



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

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.

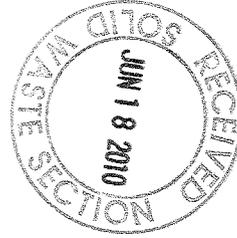
Should you require any additional information, please do not hesitate to contact us.

Yours very truly,  
Barnhill Contracting Co.

Jonathan Proctor  
Estimator/Project Manager

Enclosures

Permit/Co ID #	Date	Doc ID#
33-F	7/26/10	DIN 11229 DW



## 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

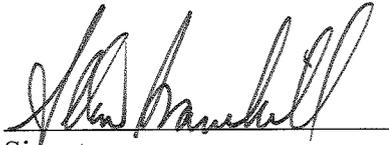
Consulting Engineer  
Appian Consulting & Engineers, PA  
PO Box 7966  
Rocky Mount, NC 27804  
(252) 972-7703

**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.



**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.

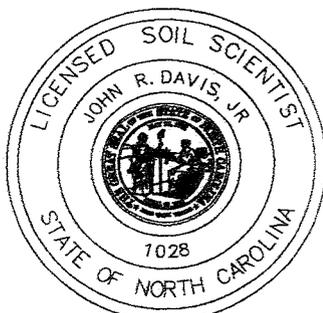
The attached Figure 1 shows the GPS location, approximate elevation of the ground surface, and observed water table for each soil boring. The elevations were based on a site benchmark rebar and cap set elevation of 73.96 msl located near the access path. These elevations are not official and will need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

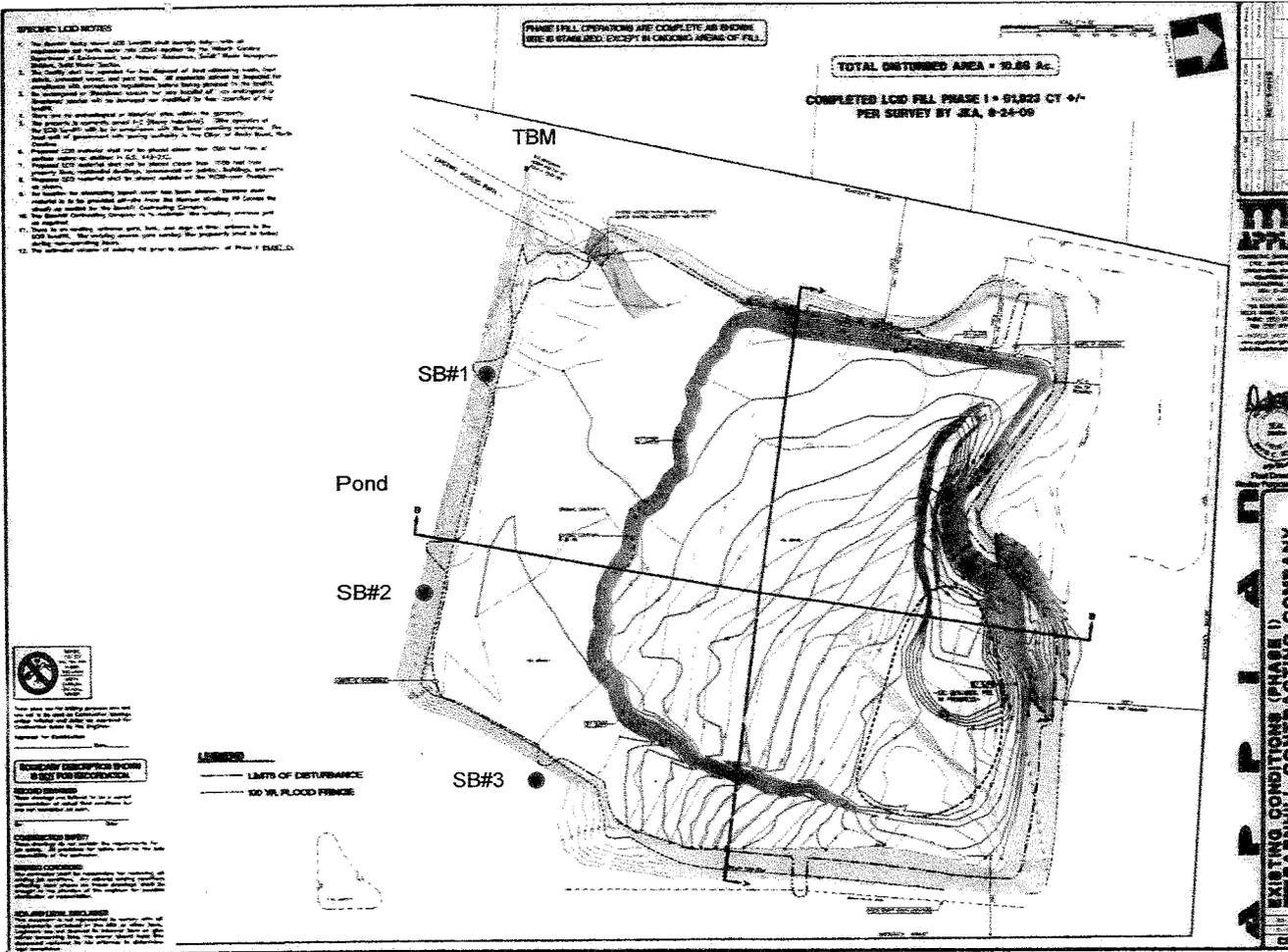
Soil Horizons, Inc. appreciates the opportunity to provide these services to Appian Consulting Engineers. Please contact us if you have any questions regarding this report.

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

**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 PH (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.

SEASON HIGH GROUNDWATER ELEVATION OBTAINED FROM HAND AUGER BORINGS ADVANCED BY A LICENSED SOIL SCIENTIST. REFER TO REPORT PREPARED BY JOHN R. DAVIS, JR., LSS, OF SOIL HORIZONS, INC., MAY 20, 2010. SITE BENCHMARK REBAR AND CAP WERE USED, ELEV. 73.96. APPROX. ELEVATION OF POND SURFACE ON DAY OF SITE VISIT = 67.75'.

SOIL BORING	GROUND SURFACE ELEVATION	WATER LEVEL ELEVATION
1	69.71	67.96
2	69.51	68.43
3	71.69	69.73



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.

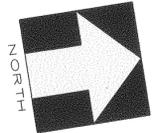
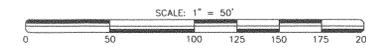
By: \_\_\_\_\_ Date: \_\_\_\_\_

**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.

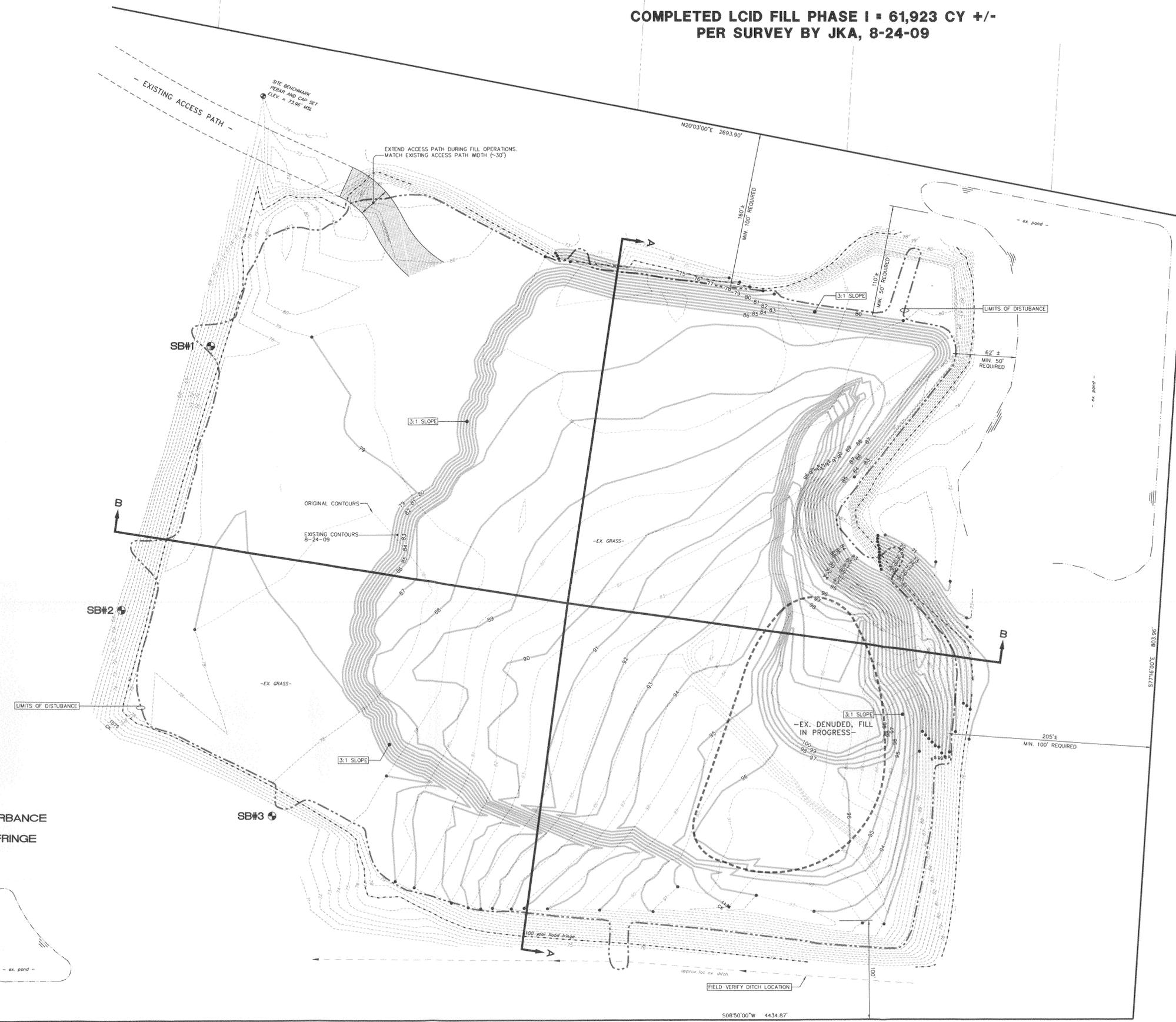
**ADA AND LEGAL DISCLAIMER**  
This document is not represented to comply with all requirements contained in the ADA or other laws. Engineers are not licensed to interpret laws or give advice concerning laws, the owner should have this document reviewed by his attorney to determine legal compliance.

**PHASE I FILL OPERATIONS ARE COMPLETE AS SHOWN. SITE IS STABILIZED, EXCEPT IN ONGOING AREAS OF FILL.**



**TOTAL DISTURBED AREA = 10.66 Ac.**

**COMPLETED LCID FILL PHASE I = 61,923 CY +/- PER SURVEY BY JKA, 8-24-09**



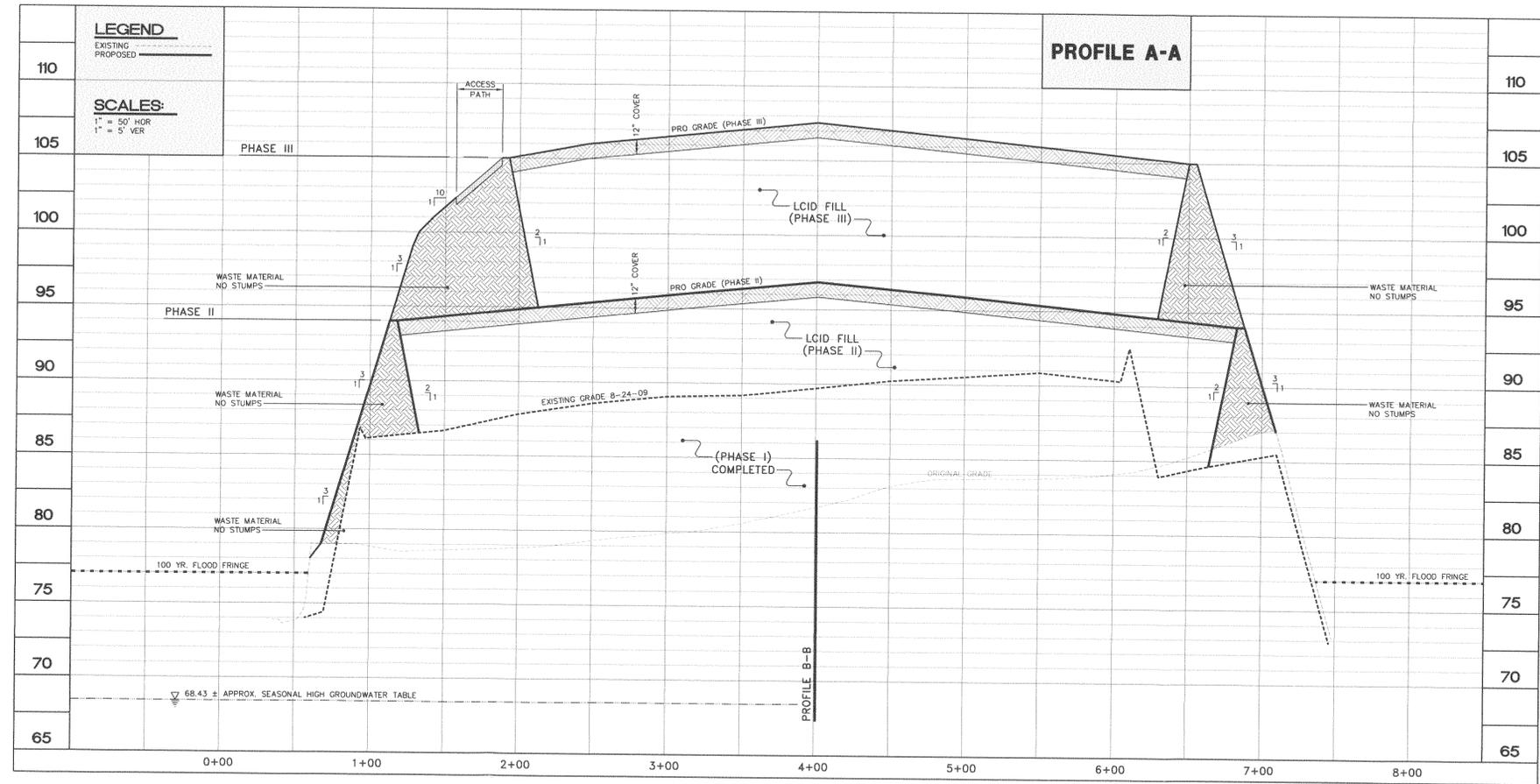
DATE: September, 14 2009	DESIGNER: David Revor
DRAWN BY: Kevin Herrick	CHECKED: David Revor
NO. Δ: 6-14-10	DATE: 6-14-10
DESCRIPTION: ADDED GROUND WATER ELEVATIONS	BY: CAD: K.S.H.
	D.C.R. K.S.H.

**APPIAN**  
CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
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.appianengineers.com  
admin@appianengineers.com

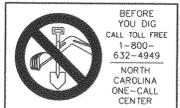
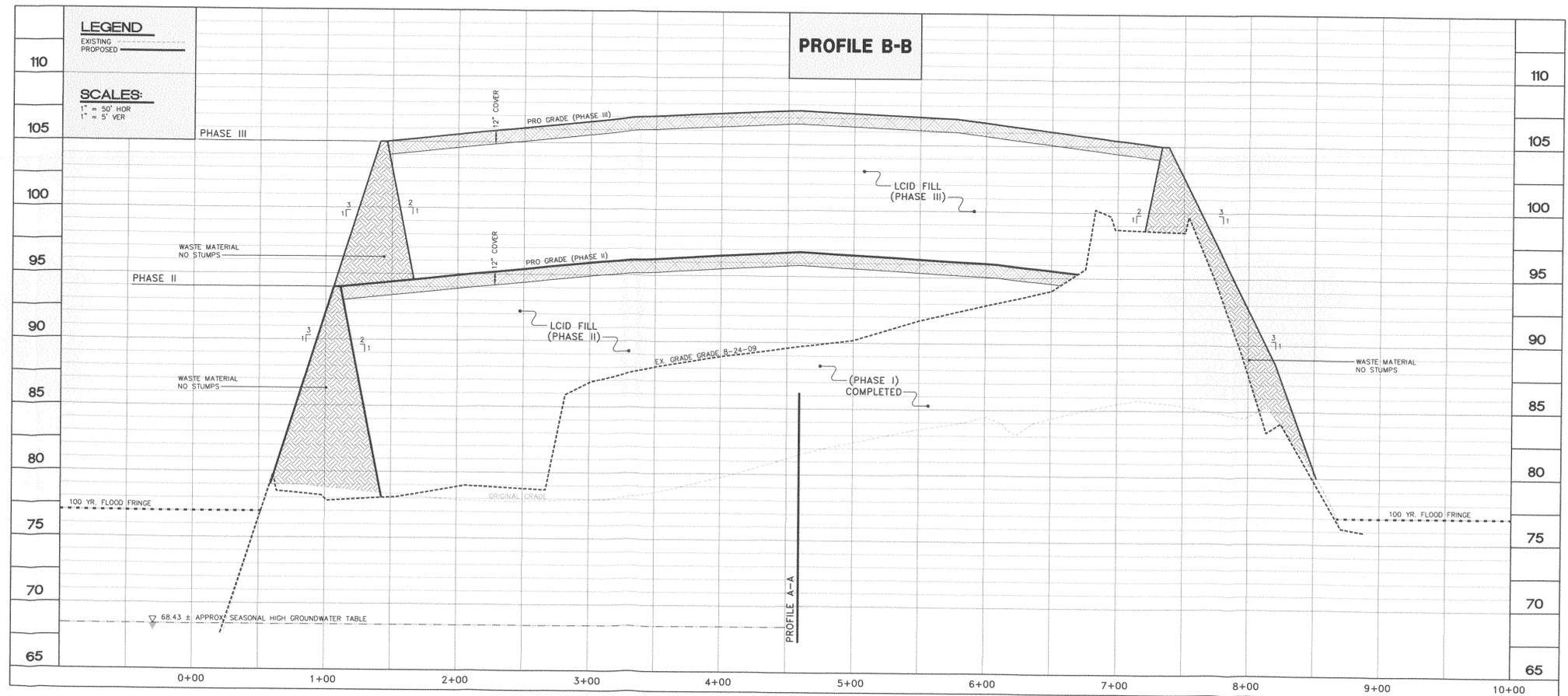
*David C. Revor*  
Professional Engineer  
SEAL 26959  
DAVID C. REVOR, P.E.  
06/14/10

Final Drawings  
Review Purposes ONLY

**APPIAN**  
**EXISTING CONDITIONS (PHASE I)**  
**BARNHILL CONTRACTING COMPANY**  
Rocky Mount, North Carolina  
09-087  
D-0000  
CE-1



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.



BEFORE YOU DIG  
CALL TOLL FREE  
1-800-632-4949  
NORTH CAROLINA  
ONE-CALL CENTER

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

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DATE: September, 14, 2009	DESIGN: David Revor
NO. 1	DATE: 6-14-10
DESCRIPTION: ADDED GROUND WATER ELEVATION	BY: D.C.R.
NO. 2	DATE: 6-14-10
DESCRIPTION: ADDED GROUND WATER ELEVATION	BY: D.C.R.
NO. 3	DATE: 6-14-10
DESCRIPTION: ADDED GROUND WATER ELEVATION	BY: D.C.R.

**APPIAN**  
CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
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Final Drawings  
Review Purposes ONLY

**APPIAN**  
PROFILE / CROSS SECTIONS for  
**BARNHILL CONTRACTING COMPANY**  
Rocky Mount, North Carolina  
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