
PHONE: (252) 972-7703  
FAX: (252) 972-7638  
— WORLD WIDE WEB: —  
www.applanengineers.com  
admin@applanengineers.com

*David C. Revor*  
Professional Engineer  
SEAL 26959  
DAVID C. REVOR  
09/15/09  
Final Drawings  
Review Purposes ONLY

**GRADING / LCID / EROSION PLAN (PHASE III)**  
**BARNHILL CONTRACTING COMPANY**  
Rocky Mount, North Carolina

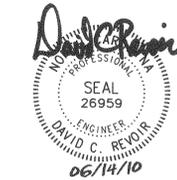
09-087  
D-0000  
**CE-3**



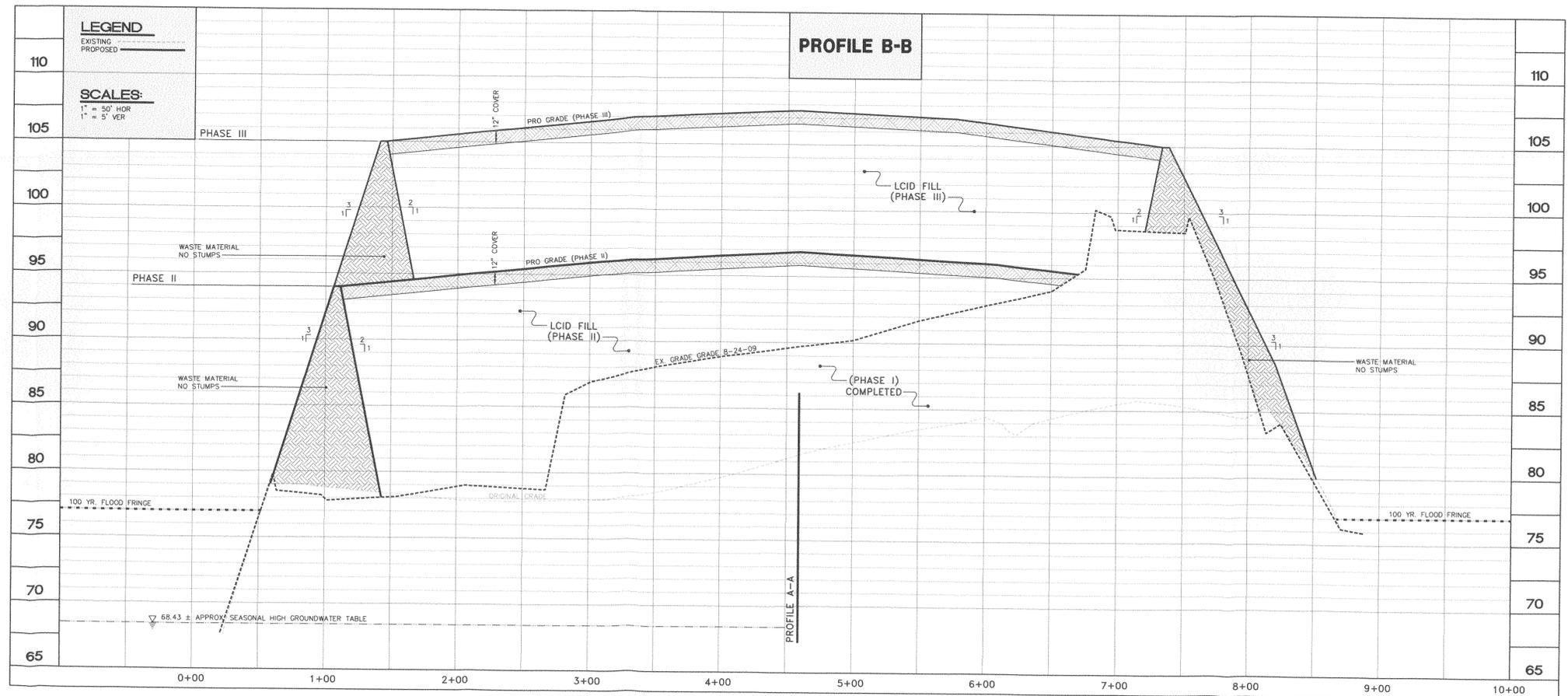
THE DATA SHOWN HEREON AS '8-24-09 FIELD SURVEY' WAS PLOTTED FROM AN ACTUAL FIELD SURVEY PERFORMED BY JOYNER KEENEY, PLLC ON 8-24-2009 USING ONE TRIMBLE R8 GPS RECEIVER AND NCGS VRS BASE.

DATE: September, 14, 2009	DESIGN: David Revor
NO. 1	DATE: 6-14-10
NO. 2	DATE: 6-14-10
NO. 3	DATE: 6-14-10
NO. 4	DATE: 6-14-10
NO. 5	DATE: 6-14-10
NO. 6	DATE: 6-14-10
NO. 7	DATE: 6-14-10
NO. 8	DATE: 6-14-10
NO. 9	DATE: 6-14-10
NO. 10	DATE: 6-14-10

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Final Drawings  
Review Purposes ONLY



These plans are for bidding purposes only and are not to be used as Construction drawings unless initialed and dated as approved for Construction below by the Engineer.

Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

**BOUNDARY DESCRIPTION SHOWN IS NOT FOR RECORDATION.**

**RECORD DRAWINGS:**  
These drawings are believed to be a correct representation of actual field conditions but are not warranted as such.

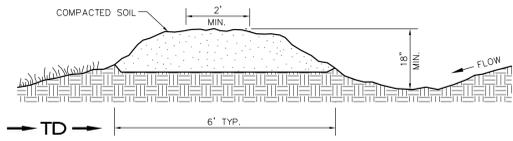
By: \_\_\_\_\_ Date: \_\_\_\_\_

**CONSTRUCTION SAFETY**  
These drawings do not contain the requirements for job safety. All provisions for safety shall be the sole responsibility of the contractor.

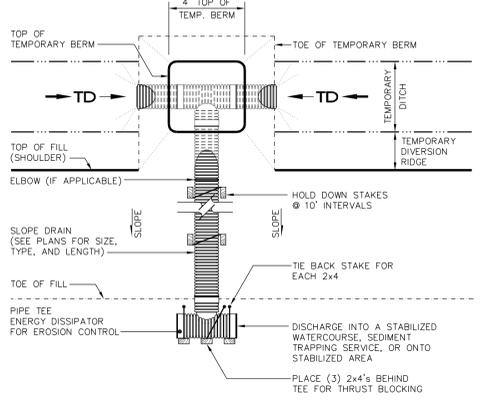
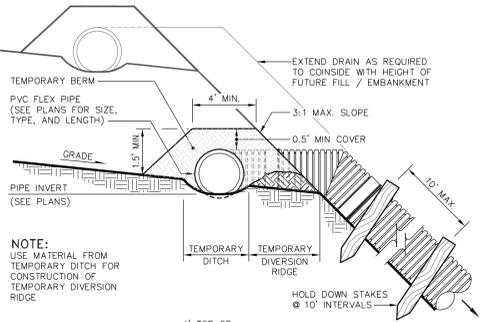
**EXISTING CONDITIONS:**  
The contractor shall be responsible for reviewing all existing job conditions. Any adverse existing conditions affecting work shown on these drawings shall be brought to the attention of the engineer for possible clarification or reconciliation.

**ADA AND LEGAL DISCLAIMER**  
This document is not represented to comply with all requirements contained in the ADA or other laws. Engineers are not licensed to interpret laws or give advice concerning laws, the owner should have this document reviewed by his attorney to determine legal compliance.

**APPIAN**  
**PROFILE / CROSS SECTIONS for**  
**BARNHILL CONTRACTING COMPANY**  
**Rocky Mount, North Carolina**  
09-087  
D-0000  
CE-4



**103.07 - TEMPORARY DIVERSION RIDGE OR CHANNEL**  
NOT TO SCALE REV. 5-15-00



**108.01 - SLOPE DRAIN**  
NOT TO SCALE REV. 5-15-00



These plans are for bidding purposes only and are not to be used as Construction drawings unless initiated and dated as approved for Construction below by the Engineer.

Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

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**EROSION AND SEDIMENTATION CONTROL NARRATIVE**

**I. PROJECT DESCRIPTION**

The purpose of this project is the construction of a Landscape, Construction, Inert Debris (LCID) Landfill. The facility is owned by the Barnhill Contracting Company of Tarboro, NC. The LCID Landfill is located on approximately 111.54± acres and is located within Edgecombe County site of Rocky Mount, NC. Approximately 10.66± acres will be disturbed during construction. The maximum fill will be 28 ft.

Phase I is scheduled to begin construction in October 2003 with Phase I completion and final stabilization by October 2008. Each phase is scheduled to last 5 years with three phases to complete the entire project. The final projected date of completion for the entire project (all three phases) is October 2018. The erosion and sediment control program for this project will include temporary diversion ditches, temporary slope drains, and outlet protection with temporary seeding and permanent seeding of the site.

**II. EXISTING SITE CONDITIONS**

The proposed site is currently cleared and zoned as I-2 (Heavy Industrial). The site drains to three existing onsite ponds, which will be used as sediment basins. The ponds are excavated borrow pits used for construction in the mid 1980's and are not subject to Section 404 of the Clean Water Act.

**III. ADJACENT PROPERTY**

All adjacent property lines and property Owners are shown on the site plan.

**IV. SOILS**

The soil at this site is sandy loam.

**V. EROSION AND SEDIMENT CONTROL MEASURES**

All vegetative and structural erosion and sediment control practices shall be constructed and maintained by the Contractor according to these plans and specifications and the minimum standards of the Dept. of Environmental Management, Land Quality Section. The Contractor shall also follow any additional requirements as outlined by the Project Engineer.

**A. Structural Practices**

- Vehicle wheels shall be clean when leaving the site to prevent the tracking of mud on paved roads.
- Contractor to maintain existing access path to the landfill.
- Slope Surface Roughening: On all slopes designated, surface roughening shall be employed by dozer tracking in the direction of top to bottom to aid in preventing rutting, rivulets, etc. Landscaping shall then be done on the roughened surface.
- Temporary Slope Drains: Temporary slope drains shall be installed as part of the grading operation where applicable, and adjusted as directed by the Engineer.

An earth berm at the top of cut and fill sections shall be constructed to channel water into the slope drain and to prevent collected water from spilling over the edge of the slope.

Temporary slope drains may be removed or left in place, as directed by the Engineer. If removed, they will become the property of the Contractor and may be used again at other temporary locations providing they are in a condition acceptable to the Engineer. Upon removal, the Contractor shall dress the area to give a pleasing appearance, and shall then seed and mulch the area.

**B. Vegetative Practices**

- Temporary Seeding: All denuded area or areas to be graded during the construction phases that are not to be brought to final grade within 30 days shall receive temporary seeding within 15 days of completing initial earthwork. Graded slopes and fills shall receive temporary or permanent seeding within 15 working days or 30 calendar days, whichever period is shorter, after completion of any phase of grading. Temporary seeding shall also be used to stabilize finished grade areas if the time of year is outside the specified permanent seeding periods. Temporary seeding shall be in accordance with paragraph V D below.

**C. Management Strategies**

- Perimeter measures are to be installed prior to grubbing or grading.
- Tail Ditches shall be stabilized immediately following their construction. As an alternate, rock check dams may be provided at their outlets and/or the terminal downstream end of disturbance until ground cover is implemented.
- Stock pile and/or waste areas must be maintained within the limits of the areas protected by the proposed measures and otherwise temporarily seeded if to be left stockpiled over 30 days.
- Construction shall be planned so that grading operations can begin and end as quickly as possible.
- Silt Fences shall also be installed prior to or as a first step in construction.
- The Contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices.

**D. Vegetative Ground Cover**

Immediately following grading, all areas shall receive either permanent or temporary seeding, as applicable, as follows:

	Feb-May	June-Oct	Nov-Jan
Permanent Seed	Tall Fescue @ 240#/Ac (Kentucky 31)	Tall Fescue @ 240#/Ac (Kentucky 31) plus Brown Top Millet @ 35#/Ac or Sorghum-Sudan Hybrid @ 25#/Ac	Tall Fescue @ 240#/Ac (Kentucky 31) plus Winter Rye @ 50#/Ac
Temporary Seed	Annual lespedeza @ 50#/Ac plus Rye grain @ 120#/Ac	German Millet @ 40#/Ac	Rye grain @ 120#/Ac

Fertilizer: 10-10-10 @ 20#/1000 SF  
Lime: 100#/1000 SF  
Mulch: Straw @ 95#/1000 SF  
Tack: 200 gallons/Ac on all mulching

**E. Maintenance**

- Reseed and mulch bare spots larger than 9 square feet (limited to 5% maximum of site area).
- Maintain all seeded areas until uniform stand is acceptable.
- If growth is not established by final project inspection, continue specified attention until the stand is acceptable.
- Correct and repair all undue settling and erosion within 1 year after final inspection.
- Remove from the site, all erosion control structures after complete stabilization at end of construction period.
- Remove silt from sediment pits and from behind check dams when silt is within half depth of the pit or spillway. Dispose of in an area where silt cannot re-enter pit/trap.
- Place rock from rock check dams and gravel/rip rap filter basins in ditch line as armor protection. Do not dispose of rock. All stone armor protection is to fit contour of channel. Do not dump but handspread.

**F. Calculations**

The practice utilized for the proposed site did require formal calculations. Calculations have been provided.

**VI. OWNERS ADDRESS**

Barnhill Contracting Company  
Attn: Allen Barnhill  
P.O. Box 1529  
Tarboro, NC 27886  
(252) 823-1021

DATE NOTED	AS NOTED	DATE	14 SEP 2009	DESIGN	David Repp
DATE	N/A	DATE		DRAWN BY	Kevin Harrell
DATE		DATE		CHECKED BY	Bobby Joyner
NO. Δ		DATE		REVISIONS	
Δ				DESCRIPTION	

**APPIAN**  
CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
COMPREHENSIVE ENVIRONMENTAL SERVICES  
BLN: C-0562  
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154 ROUNDABOUT CT.  
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- WORLD WIDE WEB: -  
www.applanengineers.com  
admin@applanengineers.com



Final Drawings Review Purposes ONLY

**CONSTRUCTION NOTES AND DETAILS for BARNHILL CONTRACTING COMPANY Rocky Mount, North Carolina**

Fac/Perm/Co ID #	Date	Doc ID#
33 F	1219 109	DIN 9014

DW



September 15, 2009

**Ms. Donna Wilson**  
NCDENR Solid Waste Section  
401 Oberlin Road - Fleet 150  
Raleigh, NC 27605



**RE: Barnhill LCID Landfill NC97**  
*Permit # 33-F Edgecombe County*  
*5-Year Renewal*

Dear Donna:

As discussed, we are submitting to you the plans, photos, and a CD of PDFs of Barnhill's NC97 LCID Landfill Site (Permit #33-F, Edgecombe County) required for the 5-year renewal. The original permit was issued in 1998 and renewed in 2004. An audit was completed by Ben Barnes, NCDENR Solid Waste Section, on 2.9.09. Updated elevations and cross sections are shown on the enclosed plans.

Please let us know if you have any questions or comments.

THANK YOU!

Respectfully,  
**Appian Consulting Engineers, P.A.**

David C. Revoir, PE, LEED AP

cc: T. Bennett Wall, Barnhill Contracting

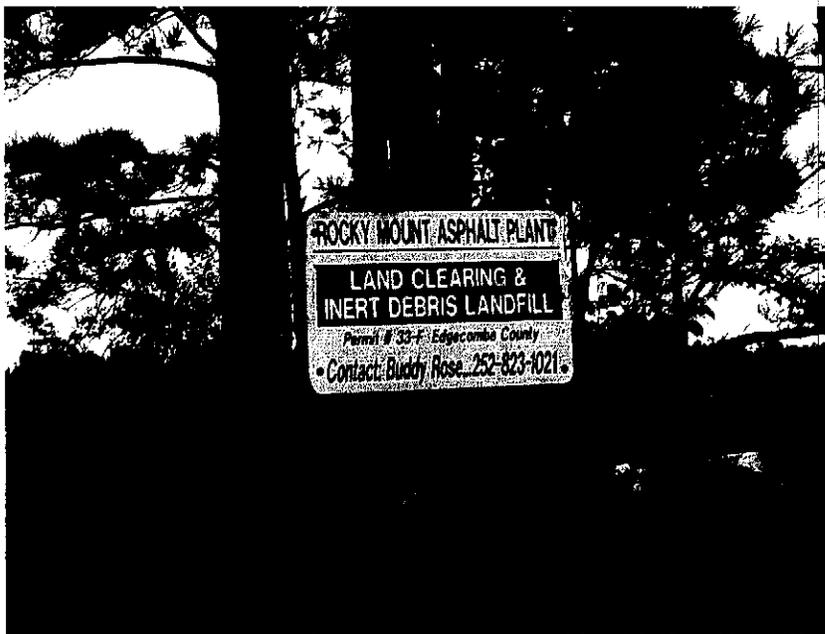


**Barnhill LCID Landfill Site Photos**



Site Photos were taken by Barnhill Contracting in September 2009.

Entrance to LCID Landfill; note wooded buffer



Entrance Sign with emergency contact information



LCID Landfill



**Barnhill LCID Landfill Site Photos**



LCID Landfill



**Barnhill LCID Landfill Site Photos**



Only access to LCID Landfill through locked gates at Barnhill's asphalt plant on NC Hwy 97











• ROCKY MOUNT ASPHALT PLANT •

**LAND CLEARING &  
INERT DEBRIS LANDFILL**

*Permit # 33-F Edgecombe County*

• *Contact: Buddy Rose...252-823-1021* •



ROCKY MOUNT ASPHALT PLANT  
LAND CLEARING & INERT DEBRIS LANDFILL  
Parcel # 234 - Edgecombe County  
Contact: Buddy Rose, 252-822-1021





















**Soil Horizons, Inc.**  
PO Box 1063  
Youngsville, North Carolina 27596

May 20, 2010

**Mr. David Revoir, PE**  
**Appian Consulting Engineers, PA**  
**PO Box 7966**  
**Rocky Mount, NC 27804**

Reference: **Barnhill LCID Water Table Assessment**  
**NC Highway 97**

**Dear David:**

Soil Horizons, Inc. is pleased to provide you with this report for the water table assessment performed at the LCID landfill site. The water table assessment was performed by advancing hand auger borings to a depth of approximately 48 inches below the existing ground surface along the edge of the existing LCID landfill. The location of these borings are identified on the attached Figure 1.

During the hand auger advancement, soils were evaluated by a Licensed Soil Scientist for evidence of seasonal high water table fluctuations. This assessment involved looking at the actual moisture content in the soil and observing the matrix and mottle soil colors. Soil colors will indicate processes that are driven by seasonally high water table fluctuations, such as iron reduction and oxidation and organic matter staining.

Based on the assessment of three hand auger borings on the site, the seasonal high water table and actual water table were observed.

Boring No. 1 had sandy loam fill material approximately 6 inches thick. The subsoil horizon consisted of a coarse sand and it extended down to at least 36 inches below the ground surface. Free water was observed in boring number 1 at approximately 21 inches from the ground surface during the site visit. From field observation of soil characteristics, it appears that the water table may be as high as 18 inches from the surface at this boring location.

Boring No. 2 had sandy loam material approximately 10 inches thick. The subsoil horizon consisted of a sandy loam material and it extended down to 32 inches below the ground surface. Coarse sand material was found from 32 to 40 inches and a massive silty clayloam material was found from 40 to 46" below the ground surface. Free water was observed in boring number 2 at approximately 13 inches from the ground surface during the site visit. From field observation of soil characteristics, it appears that the seasonally high water table may be as high as 10 inches from the surface at this boring location.

Boring No. 3 had sandy loam and sandy clay fill material approximately 28 inches thick. The subsoil horizon consisted of a coarse sand material and it extended down to at least 40 inches below the ground surface. Free water was observed in boring number 3 at approximately 23.5 inches from the ground surface during the site visit. From field observation of soil characteristics, it appears that the seasonally high water table would not be much higher than this depth.

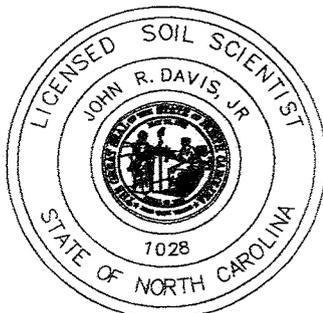
The attached Figure 1 shows the GPS location, approximate elevation of the ground surface, and observed water table for each soil boring. The elevations were based on a site benchmark rebar and cap set elevation of 73.96 msl located near the access path. These elevations are not official and will need to accurately surveyed by a professional surveyor or engineer.

Please note that the seasonal high water table assessment is based on secondary evidence and the actual direct groundwater level measurements are referenced back to the ground surface of the soil borings. Groundwater levels fluctuate for numerous reasons and these findings do not indicate that groundwater levels have not or will not rise above the noted depths. It is expected that the groundwater levels may be 2 to 3 feet higher towards the center of the landfill due to a groundwater mounding effect. Soil Horizons, Inc. recommends that you take into account the natural mounding of groundwater when designing the interior parts of the LCID landfill.

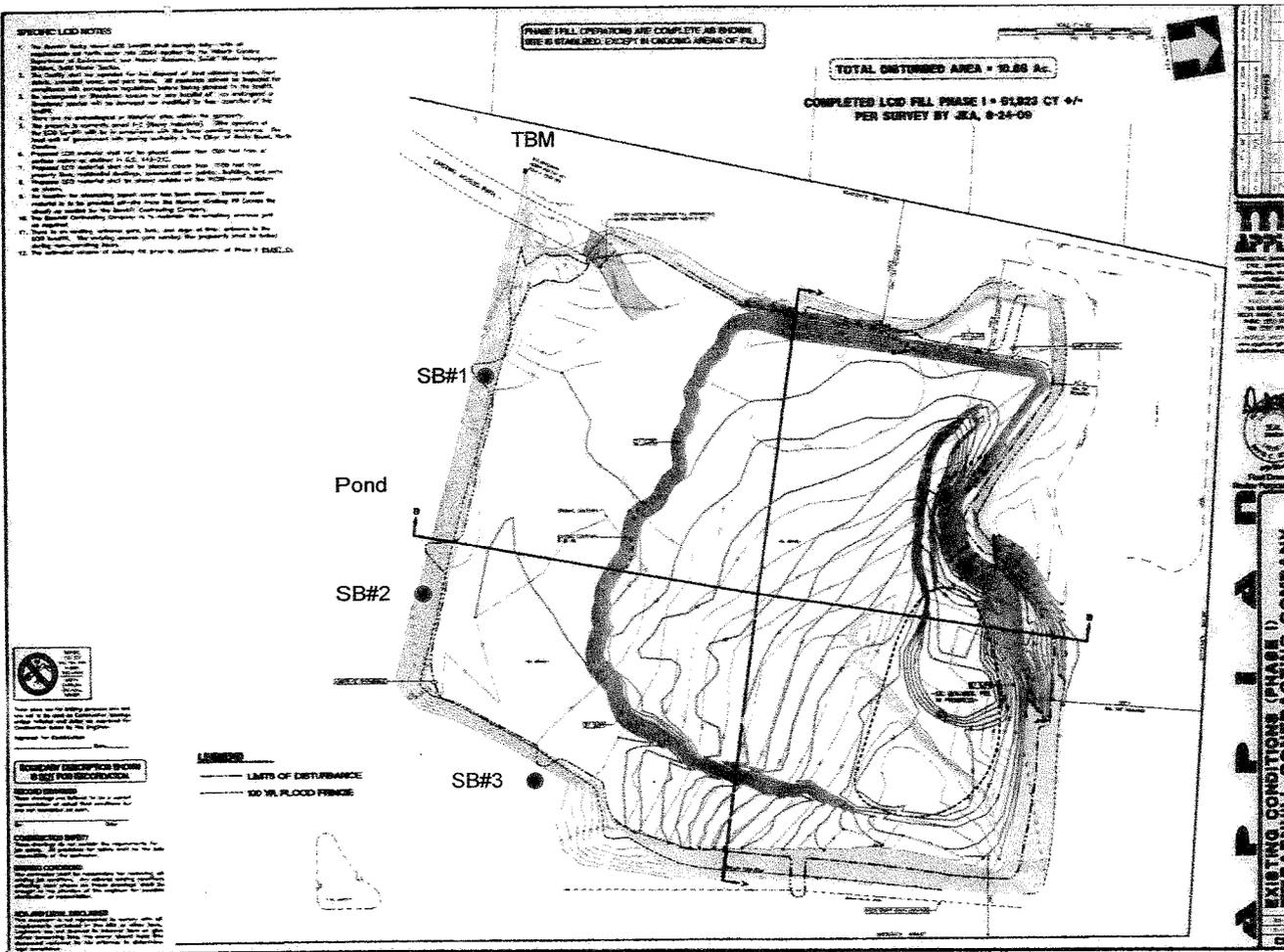
Soil Horizons, Inc. appreciates the opportunity to provide these services to Appian Consulting Engineers. Please contact us if you have any questions regarding this report.

Sincerely,

John R. Davis, Jr., L.S.S.  
Licensed Soil Scientist



Encl. Figure 1



Soil Boring	GPS Location	Ground Surface Elevation	Water Level Elevation
1	N 35.98613 W 77.74975	69.71'	67.96'
2	N 35.98639 W 77.74810	69.51"	68.43'
3	N 35.98639 W 77.74810	71.69'	69.73'

Elevations are approximate and should be accurately measured by a professional land surveyor or engineer.

Site Benchmark Rebar and Cap Set Elev. = 73.96' msl by others.

Approx. Elevation of pond surface on day of site visit = 67.75'

te: May 20, 2010



**SOIL HORIZONS, Inc.**  
 PO Box 1063  
 Youngsville, NC 27596

**Barnhill LCID Landfill Sit**  
 Water Table Study