

PREPARED FOR:

AUTRY GRADING, INC.
5124 US HWY 301
HOPE MILLS, NORTH CAROLINA 28348

**APPLICATION FOR PERMIT TO CONSTRUCT AND OPERATE
LAND CLEARING AND INERT DEBRIS LANDFILL (LCID)**

AUTRY GRADING, INC.
CUMBERLAND COUNTY, NORTH CAROLINA

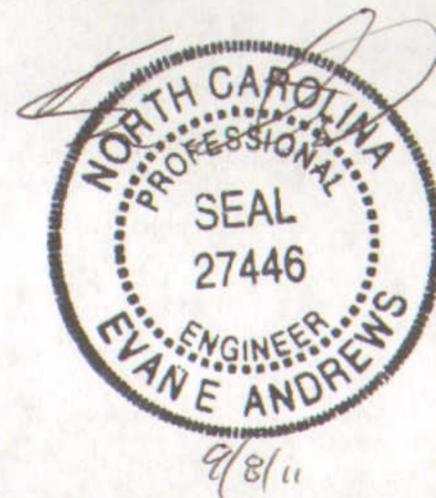
SEPTEMBER 2011



PREPARED BY:

JOYCE
ENGINEERING

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GREENSBORO, NORTH CAROLINA 27407
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JEI PROJECT No. 846.1101.11 TASK 01





Environmental Engineers, Scientists & Consultants

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September 9, 2011

Mr. Ed Mussler
NCDENR
Division of Waste Management
1646 Mail Service Center
Raleigh, North Carolina 27699

**RE: Autry LCID Landfill
Cumberland County, North Carolina
Application for Permit to Construct and Operate a LCID Landfill**

Dear Mr. Mussler:

Enclosed you will find the Permit to Construct and Operate application for the Autry Grading, Inc. Landfill.

A CD with .pdf files is also enclosed.

Your expeditious review of this application would be greatly appreciated. If you have any questions please call or e-mail me at your convenience eandrews@joyceengineering.com or 336-323-0092.

Sincerely,
JOYCE ENGINEERING, INC.

A handwritten signature in black ink, appearing to read "Evan Andrews".

Evan Andrews, P.E.
Regional Manager

Enclosures

SITE APPLICATION REPORT

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Appendix D Surface and Groundwater Requirements
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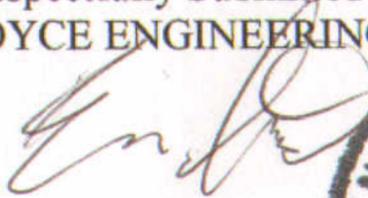
Appendix G Erosion and Sedimentation Control

Appendix H Application for 5-year Permit and Applicant Signature Pages

STATEMENT OF COMPLIANCE WITH SITE APPLICATION REQUIREMENTS

It is our opinion that the information and design described in this Site Application for the proposed Land Clearing and Inert Debris (LCID) Facility, meet the requirements of Rules .0560 thru .0566 of the North Carolina Solid Waste Management Rules, 15A NCAC 13B.

Respectfully Submitted
JOYCE ENGINEERING, INC.



9/8/11

Evan Andrews, P.E.
Regional Manger

1.0 Introduction and Overview

In accordance with 15A NCAC 13B .0560 thru .0566, Joyce Engineering, Inc. is submitting this Site Plan Application on behalf of Autry Grading, Inc. to demonstrate the suitability of the subject property for development as a Land Clearing and Inert Debris (LCID) landfill. The application is organized as follows:

- Applicability Requirements
- Siting Criteria for LCID Landfills
- Application Requirements
- Operational Requirements
- Closure
- Erosion and Sediment Control

Autry Grading, Inc. owns and operates a sand pit in Cumberland County near Hope Mills, North Carolina, Figure 1. The site is permitted for sand mining with erosion control plan approved by the State of North Carolina. The mining permit is for 34.25 acre area. The existing permitted facility boundary and permitted footprint are shown on Drawing No. CP-01 of the LCID LF Development Plan. The proposed LCID landfill facility boundary and waste footprints are shown on Drawing No. CP-02 of the LCID LF Development Plan. The property was formerly zoned Planned Industrial (M(P)) which required zoning approval before the landfill development could take place. A LCID landfill is an approved use in planned industrial use designated properties.

Autry Grading, Inc. retained Joyce Engineering, Inc. for assistance with permitting a land clearing and inert debris landfill within the footprint of their permitted Arm Pit Mine in order to process and dispose of land clearing materials such as stumps, brush, limbs, rock, brick and block. At this time, Autry Grading will be the only entity permitted to use this disposal site. The site is not permitted for public disposal of any kind of waste.

2.0 Applicability Requirements for LCID Landfills

An individual permit is required by Rule .0563 for the construction and operation of a Land Clearing and Inert Debris landfill when the facility is to be operated for the disposal of land clearing waste, inert debris, untreated wood, and yard trash. Operations must be consistent and in compliance with the local government solid waste plan as approved by the Division of Solid Waste Management and the disposal area is greater than two acres in size. Individual permits for LCID landfills shall be issued for not more than five years.

3.0 Siting Criteria for LCID Landfills

The following criteria by Rule .0564 applies for siting Land Clearing and Inert Debris disposal facilities (LCID).

3.1 Floodplains

The landfill property is shown on a copy of the Federal Emergency Management Agency (FEMA) flood insurance rate map (Appendix A) to demonstrate the proposed LCID landfill area is not located within a 100-year floodplain.

According to the North Carolina Federal Emergency Management Agency (FEMA) the landfill facility is located in “no special flood hazard areas” for the area as shown on FEMA maps in Appendix A. The facility is not located in a hazard area, no site activities are planned that will restrict the 100 year flood, reduce the temporary water storage activity of the floodplain, or result in a washout of solid waste and to pose a hazard to human life, wildlife, land, or water resources.

3.2 Endangered and Threatened Species

JEI contacted the North Carolina Department of Environment and Natural Resources Natural Heritage Program regarding the potential presence of threatened or endangered species and their habitats in the proposed site. The Division responded in a letter dated February 21, 2011 (Appendix B) which recommended referencing the NHP website for listing of rare species element occurrences within two miles from a given location. Attached in Appendix B are the location map and the identified element occurrences. None of the listed element occurrence is identified within the project area recognized in the NHP letter dated May 25, 2011.

3.3 Cultural Resources

JEI contacted the State Historic Preservation Office (North Carolina Department of Cultural Resources) regarding the presence of archaeological or historical sites within the project area. The Office responded in a letter dated February 25, 2011, that they have conducted a review of the project area and are aware of no historic resources which would be affected by the project. The Department of Cultural Resources letter is included in the Appendix B.

3.4 State Nature and Historical Preserve

The Autry Sand Mine site does not contain designated State Nature or Historic Preserves, and none are adjacent to the property. The proposed expansion will not adversely affect State-owned nature and historic preserves.

The site is not state-owned or is it adjacent to any state owned lands included in the state nature or historic preserve. The County has no State Parks, Nature Conservancy areas, or Game Land facilities within its boundaries. The facility is approximately 6 miles from the closest County boundary line. Due to the location of the facility, development of the site is not expected to cause an adverse impact on a State Parks, Game Land facilities, Nature Conservancy areas, recreation or scenic areas.

3.5 Wetlands

A wetlands site investigation for the proposed LCID facility was conducted by JEI on April 6, 2011. The US Army Corps of Engineers (USACOE) was contacted with the delineation of the LCID and the site investigation. No wetlands were identified during the delineation in the area that would be impacted by development. USACOE Section 404 jurisdictional determination is valid for a five year period. Wetlands beyond the LCID will be investigated prior to any planned activity in which land disturbance would occur in accordance with the USACOE recommendations. Findings of the investigation, correspondence with ACOE and letter of Jurisdictional Determination are included with this report in Appendix C.

For development of the LCID, no stream channels on the property are proposed to be relocated, and no stream crossings are proposed. Any subsequent design of future phases/units involving the relocation of streams or the construction of stream crossings, the plans will be forwarded to the USACOE for review and approval.

Autry Grading, Inc. understands that should wetlands be identified in accordance with USACOE Section 404 that impact the currently proposed LCID footprint, and is unable to be remediated; the permitted gross capacity of the landfill may be adjusted by the Division.

Existing onsite streams will be maintained throughout the life of the facility unless removed in accordance with all applicable laws and regulations.

3.6 Cover Soils

Suitable soils are available for cover material from on site sources. The property has been operated as sand mine until now and Autry Grading is in a process to convert it to an LCID landfill. Drawing CP-02 shows the facility boundary and waste footprint.

3.7 Surface and Groundwater Requirements

The facility must meet surface and groundwater requirements as described in section .0564. Five test pits were excavated on the pit floor on April 6, 2011 to investigate seasonal high groundwater elevation in the pit. Each pit was excavated to minimum of six feet below surface. Each pit observed for few hours for seepage and determined dry, i.e. no groundwater was identified to seep in the excavated pits; therefore the seasonal high groundwater level is six feet or more below the current ground surface elevation. The test pit locations are shown on Drawing CP-02. Photographs of the excavated pits are attached in Appendix D. From the field observations of the excavated pits, separation to seasonal high ground water is greater than the required minimum of four feet.

3.8 Buffer Requirements

The facility must meet minimum buffer requirements in accordance with .0564 (9); 50 feet from the waste boundary to all surface waters, and 100 feet from the disposal area to property lines,

residential dwellings, commercial or public buildings, and wells. The LCID LF Development Plan Drawing CP-02 shows the waste foot print and the required buffers.

3.9 Local Government Approvals

Local Government Approval has been received for the permitting progression of this facility. A letter from the local government stating the site meets local zoning ordinance is included in Appendix E.

4.0 Application Requirements for LCID Landfills

This section of the rule requires the items listed in the Section .0565;

4.1 Review and Approval of a LCID LF

The following information is required in order to review and approve the siting of LCID landfill:

- An approval letter from local government unit having zoning authority is included in Appendix E;
- Location on a County roadmap is provided in Figure 1;
- Landfill bottom elevation is above seasonal high water table information is provided in Appendix D;
- Copy of the Deed and other information of the property is provided in Appendix F
- The facility will comply with with all requirements set fourth under the Rule .0564 which are addressed in the Section 3 Siting Criterial for LCID Landfills and applicable appendices in this application submittal.

4.2 Map or Aerial Photo and other Features Surrounding the Site

- Figure 1 depicts the surrounding areas of the proposed LCID site;
- 100-year flood plain information is provided in Appendix A;
- Wetland delineation and approval from the ACOE is in Appendix C;
- The records of historical and archaeological correspondence with the State Authorities are found in Appendix B.

4.3 Development and Design Plans and Details

The LCID Landfill development drawings provided with this report address all requirements of this section including but not limited to property boundary, buffers, waste area footprint, roads, base and final grading plans, and test pit locations for investigating the high seasonal water table.

5.0 Operational Plan

The landfill receives waste generated from Autry Grading, Inc. site development activities. At this time, Autry Grading, Inc. has no plans to request service for waste outside its own needs. Public disposal of any waste is not allowed under the LCID permit.

5.1 Type, Source and Quantity of Waste Accepted

Only land clearing and inert debris will be accepted for disposal at the LCID. Land clearing debris is defined in the rules as waste that is generated solely through land clearing activities such as stumps, trees, limbs, brush, leaves, grass, and other naturally occurring vegetative matter. Other accepted waste includes rock, block and brick, and broken concrete.

The Division of Solid Waste may approve other wastes for disposal at the LCID disposal area. Requests for approval will be submitted in accordance with Division policy.

On or before August 1 of each year, Autry Grading, Inc. will report to the Solid Waste Section the amount of waste received at this facility and disposed of in the landfill. Data will be transmitted on form prescribed by the Section; NCDENR\Solid Waste Section\Annual Reporting\Facility Forms\Land Clearing and Inert Debris Landfill. The report will include the following:

- The reporting period is for the previous year beginning July 1 and ending on June 30.
- Estimated amount of waste taken in an average week at the facility.
- Number of weeks the facility operated during the year.
- The hours/days of operation for the facility.
- The acreage of the footprint of the waste on site as of June 30.

The completed report shall be forwarded to the Regional Waste Management Specialist and a copy to the County Manager of each County from which the waste was received.

5.2. Waste Placement and Compaction

The waste will be tipped in the active area close to the working face, then pushed to the desired area, and compacted with a dozer. The length of the daily working face will be kept minimal but maintained to provide adequate space for vehicles to maneuver. Each year filling phase will be 1.7 acres or a total of 8.5 acres for a each five year period.

5.3. Hours of Operation

The LCID disposal area may operate any day of the week as needed. The facility is not for public use and operation hours fluctuate based on the waste stream or other conditions. An entrance sign identifies the facility and its operating Permit Number, emergency contact and phone number.

5.4. Site Access and Safety

Access to the facility is controlled through the entrance gate, which prevents access after operating hours. Waste delivery trucks are routed from the entrance gate to the LCID disposal area in accordance with the fill sequence plan.

5.5. Prohibited Waste

Hazardous or liquid waste is not accepted. The landfill will not accept barrels and drums, other waste specifically banned from landfill disposal by rule or statute, such as lead acid batteries, whole tires, used oil, aluminum cans, appliances, construction demolition waste or house hold garbage.

Autry Grading, Inc. will notify the Division within 24 hours of attempted disposal of any waste the landfill is not permitted to receive.

5.6 Surface Water Control

Surface water control will be in accordance with Section 7.0 of this report and existing Erosion and Sedimentation Control plan in Appendix G. The site must comply with approved reclamation plan which is a condition on the continuing validity of the mining permit.

5.7. Fire Prevention and Control

Open burning of waste including yard waste and brush is prohibited at the landfill. Incoming loads of waste are observed by site operators for evidence of flames, smoke, or the odor of burning material. If evidence of fire exists, the landfill operator will perform an evaluation of the situation to determine whether the fire can be controlled using fire extinguishers or heavy equipment and soil present at the site, or if off-site assistance will be needed. If necessary, the local fire department will be called to render assistance in extinguishing the fire. Fires that occur at the landfill will be reported verbally to the Division within 24 hours and in writing within 15 days.

If a fire occurs at the waste disposal area, the operator will call Autry Grading, Inc. office to report the size of the fire. If possible, the waste will be removed or segregated from other waste in the disposal area. Following segregation, the situation will be evaluated to determine whether or not additional assistance will be necessary from off-site emergency personnel.

Fire extinguishers are located on each piece of equipment on site and the equipment operators are familiar in the use of the extinguishers. Fire extinguishers will be used for small fires. A stockpile of soil will be maintained near the working face to be used for extinguishing surface fires that may be too large to control with the hand held fire extinguishers. Emergency personnel will be notified in the case of fires too large to be extinguished with fire extinguishers or soil. Water contained in sedimentation pond can serve as emergency reservoirs to aid local firefighters in the extinguishing of fires.

5.8. Cover Material

Adequate soil cover will be applied monthly or when the active area reaches one acre in size, whichever occurs first by Section .0566 Rule (4). At least 2 to 3 passes of heavy equipment shall be made over the area to provide adequate compaction of the soil. The waste may be covered more frequently if necessary.

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. Further action may be required in order to correct any condition which is or may become injurious to the human health or nuisance to the community.

Whenever another lift of waste will not be placed for at least 120 days, additional suitable soil shall be placed over the cover material already in place on the landfill surface to provide a minimum of 12 inches of intermediate cover.

Provisions for a vegetative ground cover sufficient to restrain erosion shall be accomplished within 120 calendar days upon completion of each phase of development. Surface water runoff will be diverted from the working face without impounding water over waste. Adequate erosion control measures shall be utilized to prevent silt from leaving the site and prevent site erosion.

6.0 CLOSURE

6.1. Closure Activities

Closure of this disposal area will occur in accordance with the North Carolina Solid Waste Management Rules (15A NCAC 13B .0560).

6.2 Closure Criteria

6.2.1. Cap Design

Within 120 days of the last waste placement, the disposal area will be covered with a minimum of 12 inches suitable soil cover sloped to allow surface water runoff in a controlled manner. Proposed final grading contours for the facility are provided on Drawing No. CP-03. Final contours have been designed with post-settlement surface slopes of at least five percent on top of the cell. The following components are proposed in the cap from bottom to top:

- a. **Compacted Soil Layer** - A layer of suitable soil will be placed over the waste. This soil layer will be at least 12 inches in thickness, and will be compacted in place.
- b. **Vegetation** - If site conditions warrant it, topsoil will be placed as needed prior to seeding the area. Seeding should follow the "North Carolina Erosion and Sediment Control Planning and Design Manual", and recommendations from local agricultural specialists.

Mulch and erosion matting will be used as needed to control erosion and promote vegetative growth. Areas found to be sparsely covered will be revegetated.

6.2.2. Cap Settlement and Stability

Non-uniform settlement of the closure can be expected over the entire landfill area. The primary mechanism of settlement is waste consolidation due to decomposition of the landfilled material. Long-term settlement is typically 5 to 15 percent over 20 to 30 years; however, settlement of about 5 percent can be expected in the first few months following waste placement. A significant amount of waste consolidation will likely have occurred by the time each portion of the landfill is closed.

After capped portions are completed, monthly inspections of the final cover will be conducted to look for areas of the cap that might have experienced displacement. Should these inspections indicate problem areas (ponding, deep cracks, soil creep, etc.) repairs would be initiated as soon as practical.

6.2.3. Drainage and Erosion

A combination of drainage ditches, diversion berms, vegetative cover, sediment traps and basins will control drainage and erosion. Construction and design of sediment and erosion control features will be in accordance with applicable sections of the "North Carolina Erosion and Sediment Control Planning and Design Manual." Drainage will be directed to perimeter ditches that either exist now or will be constructed. These ditches will receive runoff from the final cap, conveying the flow to sediment control features.

6.3. Waste Volume

An estimate of the quantity of waste to be disposed in the LCID disposal area is provided in Table 1. The estimate is based on the airspace provided by proposed base and final grades, and assumptions regarding the density of waste and the amount of cover soil in the fill. Allowances for the airspace occupied by the cap were made. The estimate for airspace was determined using AutoCAD.

1. Estimate for the total airspace in cubic yards considered to be the total volume between the bottom grades and the top of the cap system.
2. Estimate the volume (cubic yards) occupied by the closure cap.
3. Subtract the cap volume from the total airspace volume to estimate the net airspace available for waste disposal.
4. Assume a 9:1 waste to soil ratio.
5. Assume a waste density of 1,300 pounds per cubic yard (0.65 tons per cubic yard).

6. Annual disposal volume was estimated at 15,000 cubic yards and to increase at rate 2% per year.

6.4. Closure Plan Schedule

The LCID has a projected operating life of approximately 20 years is tabulated in Table 2. However, the landfill is designed so that it can be closed incrementally as final contours are reached in various areas. Prior to beginning closure of any portion of the facility, Autry Grading, Inc. will notify the Division that a notice of intent to close the facility has been placed in the operating record.

6.5. Posting and Baiting

At least one sign will remain posted at the entrance to the facility notifying of the facility closing. Also, a notice prohibiting further receipt of waste materials will remain posted at the entrance. The site will be secured through the use of gates with locks, fencing, and/or natural barriers. If necessary, the site will be baited for rodent and vector control before final closure is initiated.

6.6. Post-Closure Activities

Post-closure activities will be conducted at the landfill as directed by the Division of Waste Management.

6.7. Contact

The Autry Grading, Inc. Solid Waste Department will handle questions and/or problems, which might occur during the post-closure care period.

CONTACT PERSON: Mr. Kenneth Autry
OWNER: Autry Grading, Inc., North Carolina
ADDRESS: 5124 US HWY 301, Hope Mills, NC 28348
PHONE NUMBER: (910) 424-3458
FAX: (828) 424-0388

6.8. Security

Access to the site will be controlled by the use of (natural) barriers and gates at the entrance. These control devices will be maintained throughout the post-closure care period, and inspected as part of the monthly inspection program. All barriers and gates will be clearly marked with signs stating the name and nature of the facility and the person to contact in case of emergency or breach of security.

6.9. Post-Closure Maintenance

Post-closure maintenance will be conducted at the LCID disposal area as needed after final closure. Monitoring will include quarterly inspection of the final cover system. Maintenance needs identified through the monitoring program will be handled as soon as possible after the discovery. If a danger or eminent threat to human health or the environment is indicated, action will be taken immediately. Minor cap maintenance may be deferred until there is a sufficient amount of work to justify the mobilization of equipment and personnel. Unusual or extreme maintenance needs due to calamities or vandalism might require the implementation of emergency contract service procedures established by Autry Grading, Inc.

6.10. Inspection Plan

Routine inspections will be conducted throughout the post-closure care period. These inspections will be carried out quarterly unless problems are detected that indicate that more frequent visits are warranted. Potential impacts to the public and environment will be considered in determining the inspection frequency. Stormwater management features proposed in the Erosion and Sediment Control Plan are designed to function throughout the post-closure care period. Drainage ditches and sediment control features will be inspected and maintained as needed to control surface water runoff and erosion.

6.11. Post-Closure Land Use

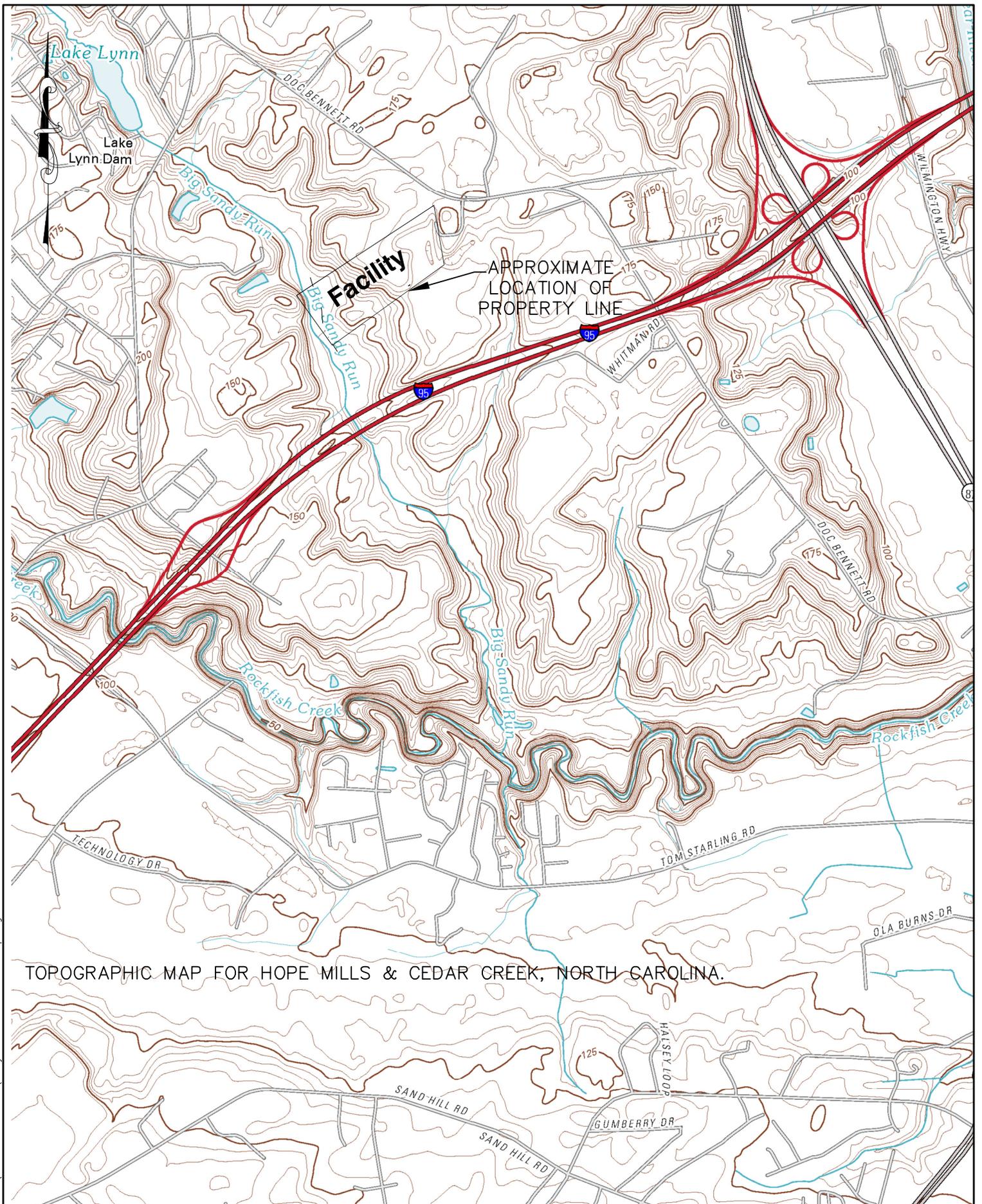
The primary land use for the site after closure of the landfill will be open dormant green space. Limited passive recreational uses may be proposed at a later time.

7.0. EROSION AND SEDIMENT CONTROL REQUIREMENTS

Existing erosion and sediment controls have been designed in accordance with all applicable requirements for the mining permit. All mining activities, including the installation and maintenance of all erosion and sedimentation control measures are conducted as indicated on the mine map "Existing Site Conditions" dated November 12, 2001 and the Site Plan and Erosion & Sedimentation Control materials submitted to the Department December 10, 2001. After the LCID landfill permit has been approved, Autry Grading, Inc. needs to modify the Mining Reclamation Plan which shall include the LCID filling plan and erosion and sedimentation controls. In the meantime, the facility will be operated in a manner which will not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402. The facility will not cause the discharge of a nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an area-wide or State-wide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act, as amended.

Surface water shall be diverted from the operational area and shall not be impounded over or in waste. Drainage structures and embankment slopes will be regularly inspected for erosion, and maintained as needed. The vegetation on these slopes will be mowed at least once a year. These slopes will be maintained with reseeding, fertilizer, and other means, as necessary, to promote a healthy stand of vegetation.

(End)



L:\AUTRY GRADING WETLAND EXHIBITS\Autry LCID Site Location map.dwg

FIGURE NO. 1



2211 WEST MEADOWVIEW ROAD
GREENSBORO, N.C. 27407
PHONE: (336) 323-0092
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SCALE
1" = 2000'

PROJECT NO.
846.1101.11

AUTRY LCID LANDFILL
SITE LOCATION MAP

Table 1
LCID Landfill Capacity

LANDFILL PHASING - PROJECTED CAPACITY

LCID PHASE	AREA (acres)	AIRSPACE (cy)	LINER (cy)	CAP (cy)	MONTHLY COVER (cy)	WASTE VOLUME (cy)	WASTE VOLUME (ton)
LCID	13	452,500	0	41,947	41,055	369,498	240,174

DESIGN VALUES (LCID)

LCID CAP SYSTEM THICKNESS (ft):	2
LCID IN-PLACE DENSITY (lb\cy)	1,300
LCID: SOIL COVER RATIO	9:1

Table 2
LCID LF Projected Life Expectancy

Year	Projected Waste Volume (ton)	Projected Waste Volume (cy)	Cummulative Waste Volume (ton)	Cummulative Waste Volume (cy)	Phase Projected Waste Capacity (cy)
1	9,750	15,000	9,750	15,000	
2	9,945	15,300	19,695	30,300	
3	10,144	15,606	29,839	45,906	
4	10,347	15,918	40,186	61,824	
5	10,554	16,236	50,739	78,061	
6	10,765	16,561	61,504	94,622	
7	10,980	16,892	72,484	111,514	
8	11,200	17,230	83,684	128,745	
9	11,424	17,575	95,108	146,319	
10	11,652	17,926	106,760	164,246	
11	11,885	18,285	118,645	182,531	
12	12,123	18,651	130,768	201,181	
13	12,365	19,024	143,133	220,205	
14	12,613	19,404	155,746	239,609	
15	12,865	19,792	168,611	259,401	
16	13,122	20,188	181,733	279,589	
17	13,385	20,592	195,118	300,181	
18	13,652	21,004	208,770	321,185	
19	13,925	21,424	222,695	342,608	
20	14,204	21,852	236,899	364,461	LCID Capacity
21	14,488	22,289	251,387	386,750	369,498

Assumptions:

- (1) LCID density (lbs/cy): 1,300
- (2) Approx. LCID accepted (ton/year)⁽¹⁾: 9,750.0
- (3) Growth Rate: 2%

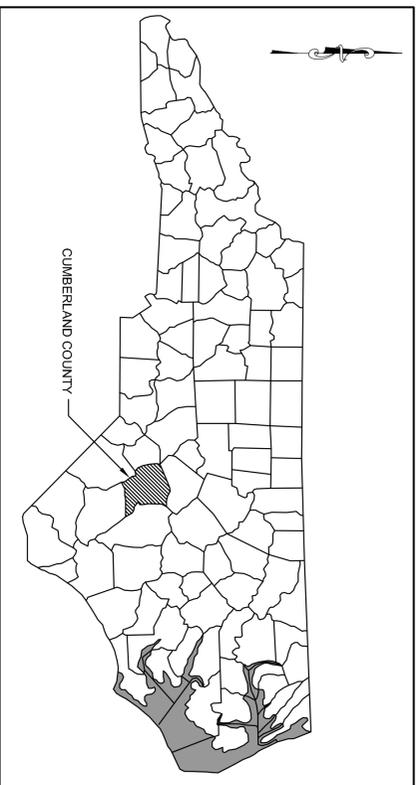
Notes:

- (1) The average annual LCID waste stream for the facility is estimated 15,000 cy/yr or 9,750 tons/yr.

AURTY GRADING, INC.

LCID LANDFILL DEVELOPMENT

CUMBERLAND COUNTY, NORTH CAROLINA

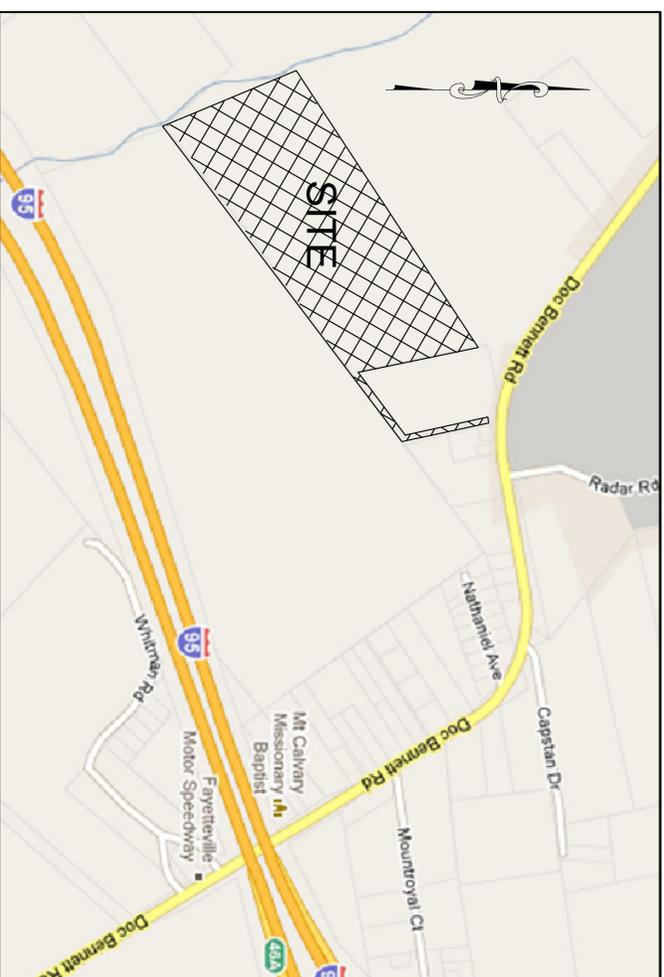


OWNER INFORMATION

OWNERS NAME: AURTY GRADING INC.
 OWNERS ADDRESS: P.O. BOX 388
 HOPE MILLS, NC 28348
 PHONE NUMBER: (910) 424-3458

PROPERTY INFORMATION

LOCATION: DOC BENNETT RD, CEDAR CREEK TOWNSHIP, NEAR CITY OF FAYETTEVILLE
 CUMBERLAND COUNTY, NORTH CAROLINA
 PIN# 0434-55-9407
 TOTAL ACREAGE: 52.93 ACRES
 DISTURBED ACREAGE: 20.5 ACRES
 ZONING: (M/P)
 SETBACKS: 50' FRONT
 30' SIDE
 20' REAR
 EXISTING LAND USE: BORROW PIT
 PROPOSED LAND USE: PRIVATE LOID LANDFILL



VICINITY MAP

CONSTRUCTION PLAN

JULY 2011

DRAWING INDEX

SHEET	DESCRIPTION
CP-1	TITLE SHEET
CP-4	LEGEND AND GENERAL NOTES
CP-01	EXISTING CONDITIONS
CP-02	GRADING PLAN, BASE GRADES
CP-03	GRADING PLAN, FINAL GRADES

NO	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

DESIGNED: HRW
 DRAWN: HRW
 CHECKED: EEA
 APPROVED: EEA
 DATE: 7/1/2011

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JOYCE ENGINEERING, INC.
 2211 W. MEADOWVIEW ROAD
 GREENSBORO, NC 27407
 PHONE: (336) 323-0092
 NC CORP LIC: C-0782

AURTY GRADING INC.
 CUMBERLAND COUNTY, NC

LCID LANDFILL DEVELOPMENT
 TITLE SHEET

PROJECT NO.
846.1101.11

SCALE
AS SHOWN

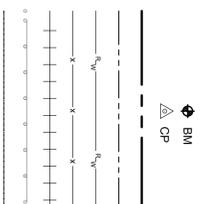
DRAWING NO.
CP-T

LEGEND AND GENERAL NOTES

ENVIRONMENTAL MONITORING FEATURES

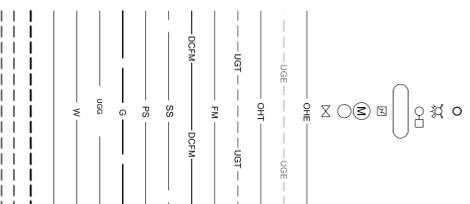
TP-1
143318

SURVEY FEATURES



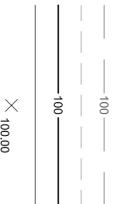
TEST PIT LOCATION
BENCHMARK
CONTROL POINT
PROPERTY LINE
EASEMENT
RIGHT OF WAY
FENCE LINE
RAILROAD
GUARDRAIL
RESOURCE PROTECTION AREA

UTILITIES



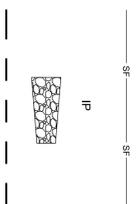
UTILITY POLE
HYDRANT
LIGHT POLE
TANK (SIZE VARIES)
TRANSFORMER
MANHOLE
CLEANOUT
VALVE
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
OVERHEAD TELEPHONE
UNDERGROUND TELEPHONE
LEACHATE FORCE MAIN
DUAL CONTAINED LEACHATE FORCE MAIN
SANITARY SEWER
PROCESS SEWER
LANDFILL GAS LINE
NATURAL GAS LINE
POTABLE WATER
SOLID PIPE (TYPE NOTED)
PERFORATED PIPE (TYPE NOTED)
CULVERT (SIZE NOTED)

TOPOGRAPHICAL FEATURES



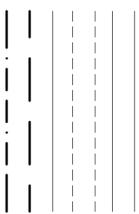
EXISTING 10' TOPO CONTOUR
EXISTING 2' TOPO CONTOUR
PROPOSED 10' TOPO CONTOUR
PROPOSED 2' TOPO CONTOUR
SPOT ELEVATION

EROSION AND SEDIMENT CONTROL FEATURES



SILT FENCE
INLET PROTECTION
OUTLET PROTECTION (SIZE VARIES)
DIVERSION BERM

LANDFILL AND ROAD FEATURES



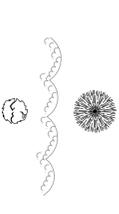
PAVED ROAD
GRAVEL/DIRRT ROAD
EDGE OF PAVEMENT
LIMIT OF WASTE/EDGE OF LINER
FACILITY BOUNDARY/CELL LIMITS/PHASE LIMITS

HYDROLOGY



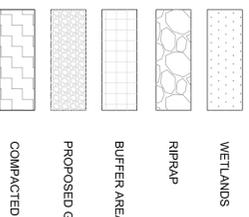
APPROXIMATE 100 YEAR FLOOD PLAN
DITCH FLOW
STREAM OR RIVER

VEGETATION



SINGLE TREE
TREE LINE
SHRUB

HATCHING



WETLANDS
RIPRAP
BUFFER AREA
PROPOSED GRAVEL ROAD
COMPACTED BACKFILL

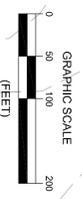
SURVEY NOTES:

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET, UNLESS INDICATED OTHERWISE.
2. TOPOGRAPHY PROVIDED BY 4D SOLUTIONS, 499 CHICAGO DRIVE, SUITE 112, FAYETTEVILLE, NC 28306. TELEPHONE NUMBER: (919) 428-6777. DATED MARCH 23, 2011.
3. APPROXIMATE 100-YR FLOODPLAIN TAKEN FROM U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION FLOOD INSURANCE RATE MAP, CUMBERLAND COUNTY, NC, PANEL NO. 3720345001, EFFECTIVE 1/9/2007.
4. THIS MAP WAS PREPARED BY DATA COMPILED FROM RECORDED SUBDIVISION PLATS, PARCEL PLATS, DEED DESCRIPTION DATA, AND OTHER PUBLIC RECORDS OWNED BY CUMBERLAND COUNTY. THE COUNTY ASSUMES NO LEGAL RESPONSIBILITY OR LIABILITY FOR ANY OF THE INFORMATION OBTAINED ON THIS MAP.
5. PROPERTY BOUNDARY BEARING AND DISTANCES PROVIDED BY 4D SOLUTIONS.
6. SITE CONTROL INFORMATION PROVIDED BY 4D SOLUTIONS.
7. THE SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND ALL EASEMENTS AND ENCUMBRANCES MAY NOT BE SHOWN.

GENERAL NOTES:

1. SITE LIGHTING IS NOT PROPOSED FOR THIS PROJECT.
2. LANDSCAPING IS NOT PROPOSED FOR THIS PROJECT. HOWEVER, THE BUFFER AREA SHOWN ON DRAWINGS WILL REMAIN UNDISTURBED EXCEPT FOR THE INSTALLATION OF UTILITIES. ANY LANDSCAPING TO BE INSTALLED SHALL BE INSTALLED WITHIN THE BUFFER AREA WITHIN THE BUFFER WILL BE ALIGNED TO MINIMIZE VISUAL IMPACTS.
3. SOIL STOCKPILE AREAS WILL BE ESTABLISHED TO FACILITATE PHASED CONSTRUCTION. STOCKPILE LOCATIONS AND SIZE MAY VARY AND MAY NOT BE LIMITED TO THE AREAS SHOWN. SILT FENCE WILL BE INSTALLED AROUND THE BASE OF THE STOCKPILE.
4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS PERTAINING TO SAFETY PRECAUTIONS AND PROGRAMS. CONTRACTOR SHALL PROTECT ALL PERSONS OR PROPERTY FROM DAMAGE, INJURY, OR LOSS, AND SHALL ERECT AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR SUCH SAFETY AND PROTECTION.

PROJECT NO. 846.1101.11	SCALE AS SHOWN	DRAWING NO. CP-1	AUTRY GRADING INC. CUMBERLAND COUNTY, NC		ENGINEERING, INC. 2211 W. MEADOWVIEW ROAD GREENSBORO, NC 27407 PHONE: (336) 323-0092 NC CORP LIC. C-0782	DESIGNED <u>HRW</u>	DRAWN <u>HRW</u>	CHECKED <u>EEA</u>	APPROVED <u>EEA</u>	DATE <u>7/1/2011</u>	DATE REVISIONS AND RECORD OF ISSUE	NO BY CK APP
			LCID LANDFILL DEVELOPMENT LEGEND AND GENERAL NOTES			© 2011 Joyce Engineering, Inc. All rights reserved.						



PROJECT NO.
846.1101.11

SCALE
AS SHOWN

DRAWING NO.
CP-01

AUTRY GRADING INC.
CUMBERLAND COUNTY, NC

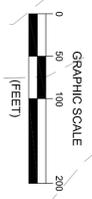
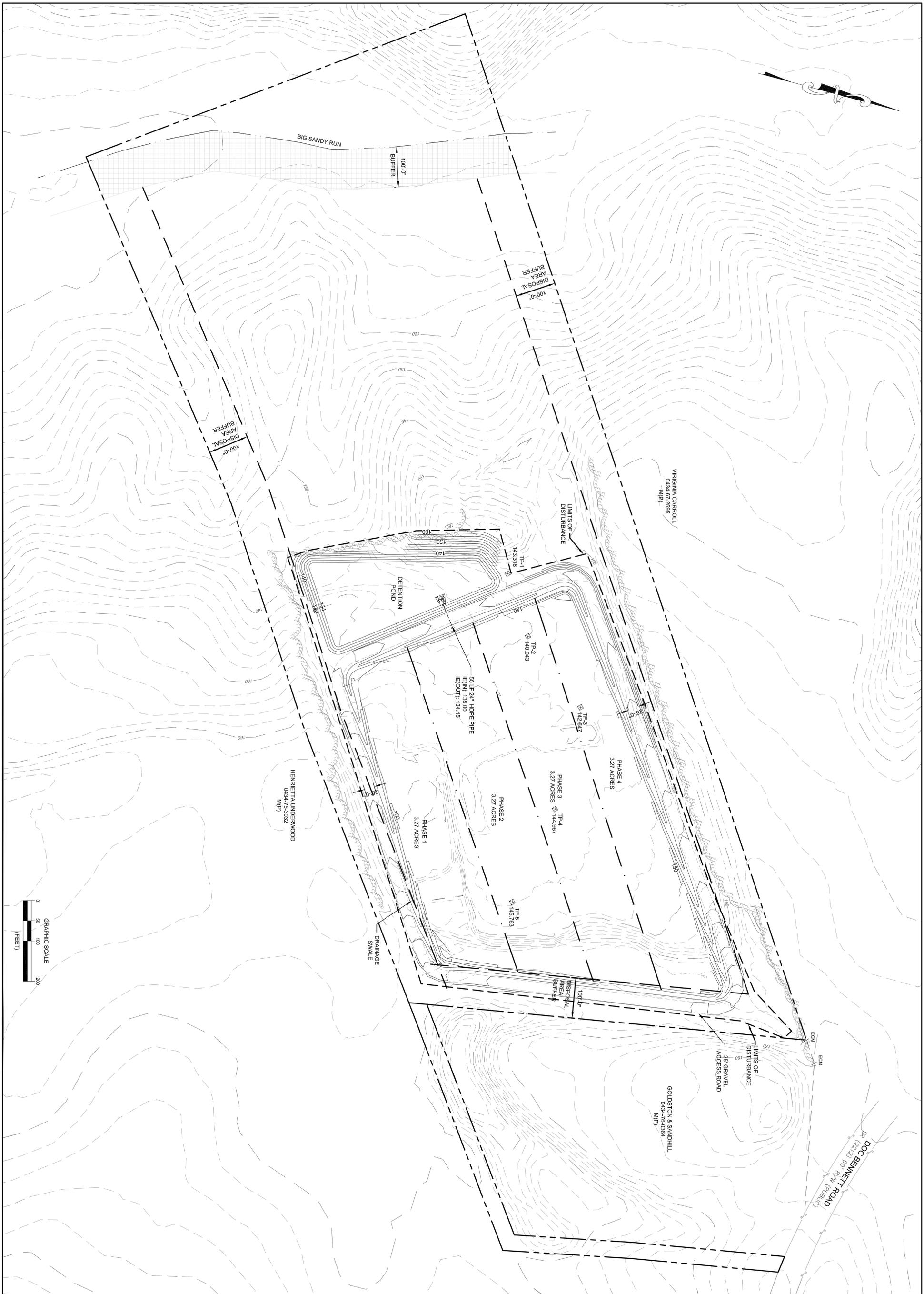
LCID LANDFILL DEVELOPMENT
EXISTING CONDITIONS

JOYCE
ENGINEERING, INC.

2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

DESIGNED HRW
DRAWN HRW
CHECKED EEA
APPROVED EEA
DATE 7/1/2011

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP



PROJECT NO.
846.1101.11

SCALE
AS SHOWN

DRAWING NO.
CP-02

AUTRY GRADING INC.
CUMBERLAND COUNTY, NC

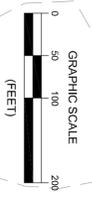
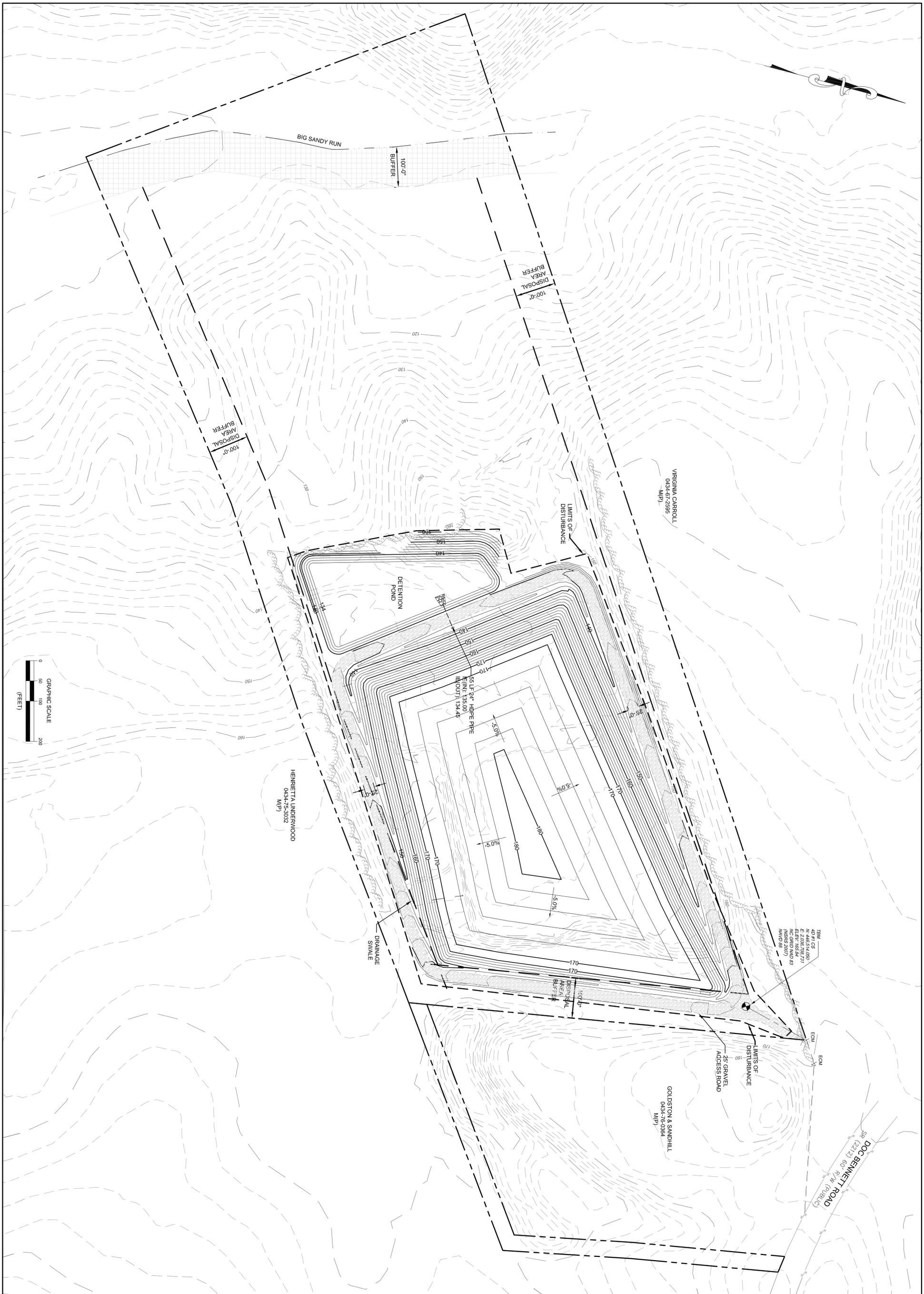
LCID LANDFILL DEVELOPMENT
BASE GRADE PLAN

JOYCE
ENGINEERING, INC.

2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

DESIGNED HRW
DRAWN HRW
CHECKED EEA
APPROVED EEA
DATE 7/1/2011

02/08/12	ADDED PHASING LIMITS	1	RWH	HK	HK
DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP



PROJECT NO.
846.1101.11

SCALE
AS SHOWN

DRAWING NO.
CP-03

AUTRY GRADING INC.
CUMBERLAND COUNTY, NC

LCID LANDFILL DEVELOPMENT
FINAL GRADE PLAN

JOYCE
ENGINEERING, INC.

2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

DESIGNED HRW
DRAWN HRW
CHECKED EEA
APPROVED EEA
DATE 7/1/2011

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

APPENDIX A
FLOODPLAINS



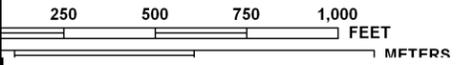
41
33

EX

Cumberland County
Unincorporated Areas
370076



GRID NORTH
SCALE 1" = 500' (1 : 6,000)



PANEL 0434J

FIRM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA

PANEL 0434

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	CID No.	PANEL	SUFFIX
CUMBERLAND COUNTY	370076	0434	J
FAYETTEVILLE, CITY OF	370077	0434	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

EFFECTIVE DATE **MAP NUMBER**
JANUARY 5, 2007 **3720043400J**



State of North Carolina
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX B
LETTERS FROM STATE AUTHORITIES



Waste Industry Experts

Joyce Engineering, Inc.
2211 West Meadowview Rd
Suite 101
Greensboro, NC 27407

tel: **336/323-0092**
fax: **336/323-0093**

www.JoyceEngineering.com

February 14, 2011

Ms. Renee Gledhill-Earley
State Historic Preservation Office
North Carolina Division of Archives and History
109 East Jones Street
Raleigh, North Carolina 27601-2807

RE: **Cultural Resources**
Site Located in Fayetteville, Cumberland County, NC
JEI Project 846.1101.11 Task 01

Dear Ms. Gledhill-Earley:

Autry Grading Company is proposing a Land Clearing and Inert Debris (LCID) landfill permitting at their Arm Pit Mine Facility. The 34 acre facility is owned and operated by Autry Grading Company, Inc. The property (Parcel ID # 0434-55-8407) is located off Doc Bennett Road, south side of Fayetteville Regional Airport. The area of concern is indicated on the attached copy of a portion of the USGS quadrangle for Fayetteville, North Carolina.

Joyce Engineering is evaluating the quarry for potential LCID landfilling activities. The North Carolina Solid Waste Management rules require the review and assessment of the presence of items of archaeological or historical significance. Archaeological and historical surveys were conducted as part of the initial mine permitting application for the existing Facility. We wish to assure that the proposed additional development of the site will not damage or destroy any archaeological or historical properties. We need to know if an updated archaeological survey is required.

Our goal is to identify any obstacles that may deter proposed development of the site. If you have any questions or need additional information, feel free to contact me by phone (336) 323-0092 or email hannu@joyceengineering.com.

Sincerely,
JOYCE ENGINEERING, INC.


Hannu Kempainen, P.G.
Senior Project Consultant

Enclosed: Site Location Map



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

February 25, 2011

Hannu Kempainen
Joyce Engineering, Inc.
2211 West Meadowview Road
Suite 101
Greensboro, NC 27407

Re: Land Clearing & Inert Debris Landfill, Autry Grading Company Arm Pit Mine Facility,
Off Doc Bennett Road, Fayetteville, Cumberland County, ER 11-00261

Dear Mr. Kempainen:

Thank you for your email of February 14, 2011, concerning the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

for Claudia Brown



Waste Industry Experts

Joyce Engineering, Inc.
2211 West Meadowview Rd
Suite 101
Greensboro, NC 27407

tel: **336/323-0092**
fax: **336/323-0093**

www.JoyceEngineering.com

February 14, 2011

Mr. Harry E. LeGrand
North Carolina Natural Heritage Program
North Carolina Department of Environmental & Natural Resources
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

**RE: Threatened and Endangered Species
Site Located in Fayetteville, Cumberland County, NC
JEI Project 846.1101.11 Task 01**

Dear Mr. LeGrand:

Autry Grading Company is proposing a Land Clearing and Inert Debris (LCID) landfill permitting at their Arm Pit Mine Facility. The 34 acre facility is owned and operated by Autry Grading Company, Inc. The property (Parcel ID # 0434-55-8407) is located off Doc Bennett Road, south side of Fayetteville Regional Airport. The area of concern is indicated on the attached copy of a portion of the USGS quadrangle for Fayetteville, North Carolina.

Joyce Engineering is evaluating the quarry for potential LCID landfilling activities. The North Carolina Solid Waste Management rules require the review and assessment of the presence of endangered or threatened species or destruction or adverse modification of a critical habitat protected under the Federal Endangered Species Act of 1973. The endangered and threatened species review was conducted as part of the initial mine permitting application for the existing Facility. We wish to assure that the proposed additional development of the site will not damage or modify a critical habitat. We need to know if an updated endangered and threatened species survey is required.

Our goal is to identify any obstacles that may deter proposed development of the site. If you have any questions or need additional information, feel free to contact me by phone (336) 323-0092 or email hannu@joyceengineering.com.

Sincerely,
JOYCE ENGINEERING, INC.


Hannu Kempainen, P.G.
Senior Project Consultant

Enclosed: Site Location Map



RECEIVED FEB 24 2011

North Carolina Department of Environment and Natural Resources
Office of Conservation, Planning, & Community Affairs

Beverly Eaves Perdue, Governor

Linda Pearsall, Director

Dee Freeman, Secretary

February 21, 2011

Mr. Hannu Kemppinen
Joyce Engineering, Inc.
2211 West Meadowview Rd., Suite 101
Greensboro, NC 27407

Subject: Proposed Land Clearing and Inert Debris (LCID) Landfill at Arm Pit Mine Facility; Fayetteville,
Cumberland County
JEI Project 846.1101.11 Task 01

Dear Mr. Kemppinen:

The Natural Heritage Program has no record of rare species, significant natural communities, significant natural heritage areas, or conservation/managed areas at the site nor within a mile of the project area. Although our maps do not show records of such natural heritage elements in the project area, it does not necessarily mean that they are not present. It may simply mean that the area has not been surveyed. The use of Natural Heritage Program data should not be substituted for actual field surveys, particularly if the project area contains suitable habitat for rare species, significant natural communities, or priority natural areas.

You may wish to check the Natural Heritage Program database website at www.ncnhp.org for a listing of rare plants and animals and significant natural communities in the county and on the quad map. Our Program also has a new website that allows users to obtain information on element occurrences and significant natural heritage areas within two miles of a given location:

<http://nhpweb.enr.state.nc.us/nhis/public/gmap75_main.phtml>. The user name is "public" and the password is "heritage". You may want to click "Help" for more information.

NC OneMap now provides digital Natural Heritage data online for free. This service provides site specific information on GIS layers with Natural Heritage Program rare species occurrences and Significant Natural Heritage Areas. The NC OneMap website provides Element Occurrence (EO) ID numbers (instead of species name), and the data user is then encouraged to contact the Natural Heritage Program for detailed information. This service allows the user to quickly and efficiently get site specific NHP data without visiting the NHP workroom or waiting for the Information Request to be answered by NHP staff. For more information about data formats and access, visit <www.nconemap.com>, then click on "FTP Data Download", and then "nheo.zip" [to the right of "Natural Heritage Element Occurrences"]. You may also e-mail NC OneMap at <dataq@ncmail.net> for more information.

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.

Sincerely,

Harry E. LeGrand, Jr., Zoologist
Natural Heritage Program

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-715-4195 \ FAX: 919-715-3060 Internet: www.oneNCAaturally.org

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One
North Carolina
Naturally
Natural Resources Planning and Conservation

Hannu Kemppinen

From: Legrand, Harry <harry.legrand@ncdenr.gov>
Sent: Wednesday, May 25, 2011 8:07 AM
To: Hannu Kemppinen
Subject: {Cleaned} RE: NHP - EO

We responded to this project on Feb. 21 – see below. We saw nothing of natural heritage concern in the vicinity of the project.

Harry LeGrand

Harry LeGrand, Vertebrate Zoologist
North Carolina Natural Heritage Program
NCDENR Office of Conservation, Planning, & Community Affairs
1601 Mail Service Center
Raleigh, NC 27699-1601
Office: (919) 715-8697
harry.legrand@ncdenr.gov
www.ncnhp.org

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

Note my new e-mail address (above)

February 21, 2011

Mr. Hannu Kemppinen
Joyce Engineering, Inc.
2211 West Meadowview Rd., Suite 101
Greensboro, NC 27407

Subject: Proposed Land Clearing and Inert Debris (LCID) Landfill at Arm Pit Mine Facility; Fayetteville, Cumberland County
JEI Project 846.1101.11 Task 01

Dear Mr. Kemppinen:

The Natural Heritage Program has no record of rare species, significant natural communities, significant natural heritage areas, or conservation/managed areas at the site nor within a mile of the project area. Although our maps do not show records of such natural heritage elements in the project area, it does not necessarily mean that they are not present. It may simply mean that the area has not been surveyed. The use of Natural Heritage Program data should not be substituted for actual field surveys, particularly if the project area contains suitable habitat for rare species, significant natural communities, or priority natural areas.

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that allows users to obtain information on element occurrences and significant natural heritage areas within two miles of a given location: <http://nhpweb.enr.state.nc.us/nhis/public/gmap75_main.phtml>. The user name is "public" and the password is "heritage". You may want to click "Help" for more information.

NC OneMap now provides digital Natural Heritage data online for free. This service provides site specific information on GIS layers with Natural Heritage Program rare species occurrences and Significant Natural Heritage Areas. The NC OneMap website provides Element Occurrence (EO) ID numbers (instead of species name), and the data user is then encouraged to contact the Natural Heritage Program for detailed information. This service allows the user to quickly and efficiently get site specific NHP data without visiting the NHP workroom or waiting for the Information Request to be answered by NHP staff. For more information about data formats and access, visit <[MailScanner has detected a possible fraud attempt from "www.nconemap.com!" claiming to be www.nconemap.com](#)>, then click on "FTP Data Download", and then "nheo.zip" [to the right of "Natural Heritage Element Occurrences"]. You may also e-mail NC OneMap at <datag@ncmail.net> for more information.

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.

Sincerely,

Harry E. LeGrand, Jr., Zoologist
Natural Heritage Program

From: Hannu Kempainen [mailto:hkempain@joyceengineering.com]
Sent: Tuesday, May 24, 2011 11:18 AM
To: Legrand, Harry
Cc: hwilburn@joyceengineering.com
Subject: NHP - EO

Harry,

In reference to my previous email below, the site suitability and permitting for the LCID landfill will proceed in accordance with the state regulations Section 0564. In the attached Element Occurrences of the 16 species found within two miles of the site, none of them are observed in the sand quarry type habitat. We understand that the Natural Heritage Program has no objection to the LCID landfill permitting.

Hannu Kempainen, P.G.
Senior Project Consultant

JOYCE ENGINEERING, INC.
2211 W. Meadowview Road, Suite 101
Greensboro, NC 27407
tel: (336) 323-0092
fax: (336) 323-0093
dir: (336) 790-2252
www.JoyceEngineering.com

From: Hannu Kempainen
Sent: Friday, April 22, 2011 10:58 AM
To: 'Legrand, Harry'
Subject: RE: NHP - EO

Harry,

RE: proposed Land Clearing and Inert Debris Landfill at Arm Pit Mine Facility, Fayetteville, Cumberland County.

Thanks for providing correct link to the workroom. Now that I have visited the nhp virtual workroom and located the site (map attached) and clicked on IDENTIFY I have a list of plant species found within 2 miles of the selected point (attached). Question we need help with now is what does this information mean. The site is an existing sand quarry and the planned use will be for Land Clearing and Inert Debris (LCID) Landfill. The waste the operator will be placing in the sand pit will be land clearing materials such and stumps, brush and rocks. Will the change in the site operation cause any change in regards to NHP and the identified element occurrences within the two mile area? No site expansion is proposed, meaning the sand pit – LCID landfill will be operated in the same footprint.

Please advise as to what is the next step; what will be required in order to get approval from the NHP for this site to be permitted for landfilling operation?

Hannu Kempainen, P.G.
Senior Project Consultant

JOYCE ENGINEERING, INC.
2211 W. Meadowview Road, Suite 101
Greensboro, NC 27407
tel: (336) 323-0092
fax: (336) 323-0093
dir: (336) 790-2252
www.JoyceEngineering.com

From: Legrand, Harry [mailto:harry.legrand@ncdenr.gov]
Sent: Monday, March 21, 2011 9:37 AM
To: Hannu Kemppinen
Subject: FW: Address to Public Website

Hannu:

Got your phone call, and you are correct! Old URL. Here is the new/correct one.

<http://nhpweb.enr.state.nc.us/public/virtual_workroom.phtml>. To log-in, see the instructions on the log-in screen. You may want to click "Help" for more information, once you get into the website.

From: Finnegan, John
Sent: Monday, March 21, 2011 9:15 AM
To: Legrand, Harry
Subject: Address to Public Website

http://nhpweb.enr.state.nc.us/public/virtual_workroom.phtml

--

This message has been scanned for viruses and dangerous content by the ipengines.net MailScanner and is believed to be clean.

--

This message has been scanned for viruses and dangerous content by the ipengines.net MailScanner and is believed to be clean.

16 record(s) found within 2 miles of the selected point

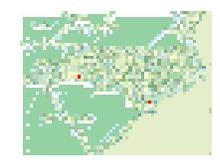
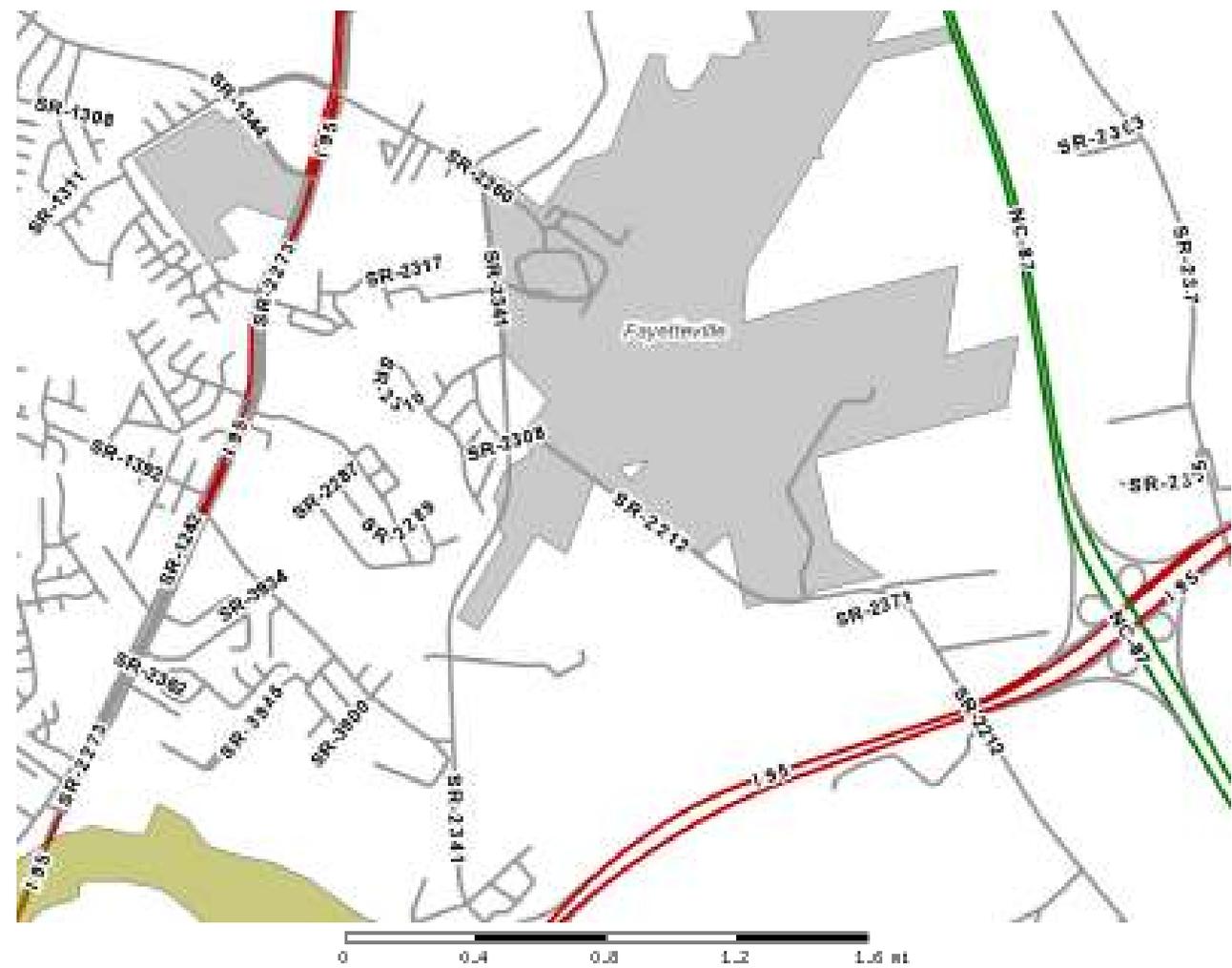
Scientific Name	EO Nb	Common Name	Date Last Observed	EO Rank	EO Accuracy	State Protection Status	Federal Protection Status	State Rank	Global Rank	Habitat Comments
<i>Astragalus michauxii</i>	3	Sandhills Milk-vetch	1921-05-08	X	Low	SC-V	FSC	S3	G3	Dry to xeric longleaf pine-oak woodlands and river-deposited sandhills
<i>Astragalus michauxii</i>	21	Sandhills Milk-vetch	1994-08-19	F	Low	SC-V	FSC	S3	G3	Dry to xeric longleaf pine-oak woodlands and river-deposited sandhills
<i>Eupatorium resinosum</i>	77	Pine Barren Bonaset	2000-09-17	B	Medium	SR-O		S3	G3	Seepage bogs, impoundments, shrub swamps, openings in streamhead pocosins
<i>Gaillardia aestivalis</i> var. <i>aestivalis</i>	7	Sandhills Blanket-flower	1949-07-08	H	Low	E		S2	G5TNR	Dry sandy roadsides, dry longleaf pine-oak uplands
<i>Galactia mollis</i>	3	Soft Milk-pea	1949-07-08	H	Low	T		S2	G4G5	Loamy sand depressions in longleaf pine-oak uplands
<i>Lanius ludovicianus</i>	73	Loggerhead Shrike	2007-09-29	E	Low	SC		S3B,S3N	G4	Fields and pastures [breeding season only]
<i>Liatris squarrulosa</i>	9	Earle's Blazing-star	1939-10-08	H	Low	SR-P		S2	G4G5	Diabase glades, open woods especially over mafic rocks; also loamy-sand soils in longleaf pine-oak sandhills
<i>Liatris squarrulosa</i>	35	Earle's Blazing-star	2001-11-03	C	Medium	SR-P		S2	G4G5	Diabase glades, open woods especially over mafic rocks; also loamy-sand soils in longleaf pine-oak sandhills
<i>Litium pyrophilum</i>	4	Sandhills Lily	1957-08-07	H	Low	E	FSC	S2	G2	Streamhead pocosin ecotones and openings
Little river bluff	2		2006	A	Medium			S1	G1?	
Little river seepage bank	3		2002-02-23	A				S1	G1?	
<i>Lysimachia asperifolia</i>	7	Rough-leaf Loosestrife	1957-08	F	Low	E	E	S3	G3	Pocosin/savanna ecotones, pocosins
<i>Masticophis flagellum</i>	6	Coachwhip	1877-PRE	H	Very Low	SR		S3	G5	Dry and sandy woods, mainly in pine/oak sandhills
<i>Picoides borealis</i>	1502	Red-cockaded Woodpecker	1977	H	Low	E	E	S2	G3	Mature open pine forests, mainly in longleaf pine [breeding evidence only]
<i>Pyxidanthera brevifolia</i>	1	Sandhills Pyxie-moss	1990-06-11	F	Low	SR-L	FSC	S3	G4T3Q	Sandhills
<i>Spiranthes eatonii</i>	10	Eaton's Ladies'-tresses	1957-06-27	H	Very Low	E		S2	G2G4	Pine savannas and pine-oak sandhills

Home Help

NC Natural Heritage Program Virtual Workroom

Locator Map

- Legend**
- Element Occurrences (not displayed)
 - Significant Natural Heritage Areas
 - Managed Areas
 - Roads
 - Municipalities
 - Rivers and Lakes
 - Topo Maps
 - Aerial Images (2010)
 - Topo Boundaries
 - County Boundaries
 - Redraw Map



Map Size: 800 x 600

Functions

- Zoom In
- Zoom Out
- Pan
- Identify

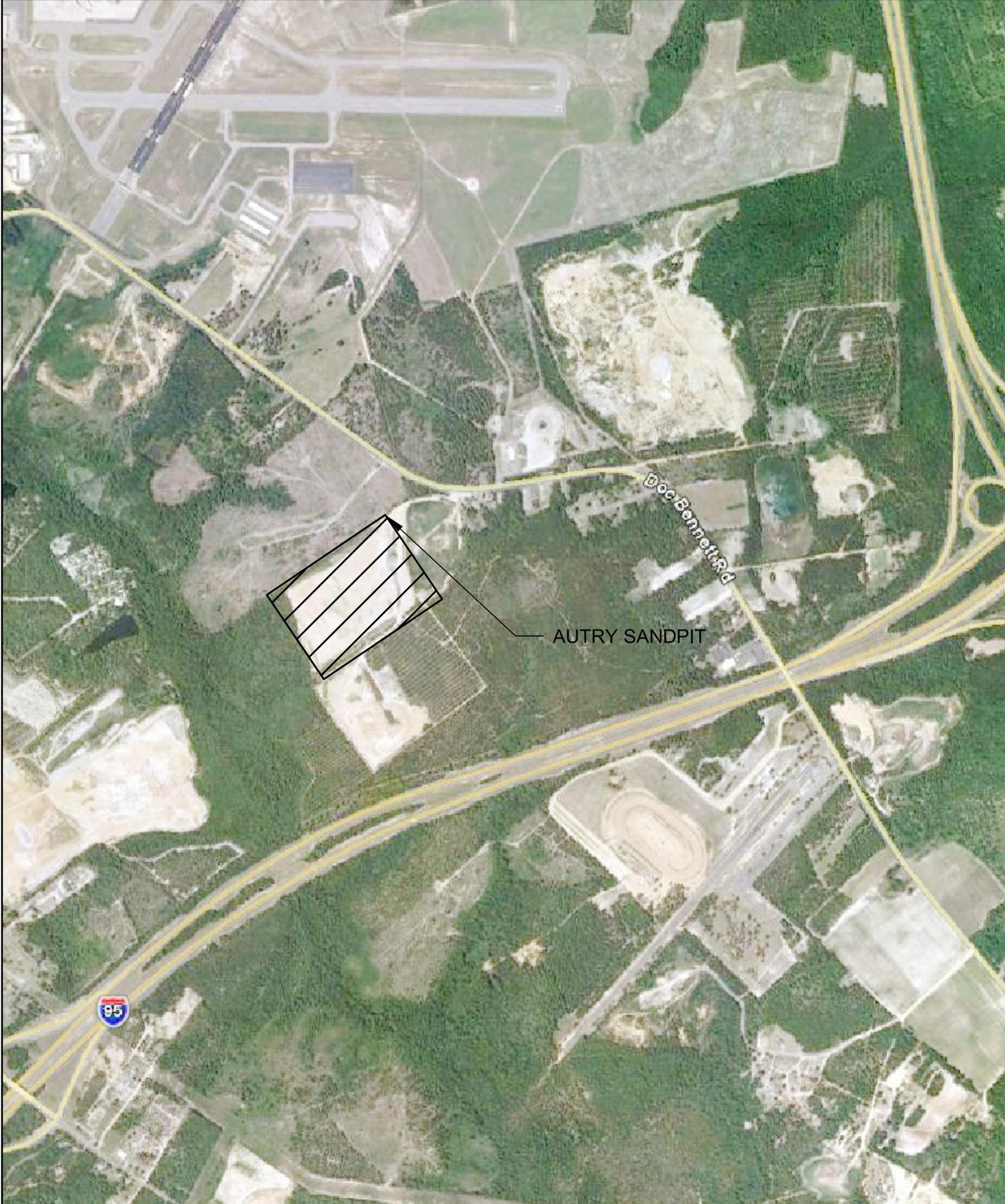
Quick View

--Choose Region--

[Problems or Questions?](#)

GIS Data Sources: NCNHP, CGIA, NCDOT, USGS. NCNHP data updated on: 2011-Apr-21

Powered By: MapServer PHP PostgreSQL PostGIS



AUTRY GRADING
FAYETTEVILLE, NC

SITE LOCATION MAP

JOYCE
ENGINEERING, INC.
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092

DESIGNED _____ RH _____
DRAWN _____ RH _____
CHECKED _____ HK _____
APPROVED _____ HK _____
DATE _____ 2/14/11 _____

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SCALE
N.T.S

NC CORP LIC: C-0782

PROJECT NO.
846.1101.11

DRAWING NO.

1

APPENDIX C

WETLANDS

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

RECEIVED SEP 07 2011

Action Id. 201101080

County: Cumberland

U.S.G.S. Quad: Hope Mills

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner/Agent: Mr. Ken Wilman
Address: 5124 US Highway 301 S
Hope Mills, North Carol

Telephone No.: _____

Property description:

Size (acres)	<u>53</u>	Nearest Town	<u>Fayetteville</u>
Nearest Waterway	<u>Big Sandy Run</u>	River Basin	<u>Cape Fear</u>
USGS HUC	<u>03030004</u>	Coordinates	N <u>34.973941</u> W <u>-78.878934</u>

Location description The property is locted off of Doc Bennett Road, approxiamtely 0.75 miles northwest of the intersection of Doc Bennett Road and Interstate 95 in Fayetteville, North Carolina (PIN# 0434-55-8407). The project review area is located within the northeastern portion of the site and is shown as the "Investigation Boundary" in the attached map.

Indicate Which of the Following Apply:

A. Preliminary Determination

Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).

B. Approved Determination

There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are wetlands on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.

The wetland on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

The wetlands have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are no waters of the U.S., to include wetlands, present on the above described project area which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Washington, NC, at (252) 946-6481 to determine their requirements.

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact Crystal Amschler at 910-251-4170.

C. Basis For Determination

Determination was based on review of aerial photography, USGS, soils and Lidar maps and from observations made during the site visit.

D. Remarks

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

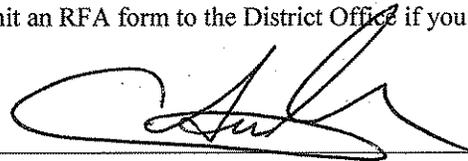
This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division
Attn: Crystal Amschler, Project Manager,
Wilmington Regulatory Field Office
69 Darlington Ave
Wilmington, North Carolina 28403

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the District Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 11/1/2011.

It is not necessary to submit an RFA form to the District Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: _____



Date 09/02/2011

Expiration Date 09/02/2016

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at <http://per2.nwp.usace.army.mil/survey.html> to complete the survey online.

Copy furnished:

Joyce Engineering, Inc
Attn: Mr. Ron Heater
2211 W. Meadowview Road, Suite 101
Greensboro, North Carolina 27407

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: <u>Mr. Ken Wilman</u>		File Number: <u>2010-01080</u>	Date: <u>09/02/2011</u>
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

If you only have questions regarding the appeal process you may also contact:
Jason Steele
Administrative Appeals Review Officer
60 Forsyth Street, SW (Room 9M10)
Atlanta, GA 30303-8801
404-562-5137

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

Prepared for:

**Autry Grading, Inc.
5124 US Highway 301 S
Hope Mills, NC 28348-2524**

**JURISDICTIONAL WATERS/WETLAND
DELINEATION REPORT**

**AUTRY SAND PIT
FAYETTEVILLE, NC
JUNE 2011**

Prepared by:



**2211 West Meadowview Road, Suite 101
Greensboro, North Carolina 27407**

(336) 323-0092

JEI Project No. 846.1101.11, Task 01



Waste Industry Experts

Joyce Engineering, Inc.
2211 West Meadowview Rd
Suite 101
Greensboro, NC 27407

tel: **336/323-0092**
fax: **336/323-0093**

www.JoyceEngineering.com

June 8, 2011

Ms. Crystal Amshler
U.S. Army Corp of Engineers
69 Darlington Avenue
Wilmington, NC 28403

RE: Jurisdictional Waters / Wetland Determination

Autry Grading, Inc. – LCID Landfill Siting
Fayetteville, North Carolina

Dear Ms. Amshler,

Joyce Engineering, Inc. (JEI) was contracted to prepare a permit application for a Land Clearing and Inert Debris (LCID) landfill for Autry Grading, Inc. in Fayetteville, North Carolina. Part of the requirements from NCDENR is that wetland investigations be completed. Once completed, the determination letter from the Army Corp of Engineers is required for the permit submittal.

Project Background

The mine property was permitted, and utilized for a sand mining operation, under NCDENR Permit No. 26-32 on February 22, 2002. Permitted acreage at the site is 43.755 acres, with approved disturbance limited to 34.25 acres. Currently the mining operation has been completed, and Autry Grading is seeking design and permits to dispose of LCID waste onto the site.

The LCID landfill operation would be designed within the existing mining operation, where disturbance has already taken place. Additional disturbance is not expected, however it may be necessary for permit requirements to assist in stormwater control and access.

Literature Review

The Soil Survey for Cumberland County, North Carolina, indicates that a majority of the expansion area (93%) is covered by Lakeland Sand, with small inclusions of Candor Sand and Blaney Loamy Sand.

The National Wetland Inventory Map for the study area indicates no wetland presence within the proposed project area. A copy of the NWI map is included as Figure 2.

June 8, 2011

Page 2

Site Reconnaissance

A wetland determination was performed on the property by Joyce Engineering personnel on April 6, 2011, following procedures outlined in the 1987 U.S Army Corps of Engineers 1987 Wetland Delineation Manual. The field reconnaissance concentrated on the existing disturbed footprint of the mine and immediate surrounding areas, very little additional disturbance, if any, is expected. As the photographs show, the footprint is almost void of vegetation. Soils are consistent across the site with little variation from one end to the other. The surrounding wooded area consists mostly of pine with few hardwood species.

Enclosed with this report are a site location map, a National Wetland Inventory Map, and the Soil Survey. If you have any questions or require any additional information, please do not hesitate to call me at 336-323-0092.

Sincerely,
JOYCE ENGINEERING, INC.

Ronald Heater
Staff Consultant

Attachments:

- Photos
- Figure WT-1 – Site Location Map
- Figure WT-2 – National Wetland Inventory Map
- Soils Survey



From access road looking southwest



From access road looking west



From south access road looking north across site



From center of property looking west



From north of property looking south

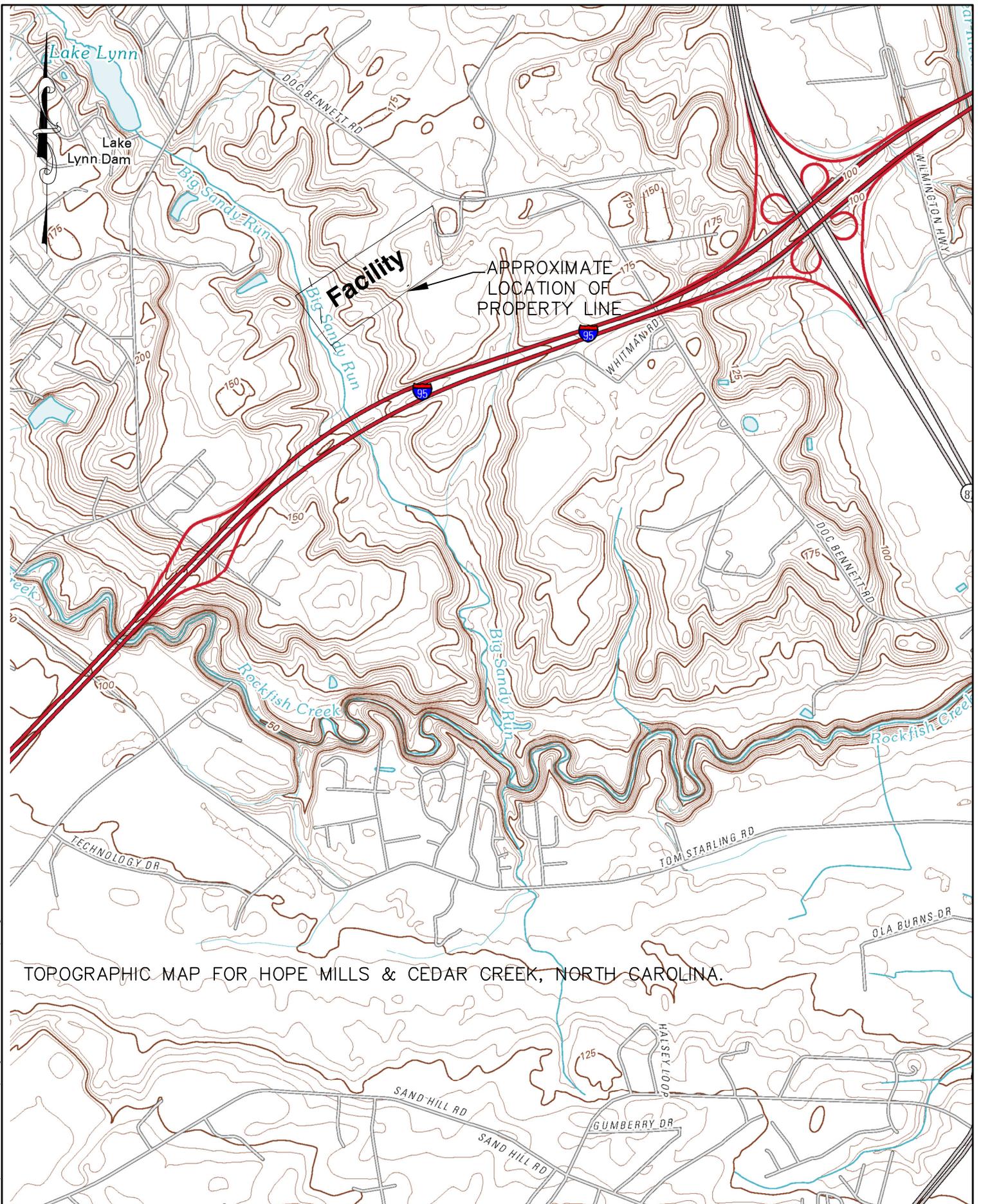


FIGURE NO. 1

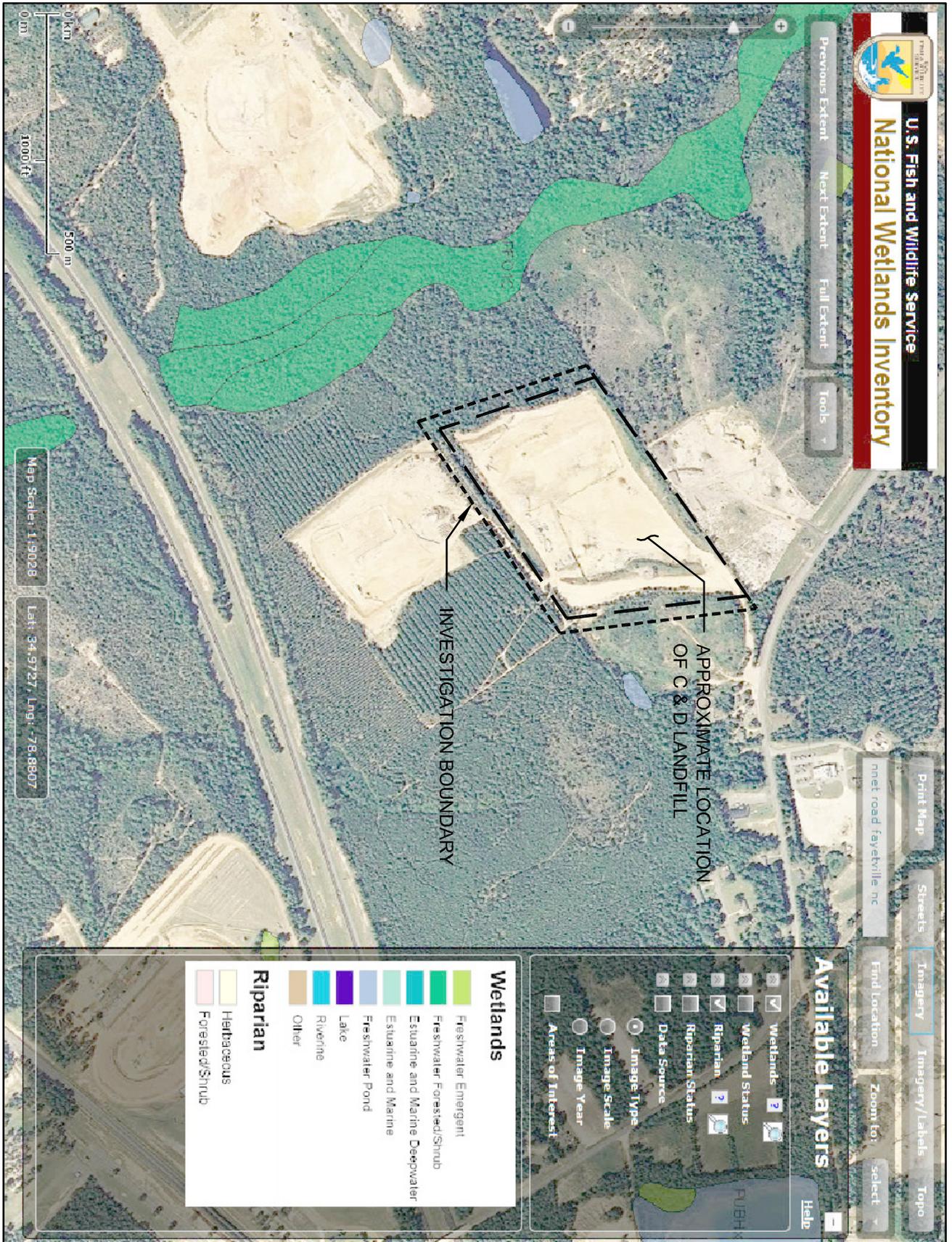


2211 WEST MEADOWVIEW ROAD
GREENSBORO, N.C. 27407
PHONE: (336) 323-0092
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SCALE
1" = 2000'

PROJECT NO.
846.1101.11

AUTRY LCID LANDFILL
SITE LOCATION MAP



NWI MAP TAKEN FROM US FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY

AUTRY GRADING, INC.
 FAYETTEVILLE, NORTH CAROLINA

NATIONAL WETLANDS INVENTORY
 MAP



ENGINEERING, INC.
 2211 W. MEADOWVIEW ROAD
 GREENSBORO, NC 27407
 PHONE: (336) 323-0092

DESIGNED _____ RWH
 DRAWN _____ RWH
 CHECKED _____ LJB
 APPROVED _____ EEA
 DATE _____ 06/08/11

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SCALE
 AS SHOWN

NC CORP LIC: C-0782

PROJECT NO.
 846.1101.11

DRAWING NO.
 WT-2



A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Cumberland County, North Carolina

AUTRY LCID LANDFILL- CUMBERLAND COUNTY, NC



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map (AUTRY LCID LANDFILL)



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

 Cities

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:3,060 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County, North Carolina
 Survey Area Data: Version 10, Jun 5, 2009

Date(s) aerial images were photographed: 6/21/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (AUTRY LCID LANDFILL)

Cumberland County, North Carolina (NC051)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaB	Blaney loamy sand, 2 to 8 percent slopes	0.1	0.5%
BaD	Blaney loamy sand, 8 to 15 percent slopes	1.5	5.2%
CaB	Candor sand, 1 to 8 percent slopes	0.3	1.2%
LaB	Lakeland sand, 1 to 8 percent slopes	26.5	93.1%
Totals for Area of Interest		28.5	100.0%

Map Unit Descriptions (AUTRY LCID LANDFILL)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic

Custom Soil Resource Report

classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cumberland County, North Carolina

BaB—Blaney loamy sand, 2 to 8 percent slopes

Map Unit Setting

Elevation: 160 to 660 feet

Mean annual precipitation: 38 to 52 inches

Mean annual air temperature: 61 to 70 degrees F

Frost-free period: 210 to 245 days

Map Unit Composition

Blaney and similar soils: 90 percent

Description of Blaney

Setting

Landform: Low hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy and loamy marine deposits

Properties and qualities

Slope: 2 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.0 inches)

Interpretive groups

Land capability (nonirrigated): 3s

Typical profile

0 to 4 inches: Loamy sand

4 to 25 inches: Loamy sand

25 to 62 inches: Sandy clay loam

62 to 80 inches: Loamy coarse sand

BaD—Blaney loamy sand, 8 to 15 percent slopes

Map Unit Setting

Elevation: 160 to 660 feet

Mean annual precipitation: 38 to 52 inches

Mean annual air temperature: 61 to 70 degrees F

Frost-free period: 210 to 245 days

Map Unit Composition

Blaney and similar soils: 85 percent

Description of Blaney

Setting

*Landform: Low hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and loamy marine deposits*

Properties and qualities

*Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.0 inches)*

Interpretive groups

Land capability (nonirrigated): 3e

Typical profile

*0 to 4 inches: Loamy sand
4 to 25 inches: Loamy sand
25 to 62 inches: Sandy clay loam
62 to 80 inches: Loamy coarse sand*

CaB—Candor sand, 1 to 8 percent slopes

Map Unit Setting

*Elevation: 80 to 330 feet
Mean annual precipitation: 38 to 55 inches
Mean annual air temperature: 59 to 70 degrees F
Frost-free period: 210 to 265 days*

Map Unit Composition

Candor and similar soils: 80 percent

Description of Candor

Setting

*Landform: Ridges on marine terraces
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex*

Custom Soil Resource Report

Parent material: Sandy and loamy marine deposits and/or eolian sands

Properties and qualities

Slope: 1 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability (nonirrigated): 4s

Typical profile

0 to 8 inches: Sand

8 to 26 inches: Sand

26 to 38 inches: Loamy sand

38 to 62 inches: Sand

62 to 80 inches: Sandy clay loam

LaB—Lakeland sand, 1 to 8 percent slopes

Map Unit Setting

Elevation: 160 to 660 feet

Mean annual precipitation: 38 to 52 inches

Mean annual air temperature: 61 to 70 degrees F

Frost-free period: 210 to 245 days

Map Unit Composition

Lakeland and similar soils: 80 percent

Description of Lakeland

Setting

Landform: Low hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy marine deposits and/or eolian sands

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95
to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Custom Soil Resource Report

Available water capacity: Low (about 4.0 inches)

Interpretive groups

Land capability (nonirrigated): 4s

Typical profile

0 to 6 inches: Sand

6 to 48 inches: Sand

48 to 80 inches: Sand

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. <http://soils.usda.gov/>

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. <http://soils.usda.gov/>

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. <http://soils.usda.gov/>

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. <http://soils.usda.gov/>

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.glti.nrcs.usda.gov/>

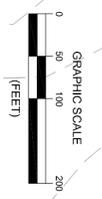
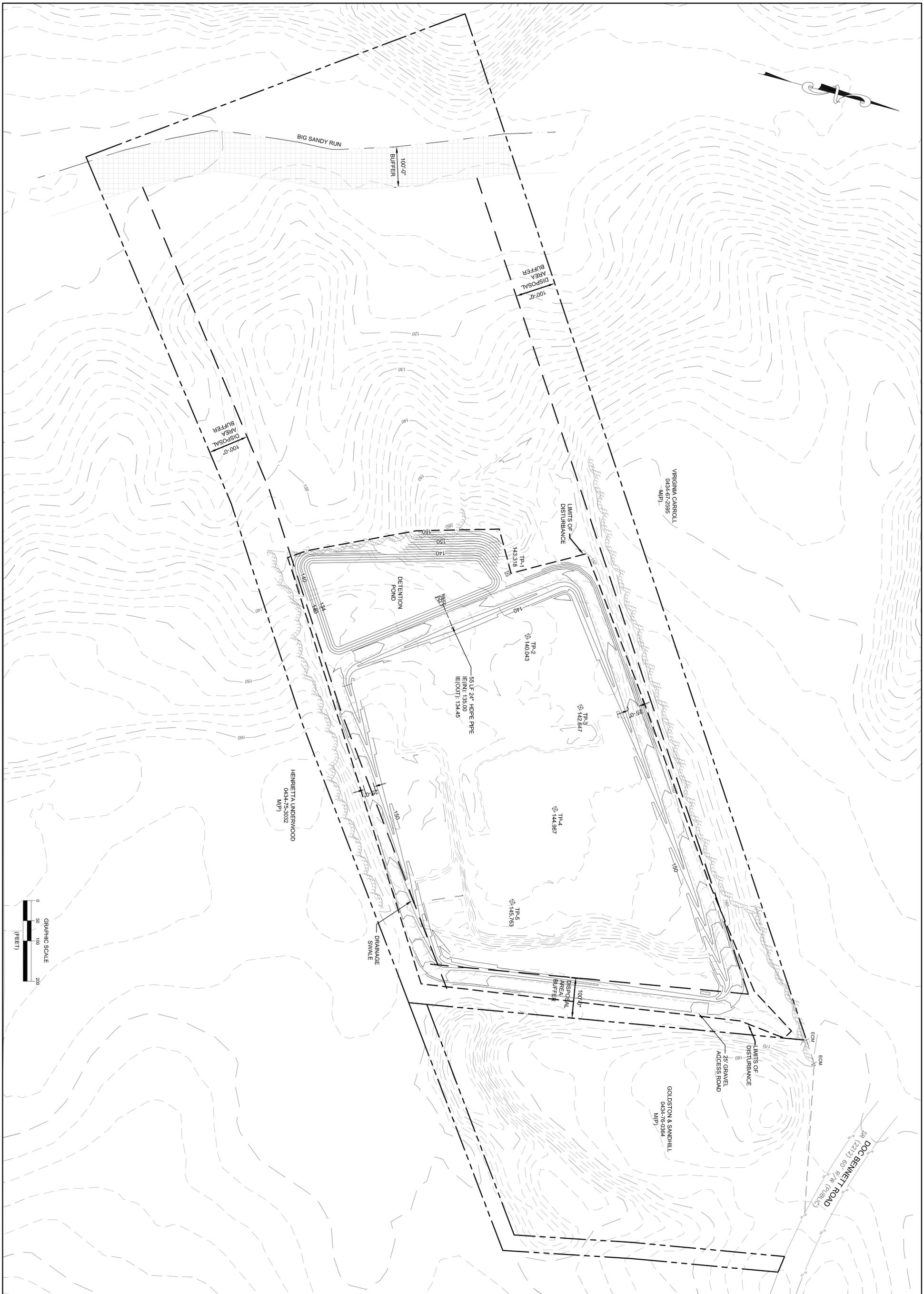
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. <http://soils.usda.gov/>

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. <http://soils.usda.gov/>

Custom Soil Resource Report

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

APPENDIX D
SURFACE AND GROUNDWATER REQUIREMENTS



PROJECT NO.
846.1101.11

SCALE
AS SHOWN

DRAWING NO.
CP-02

AUTRY GRADING INC.
CUMBERLAND COUNTY, NC

LCID LANDFILL DEVELOPMENT
BASE GRADE PLAN

JOYCE
ENGINEERING, INC.

2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

DESIGNED HRW
DRAWN HRW
CHECKED EEA
APPROVED EEA
DATE 7/1/2011

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP



1. Autry Grading, Inc. Arm Pit Mine (April 6, 2011)



2. Sand pit floor (typical).



3. Test Pit #1 was excavated to 6 feet depth; no water present.



4. Test Pit #2 was excavated to 6 feet depth; no water present.



5. Test Pit #3 was excavated to 6 feet depth; no water present.



6. Test Pit #4 was excavated to 6 feet depth; no water present.



7. Test Pit #5 was excavated to 6 feet depth; no water present.



8. East end of the Arm Pit Mine.

APPENDIX E
LOCAL GOVERNMENT APPROVAL

Roy Turner,
Chair
Cumberland County

Walter Clark,
Vice-Chair
Cumberland County

Garland C. Hostetter,
Town of Spring Lake
Harvey Cain, Jr.,
Town of Stedman
Patricia Hall,
Town of Hope Mills
Charles C. Morris,
Town of Linden



COUNTY of CUMBERLAND
Planning and Inspections Department

Thomas J. Lloyd,
Director

Cecil P. Combs,
Deputy Director

Lori Epler,
Sara E. Piland,
Cumberland County

Benny Pearce,
Town of Eastover

Donovan McLaurin,
Wade, Falcon & Godwin

STAFF REVIEW: 08-2-11 PLANNING BOARD DECISION: N/A

CASE NO: 11-070 NAME OF DEVELOPMENT: AUTRY LICD DEVELOPMENT, LLC

MIA: FAYETTEVILLE M(P) SITE PLAN REVIEW

LOCATION: SOUTHWEST SIDE OF SR 2212 (DOC BENNETT ROAD) ZONING: M (P) (AOD)

NORTH OF I-95 PIN: 0434-55-8407-

OWNERS / DEVELOPER: AUTRY GRADING, INC ENGINEER OR DESIGNER: JOYCE ENGINEERING

PLANNING & INSPECTIONS DEPARTMENT ACTION:

- PRELIMINARY
- EXTENSION REVISION
- APPROVED CONDITIONALLY
- DENIED

PLANNING BOARD DECISION:

- PRELIMINARY
- EXTENSION REVISION
- APPROVED CONDITIONALLY
- DENIED

The development plat/plan you submitted to this office is conditionally approved. Your approval is subject to the following conditions:

Permit-Related:

1. The owner/developer(s) of these lots must obtain detailed instructions on provisions of the County Zoning Ordinance and permits required to place any structure within this development from the County Code Enforcement Section, Room 101 in the Historic Courthouse at 130 Gillespie Street. For additional information, the developer should contact a Code Enforcement Officer.
2. The developer must provide documentation of approval of plans from the NC Department of Environment, Division of Solid Waste Management to Code Enforcement prior to application for local permits. Note: This permit is not required if the waste is generated solely from, and within the right-of-way of, NC Department of Transportation (NCDOT) projects
3. The developer must provide a site-specific address and tax parcel number at the time of building/zoning permit application.
4. New development where the developer will disturb or intends to disturb more than one acre of land is subject to the Post-Construction Stormwater Management Permitting Program (Phase II Stormwater Management Requirements) administered by the Division of Water Quality, North Carolina Department of Environment and Natural Resources. If one acre or more of land is to be disturbed, prior to the issuance of any building/zoning permits for this site, a copy of the State's *Post-Construction Permit* must be provided to County Code Enforcement.
5. For any new development where the developer disturbs or intends to disturb more than one acre of land, the developer must provide the Code Enforcement Section with an approved NC Department of Environment and Natural Resources (NCDENR) sedimentation and erosion control plan (S&E) prior to any application for permits. (Note: If any retention/detention basins are required for state approval of this plan, then three copies of a revised plan must be submitted and approved by Planning & Inspections prior to application for any building/zoning permits.) A copy of the NCDENR approval must be provided to Code Enforcement at the time of application for any building/zoning permits.
6. The building final inspection cannot be accomplished until a Code Enforcement Officer inspects the site and certifies that the site is developed in accordance with the approved plans.
7. A review of the data available to the Army Corp of Engineers indicates that jurisdictional waters are likely to be present on this property and therefore are likely to be impacted by the proposed project. However, without an official Jurisdictional Determination at the property, these findings cannot be confirmed.

A permit will be required for this project if construction will involve the temporary and/or permanent placement of fill in waters of the United States including wetlands. If a permit is required, the applicant will be required to avoid and minimize impacts to wetland/waters of the United States and may need to provide compensatory mitigation for unavoidable impacts.

8. Because the subject property is located within the Airport Overlay District, height limitations may apply to the subject property, In the event any item, man-made or natural, is greater than 200 feet in height from sea level, the developer will be required to

provide a FCC Form 7460-1 to Code Enforcement at the time of permit application. This form must be acknowledged by the FCC that the structure is not a hazard or obstruction to air traffic.

Site-Related:

9. All uses, dimensions, setbacks and other related provisions of the County Subdivision and Zoning Ordinances for the M(P) zoning and the AOD Airport Overlay districts must be complied with, as applicable.
10. This facility is to be operated only for the disposal of land clearing waste, inert debris, untreated wood, and yard trash, and operated in accordance with the permit approved by the Solid Waste Management of the NC Department of Environment and Natural Resources.
11. This conditional approval is not approval of any freestanding signs. If a freestanding sign is desired, re-submittal of the site plan is required prior to application for any freestanding sign permits. Attached signage for this development must be in accordance with the applicable sign regulations as set forth in Article XIII of the County Zoning Ordinance and that the proper permit(s) must be obtained prior to the installation of any permanent signs on the property. (Note: This conditional approval is **not** approval of the size, shape, or location of any signs.)
12. The developer is required to keep the ingress/egress roadway into and out of the site in a manner in which dust is kept at a minimum.
13. The small stream standards set forth in Section 6.5-44, County Flood Damage Prevention Ordinance, shall be complied with during construction and upon completion of development within this operation as enforced by the County Engineer's Office.
14. For any new development, an adequate drainage system must be installed by the developer in accordance with the NC Department of Environment and Natural Resources' (NCDENR) *Manual on Best Management Practices* and all drainage ways must be kept clean and free of debris. (Section 2306 D, County Subdivision Ordinance)
15. For new development, all utilities, except for 25kv or greater electrical lines, must be located underground. (Section 2306 C, County Subdivision Ordinance)
16. The owner/developer must secure the stormwater utility structure with a four foot high fence with a lockable gate, and is required to maintain the detention/retention basin, keeping it clear of debris and taking measures for the prevention of insect and rodent infestation.
17. The developer must obtain a driveway permit from the NC Department of Transportation (NCDOT). A copy of the approved driveway permit must be provided to Code Enforcement at the time of application for building/zoning permits.
18. Turn lanes may be required by the NC Department of Transportation (NCDOT).
19. All lighting is required to be directed internally within this development and comply with the provisions of Section 1102 M, Outdoor Lighting, County Zoning Ordinance.
20. The developer is required to keep the road way into and out of the site in a manner in which dust is kept at a minimum.
21. The owner/developer is responsible and liable for maintenance and upkeep of this site, all structures, and appurtenances, to include ensuring that the site is kept free of litter and debris, all grass areas mowed, all buffers and shrubbery kept trim and maintained, so that the site remains in a constant state of being environmentally pleasing.
22. When the landfill ceases to be used as such, the property owner is the responsible part to ensure the site is covered, grassed and aesthetically pleasing. In addition, the property owner is strongly encouraged to plant trees of the type(s) that do not grow to significant heights.

Advisories:

23. The applicant is advised to consult an expert on wetlands before proceeding with any development. There may be wetlands located in the project area that are subject to the permit requirements of Section 404 of the Clean Water Act. To avoid a violation of federal and/or state law, it is recommended the developer contact the Office of the Army Corp of Engineers or hire an environmental consultant to identify and delineate any wetlands in the project area prior to construction. A Section 404 permit will be required if the applicant needs to fill wetlands and the permit must be obtained prior to any construction on this site.
24. The owner/developer is responsible for ensuring easements which may exist on the subject property are accounted for, not encumbered and that no part of this development is violating the rights of the easement holder.
25. This conditional approval is not to be construed as all encompassing of the applicable rules, regulations, etc. which must be complied with for any development. Other regulations, such as building, environmental, health and so forth, may govern the specific development. The developer is the responsible party to ensure full compliance with all applicable Federal, State, and local regulations.
26. Because the subject property is located within the Airport Overlay District, the developer is strongly encouraged to discuss their development plans with Land Use Codes Section and/or the Fayetteville Regional Airport Director early in the planning stage to ensure that the proposed height of any proposed structure can be found to be no obstruction or hazard to air navigation.

27. The subject property is located within the City of Fayetteville's Municipal Influence Area (MIA) and typically sidewalks would have been required to be constructed in this area; however, since the application is a re-use of the property in its current state and no building construction proposed, this conditional approval is not contingent upon sidewalk construction.

If you need clarification of any conditions, please contact Ed Byrne at 910-678-7609 or Patti Speicher at 910-678-7605; otherwise, contact the appropriate agency at the contact numbers below.

Contact Information (Area Code is 910 unless otherwise stated):

Subdivision/Site Plan/Plat	Ed Byrne	678-7609
Code Enforcement (Permits):	Ken Sykes	321-6654
County Health Department:	Daniel Ortiz	433-3680
PWC:	Heidi Maly	223-4737
Fayetteville Planning:	Marsha Bryant	433-1416
Corp of Engineers (wetlands):	Crystal C. Amschler	(910) 251-4170
NCDENR (E&S):	Sally Castle	433-3300
Location Services:		
Site-Specific Address:	Ron Gonzales	678-7616
Tax Parcel Numbers:		678-7549
NCDOT (driveways/curb-cuts):	Gary Burton	486-1496
N.C. Division of Water Quality:	Mike Randall	(919) 733-5083 ext. 545

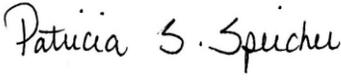
cc: Marsha Bryant, City of Fayetteville

**OFFICIAL PRELIMINARY STAMP
CUMBERLAND COUNTY
CASE NO: 11-070**

THIS PLAN APPROVED BY THE CUMBERLAND COUNTY PLANNING &
INSPECTION DEPARTMENT ON: **8-02-11**

COMMENTS: SUBJECT TO CONDITIONS

I CERTIFY THAT THIS PLAN HAS BEEN APPROVED BY THE CUMBERLAND
COUNTY PLANNING & INSPECTIONS DEPARTMENT AS DRAWN HEREON
AND MAY BE USED FOR ANY OFFICIAL PURPOSE AS PERMITTED BY LAW.
THIS APPROVAL IS VALID UNTIL: **12-31-13**



SUPERVISOR, LAND USE CODES **GB**

not typically considered intrusive to neighboring residential properties or in areas generally requiring a greater degree of restrictions regarding the commercial use of properties.

(Amd. 02-19-08)

C. C(P) Planned Commercial District. This district is designed to assure the grouping of buildings on a parcel of land so as to constitute a harmonious, efficient and convenient retail shopping area. Site plans assure traffic safety and the harmonious and beneficial relations between the commercial area and contiguous land. To promote the essential design features with the C(P) district, plan approval is a requirement.

(Amd. 02-19-08)

SECTION 307. PLANNED INDUSTRIAL DISTRICTS.

A. M1(P) Planned Light Industrial District. This district is designed for a wide variety of light industrial operations involving manufacturing, processing and fabrication of materials, operations involving wholesaling and bulk storage, other non-retail uses and certain public assembly and recreational uses. The general intent of the district is to prohibit residential, retail and heavy industrial uses of the land. By their nature, the uses permitted in this district are generally not compatible with residential or shopping center uses. To promote the essential design features with the M1(P) district, site plan approval is a requirement.

(Amd. 02-19-08)

B. M(P) Planned Industrial District. This district is designed primarily for basic manufacturing and processing industries, all of which normally create a high degree of nuisance and are not generally compatible with surrounding or abutting residential or commercial areas. The general intent of this district is to permit uses confined to service, wholesaling, manufacturing, fabrication and processing activities that can be carried on in an unobtrusive manner characterized by low concentration and limited external effects with suitable open spaces, landscaping, parking and service areas. This district is customarily located on larger tracts of land with good highway and rail access buffered from residential districts by other more compatible uses. Commercial activities are not permitted except those having only limited contact with the general public and those not involving the sale of merchandise at retail except for items produced on the premises or for the purpose of serving employees, guests and other persons who are within the district with an industrial activity. To promote the essential design features with the M(P) district, site plan approval is a requirement.

(Amd. 02-19-08)

ARTICLE IV PERMITTED, CONDITIONAL, AND SPECIAL USES

SECTION 401. GENERAL.

Within the various zoning districts established in Article III and subject to the requirements of this ordinance, no land, building or structure shall be used, and no building or structure shall be erected which is intended or designed to be used, in whole or in part for any use other than the uses permitted by the various districts established herein. The use regulations for the various districts are intended to be permissive in nature and none other than those specifically listed shall be construed as being allowable uses. Some land uses may be allowed through Conditional Use District and approval of a Permit or by issuance of a Special Use Permit only upon findings that certain conditions exist or should be applied, and is requested and agreed to by the property owner. The establishment of these uses shall be allowed only after review through appropriate measures and approval of plans.

Permitted uses in the various districts are indicated in the appropriate column of the following matrix. Special Uses, with Board of Adjustment approval and issuance of the Permit, and some Conditional Use Districts, after Board of Commissioner approval and issuance of the Permit, are also indicated in the matrix. All proposed uses in any planned district require site plan review and approval and shall be in compliance with the standards of this ordinance and the County Subdivision Ordinance.

SECTION 402. USES BY RIGHT.

All uses of property are prohibited except those that are permitted or otherwise allowed under the terms of this ordinance.

SECTION 403. USE MATRIX.

The matrix on the following pages indicates Permitted, Special and some Conditional Uses.

SECTION 403 USE MATRIX

CUMBERLAND COUNTY ZONING ORDINANCE

P = PERMITTED USE
 S = SPECIAL USE (Sec. 1606 Board of Adjustment approval required)
 X = CONDITIONAL USE (Article V – County Commissioners approval required)

LAND USES	ZONING CLASSIFICATIONS																							
	GD	A1	A1A	R40	R40A	R30	R30A	RR	R20	R20A	R16	RT7.5	R6	R6A	R6	R6A	R5	R5A	O4(P)	C1(P)	C2(P)	C(P)	M1(P)	M(P)
HOME OCCUPATIONS, Incidental (Sec. 1002A)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P				
HOTEL/MOTEL, except as regulated by Sec. 924																					P			
INDUSTRIAL OPERATIONS NOT OTHERWISE PROHIBITED																								
INDUSTRIAL SALES OF EQUIPMENT OR REPAIR SERVICE																						P	P	P
JANITORIAL SERVICE																						P	P	P
KENNEL OPERATIONS ³ (Sec. 912)		P	S	S	S			S																
LABORATORY OPERATIONS, medical or dental																				P	P	P		
LABORATORY, RESEARCH																				P	P	P		
LANDFILL, DEMOLITION/INERT DEBRIS																				P	P	P		
LIBRARY (SEC. 916)		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			
LIVESTOCK SALES & AUCTIONING (SEC. 916)		P																						
LOCKSMITH, GUNSMITH																								
MACHINE TOOL MANUFACTURING OR WELDING																								
MANUFACTURED HOME CLASS A, for residential occupancy		P	P					P	P	P														
MANUFACTURED HOME CLASS B, for residential occupancy		P						P	P	P														
MANUFACTURED HOME CLASS C, for residential occupancy (Sec. 913)																								
MANUFACTURED HOME PARK (County Subdivision Ordinance), excluding any manufactured home sales																								
MANUFACTURED HOME SALES																								
MASSAGE & BODYWORKS THERAPY																								
MILLING OR GRINDING GRAIN AND SEED INTO FOOD (SEC. 916)		P																						
MINI-WAREHOUSING (SELF-STORAGE FACILITY) (no outside commercial storage of motor vehicles (Sec. 914)		P																						
MINI-WAREHOUSING (SELF-STORAGE FACILITY) (including outside commercial storage of motor vehicles)		S																						

³See Section 912.G for allowed temporary housing/boarding of dogs in all residential zoning districts. (Amd. 01-19-10)

SECTION 403 USE MATRIX

ARTICLE XIV PLANNED DISTRICTS

SECTION 1401. GENERAL OBJECTIVES.

This article recognizes that through ingenuity, imagination and quality design, community development can be improved. All planned zoning districts shall be subject to site plan review and approval prior to application for any permits. The careful review of development plans by the Planning and Inspections Staff is a process that will:

- A. Permit creative approaches to the development of land, reflecting changes in the technology of land development;
- B. Provide for an efficient use of land, which can result in smaller networks of utilities and streets and thereby lower development costs;
- C. Provide and ensure an environment of stable character compatible with surrounding land uses;
- D. Accomplish a more desirable environment than would otherwise be possible; and
- E. Enhance the appearance of the community.

SECTION 1402. DETAILED SITE PLAN SPECIFICATIONS.

In any planned district, permits shall not be issued by the Coordinator except in conformance with a detailed plan submitted to and approved by the Planning and Inspections Staff. Plans submitted for approval shall be in the number as required by the Director drawn to an engineering scale of not less than one inch equals 200 feet, and shall show all information necessary for proper evaluation of the plan, including:

- A. The dimensions and location of the property, all existing and proposed structures, including any existing and/or proposed freestanding signs, and all existing and proposed right(s)-of-way;
- B. The parking and general circulation plan, including entrances, exits and pedestrian ways;
- C. The service area, including off-street loading facilities, service drives and dimensions thereof and proposed uses of all structures;

D. The proposed location and material of fences, walls, buffers, and landscaping; and

E. The name of the developer, the date, the scale, the north arrow, Parcel Identification Number, general vicinity sketch map, and the person or firm preparing the plan.

(Amd. 02-19-08)

SECTION 1403. SITE PLAN REVIEW.

Plans for developments shall be submitted to the Planning and Inspections Staff in accordance with the schedule established by the Planning Board. The Planning and Inspections Staff shall ensure the plan is in compliance with this ordinance, the Subdivision Ordinance, and the Water Supply Watershed Management and Protection Ordinance, if applicable.

The burden shall be on the developer to show that their plans are in the best interests of the community and the users of the proposed developments. Site planning of the proposed development shall provide protection of the development from potentially adverse surrounding influences and protection of surrounding areas from potentially adverse influences within the development. The development plan shall show, and careful review shall be given to, the following information:

A. Proposed land uses, the location of various land uses, their types and densities;

B. Proposed circulation pattern for vehicles and pedestrians, including providing for the interconnectivity of drives and parking areas by means of lateral access;

C. Proposed parks and other common open space areas, proposed means of dedication of any common open space areas and organizational arrangements for the ownership, maintenance and preservation of common open space;

D. Delineation of the units or phases to be constructed in progression;

E. Relation to land uses in surrounding areas and to the general development plan;

F. The layout of motor vehicle parking and loading areas, service areas, entrances, exits, yards, courts and landscaping, location of freestanding signs, control of lighting, noise or other potentially adverse influences in order to protect the residential character within and/or adjacent to the planned development;

G. The yard setbacks and type of buffering and/or screening of various land uses;

H. The plan shall note and the developer shall ensure that all utilities are placed underground, except for 25kv or greater electrical lines; and

I. Extension and connection to public water and/or sewer is required if extension and/or connection would be required under the provisions of the County Subdivision Ordinance. If the development consists of a non-residential use or a mixed use and utilities are present within the right-of-way or if any adjacent lot is served by utilities, extension and connection is mandatory.

(Amd. 02-19-08)

The Planning and Inspections Staff shall either approve the site plan and state the conditions of such approval, if any, or shall disapprove the site plan and state its reasons. Where a site plan meets the provisions of the Subdivision Ordinance, approval of the site plan shall constitute preliminary subdivision plat approval for the purposes of the County Subdivision Ordinance. The approved plan shall be filed with the Coordinator. The approved plan may be amended in the same manner as provided for original plan approval.

(Amd. 02-19-08)

SECTION 1404 PLANNING BOARD CONSIDERATION

The Planning Board may hear and approve or deny a site plan, upon the written request for a hearing from the developer, under the following circumstances:

A. The Planning Board may approve alternate requirements from the provisions of Sections 1102 A, B, E, F, I, and J and the yard setbacks of Section 1104 for development in any planned district if such approval will provide a more logically planned development. The Board shall give careful consideration to the relation and effect on the surrounding properties and the intent of this ordinance prior to granting approval under this section.

(Amd. 02-19-08)

B. An aggrieved developer may appeal conditions placed upon the approval of a site plan by the Planning and Inspections Staff to the Planning Board in accordance with the Board's policy and schedule for hearing appeals.

(Amd. 01-19-10)

Any consideration by the Planning Board on alternate requirements or appeals by an aggrieved developer shall be conducted as a public hearing

following quasi-judicial standard in the same manner as required by Article XVI. Prior to granting any alternate requirement from the provisions of this ordinance, the Planning Board shall find all listed conditions of Section 1605 exist for the individual case. Any appeal of the Planning Board's final decision shall be filed with Superior Court within 30 calendar days after the decision of the Board is made final. The decision of the Board shall be delivered to the aggrieved party either by personal service or by registered mail or certified mail, return receipt requested.

(Amd. 01-19-10)

APPENDIX F
PROPERTY DEED

36153

CUMBERLAND COUNTY NC 09/19/2000
\$450.00



Real Estate
Excise Tax

Excise Tax \$ 450.00

RECEIVED

9-19-2000 AM 9:41:15

GEORGE E. TATUM
REGISTER OF DEEDS
CUMBERLAND CO., N.C.

Recording Time, Book and Page

Tax Lot No. Parcel Identifier No.
Verified by County on the day of
by

Mail after recording to McCoy, Weaver, Wiggins, Cleveland & Raper, 202 Fairway Drive, Fayetteville, NC 28305

This instrument was prepared by McCoy, Weaver, Wiggins, Cleveland & Raper, 202 Fairway Drive, Fayetteville, NC 28305

Brief description for the Index

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 15th day of September, 2000, by and between

GRANTOR

GRANTEE

APAC-Carolina, Inc.

Autry Grading, Inc.
5959 Fischer Road
Fayetteville, NC 28304

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Fayetteville, Township, Cumberland County, North Carolina and more particularly described as follows:

See Exhibit "A" attached hereto and incorporated herein by reference.

Grantor herein reserves to itself, its successors and assigns an easement across the herein described property, to provide ingress, egress and regress to adjoining property owned by Grantor.

Grantor also conveys to Grantee an easement for ingress, egress and regress across that 1.2 acres leading from Doc Bennett Road to the property herein conveyed as shown on Exhibit "B" attached hereto and incorporated herein by reference.

APAC-Carolina, Inc., is the successor by merger to Crowell Constructors, Inc.

The property hereinabove described was acquired by Grantor by instrument recorded in Book 2952, Page 355.....

A map showing the above described property is recorded in Plat Book page.....

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.

Title to the property hereinabove described is subject to the following exceptions:

Easements, restrictions and rights of way of record, and taxes for the year of closing.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

APAC-Carolina, Inc. _____
(Corporate Name)

By: *Graham T. Moore, Jr.* _____
Graham T. Moore, Jr.
Vice President

ATTEST: _____
Secretary (Corporate Seal)

USE BLACK INK ONLY

(SEAL)

(SEAL)

(SEAL)

(SEAL)

SEAL-STAMP

NORTH CAROLINA, _____ County.

I, a Notary Public of the County and State aforesaid, certify that _____ Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this _____ day of _____

My commission expires: _____ Notary Public

SEAL-STAMP

NORTH CAROLINA, _____ Cumberland _____ County.

I, a Notary Public of the County and State aforesaid, certify that *Graham T. Moore Jr.* personally came before me this day and acknowledged that he is *Vice President* Secretary of APAC-Carolina, Inc. a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its *Vice* President, sealed with its corporate seal and attested by _____ as its Secretary. Witness my hand and official stamp or seal, this *15th* day of *September* 2000

My commission expires: *5-23-2001* *Julia Faulkner* Notary Public

The foregoing Certificate(s) of *Julia Faulkner*

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

By: *George E. Tatum* REGISTER OF DEEDS FOR CUMBERLAND COUNTY, Deputy / Assistant Register of Deeds

EXHIBIT "A"

BEGINNING at a found concrete monument, said concrete monument being a southern corner of Fayetteville Municipal Airport as recorded in Plat Book 12, Page 20, aforesaid concrete monument being South 79 degrees 46 minutes 28 seconds West, 371.36 feet from another found concrete monument on the southern right-of-way margin of Doc Bennett Road, a sixty (60') foot right-of-way, said monument being 2.3 miles from U. S. 301; thence South 08 degrees 44 minutes 45 seconds East, 982.17 feet with Herman Minges N/F Book 2373, Page 609, to a found iron pipe with pointers, said iron pipe being South 55 degrees 10 minutes 16 seconds West, 1168.61 feet from a found iron pipe, the Southwest corner of the V. F. W. tract; thence running with Hamilton Underwood, N/F, Book 436, Page 467, South 55 degrees 02 minutes 31 seconds West, 798.81 feet to a found iron pipe; thence South 57 degrees 17 minutes 26 seconds West, 576.16 feet to a found iron pipe; thence South 53 degrees 38 minutes 11 seconds West, 928.76 feet to a point in the run of Sandy Run Creek; thence running with Murphy Land, N/F, North 34 degrees 54 minutes 27 seconds West, 1000.00 feet to a found concrete monument, a point in the southern line

of Thomas & Robert Clark, N/F, Book 2122, Page 6; thence North 57 degrees 32 minutes 53 seconds East, 360.99 feet to a found concrete monument on the eastern bank of Sandy Run Creek, a common corner between Clark and Seavy A. Carroll, N/F, Book 716, Page 267; thence running with Carroll, North 57 degrees 31 minutes 22 seconds East, 976.71 feet to a found iron stake; thence North 57 degrees 31 minutes 17 seconds East, 1400.81 feet to the Point of Beginning, containing 54.300 acres, more or less.

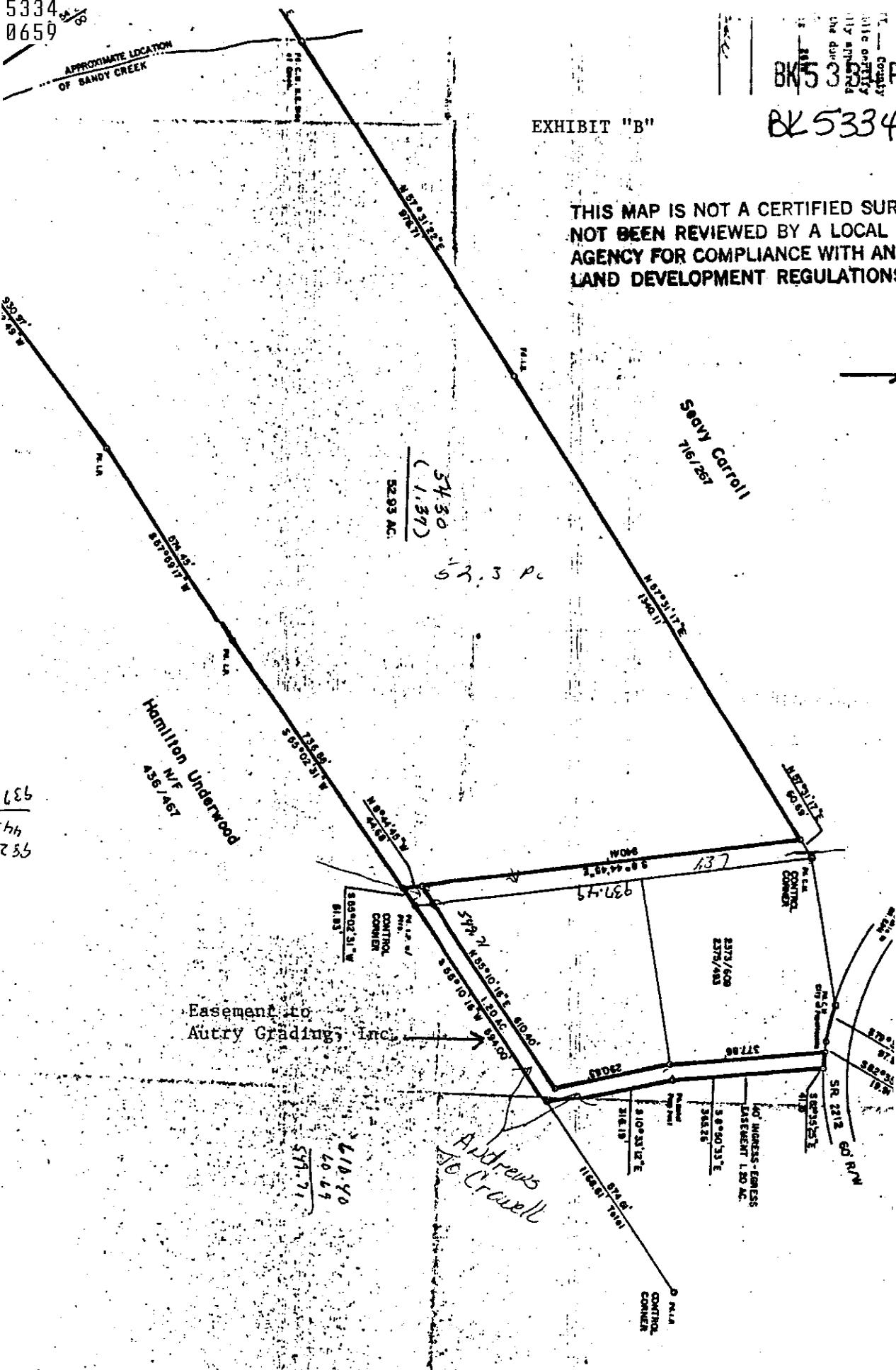
Less and excepting from their conveyance the 1.37 acre tract previously conveyed to Andrews by deed recorded in Book 3036, Page 473 Cumberland Count Registry.

5334
0659

BK 5334 PG 0659
BK 5334 PG 659

EXHIBIT "B"

THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.



686
44
255

610.40
60.69
579.71

PROPERTY OF
INSTRUCTORS INC.



GODWIN-JORDAN & ASSOCIATES, P.A.
ENGINEERING, SURVEYING & PLANNING



COUNTY TAX ASSESSOR
[EMAIL](#)

Property Information Mini-Sheet

[Click for Tax Sheet](#)

[Tax Records](#) | [General Info](#) | [Phone Numbers](#) | [Real Estate](#) | [Personal](#) | [County](#)

Date: 05/23/2011

COUNTY OF CUMBERLAND Tax Year: 2009

Time: 15:28:50

Parcel ID: 0434-55-8407- **TaxYear:** 2009

Owner Name(s): AUTRY GRADING INC

Owner Address: PO BOX 368 HOPE MILLS NC 28348

Situs Address: 000000 ? N/A N/A

Taxing District: 0051 PEARCES MILL

Tax Bill Number: 0018759

Old Parcel ID: 0434-55-6494-

Property Class: COMMERCIAL

Neighborhood: 8058

Zoning: MP -

Frontage: 0.00 **Depth:** 0.00

Map & Sheet: 0434-02

Plat Book & Page: -

Legal Description: 52.93 ACS WOOD-SANDHILL LD

Parcel Taxable Value: (REVALUATION 2009)

	Total	Land	Building	Misc.	Date
Appraised:	173,864.00	173,864.00	0.00	0.00	04/08/2008

Land Assessment:

	Land Use	Land Units	Land Type	Land Rate	Land Value
	COMMERCIAL SQ FOOTAG	2,005,066.80	SF	0.09	171,794.00
	SWAMP WASTE	6.90	AC	300.00	2,070.00

(A max of 5 sales can be shown)

Sale History Data:

Deed Book	Deed Page	Sale Date	Sale Price
05334	00656	09/19/2000	225,000.00
02952	00355	07/01/1984	0.00

(A max of 10 improvements can be shown)

Miscellaneous Improvements:

Description	Type	Unit	Number of Units
NO DATA FOUND			

Choose the Building to Display: 00

		Building Characteristics			
Building #:		00 OF 00			# of Stry
Improvement Type:		NO DATA FOUND			
Quality Grade:					
Actual Year Built:					
Foundation:		Exterior:			
Heat Method:		Heat Source:			
Roof Type:		Cover:			
5-Fix Baths:	4-Fix Baths:	3-Fix Baths:	2-Fix Baths:	Extra Fix:	
Bedrooms:	Fireplaces:	Air Cond:	Condition:		

[Click for Tax Sheet](#)

Personal Property Search for AUTRY GRADING INC

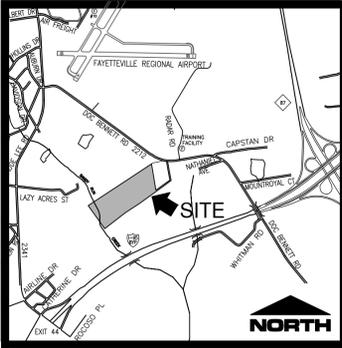
| [Tax Records](#) | [General Info](#) | [Phone Numbers](#) | [Real Estate](#) | [Personal](#) | | [County](#) |

Disclaimer:

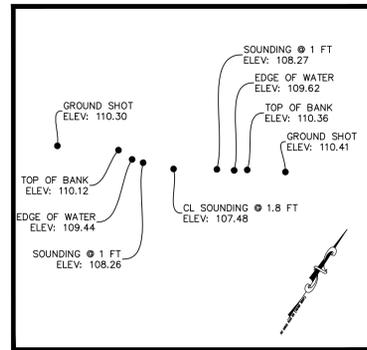
The public information contained herein is furnished as a public service by the Cumberland County Tax Administration Office. The Cumberland County Tax Administration Office makes **no warranties**, either expressed or implied, concerning the accuracy, completeness, reliability, or suitability of the information for any other particular use. Furthermore, the Cumberland County Tax Administration Office assumes **no liability** associated with the use or misuse of said information.

ERROR

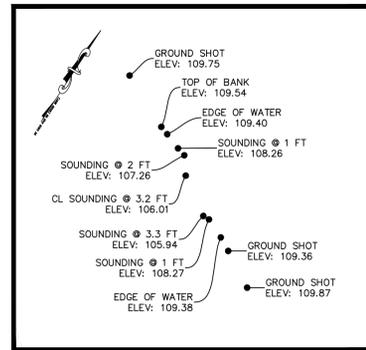
APPENDIX G
EROSION AND SEDIMENTATION CONTROL



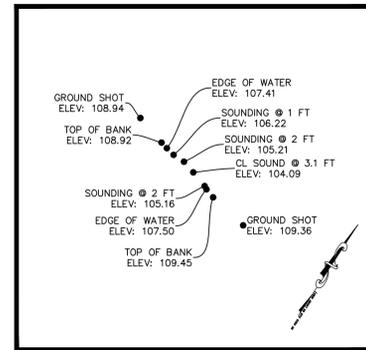
VICINITY MAP
NOT TO SCALE



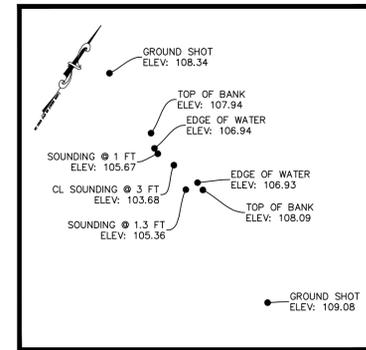
CROSS SECTION A
SCALE: 1" = 10'



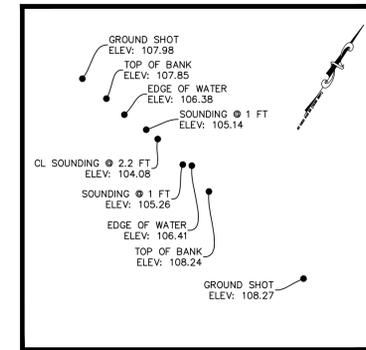
CROSS SECTION B
SCALE: 1" = 10'



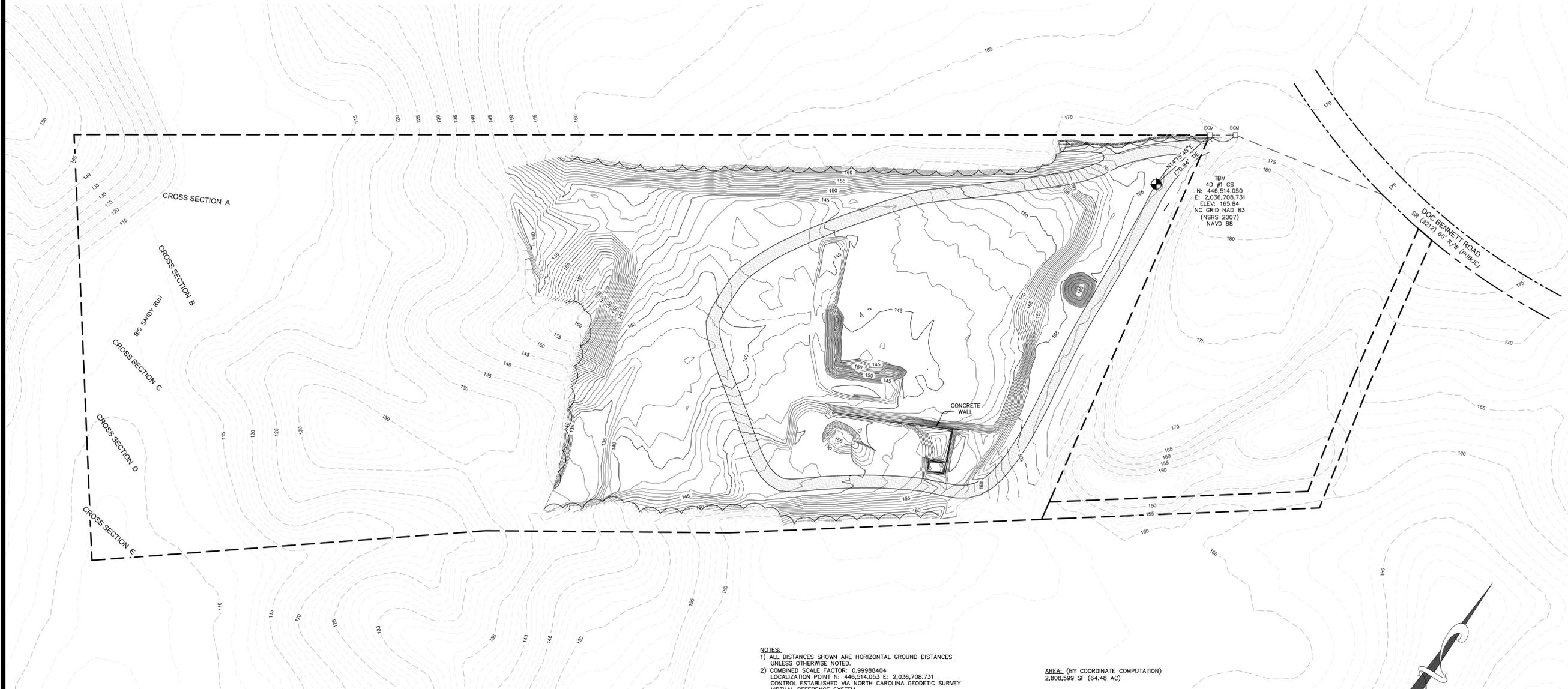
CROSS SECTION C
SCALE: 1" = 10'



CROSS SECTION D
SCALE: 1" = 10'



CROSS SECTION E
SCALE: 1" = 10'



- NOTES:
- 1) ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.
 - 2) COMBINED SCALE FACTOR: 0.99988044
LOCALIZATION POINT N: 446,514.053 E: 2,036,708.731
CONTROL ESTABLISHED VIA NORTH CAROLINA GEODETIC SURVEY VIRTUAL REFERENCE SYSTEM.
 - 3) NO MONUMENT WITHIN 2000' OF SITE.
 - 4) LINES NOT SURVEYED ARE SHOWN AS DASHED LINES FROM INFORMATION REFERENCED ON THE FACE OF THIS MAP.
 - 5) NONCONFORMING STRUCTURES HAVE NOT BEEN CREATED BY THIS SURVEY.
 - 6) THIS SURVEY WAS DONE WITHOUT BENEFIT OF A TITLE SEARCH AND IS BASED ON REFERENCED INFORMATION SHOWN HERE ON. OTHER DOCUMENTS OF RECORD MAY EXIST WHICH COULD AFFECT THIS PROPERTY. NO RESPONSIBILITY IS ASSUMED BY THIS SURVEYOR FOR ANY CONDITIONS WHICH MAY PRESENTLY EXIST BUT ARE UNKNOWN OR REFERENCED HERE ON, SUCH AS BUT NOT LIMITED TO HAZARDOUS WASTE MATERIALS, EASEMENTS, CEMETERIES, AND FLOOD AREAS.
 - 7) LOCATIONS OF ALL UNDERGROUND UTILITIES LYING WITHIN THIS MAPPED AREA MAY NOT BE SHOWN ON THIS PLAN. DEVELOPERS OR CONTRACTORS SHOULD NOT ONLY MAKE SUBSURFACE INVESTIGATIONS BUT SHOULD ALSO ALLOW FOR CONTINGENCIES WHICH MIGHT ARISE BY REASON OF ENCOUNTERING UNRECORDED LINES OR OF LINES BEING IN DIFFERENT LOCATIONS THAN INDICATED ON THIS SURVEY.
 - 8) THIS PROPERTY DOES NOT LIE WITHIN A FLOOD ZONE ACCORDING TO MAP # 3720043400J OF THE FLOOD INSURANCE RATE, DATED JANUARY 5, 2007.
 - 9) BOUNDARY INFORMATION PROVIDED BY CLIENT WITH EXISTING SITE CONDITIONS DRAWING DATED 11/12/01.

AREAL (BY COORDINATE COMPUTATION)
2,806,599 SF (64.48 AC)

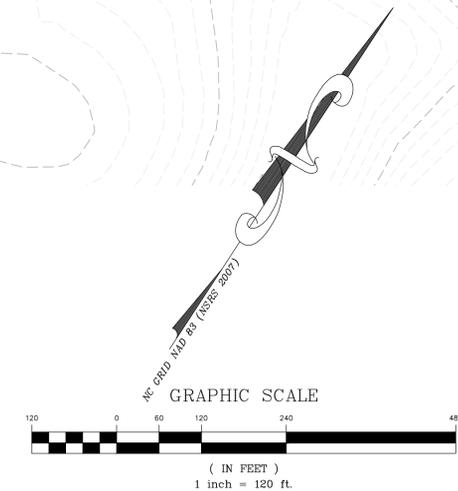
PIN NO. 0434-55-8407

ZONING: M(P)

50' FRONT
30' SIDE
20' REAR

REFERENCES:
DB 5334, PG 656

- LEGEND:
- ECM - EXISTING CONCRETE MONUMENT
 - PROPERTY LINE
 - - - RIGHT-OF-WAY
 - MAJOR CONTOUR (SURVEYED)
 - MINOR CONTOUR (SURVEYED)
 - MAJOR CONTOUR (LIDAR)
 - MINOR CONTOUR (LIDAR)
 - TREE LINE
 - ⊕ BENCHMARK



I, SEAN R. SEEVER, CERTIFY THAT THIS CLASS "C" TOPOGRAPHIC MAP WAS DRAWN FROM AN ACTUAL SURVEY PERFORMED UNDER MY DIRECT SUPERVISION AND THAT IT MEETS OR EXCEEDS THE NORTH CAROLINA ADMINISTRATIVE CODE 21.56.1605 AND 21.56.1606. WITNESS MY HAND AND SEAL THIS 24 DAY OF MARCH, A.D., 2011.

PROFESSIONAL LAND SURVEYOR - L-4571

I, SEAN R. SEEVER, CERTIFY THAT THE CONTROL FOR THIS SURVEY WAS ESTABLISHED FROM AN ACTUAL GPS SURVEY UNDER MY SUPERVISION. THIS GPS SURVEY WAS PERFORMED TO C-2II FGCC SPECIFICATIONS RTK GPS WITH VRS FIELD PROCEDURES WERE USED. THE COORDINATES WERE OBTAINED THROUGH A GRID TO GROUND ADJUSTMENT USING THE COMBINED SCALE FACTOR SHOWN HEREON. THIS SURVEY WAS PERFORMED ON MARCH 21, 2011 USING TWO TRIMBLE 5700 RECEIVERS.

PROFESSIONAL LAND SURVEYOR - L-4571



REVISIONS

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

PROJECT NAME

**ARMPIT
BORROW PIT
TOPOGRAPHY
SURVEY**

TAX ID# 0434-55-8407
DOC BENNETT ROAD
CEDAR CREEK TOWNSHIP
NEAR CITY OF FAYETTEVILLE
CUMBERLAND COUNTY
NORTH CAROLINA

CLIENT

AUTRY GRADING

PO Box 368
Hope Mills, North Carolina 28348
Phone: (910) 818-9060

PROJECT INFORMATION

SURVEYED BY:	RON
DRAWN BY:	DAVID
CHECKED BY:	JIMMY
PROJECT NUMBER:	592

DRAWING SCALE

HORIZONTAL: 1"=120'

DATE SURVEYED

MARCH 23, 2011

SHEET NUMBER

1
OF 1

APPENDIX H
APPLICATION FOR 5-YEAR PERMIT

Applicant Signature Page

Name of facility Autry Grading INC

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

Kenneth Autry
Print Name

9-17-2011
Date

Owner
Title

Autry Grading INC
Business or organization name

**SOLID WASTE SECTION PERMIT APPLICATION
COMPLIANCE REVIEW REQUEST
AND PERMIT FEE INVOICE REQUEST**

Submit to the Field Operations Branch Head (or Compliance Officer) and to Jeff Skabo

Review Requested by:	<u>AUTRY GRADING</u>	Date Requested:	<u>SEPT, 12, 2011</u>
----------------------	----------------------	-----------------	-----------------------

Name of facility and permit number	<u>— AUTRY GRADING, INC. LCID LANDFILL</u>
Applicant (Owner) Name	<u>— KENNETH AUTRY</u>
Description of Permit Request	<u>— LCID LANDFILL</u>
Permit Fee Action	<u>— INVOICE</u>
Date Application Received	<u>—</u>
Contact Name and Title	<u>— KENNETH AUTRY, OWNER</u>
Company	<u>— AUTRY GRADING, INC.</u>
911 Address	<u>— 5124 US HWY 301, HOPE MILLS</u>
Mailing Address	<u>— 5124 US HWY 301</u>
City/State/Zip	<u>— HOPE MILLS, NC 28348</u>
Parent Company	<u>— NONE</u>
Known Subsidiaries	<u>— NONE</u>
Other known names business has operated under	<u>— NONE</u>
Known Counties of Operation	<u>— CUMBERLAND COUNTY, NC</u>
Does the applicant have a past or current solid waste permit? If Yes:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Facility Type: <u>—</u> Permit #: <u>—</u>
Does the applicant have other DENR permits? If Yes:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Division: <u>DLR</u> Facility Type: <u>MINE</u> Permit #: <u>26-32</u>
Did the permit applicant submit Financial Assurance cost estimates?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/a <input type="checkbox"/> Not Needed <input type="checkbox"/>
Are the cost estimates sufficient?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/a <input checked="" type="checkbox"/>
Other notes	<u>—</u>



Make checks payable to **N.C. Division of Waste Management, Solid Waste Section**, include Permit Number and invoice number on check. If you are paying by electronic transfer, include the invoice number with your electronic transfer. [G.S. 25-3-506: A \$25.00 processing fee will be charged on all returned checks.] Please return a copy of this invoice with your payment.

Applicant Address:	Contact/Billing Information:	Facility Location Address:
	Mr. Kenneth Autry Autry Grading, Inc. 5124 US Hwy 301 Hope Mills, NC 28348	Autry Grading, Inc. LCID Landfill 5124 US Hwy 301 Hope Mills, NC 28348

INVOICE NUMBER	INVOICE DATE	DUE DATE	AMOUNT DUE
SW011-0090	11-17-2011		\$1,000.00

A. Permit Fee Requirements: Pursuant to North Carolina General Statute 130A-295.8 you are required to pay fee(s) based on your solid waste management activities. The fee(s) shall be used to support the solid waste management program. An application is deemed incomplete until all fees are received.

B. Explanation of Invoice Amount is Based on Facility's Current Permit Application

Proposed Permit #	Facility Type	Application Type	Application Date	Fee	Total Amount
	LCID	New LCID Landfill	11-7-2011	\$1,000.00	\$1,000.00
Total Amount Due					\$1,000.00
Amount Paid					

C. Remit Payment (including a copy of this invoice) To:

Division of Waste Management
 Solid Waste Section
 1646 Mail Service Center
 Raleigh, NC 27699-1646
 Attn: Ellen Lorscheider

D. Solid Waste Contacts:

- Questions about billing process: Ellen Lorscheider at (919) 707-8445
- Questions about the Regulations and Technical Assistance:

Ed Mussler (919) 707-8231	Landfills, Transfer Stations
Michael Scott (919) 707-8246	Land Application Sites, Compost Facilities

E. Update Your Information: Please indicate any changes in Facility or Contact Information.

APPLICATION GUIDANCE
LAND CLEARING AND INERT DEBRIS (LCID) LANDFILL PERMIT
North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section

The following is a guide for applying for a Permit to Construct and/or Operate a Land Clearing and Inert Debris (LCID) landfill.

All landfill Permits to Operate issued by the NC-DENR DWM are for 5-year periods. No later than 6 months prior to the expiration of the LCID landfill Permit to Operate, the permittee must submit an application for the next 5-year phase of operation.

The following definitions apply to the types of permit actions for a LCID landfill:

New Permit means an application for a permit for a landfill not previously permitted by the Department.

5-Year Permit means an application for the next 5-year permit for disposal operation within the approved landfill waste boundaries.

Permit Modification means an application for a minor change to the approved Operations Plan that does not affect approved landfill capacity or waste boundaries.

The fees for a LCID landfill permit are as follows:

New Permit	\$1,000
5-Year Permit:	\$500
Permit Modification	\$250
Annual Permit Fee	\$500

Regulating Agency

The complete name of the agency that reviews applications, issues permits and monitors operations of LCID landfills is the North Carolina Department of Environment and Natural Resources (NC-DENR) Division of Waste Management (DWM) Solid Waste Section (SWS).

The SWS Permitting Branch engineers and hydrogeologists review the permit applications and draft the permits, and the Field Operations Branch monitor the facility operations.

Location and Mailing Address

Applications must be sent to one of the following addresses:

<u>By Mail</u>	<u>By Delivery</u>
NC DENR, Division of Waste Management	NC DENR, Division of Waste Management
Solid Waste Section Permitting	Solid Waste Section Permitting
1646 Mail Service Center	401 Oberlin Road
Raleigh, NC 27699-1646	Raleigh, NC 27605

The Section requests that 2 hard copies and 1 electronic (Portable Document Format or PDF) version of the application is requested to be submitted along with the appropriate fee.

Questions regarding an application should be directed to the Solid Waste Section, Phone 919-508-8400.

Rules and Laws Applicable to LCID Landfills

The North Carolina Solid Waste Section Rules and applicable statutes are on the Section website as follows:

Solid Waste Rules: <http://www.wastenotnc.org/swhome/rules.asp>

General Statutes: http://www.ncleg.net/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_130A/Article_9.html

Applications for a New, Expansion or Renewal Permit

The application for a New Permit must include the requirements contained in the North Carolina Solid Waste Management Rules 15A NCAC 13B (included at the end of this guidance) and the information listed below. The permit is issued in two parts: A Permit to Construct and a Permit to Operate. Commonly for LCID landfills, the two permits are combined into one document.

The application submittal for a Permit Renewal must address Sections 1 and 7 below and any other information that may need to be updated. The permit issued would be a Permit to Operate for a specified 5-year period of time.

A Permit Modification must address the pertinent and affected facility information. Since modifications must be evaluated on a case-by-case basis, the applicant is encouraged to discuss the proposal with a permit engineer and/or hydrogeologist before submitting the application.

Compliance and Financial Qualification Review

A Compliance and Financial Qualification Review is required of the applicant in accordance with State statutes for a new permit. Only the Compliance History Review is necessary for the 5-year Renewal applications.

After the application is submitted, the applicant is sent a letter requesting information regarding their history of complying with environmental rules along with corporate parent, subsidiary or other affiliate information. For applications requiring the Financial Qualification Review, information is requested regarding the applicant's ability to provide the necessary funding for the proper design, construction, operation, maintenance and closure of the facility.

- ✓ Be aware that the Section may request follow-up information to fully address the applicant's compliance history or financial qualifications based on received information.

Format and Contents

The Section requests the application include a cover letter that states whether the application is for a new permit, a permit Renewal or a permit modification and provides a narrative describing the purpose of the application.

The application should consist of the following sections.

Section 1 - General Information

Provide a narrative of general information for the facility, including the following:

1. Name of the proposed or existing LCID landfill.

2. Name, address, telephone number and email address of each person involved in the applicant including the landowner, the business owner, the operator and the person in responsible charge of the daily operations.
3. Name, address, telephone number and email address of the Applicant's consulting engineer.
4. Name, address, telephone number and email address of person to receive permit fee invoices and annual fee invoices.

Section 2 - Property information and maps

In the application for a new LCID landfill, the applicant must provide at least the following information:

1. A narrative description of the landfill location. If the property was previously used for solid waste management activities, provide a description of the operation including permit information and a drawing showing the existing waste boundaries.
2. The total acreage of the property and the size of the area to be used for LCID landfill operation.
3. A complete copy of the current land deed, a legal description of the property, and a copy of any available current plats or survey drawings of the property.
4. A copy of the USGS topographic quadrangle map of the area at a scale of 1:24,000. The property boundaries of the site and the approximate transfer area should be accurately depicted on the map. The map may be a high quality photocopy.
5. Provide a letter from the appropriate City or County official confirming that the siting of the facility will be in conformance with all zoning and local laws, regulations and ordinances, or that no such zoning, laws, regulations or ordinances are applicable.
6. Provide a copy of the FEMA Flood Insurance floodplains map for the area with the property accurately marked on the map.
7. Provide a letter from the Army Corps of Engineers that addresses wetlands determination for the property and compliance with any applicable requirements.

Section 3 - Operation Plan

The Operation Plan should fully describe the following elements:

1. The wastes to be accepted. The disposal of any material other than land clearing waste, inert debris, untreated wood, and yard trash is strictly prohibited.
2. Calculation of cubic yards expected to be managed at the LCID landfill operation over the life of the facility and for each 5-year phase of operation.
3. The counties in which the waste materials will originate.
4. The equipment to be used for the operation of the facility.
5. Site security and access control. Note that access roads must be of all weather construction.
6. The hours of operation.

7. Signs to be posted at the entrance and within the site to direct traffic. Signs must provide a description of the types of acceptable wastes, the types of waste prohibited, operating hours, permit number, and emergency contact phone numbers.
8. The procedures for handling unacceptable wastes including the storage of unacceptable wastes and the frequency of removal of the waste. Unacceptable waste such as waste tires, appliances, construction and demolition waste, and household garbage must not be disposed in the LCID landfill.
9. Surface water control features including run-on and run-off. Describe plan for operation of the facility in wet weather. A copy of the storm water application and permit must be provided.
10. Fire prevention and response actions to be taken in the event of a fire.
11. Where and how the official operating file including copies of all permits, operations plan, inspections, correspondence and site drawings will be maintained.
12. Application of cover material including the frequency and source of the cover material.
13. Provisions for proper closure of the facility including the source of equipment, labor, final cover soil and ground cover.

Section 4 – Sedimentation and Erosion Control Plan

For new LCID landfill operations or existing LCID landfill operations with proposed construction modifications, provide a copy of the sedimentation and erosion control plan as required by local governments and the NC Division of Land Resources. Provide one electronic copy and one paper copy.

Section 5 – Signature Pages

1. Applicant signature page (see attached).
2. Contract operator signature page (see attached).
3. If the landowner of the property is not the applicant, the attached certification form by the land owner is required.

Section 6 – Engineering Drawings

For a new LCID landfill operation or an existing LCID landfill operation with proposed construction modifications, provide drawings showing the transfer station/recycling operation building or modifications. Engineering drawings should be prepared and sealed by a NC professional engineer, drawn to scale, and should include:

- Existing and proposed waste boundaries, contours and elevations
- Property boundaries
- Gates/fences or other access control features
- Utilities such as sewer and stormwater
- Existing and proposed roads
- Storage areas indicating recyclable and waste type and types and sizes of containers
- Leachate and runoff collection details
- Buildings (existing and proposed)
- Concrete foundations/pads and all other ground cover for the site operation
- Distances to wells and residential structures

- Sedimentation basin details
- Existing surface water features (ditches, ponds streams, wetlands, etc.)
- Other pertinent physical characteristics of the site

Section 7 - Application for 5-Year Permit

Each 5-year period of operation requires an application for permit Renewal. The following information must be submitted to the Section within no less than 3 months from the expiration date of the previous Permit to Operate to maintain continuous operation of the LCID landfill.

1. The Compliance Review and General Information contained in Section 1 above.
2. A minimum of two cross-sections along each major axis per operational area that shows the current elevations, the proposed excavation, the proposed elevation at the end of the 5-year phase of operation and the proposed final elevations. The excavation drawing must show the separation to groundwater and bedrock is at least 4 feet.
3. Any updates needed to the Operation Plan.
4. Completed request for Compliance History Review.
5. Letter from local government stating that the LCID complies with local land use and zoning ordinances.

**SOLID WASTE SECTION PERMIT APPLICATION
COMPLIANCE REVIEW REQUEST
AND PERMIT FEE INVOICE REQUEST**

Submit to the Field Operations Branch Head (or Compliance Officer) and to Jeff Skabo

Review Requested by: _____	Date Requested: _____
----------------------------	-----------------------

Name of facility and permit number	_____
Applicant (Owner) Name	_____
Description of Permit Request	_____
Permit Fee Action	_____
Date Application Received	_____
Contact Name and Title	_____
Company	_____
911 Address	_____
Mailing Address	_____
City/State/Zip	_____
Parent Company	_____
Known Subsidiaries	_____
Other known names business has operated under	_____
Known Counties of Operation	_____
Does the applicant have a past or current solid waste permit? If Yes:	Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Facility Type: _____ Permit #: _____
Does the applicant have other DENR permits? If Yes:	Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Division: _____ Facility Type: _____ Permit #: _____
Did the permit applicant submit Financial Assurance cost estimates?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/a <input type="checkbox"/> Not Needed <input type="checkbox"/>
Are the cost estimates sufficient?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/a <input type="checkbox"/>
Other notes	_____

Applicant Signature Page

Name of facility _____

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

Print Name

Date

Title

Business or organization name

Certification by Operator (if different from Applicant)

Name of facility _____ has an agreement with the transfer station/recycling operation owner to operate a LCID landfill operation on the land and the land owner has specifically granted permission for the operation of the facility. I understand that both the operator and owner are jointly and severally liable for improper operations and proper closure of the LCID landfill operation.

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	_____ Print Name	_____ Date
_____ Title	_____ Business or organization name	

NORTH CAROLINA

_____ County

I, _____, a Notary Public for said County and State, do hereby certify that _____ personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the ___ day of _____, 20__.

(Official Seal)

Notary Public _____

My commission expires _____, 20__

**EXCERPT OF NORTH CAROLINA SOLID WASTE MANAGEMENT RULES
FOR LAND CLEARING AND INERT DEBRIS (LCID) LANDFILLS**

15A NCAC 13B .0560 LAND CLEARING AND INERT DEBRIS (LCID) LANDFILLS

Rules .0560 - .0566 of Title 15A Subchapter 13B of the North Carolina Administrative Code (T15A.13B .0560 - .0566); have been adopted covering the siting, design, and permitting of land clearing and inert debris landfills, effective January 4, 1993.

History Note: *Authority G.S. 130A-294;*
 Eff. January 4, 1993.

15A NCAC 13B .0561 RESERVED FOR FUTURE CODIFICATION

15A NCAC 13B .0562 BENEFICIAL FILL

A permit is not required for beneficial fill activity that meets all of the following conditions:

- (1) The fill material consists only of inert debris strictly limited to concrete, brick, concrete block, uncontaminated soil, rock, and gravel.
- (2) The fill activity involves no excavation.
- (3) The purpose of the fill activity is to improve land use potential or other approved beneficial reuses.
- (4) The fill activity is not exempt from, and must comply with, all other applicable Federal, State, and Local laws, ordinances, rules, and regulations, including but not limited to zoning restrictions, flood plain restrictions, wetland restrictions, mining regulations, sedimentation and erosion control regulations. Fill activity shall not contravene groundwater standards.

History Note: *Authority G.S. 130A-294;*
 Eff. January 4, 1993.

15A NCAC 13B .0563 APPLICABILITY REQ. FOR LAND CLEARING/INERT DEBRIS (LCID) LANDFILLS

Management of land clearing and inert debris shall be in accordance with the State hierarchy for managing solid waste as provided for under G.S. 130A-309.04(a). Disposal in a landfill is considered to be the least desirable method of managing land clearing and inert debris. Where landfilling is necessary, the requirements of this Rule apply.

- (1) An individual permit from the Division of Solid Waste Management is not required for Land Clearing and Inert Debris (LCID) landfills that meet all of the following conditions:
 - (a) The facility is to be operated for the disposal of land clearing waste, inert debris, untreated wood, and yard trash. Operations must be consistent and in compliance with the local government solid waste management plan as approved by the Division of Solid Waste Management.
 - (b) The total disposal area is under two acres in size.
 - (c) The facility and practices comply with the siting criteria under Rule .0564, and operational requirements under Rule .0566.
 - (d) The fill activity is not exempt from, and must comply with all other Federal, State, or Local laws, ordinances, Rules, regulations, or orders, including but not limited to zoning restrictions, flood plain restrictions, wetland restrictions, sedimentation and erosion control requirements, and mining regulations.
- (2) Where an individual permit is not required, the following applies:
 - (a) The owner of the land where the landfill is located must notify the Division on a prescribed form, duly signed, notarized, and recorded as per Sub-item (2)(b) of this Rule. The operator of the landfill, if different from the land owner, shall also sign the notification form.

- (b) The owner must file the prescribed notification form for recordation in the Register of Deeds' Office. The Register of Deeds shall index the notification in the grantor index under the name of the owner of the land in the county or counties in which the land is located. A copy of the recorded notification, affixed with the Register's seal and the date, book and page number of recording shall be sent to the Division of Solid Waste Management.
 - (c) When the land on which the Land Clearing and Inert Debris Landfill is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument a statement that the property has been used as a Land Clearing and Inert Debris Landfill and a reference by book and page to the recordation of the notification.
- (3) An individual permit is required, except for landfills subject to Item (5) of this Rule, for the construction and operation of a Land Clearing and Inert Debris (LCID) landfill when:
- (a) The facility is to be operated for the disposal of land clearing waste, inert debris, untreated wood, and yard trash. Operations must be consistent and in compliance with the local government solid waste management plan as approved by the Division of Solid Waste Management, and
 - (b) The total disposal area is greater than two acres in size.
- (4) Individual permits for land clearing and inert debris landfills shall be issued for not more than five years.
- (5) Landfilling of land clearing and inert debris generated solely from, and within the right of way of, North Carolina Department of Transportation projects shall be subject to the following:
- (a) Only waste types as described in Sub-item (1)(a) of this Rule may be disposed of within the Department of Transportation right of way.
 - (b) Waste is landfilled within the project right of way from which it was generated.
 - (c) The disposal area shall not exceed two contiguous acres in size.
 - (d) Disposal sites shall comply with the siting requirements of Rule .0564 of this Section except for Item (10).
 - (e) Disposal sites are not subject to the requirements of Item (2) of this Rule and Rule .0204 of this Subchapter.
- (6) Landfills that are currently permitted as demolition landfills are required to comply with the following:
- (a) Only waste types as described in Sub-item (3)(a) of this Rule may be accepted for disposal, as of the effective date of this Rule unless otherwise specified in the existing permit.
 - (b) Operations must be in compliance with Rule .0566 of this Section as of the effective date of this Rule.
 - (c) Existing demolition landfills must comply with the siting criteria requirements of these Rules as of January 1, 1998 or cease operations and close in accordance with these Rules.

*History Note: Authority G.S. 130A-294; 130A-301;
Eff. January 4, 1993.*

15A NCAC 13B .0564 SITING CRITERIA FOR LAND CLEARING AND INERT DEBRIS (LCID) LANDFILLS

The following siting criteria shall apply for Land Clearing and Inert Debris (LCID) landfills:

- (1) Facilities or practices, shall not be located in the 100-year floodplain.
- (2) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife.
- (3) Facilities or practices shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 CFR Part 17 which is hereby incorporated by reference including any subsequent amendments and editions. This material is available for inspection at the Department of Environment, Health, and Natural Resources, Division of Solid Waste Management, 401 Oberlin Road, Raleigh, North Carolina 27605 where copies can be obtained at no cost.
- (4) Facilities or practices shall not damage or destroy an archaeological or historical site.
- (5) Facilities or practices shall not cause an adverse impact on a state park, recreation or scenic area, or any other lands included in the state nature and historic preserve.
- (6) Facilities shall not be located in any wetland as defined in the Clean Water Act, Section 404(b).
- (7) It must be shown that adequate suitable soils are available for cover, either from on or off site.

- (8) Land Clearing and Inert Debris landfills shall meet the following surface and ground water requirements:
 - (a) Facilities or practices shall not cause a discharge of pollutants into waters of the state that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES), under Section 402 of the Clean Water Act, as amended.
 - (b) Facilities or practices shall not cause a discharge of dredged materials or fill material into waters of the state that is in violation of the requirements under Section 404 of the Clean Water Act, as amended.
 - (c) Facilities or practices shall not cause non-point source pollution of waters of the state that violates assigned water quality standards.
 - (d) Waste in landfills with a disposal area greater than two acres shall be placed a minimum of four feet above the seasonal high water table, except where an alternative separation is approved by the Division.
 - (e) Waste in landfills with a disposal area less than two acres shall be placed above the seasonal high water table.
- (9) The facility shall meet the following minimum buffer requirements:
 - (a) 50 feet from the waste boundary to all surface waters of the state as defined in G.S. 143-212.
 - (b) 100 feet from the disposal area to property lines, residential dwellings, commercial or public buildings, and wells.
 - (c) Buffer requirements may be adjusted as necessary to insure adequate protection of public health and the environment.
- (10) The facility shall meet all requirements of any applicable zoning ordinance.

*History Note: Authority G.S. 130A-294;
Eff. January 4, 1993.*

15A NCAC 13B .0565 APPLICATION REQUIREMENTS FOR LAND CLEARING/INERT DEBRIS (LCID) LANDFILLS

Five sets of plans, maps, and reports shall be required with each application. The seal of a professional engineer is required when submitting plans for a Land Clearing and Inert Debris (LCID) landfill.

- (1) The following information is required in order to review and approve the siting of a Land Clearing and Inert Debris (LCID) landfill:
 - (a) An approval letter from the unit of local government having zoning authority over the area where the facility is to be located stating that the site meets all of the requirements of the local zoning ordinance, or that the site is not zoned.
 - (b) Location on a county road map.
 - (c) Information showing that the bottom elevation of the waste shall be four feet above the seasonal high water table. Seasonal high water table elevations shall be obtained from on site test borings, test pits, or from other geological or water table investigations, studies, or reports from the immediate area of the proposed facility.
 - (d) A written report indicating that the facility shall comply with all the requirements set forth under Rule .0564 of this Section.
 - (e) A copy of the deed or other legal description of the site that would be sufficient as a description in an instrument of conveyance, showing property owner's name.
 - (f) Any other information pertinent to the suitability of the proposed facility.
- (2) The following shall be provided on a map or aerial photograph with a scale of at least one inch equals four hundred feet showing the area within one-fourth mile of the site:
 - (a) Entire property or portion thereof owned or leased by the person providing the disposal site.
 - (b) Location of all homes, buildings, public or private utilities, roads, wells, watercourses, water or other impoundments, and any other applicable features or details.
 - (c) 100-year flood plain boundaries, if any.
 - (d) Wetland boundaries, if any.
 - (e) Historical or archaeological sites, if any.
 - (f) Park, scenic, or recreation area boundaries, if any.

- (3) Development and design plans and details, at a scale of at least one inch equals one hundred feet with one inch equals forty feet preferred, and specifications containing the following information shall be submitted with the application for a proposed Land Clearing and Inert Debris (LCID) landfill:
- (a) Property or site boundary, fully dimensioned with bearings and distances, tied to North Carolina grid coordinates where reasonably feasible.
 - (b) Easements and right-of-ways.
 - (c) Existing pertinent on site and adjacent structures such as houses, buildings, wells, roads and bridges, water and sewer utilities, septic fields, and storm drainage features.
 - (d) Proposed and existing roads, points of ingress and egress along with access control such as gates, fences, or berms.
 - (e) Buffer and set back lines along with the buffered boundary or feature.
 - (f) Springs, streams, creeks, rivers, ponds, and other waters and impoundments.
 - (g) Wetlands, if any.
 - (h) Boundary of the proposed waste area.
 - (i) Existing topography with contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify existing topographic conditions.
 - (j) Proposed excavation, grading, and final contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify proposed grading. Excavation, grading, and fill material side slopes shall not exceed three to one (3:1).
 - (k) Where on site borrow for operational and final cover is proposed, indicate the borrow excavation and grading plan with contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify proposed grading.
 - (l) Proposed surface water control features and devices such as slope drains, storm water pipes, inlets, culverts, and channels.
 - (m) Information showing that the project meets the requirements of 15A NCAC 4, Sedimentation Control Rules.
 - (n) Location of test borings or test pits, if used to determine the seasonal high water table elevation, shall be shown on the plans.
 - (o) A minimum of two cross-sections, one each along each major axis, per operational area showing:
 - (i) Original elevations.
 - (ii) Proposed excavation.
 - (iii) Proposed final elevations.
- (4) An operational plan addressing the requirements under Rule .0566 of this Section and containing the following information shall be submitted with the application for a proposed Land Clearing and Inert Debris (LCID) landfill:
- (a) Name, address, and phone number of individual responsible for operation and maintenance of the facility.
 - (b) Projected use of the land after completion.
 - (c) Description of systematic usage of disposal area, operation, orderly development and closure of the landfill.
 - (d) Type, source, and quantity of waste to be accepted.
 - (e) An emergency contingency plan, including fire fighting procedures.

*History Note: Authority G.S. 130A-294;
Eff. January 4, 1993.*

15A NCAC 13B .0566 OPERATIONAL REQ. FOR LAND CLEARING/INERT DEBRIS (LCID) LANDFILLS

Land Clearing and Inert Debris (LCID) landfills shall meet the following operational requirements:

- (1) Operational plans shall be approved and followed as specified for the facility.
- (2) The facility shall only accept those solid wastes which it is permitted to receive.
- (3) Solid waste shall be restricted to the smallest area feasible and compacted as densely as practical into cells.
- (4) Adequate soil cover shall be applied monthly, or when the active area reaches one acre in size, whichever occurs first.
- (5) 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 Division may require further action in order to correct any condition which is or may become injurious to the public health, or a nuisance to the community.
- (6) Adequate erosion control measures, structures, or devices shall be utilized to prevent silt from leaving the site and to prevent excessive on site erosion.
 - (7) Provisions for a ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of landfill development.
 - (8) The facility shall be adequately secured by means of gates, chains, berms, fences, etc. to prevent unauthorized access except when an operator is on duty. An attendant shall be on duty at all times while the landfill is open for public use to assure compliance with operational requirements and to prevent acceptance of unauthorized wastes.
 - (9) Access roads shall be of all-weather construction and properly maintained.
 - (10) Surface water shall be diverted from the working face and shall not be impounded over waste.
 - (11) Solid waste shall not be disposed of in water.
 - (12) Open burning of solid waste is prohibited.
 - (13) The concentration of explosive gases generated by the facility shall not exceed:
 - (a) Twenty-five percent of the lower explosive limit for the gases in facility structures.
 - (b) The lower explosive limit for the gases at the property boundary.
 - (14) Leachate shall be properly managed on site through the use of current best management practices.
 - (15) Should the Division deem it necessary, ground water or surface water monitoring, or both, may be required as provided for under Rules .0601 and .0602 of this Subchapter.
 - (16) A sign shall be posted at the facility entrance showing the contact name and number in case of an emergency and the permit number. The permit number requirement is not applicable for facilities not requiring an individual permit.

*History Note: Authority G.S. 130A-294;
Eff. January 4, 1993.*

**SOLID WASTE SECTION PERMIT APPLICATION
COMPLIANCE REVIEW REQUEST
AND PERMIT FEE INVOICE REQUEST**

Submit to the Field Operations Branch Head (or Compliance Officer) and to Jeff Skabo

Review Requested by: _____	Date Requested: _____
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Name of facility and permit number	_____
Applicant (Owner) Name	_____
Description of Permit Request	_____
Permit Fee Action	_____
Date Application Received	_____
Contact Name and Title	_____
Company	_____
911 Address	_____
Mailing Address	_____
City/State/Zip	_____
Parent Company	_____
Known Subsidiaries	_____
Other known names business has operated under	_____
Known Counties of Operation	_____
Does the applicant have a past or current solid waste permit? If Yes:	Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Facility Type: _____ Permit #: _____
Does the applicant have other DENR permits? If Yes:	Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Division: _____ Facility Type: _____ Permit #: _____
Did the permit applicant submit Financial Assurance cost estimates?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/a <input type="checkbox"/> Not Needed <input type="checkbox"/>
Are the cost estimates sufficient?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/a <input type="checkbox"/>
Other notes	_____