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Permit Renewal Application

Durham LCID Landfill
Durham, North Carolina
NC Solid Waste Permit No. 32-J

Prepared For:

Waste Industries, LLC
3301 Benson Drive, Suite 601
Raleigh, North Carolina 27609



APPROVED
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

Date 02/20/2009 By *Patricia M. Backus*
A1P2D12

Prepared By:

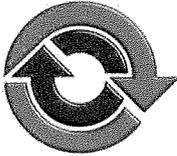


July 2008
Rev. February 2009

Permit Renewal Application

**Durham LCID Landfill
(NC Solid Waste Permit No. 32-J)
Durham, North Carolina**

Prepared for:



LLC pmk 2/19/09
Waste Industries, Inc.
3301 Benson Drive, Suite 601
Raleigh, North Carolina

RSG Project No. DURHAM-08-2

[Handwritten Signature]
John M. Gardner, P.E.
Senior Project Manager

SEAL
21278
NORTH CAROLINA
PROFESSIONAL
ENGINEER
JOHN M. GARDNER

7/14/08

July 2008

Signature page of applicant –

Name of facility Durham LCID Landfill

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

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


Signature

Jerry Johnson
Print Name

2/2/09
Date

Vice President
Title

Waste Industries LLC
Business or organization name

DURHAM LCID LANDFILL
PERMIT RENEWAL APPLICATION

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ATTACHMENTS

Attachment A	Operations Manual
Attachment B	Deed
Attachment C	Ground Water Evaluation
Attachment D	Natural Heritage Program Letter
Attachment E	Approval Letter
Attachment F	Drawings

**DURHAM LCID LANDFILL
PERMIT RENEWAL APPLICATION**

DRAWING LIST

Drawing Title	Drawing No.	Prepared by
Cover Sheet	--	Sungate
Preliminary Master Plan	MP1	Sungate
Excavation Plan	G-1	Sungate
Restoration Plan	G-2	Sungate
Cross-Section Plan	PP-1	Sungate
S&E Plan	SE-1	Sungate
Sedimentation and Erosion Control Details	SE-2	Sungate
Landscape Plan	L-1	Sungate
Location Map	S-1	Sungate
Plan and Typical Cross Section	X1	Richardson Smith Gardner

1.0 INTRODUCTION

This application represents a permit renewal submittal by Richardson Smith Gardner & Associates, Inc. on behalf of Waste Industries USA, Inc. for the Durham District Campus Land Clearing and Inert Debris (LCID) Landfill. This application presents a recompiled and consolidated package consisting of portions of the original (1999) permit application (as prepared by Sungate Design Group, P.A.) and subsequent permit modifications submitted by various parties. In some cases, revised application drawings are being submitted in place of the original documents for added clarity and updating. *However, it is noted that there are no changes being proposed to the facility design or operation in this renewal application and all site design and operations are intended to be consistent with the most current site modifications on file with the North Carolina Department of Environment and Natural Resources (NCDENR), as summarized below.*

The Durham LCID facility, located at 148 Stone Park Court, Durham, North Carolina is currently operated as the Phase III portion of the Durham District Campus facility. The District Campus is a solid waste management facility located on approximately 37 acres within the Stone Road Industrial Park, within Durham County, North Carolina. The LCID landfill is located on approximately 12 acres within the westernmost portion of the property. In general, this (LCID) site is situated within the prior, abandoned Borden Brick Mine. This operation is generally considered a reclamation project that converted the abandoned mine into a useable industrial site. The current use includes the controlled disposal of land clearing and inert debris, with some recycling. This industrial site development also contains administrative offices and trucking terminal (Phase I) and a transfer station (Phase II) within the facility property.

A brief summary of the NCDENR permitting history associated with the Durham LCID Landfill is provided below

- ~ (Original) Permit to Construct, Permit No. 32-J, on April 16, 1999.
- ~ Permit Modification No. 1: August 18, 1999, Permit to Operate, Phase 1, Cell 1.
- ~ Permit Modification No. 2: June 19, 2000, Permit to Operate, Phase 1, Cell 2.
- ~ Permit Modification No. 3: November 15, 2002, to allow wood recycling to take place on site.
- ~ Permit Modification No. 4: August 12, 2003, Permit to Operate, Phase 1 Cells 1 - 3 Permit Renewal.

2.0 SITING CRITERIA

The following summarizes siting criteria for the Durham LCID as established by the NCDENR Rule Section 0564 and is a summary of previous information provided by others and previously approved by the NCDENR for this site.

.0564(1) Facilities or practices, shall not be located in the 100-year floodplain.

The facility is adjacent an unnamed tributary which is not included in mapping associated with flooding. Consequently, the site is not located within the 100-year floodplain..

.0564(2) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish or wildlife.

As contained in the original permit application submittal information, NCDENR provided correspondence dated September 15, 1998 and included statements that "The North Carolina Natural Heritage Program (NC NHP) has no records of high quality natural communities, rare species.....at or within a 1.0 mile radius of the proposed LCID site, Durham, Durham County, North Carolina." A copy of this letter is included in **Attachment D**.

.0564(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.

Refer to the response associated with Rule Section .0564(2) above.

.0564(4) Facilities or practices shall not damage or destroy an archeological or historical site.

As contained in the original permit application submittal information, NCDENR provided correspondence dated September 15, 1998 and included statements that "The North Carolina Natural Heritage Program (NC NHP) has no records of..... Significant Heritage Areas.....at or within a 1.0 mile radius of the proposed LCID site, Durham, Durham County, North Carolina." A copy of this letter is included in **Attachment D**.

.0564(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.

As contained in the original permit application submittal information, NCDENR provided correspondence dated September 15, 1998 and included statements that "The North Carolina Natural Heritage Program (NC NHP) has no records of..... scenic river, state park, recreational or scenic areas.....at or within a 1.0 mile radius of the proposed LCID site, Durham, Durham County, North Carolina." A copy of this letter is included in **Attachment D**.

.0564(6) Facilities shall not be located in any wetland as defined in the Clean Water Act, Section 404(b).

Referencing the original permit documents, the property contains no wetlands.

.0564(7) It must be shown that adequate suitable soils are available for cover, either from on or off site.

Based on historical construction estimates and current site topography, it is expected that there will be a surplus of suitable soils that will be generated from the construction (excavation) of future cells. In fact, the soil quantities are sufficient enough that on-site soils are planned to be used for all operational cover, final cover, and perimeter berm construction.

.0564(8) Land Clearing and Inert Debris landfills shall meet the following 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.*

Based on the original site grading and drainage plan (which is unchanged in this renewal application), and as reviewed and approved by both City of Durham and NCDENR, the landfill incorporates a soil erosion and sediment control plan, including associated features (perimeter channels, diversions, and a sedimentation basin structure) that will prevent pollutants, dredged materials and non-point source pollution from entering waters of the

state. Similarly, the waste will be placed a minimum of four feet above the seasonal high water table. This can be seen on the cross-sections shown on Sheet No. PP-1 of the original (approved) permit drawings included as **Attachment F**.

- .0564(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. 143212.*
 - 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.*

Figure 2 shows the location of all surface waters, property lines, residential dwellings, commercial and public buildings. The facility maintains adequate buffers on all of these items.

- .0564(10) The facility shall meet all requirements of any applicable zoning ordinance.*

The site is zoned Heavy Industrial (I-3) and is within an industrial subdivision. Since Durham City-County does not have a mechanism for approving a solid waste landfill within this zoning classification, a temporary building permit was issued at the time of the original permitting. This approval was renewed in 2003 and at that time, the renewal by Durham City-County was issued for a 10-year period and now expires on June 30, 2013. A copy of this permit is included in **Attachment E**.

3.0 APPLICATION REQUIREMENTS

Attachment E includes a copy of the Durham City-County approval of the Durham LCID facility with respect to local approvals, zoning, etc. The general vicinity of the site is presented on **Figure 1**. The site location is presented on a regional road map on **Figure 2**.

With respect to groundwater levels, a previous site investigation was conducted by Terra Tech, on behalf of Sungate. A copy of the report is included in **Attachment C**. At that time, two borings (B-2 and B-3) were drilled within the landfill footprint to a depth of approximately 10 feet. Groundwater levels were obtained at that time. Landfill basegrades apparently accounted for these levels to maintain the required four (4) foot separation with respect to seasonal high groundwater levels. Additionally, cells

constructed to date (Cells 1 through 3) have not encountered any groundwater.

Section 2.0 summarizes the siting criteria. A copy of the deed is provided in **Attachment B. Figure 3** presents an aerial photograph of the Durham LCID landfill, including identification of a 1/4-mile area surrounding the site.

Table 3.0, below, lists the requirements to be provided on development/design drawings/figures and indicates which drawing presents the listed requirements/features.

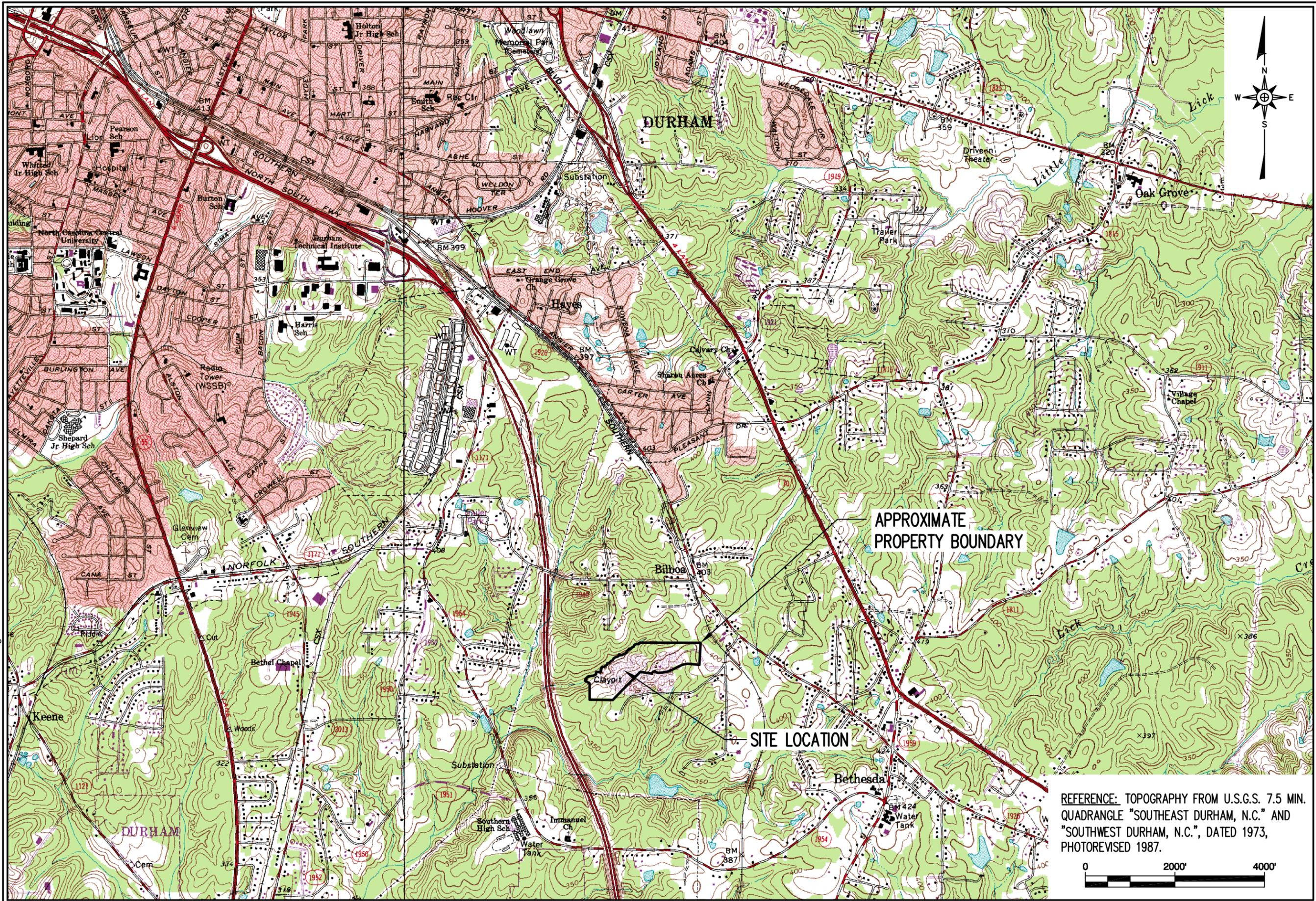
Table 3.0
Permit Application Drawing Requirements

Requirement	Drawing
Property	Figure 1
Location of homes, buildings, utilities, roads and water	Figure 2
100-year flood plain boundaries	Not Applicable
Wetland Boundaries	Not Applicable
Historical or archaeological sites	Not Applicable
Park, scenic or recreation area boundaries	Not Applicable
Site boundary tied to North Carolina grid coordinates	Drawing No. X1
Easements and right-of-ways	Drawing No. MP1
Existing on site and adjacent structures	Drawing No. MP1
Proposed and existing road and access control	Drawing No. MP1
Buffer and set back lines	Drawing No. MP1
Springs, streams, creeks, rivers, ponds and other waters	Drawing No. MP1
Wetlands	Not Applicable
Boundary of the waste area	Drawing No. X1
Existing topography	Drawing No. G-1
Proposed excavation, grading and final contours	Drawings No. G-1 and G-2
On site borrow areas	Drawing No. G-1
Surface water control features and devices	Drawings No. G-2 and SE-1
Location of test borings or test pits	Drawing No. G-2
Cross-sections	Drawings No. PP-1 and X1

Attachment A provides a copy of the operational plan for the Durham LCID Landfill.

Figures

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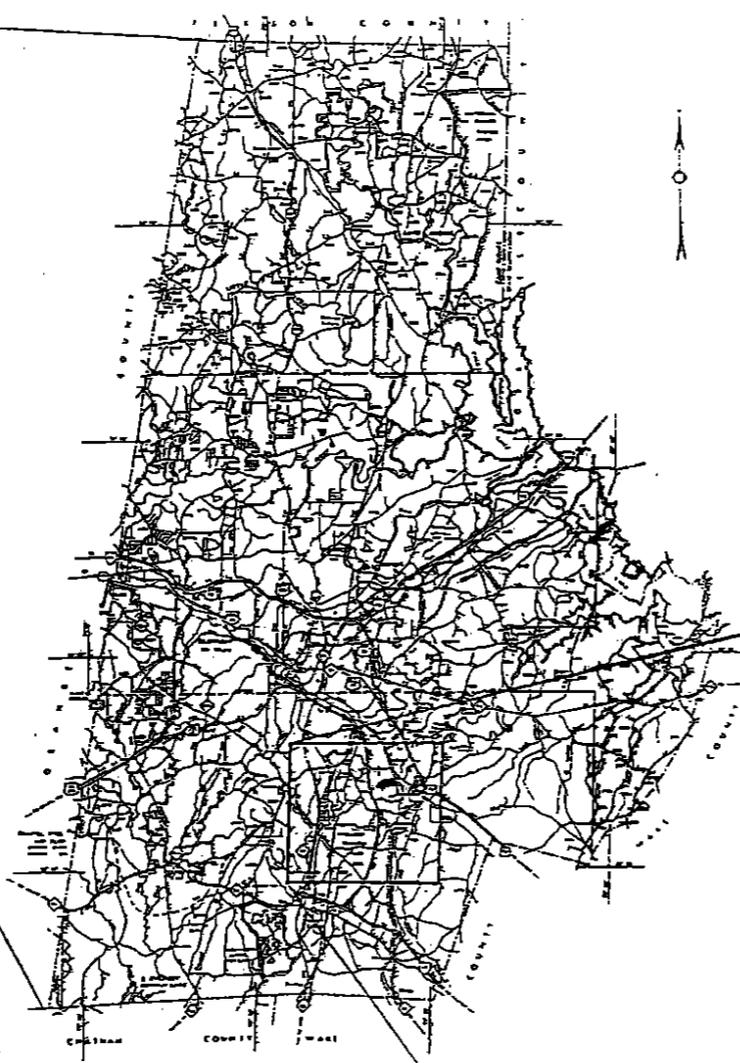
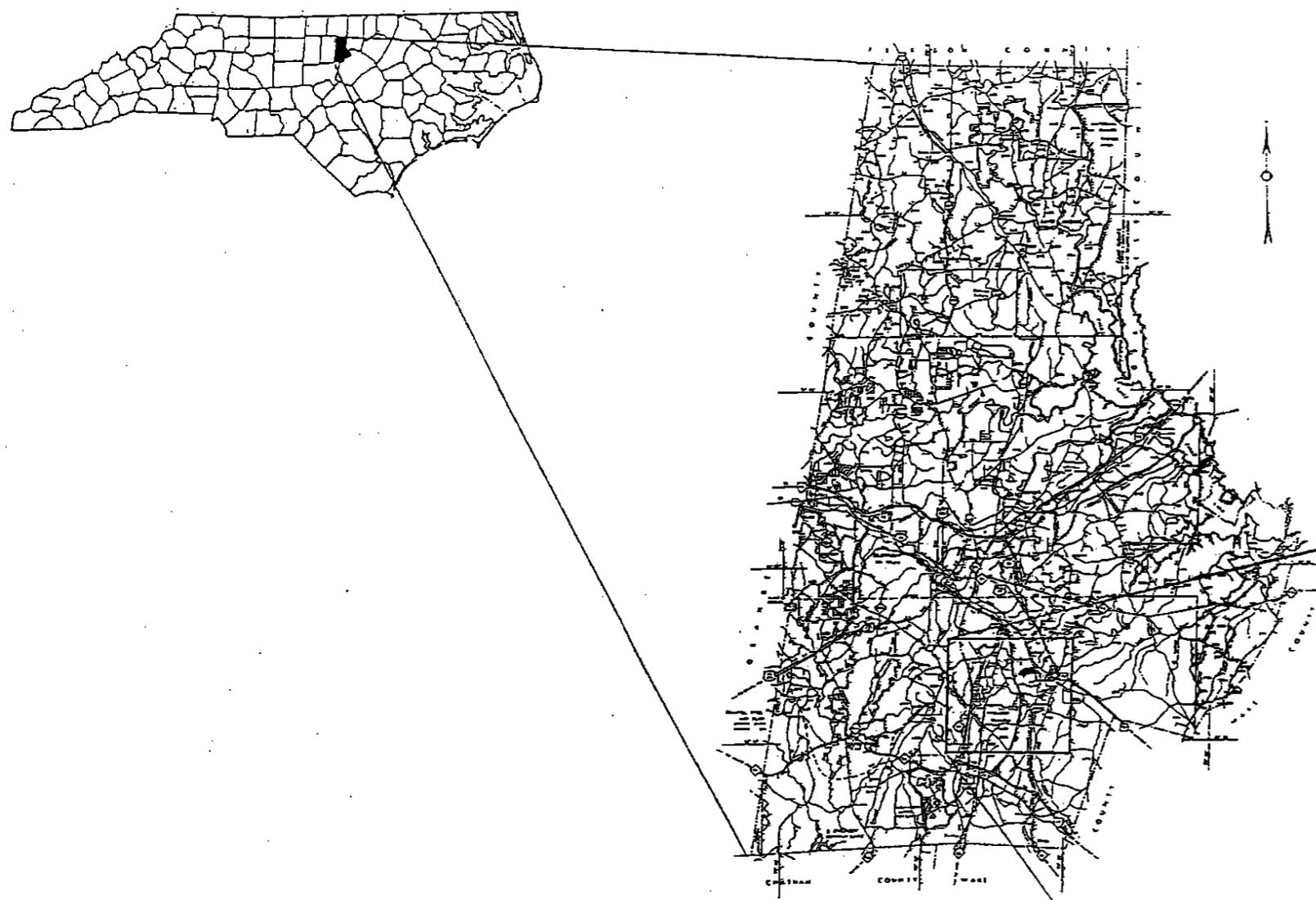


REFERENCE: TOPOGRAPHY FROM U.S.G.S. 7.5 MIN. QUADRANGLE "SOUTHEAST DURHAM, N.C." AND "SOUTHWEST DURHAM, N.C.", DATED 1973, PHOTOREVISED 1987.

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 www.rsgengineers.com
 14 N. Boylan Ave.
 Raleigh, N.C. 27603
 ph: 919-826-0577
 fax: 919-826-3899

FIGURE NO.	1
SCALE:	AS SHOWN
CHECKED BY:	J.M.G.
PROJECT NO.	DURHAM 08-2
FILE NAME	DURHAM-B0062
DRAWN BY:	C.T.J.
DATE:	Jul. 2008

TITLE:
**DURHAM LCID LANDFILL
 SITE LOCATION MAP**



LOCATION MAP FOR:
LC.I.D. LANDFILL
WASTE INDUSTRIES
DURHAM DISTRICT CAMPUS
DURHAM, NORTH CAROLINA

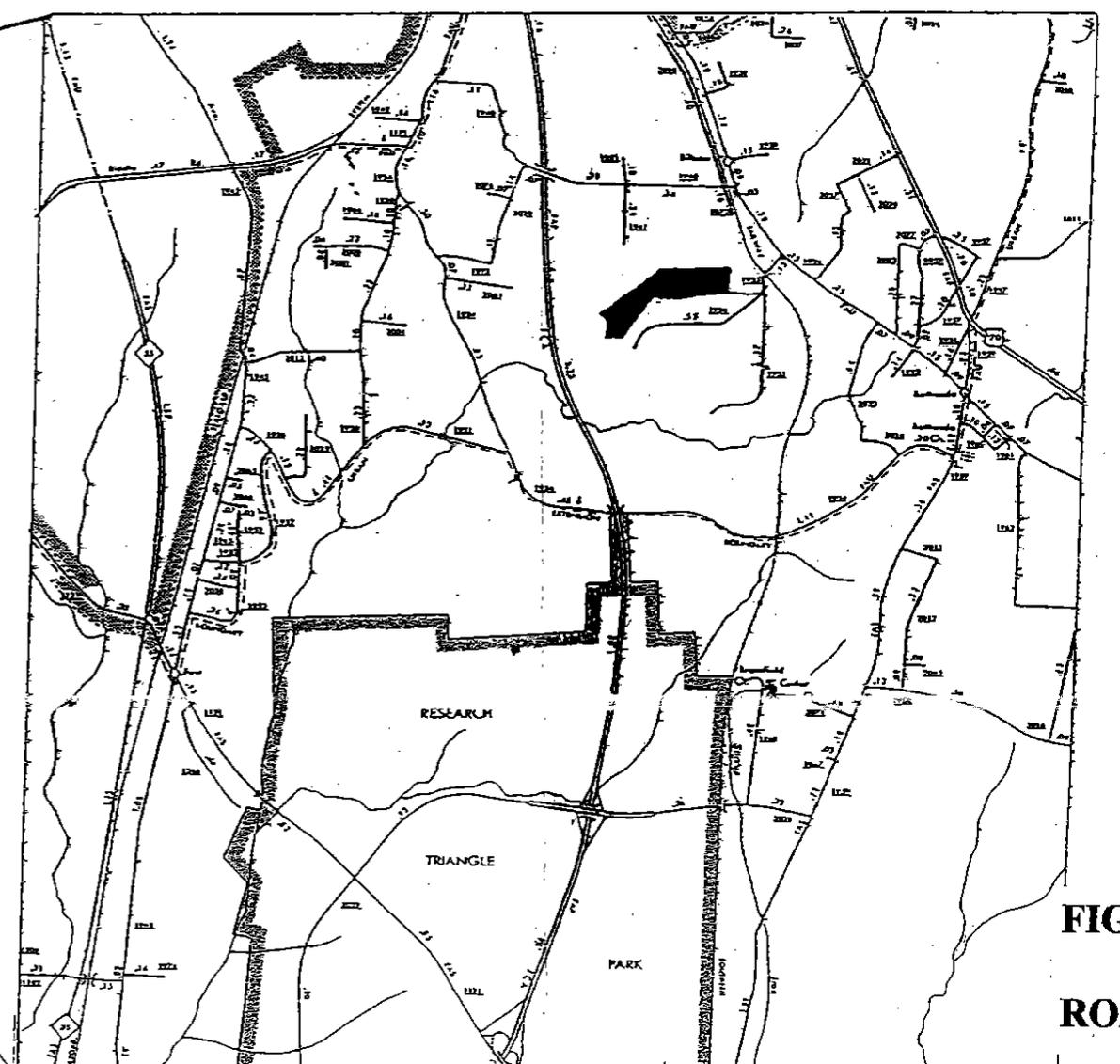


FIGURE 2
ROAD MAP

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LEGEND

- PROPERTY LINE (SEE REFERENCE 2)
- QUARTER MILE RADIUS FROM PROPERTY LINE
- LCID LANDFILL LIMITS
- UTILITY EASEMENT (SEE REFERENCE 3)

NOTES

1. AS NOTED IN THE APPLICATION FOR LAND CLEARING AND INERT DEBRIS LANDFILL FOR WASTE INDUSTRIES, DURHAM DISTRICT, PREPARED BY SUNGATE DESIGN GROUP P.A., THERE ARE NO WETLANDS LOCATED ON THIS SITE, SEE REFERENCE 4.
2. AS NOTED IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES LETTER DATED SEPTEMBER 15, 1998, THERE ARE NO SCENIC RIVERS, STATE PARKS, RECREATIONAL OR SCENIC AREAS, OR SIGNIFICANT NATURAL HERITAGE AREAS AT OR WITHIN A 1.0 MILE RADIUS OF THE SITE, PER REFERENCE 4.

REFERENCES

1. AERIAL IMAGERY FROM U.S.D.A. NAIP (NATIONAL AGRICULTURE IMAGERY PROGRAM) ONE METER GROUND SAMPLE DISTANCE COMPRESSED COUNTY MOSAIC. DATE OF PHOTOGRAPHY IS YEAR 2006.
2. PROPERTY LINE FROM FIELD SURVEY BY SURVEYING SOLUTIONS, P.C., DATED APRIL 2000.
3. PUBLIC SEWER 30' EASEMENT AND PUBLIC SERVICE CO. 50' EASEMENT LOCATIONS ARE APPROXIMATE.
4. LCID LANDFILL LIMITS FROM APPLICATION FOR LAND CLEARING AND INERT DEBRIS LANDFILL DATED FEBRUARY 1999, PREPARED BY SUNGATE DESIGN GROUP, P.A.



DATE	NO.	REVISION

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 Raleigh, N.C. 27603
 www.rsgengineers.com
 ph: 919-828-0077
 fax: 919-828-3899

PROJECT TITLE:
 DURHAM LCID LANDFILL

DRAWING TITLE:
 AERIAL PHOTOGRAPH WITH QUARTER-MILE RADIUS

DESIGNED BY: J.M.G	DRAWN BY: C.T.J.
CHECKED BY:	PROJECT NO.: DURHAM 08-2
SCALE: AS SHOWN	DATE: JULY 2008
FILE NAME: DURHAM-00063	DRAWING NO.:
SHEET NO.:	DRAWING NO.:

FIG. 3

Attachment A

Operations Manual

Operations Manual
Durham LCID Landfill
Durham County, North Carolina

Prepared for:
Waste Industries, Inc.
Raleigh, North Carolina

July 2008

PERMIT ISSUE DOCUMENTS

Prepared by:



DURHAM LCID LANDFILL

OPERATIONS MANUAL

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FIGURES

Figure 1 Durham LCID Landfill Site Location Map
Figure 2 Durham LCID Landfill Recycling /Storage

SECTION 1.0 GENERAL FACILITY OPERATIONS

1.1 OVERVIEW

This Operations Manual was prepared for the Durham LCID Landfill located within the Stone Road Industrial Park in Durham, North Carolina (see **Figure 1**). The Durham LCID facility, located at 148 Stone Park Court, Durham, North Carolina is currently operated as the Phase III portion of the Durham District Campus facility. The District Campus is a solid waste management facility located on approximately 37 acres within the Stone Road Industrial Park, within Durham County, North Carolina, and is permitted by Durham County to operate through June 30, 2013 (see **Attachment E** of the Permit Renewal Application). The LCID landfill is located on approximately 12 acres within the westernmost portion of the property. In general, this (LCID) site is situated within the prior, abandoned Borden Brick Mine. This operation is generally considered a reclamation project that converted the abandoned mine into a useable industrial site. The current use includes the controlled disposal of land clearing and inert debris, with some recycling. This industrial site development also contains administrative offices and trucking terminal (Phase I) and a transfer station (Phase II) within the facility property.

The closure of the landfill will be a continued function of the development with each area receiving a one foot (minimum) layer of cover material. Each completed area shall be graded to provide uniform side slopes and top grades as shown on the plans (see **Attachment F** of the Permit Renewal Application). As a protection of the side slopes, a top berm shall be constructed along the perimeter and diversion ditches installed to direct surface flow to a series of slope drains. A ditch is proposed along the slope toe to convey the runoff to the on-site sediment/stormwater basin. A "closure" bond has been posted for landscaping, seeding and plant materials.

The final development of the property is anticipated to be incorporated into the Durham District Campus plans as outdoor storage areas and a possible future building site. In order for the area to be used as a building site, the fill operation and materials will be monitored to insure beneficial fill only and controlled placement and compaction.

Solid waste shall be restricted to the smallest area feasible and compacted as densely as practical into cells. Adequate soil cover shall be applied monthly, or when the active area reaches one acre in size, whichever occurs first. At the completion of any phase, or upon revocation of a permit, the disposal area must be covered with a minimum of one foot of suitable soil cover sloped to allow surface water runoff in a controlled manner. This must occur within 120 days. There shall be no burning of solid waste.

The information contained herein was prepared to provide facility personnel with a clear understanding of how the Design Engineer assumed that the completed facility would be operated. While deviations from the operations outlined here may be acceptable, they should be reviewed and approved by the Design Engineer.

1.1.1 Processing Overview

The processing at the site generally involves gross sorting of materials, grinding of land clearing debris materials, and screening of the material into three (3) products as follows:

- Mulch
- Mulch and Soil Combination (Amended Soil)
- Soil

1.2 CONTACT INFORMATION

All correspondence and questions concerning the operation of the Durham LCID Landfill should be directed to the appropriate contact personnel, Engineer, and State personnel listed below. For fire or police emergencies dial 911.

1.2.1 Owner/Operator

Waste Industries USA, Inc.
Attn: Richard Johnson, General Manager
148 Stone Park Court
Durham, NC 27703
Phone: (919) 596-1363

1.2.2 Engineer

Richardson Smith Gardner & Associates, Inc.
Attn: John M. Gardner, P.E.
14 N. Boylan Avenue
Raleigh NC 27603
Phone: (919) 828-0577
Fax: (919) 828-3899
email: john@rsgengineers.com

1.2.3 North Carolina Department of Environment and Natural Resources

North Carolina Department of Environment and Natural Resources
401 Oberlin Road, Suite 150
Raleigh, NC 27605
Phone: (919) 508-8400
Fax: (919) 733-4810

Division of Waste Management (DWM) - Solid Waste Section:

Branch Head:

Ed Mussler, III, P.E.

Division of Land Resources - Land Quality Section:

Raleigh Office: 3800 Barrett Drive, P.O. Box 27687
Raleigh, NC 27611
Phone: (919) 571-4700

1.3 ACCESS CONTROL

Limiting access to the Durham LCID Landfill is important for the following reasons:

- Unauthorized and illegal dumping of waste materials is prevented.
- Trespassing, and injury resulting therefrom, is discouraged.
- The risk of vandalism is greatly reduced.

The facility attendant will be on duty at all times when the facility is open for public use to enforce access restrictions.

1.3.1 Physical Restraints

The site will be accessed by Stone Court. A guard house (trailer) is provided at the entrance. Access to the landfill includes an all-weather access road. The entrance off of Stone Court is securely locked during non-operating hours.

1.3.2 Security

Frequent inspections of gates and fences is performed by facility personnel. Evidence of trespassing, vandalism, or illegal operation are reported to the Owner.

1.4 SIGNAGE

A prominent sign containing the information required by the DWM will be placed just inside the main gate. This sign will provide information on the facility's name, operating hours, emergency contact information, and permit number. Service and maintenance roads for use by operations personnel will be clearly marked and barriers (e.g., traffic cones, barrels, etc.) will be provided as required.

1.5 COMMUNICATIONS

Due to the close proximity of the processing area and the guard house, communication will be maintained between the guard house and the processing areas verbally. The guard house will have a telephone (land or cell) in case of emergency and for the conduct of day-to-day business. Emergency telephone numbers are displayed in the guard house.

1.6 FIRE SAFETY

The possibility of fire at the landfill must be anticipated in the daily operation of the facility. A combination of factory installed fire suppression systems and/or portable fire extinguishers will be operational on all heavy pieces of equipment at all times. For larger or more serious outbreaks, the local fire department will respond. A 25 foot clear perimeter will be maintained around the processing area and between storage piles to allow access by fire department personnel.

Potential fire hazards at the landfill are created from the build-up of fine dry dust particles on and around operational motors and control panels. The presence of these build-ups can cause overheating and potential fire if periodic equipment cleaning and maintenance are not practiced. Portable fire extinguishers should be maintained in a state of readiness at the screen location and on each piece of moving equipment.

1.7 EQUIPMENT REQUIREMENTS

The facility will maintain on-site equipment required to perform the necessary landfill activities. Periodic maintenance of all facility equipment, and minor and major repair work will be performed at designated maintenance zones on-site. Refer to equipment specific O&M Manuals for recommended equipment maintenance schedules.

1.8 PERSONNEL REQUIREMENTS

At least one (1) member of the supervisory staff will be trained in the equipment operations. Each facility employee will go through an annual training course (led by supervisory staff).

1.9 HEALTH AND SAFETY

All aspects of the landfill operations were developed with the health and safety of the operating staff, customers, and neighbors in mind. Prior to commencement of operations of the facility, a member of the operating staff will be designated site safety officer. This individual, together with the facility's management will modify the site safety and emergency response program to remain consistent with National Solid Waste Management Association and Occupational Safety and Health Administration (OSHA) guidance.

Safety equipment provided includes equipment rollover protective cabs, seat belts, audible reverse warning devices, hard hats, safety shoes, and first aid kits. Facility personnel will be encouraged to complete the American Red Cross Basic First Aid Course. Other safety requirements as designated by the Owner will also be implemented.

Each facility employee will go through an annual training course in health and safety (led by supervisory staff). All training shall be documented and attested to by signatures of the trainer and trainee. The following are some general recommendations for the health and safety of workers at the Durham LCID Landfill.

1.9.1 Personal Hygiene

The following items are recommended as a minimum of practice:

- Wash hands before eating, drinking, or smoking.
- Wear personal protective equipment as described in **Section 1.9.2**.
- Wash, disinfect, and bandage ANY cut, no matter how small it is. Any break in the skin can become a source of infection.
- Keep fingernails closely trimmed and clean (dirty nails can harbor pathogens).

1.9.2 Personal Protective Equipment

Personal Protective Equipment (PPE) must be evaluated as to the level of protection necessary for particular operating conditions and then made available to facility employees. The list below includes the PPE typically used and/or required in a compost facility workplace.

- Safety shoes with steel toes.
- Noise reduction protection should be used in areas where extended exposure to continuous high decibel levels are expected.
- Disposable rubber latex or chemical resistant gloves for handling and/or sampling of waste materials.
- Dust filter masks

Following use, PPE's should be disposed of or adequately cleaned, dried, or readied for reuse.

1.9.3 Mechanical Equipment Hazard Prevention

The loaders and other equipment should be operated with care and caution. All safety equipment such as horns, backup alarms, and lights should be functional. A Lockout-Tagout program shall be used to identify equipment in need or under repair and insure that operation is "off-limits" prior to maintenance or repair. All operators shall be trained in the proper operation of equipment.

1.9.4 Employee Health and Safety

Some general safety rules are:

- Consider safety first when planning and conducting activities.
- Review the equipment O&M Manual prior to attempting repairs/changes.
- Remember the buddy system in case of repair of mechanical equipment.
- Post emergency contact phone numbers.
- Provide easy and visible access to the Right to Know materials.
- Provide easy and visible access to the first aid kit and fire extinguishers.

1.9.5 Physical Exposure

Facility personnel may come in contact with the fluids, solids, and airborne constituents found at the landfill. Routine training should be conducted regarding the individual and collective materials used in the recycling process and their associated hazards. Training concerning safe work practices around these potential exposures should use equipment and proper disposal procedures.

1.9.6 Material Safety Data Sheets

Material Safety Data Sheets (MSDS) shall be collected on every waste (if available) that enters the facility. Information shall also be made available for all chemicals stored on site for use by the Site. MSDS sheets shall be stored in a location with all other Right to Know information for the site.

1.10 UTILITIES

Electrical power, water, telephone, and portable restrooms will be provided at the guard house (trailer).

1.11 RECORD KEEPING PROGRAM

The facility shall maintain the following documents in an operating record at the facility. The operating record will be kept up to date by the Site Manager or his designee. It will be presented upon request to DWM for inspection. A copy of this Operations Manual will be kept at the facility and will be available for use at all times.

SECTION 2.0 PROCESSING OPERATIONS

2.1 OVERVIEW

This section describes the processing operations for the Durham LCID Landfill.

2.2 ACCEPTABLE WASTES

The Durham LCID Landfill will accept the following wastes: stumps, trees, limbs, brush, grass and other naturally occurring vegetative material as well as concrete, brick, concrete block, used asphalt or used asphalt mixed with dirt, sand, uncontaminated soils, gravel, untreated/unpainted wood, yard trash, and other items approved by the N.C. Solid Waste Division.

The Durham LCID Landfill also plans to process and temporarily store selected, recyclable materials within the LCID cell limits. These materials include the following:

1. Concrete (including reinforced and painted as long as the paint is not lead-based¹);
2. Asphalt/bituminous concrete pavement;
3. Clean wood (including pallets, lumber and wood products that are not treated, painted, or stained); and
4. Engineered wood products, which will be temporarily stored and disposed at a permitted facility but not processed on site.

2.3 WASTE ACCEPTANCE

It is anticipated that the source of waste will be from public and private sources in the Triangle Area including, but not limited to, Durham County, Wake County, Orange County and RTP. Although historically the Durham LCID Landfill processed (on average) about 250 cubic yards per day, since 2003 this rate has dramatically reduced and is anticipated to remain relatively low. The operating hours of the facility are anticipated to be from 6:30 a.m. to 7:00 p.m. Monday through Friday.

2.3.1 Site Capacity

An estimate of site capacity is summarized below:

Remaining Capacity Phase I (Cells 1,2 and 3):	150,000 CY (Gross, to Elevation 384')
--	---------------------------------------

¹ Based on Title X of the Housing and Community Development Act and the Toxic Substances Control Act as paint that contains less than 0.5% lead by weight (or 5,000 parts per million) or 1 mg/cm²

Remaining Capacity
Phase I (Cells 4 & 5): 225,725 CY (Gross, to Elevation 384')

Total Site Capacity (Gross): 625,000 CY (to Elevation 420')
Remaining Capacity Cells 1,2 and 3: 190,000 CY (Gross, to Elevation 420')
Capacity Cells 4 & 5: 319,000 CY (Gross, to Elevation 420')
Total Remaining Capacity: 509,000 CY (to Elevation 420')

It is noted that the current, final permit grades, as originally permitted in 1999 reflect maximum final cover grades to Elevation 384'. Site capacities (potential) summarized above reflect final cover grades peaking at about Elevation 420'. This represents final grades that are about 36 feet higher than currently approved final cover grades, which will require a permit modification through NCDENR as well as review and approval by Durham City-County prior to implementing this higher grades/volumes.

2.4 WASTE SCREENING

In order to assure that prohibited wastes are not processed, waste screening programs will be implemented. A spotter will be used to monitor the incoming waste and identify any non-acceptable wastes. If any non-acceptable wastes are identified, these wastes will be placed into a stockpile or container and removed from the site for disposal at a solid waste facility permitted to accept the particular waste. All records and receipts for this disposal shall be kept in the operating record for the site. It is anticipated that unacceptable wastes will either be generally classified as construction and demolition debris (C&D), white goods, or recyclable materials (i.e. plastic, steel, etc.) The individual spotters and operators will be trained on identifying non-conforming/non-acceptable wastes.

2.5 PROCESSING OPERATIONS

Wood pallets will be delivered and stockpiled within the limits of the LCID cell area as shown in **Figure 2**. Pallets will be shredded along with limbs, logs, stumps, and clean lumber. The processed material will subsequently be stockpiled in this same area until it is removed from the site for sale as fuel, compostable material, etc. The material will be stockpiled at the site for a maximum of 60 days. The final destination of the recyclable materials separated from the waste may vary depending on market prices for such materials.

Concrete (cement and asphaltic/bituminous) will be delivered and stockpiled within the limits of the LCID cell area as shown in **Figure 2**. The concrete waste will be crushed and subsequently stockpiled in this same area until it is removed from the site for sale as fill, aggregate, etc., as markets allow.

2.5.1 Operating Capacity

The Operating Capacity for the Durham LCID Landfill is estimated to be as much as 250 CY, and as little as a few CY of material undergoing disposal and/or processing per day (on average). Actual site quantities may vary from this.

2.5.2 Equipment Requirements

The anticipated equipment requirements for operation and maintenance of the LCID site are listed in the following table. Actual pieces of equipment used at the site may vary from this.

Description	Primary Function (Allocation)
1) Excavator	as required; LCID landfill sorting
2) Front End Loader	as required; loading and mixing
3) Grinder	as required; grinding/shredding of bulky wastes, stumps, limbs, etc.
4) Screening Equipment	as required; processing material to uniform consistency and sorting of various gradations.
5) Dump Truck	as required; hauling material around site.

2.5.3 Grinding/Chipping

Grinding and/or chipping will be conducted at the site from time to time on an as-needed basis. The grinding/chipping operations will be conducted as needed to facilitate the landfill operations. It is anticipated that grinding and chipping will be conducted on a continual basis. Grinders and chippers pose both maintenance and safety hazards. Therefore, please refer to the manufacturer's safety and or maintenance literature prior to operating equipment at the site.

2.5.4 Screening

Screening will be conducted on an as-needed basis, just beyond the grinding area centrally on the site. Screening is conducted after the grinding/chipping has been completed to provide a uniform material for distribution/sale. The screening process removes remaining large materials for a uniform product. The finished product will be stored on site in a loading area until ready for delivery.

During the screening process additional non-conforming wastes may be identified. Once identified, these wastes will be removed and placed in the stockpiles or containers for disposal off-site. Screening machines pose both maintenance and safety hazards. Therefore, please refer to the manufacturer's safety and or maintenance literature prior to operating equipment at the site.

2.5.5 Access and Roadways

The site has been designed to provide all-weather access to the disposal area and will be properly maintained.

SECTION 3.0 ENVIRONMENTAL MANAGEMENT

3.1 OVERVIEW

This section reviews the overall environmental management tasks required for the successful operation of the Durham LCID Landfill. Emphasis is given to the supplemental tasks required for the new facility. The definition of "surface water" as used herein is water which results from precipitation or site run-on that has not contacted the waste.

3.2 SURFACE WATER CONTROL

Solid Waste shall not be disposed of in water. Proper control of surface water at the landfill will accomplish the following goals:

- Limit accelerated erosion caused by surface waters, and
- Limit sediments carried off-site by surface waters.

The following is a brief discussion of some of the site's surface water control features and practices.

3.2.1 Erosion Control

Erosion control provisions incorporated in and around the disposal area include the following:

- Drainage swales are provided to gather surface water from entire site.
- Water collected by each drainage swale is routed to the sediment basin.
- Areas that reach final grade and that are not included in the processing areas must be seeded immediately.
- A ground cover sufficient to restrain erosion must be in place within 30 working days or 120 calendar days upon the completion of any phase.

All areas should be inspected regularly for erosion damage and promptly repaired.

3.2.2 Sedimentation Control

Stormwater run-off from the landfill facility is conveyed to the existing sediment basin. The basin is inspected regularly for sediment build-up or erosion damage and shall be cleaned out when sediments fill the lower half of the basin.

3.3 DUST CONTROL

Dust related to equipment operations and traffic on the access roads will be minimized by using a water truck to limit dust on the gravel portion of the road, as needed.

3.4 SEVERE WEATHER CONDITIONS

Unusual weather conditions can directly affect the site operation. Some of these weather conditions and recommended operational responses are as follows.

3.4.1 Ice Storms

An ice storm can make access to the site dangerous, prevent movement or placement of materials, and, thus, may require closure of the landfill until the ice is removed or has melted.

3.4.2 Heavy Rains

Intermediate cover soil, final cover soil, and exposed stockpiles of unprocessed (recyclable) materials can be eroded during rainy periods. After heavy rain events, inspection by facility personnel will be initiated and corrective measures taken to repair any damage found before the next rainfall.

3.4.3 Electrical Storms

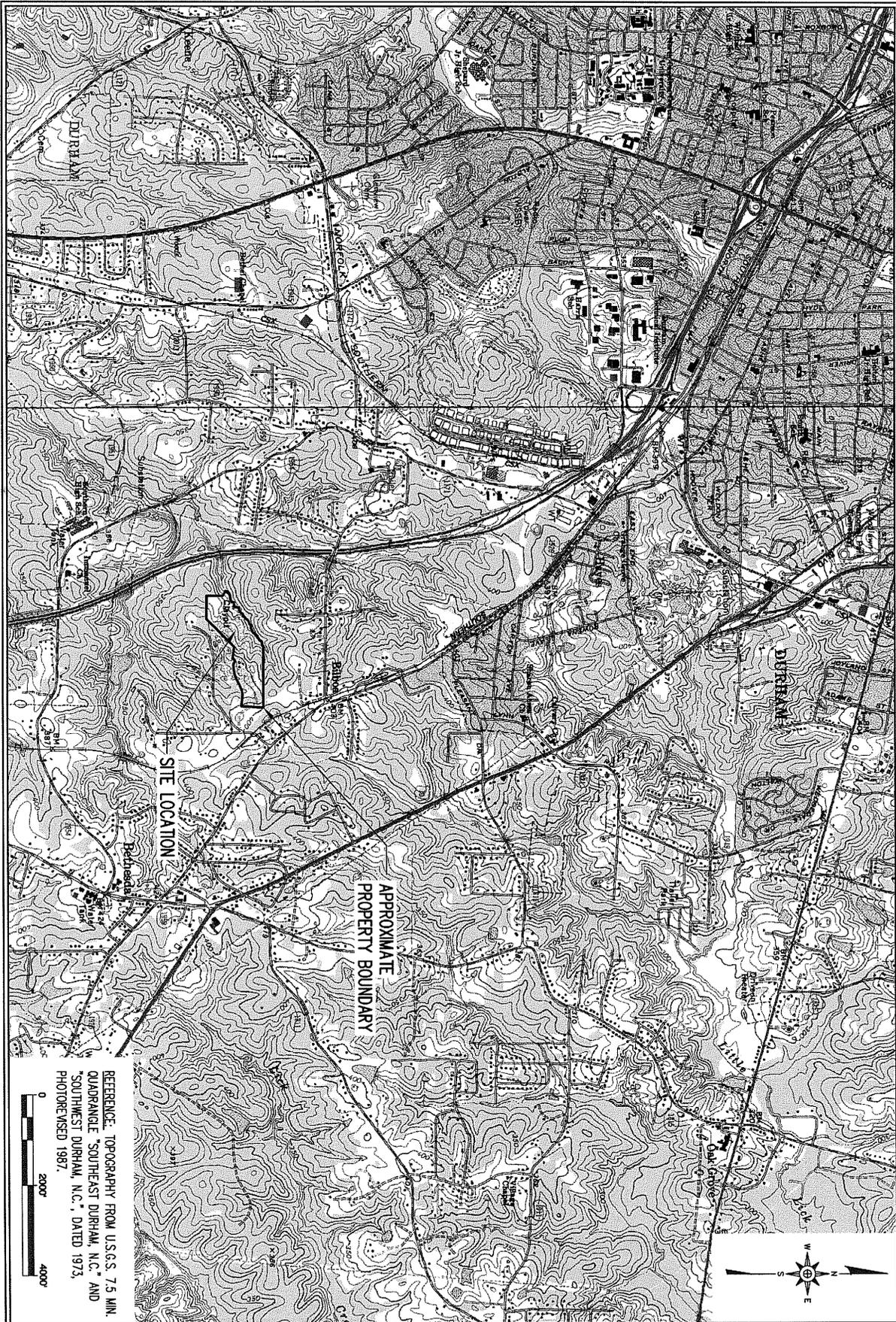
In electrical storms, landfilling activities will be temporarily suspended. To guarantee the safety of all field personnel, refuge will be taken in the on-site guard house or in rubber-tired vehicles, or shelter in the transfer station.

3.4.4 Windy Conditions

Windy conditions may increase the risk of blown debris or an increase in dust. As applicable, dusty areas will be watered to minimize exposure.

3.4.5 Violent Storms

In the event of hurricane, tornado, or severe winter storm warning issued by the National Weather Service, facility operations may be temporarily suspended until the warning is lifted.



REFERENCE: TOPOGRAPHY FROM U.S.G.S. 7.5 MIN. QUADRANGLE "SOUTHEAST DURHAM, N.C." AND "SOUTHWEST DURHAM, N.C.", DATED 1973, PHOTOREVISED 1987.

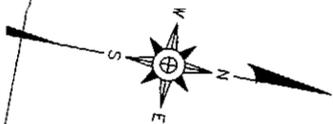
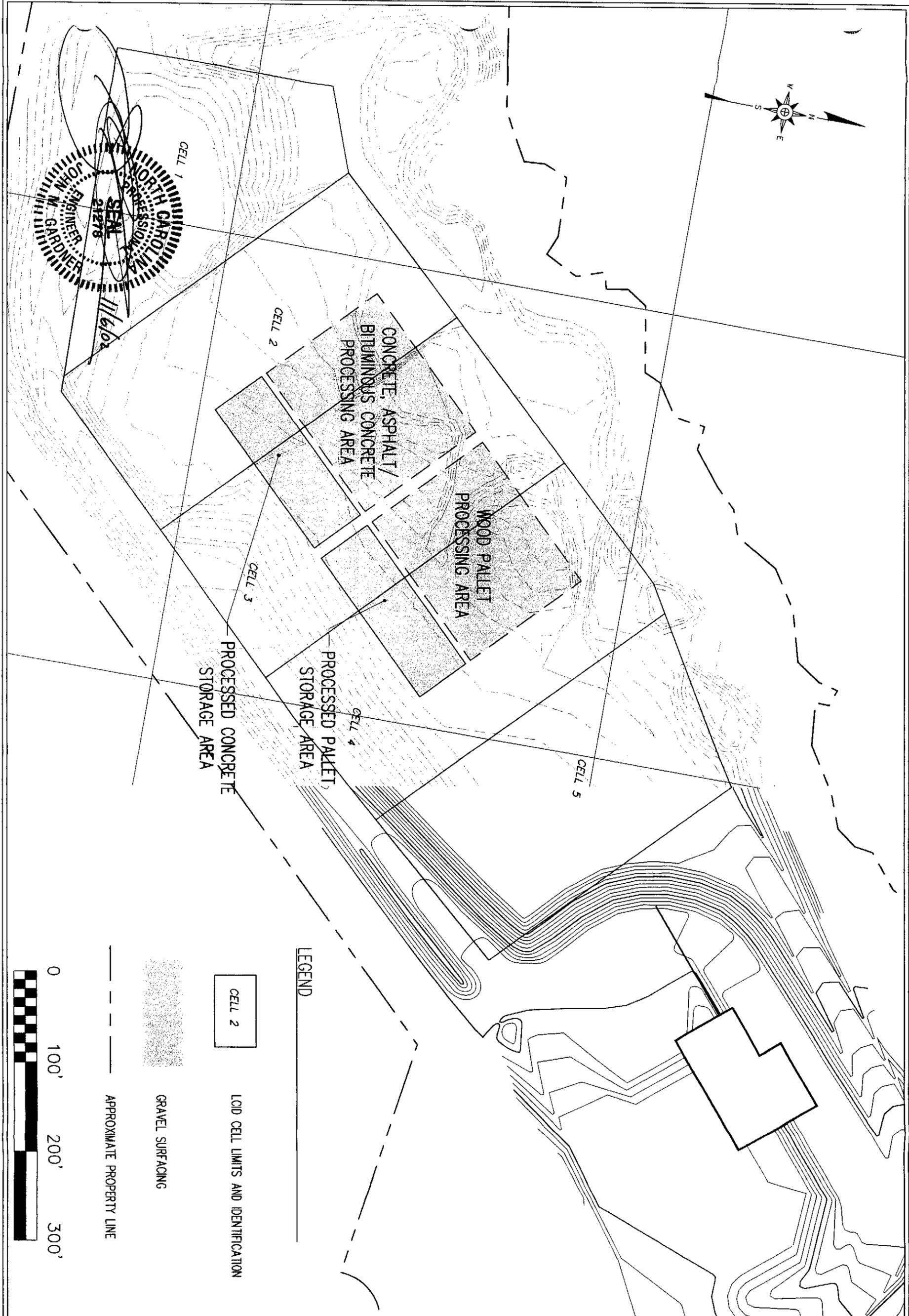
TITLE:
**DURHAM LCID LANDFILL
 SITE LOCATION MAP**

DRAWN BY: C.T.J.	CHECKED BY: J.M.G.	SCALE: AS SHOWN	FIGURE NO. 1
DATE: Jul. 2008	PROJECT NO. DURHAM 08-2	FILE NAME DURHAM-B0062	

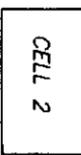
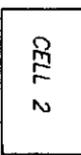

**RICHARDSON SMITH GARDNER
 & ASSOCIATES**

14 N. Boylan Ave.
 Raleigh, N.C. 27603
 www.rsgengineers.com

ph: 919-828-0077
 fax: 919-828-3886



LEGEND

-  CELL 2
-  GRAVEL SURFACING
-  APPROXIMATE PROPERTY LINE
-  LCID CELL LIMITS AND IDENTIFICATION



TITLE: WASTE INDUSTRIES, INC. DURHAM LCID LANDFILL RECYCLING/STORAGE	DRAWN BY: C.T.J.	CHECKED BY: J.M.G.	SCALE: AS SHOWN	FIGURE NO. 1	G.N. RICHARDSON & ASSOCIATES, INC. Engineering and Geological Services 425 N. Boylan Avenue Raleigh, North Carolina (919)-828-0577 Fax:(919)-828-3899 www.gnra.com
	DATE: NOV. 2002	PROJECT NO. DURHAM-1	FILE NAME DURHAM-B0025		

Attachment B

Deed

WYRICK, ROBBINS, YATES & PONTON L.L.P.
ATTORNEYS AT LAW

SAMUEL T. WYRICK, III
LARRY E. ROBBINS
JAMES M. YATES, JR.
ROBERT A. PONTON, JR.
MADISON E. BULLARD, JR.
F. DANIEL BELL, III
ERIC A. VERNON
J. KEMP SHERRON, III
CAROLYN M. DUDZIK
STEPHEN C. BRISSETTE
L. DIANE TINDALL
ERIC R. SPENCE
ROGER W. KNIGHT
GRADY L. SHIELDS
J. CHRISTOPHER LYNCH
DONALD R. REYNOLDS
E. WILLIAM KRATT
PAMELA P. KEENAN
ROBERT P. RUSCHER

THE SUMMIT
4101 LAKE BOONE TRAIL, SUITE 300
RALEIGH, NORTH CAROLINA 27607-7506

MAILING ADDRESS
POST OFFICE DRAWER 17803
RALEIGH, NORTH CAROLINA 27619

REAL ESTATE TELECOPIER
(919) 571-7300

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JOHN F. WIBLE
STEPHEN D. CELESTINI
ALEXANDRA M. HIGHTOWER
CHARLES W. CLANTON
JEFFREY J. JOHNSON
CHARLES H. MUNN, JR.
DAVID A. KIRKERIDE
KEVIN A. PRAKKE
LEE M. WHITMAN
THOMAS D. APPLEWHITE
D. CALDWELL BAREFOOT, JR.

OF COUNSEL
J. ANTHONY PENRY
BENJAMIN N. THOMPSON

JOHN C. BRYCE
(1954-1992)

February 25, 1997

Mr. Ven Poole
WASTE INDUSTRIES, INC.
3949 Browning Place
Raleigh, NC 27609

RE: Cherokee Sanford closing, Durham County

Dear Mr. Poole:

Enclosed are the original recorded Deed of Easement and General Warranty Deed, and copies of the Agreement and Indemnification Agreement in connection with the above-referenced closing. Your final Owner's Title Insurance Policy will be mailed directly to you from Lawyers Title in the next several days.

Should you have any questions, please feel free to call Jeff Johnson or me.

Sincerely,
WYRICK, ROBBINS, YATES & PONTON L.L.P.


Linda Blackwell
Real Estate Paralegal

Enclosures

DURHAM COUNTY

FEB 4 1997

'97 FEB 4 PM 4 45

~~XXXXXXXXXX~~ AMOUNT

112.00



Real Estate
Excise Tax

Excise Tax 112.00

Recording Time, Book and Page

Tax Lot No. Parcel Identifier No. 641-02-051
Verified by County on the day of, 19

Mail after recording to ~~XXXXXXXXXX~~ Wyrick, Robbins, Yates & Ponton L.L.P., Post Office Drawer 17803
Raleigh, North Carolina 27619 (Attn: JJJ)

This instrument was prepared by WYRICK, ROBBINS, YATES & PONTON L.L.P.

Brief description for the Index Tract 2, Stone Road Industrial Park

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 18 day of December, 1996, by and between

GRANTOR

GRANTEE

CHEROKEE SANFORD, INC., formerly known as
CHEROKEE SANFORD GROUP, INC.,
a North Carolina corporation

WASTE INDUSTRIES, INC.
a North Carolina corporation

P.O. Box 20366
Raleigh, North Carolina 27619

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 here acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all the certain lot or parcel of land situated in the City of Oak Grove Townsh
Durham County, North Carolina and more particularly described as follows:

see attached Exhibit A
for a more particular description

The property hereinabove described was acquired by Grantor by instrument recorded in Deed Book 269, Page 546, Durham County Registry (Borden Brick and Tile Company)

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:

- 1997 ad valorem taxes

Easements, restrictions, and rights-of-way of record, if any.



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

CHEROKEE SANFORD GROUP, INC.

(Corporate Name)

By: [Signature] Chairman of the Board of Directors

USE BLACK INK ONLY

ATTEST: [Signature]

Secretary (Corporate Seal)

SEAL-STAMP

NORTH CAROLINA, [Signature] County

I, a Notary Public of the County and State aforesaid, certify that [Signature] Grantor personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 31 day of [Signature] 99

My commission expires: 4-11-2000 [Signature] Notary Public

SEAL-STAMP

NORTH CAROLINA, _____ County.

I, a Notary Public of the County and State aforesaid, certify that _____ personally came before me this day and acknowledged that _____ he is _____ Secretary of Cherokee Sanford Group, Inc. a North Carolina corporation, and that by authority of _____ given and as the act of the corporation, the foregoing instrument was signed in its name by its Chairman _____, sealed with its corporate seal and attested by _____ as its _____ Secretary. Witness my hand and official stamp or seal, this _____ day of _____

Board of Directors

EXHIBIT A

BEGINNING at an existing railroad iron located in the southwestern corner of the property herein described, said iron being the northwestern corner of the property owned now or formerly by Leonard B. Shaffer (Tax Parcel 641-50; Deed Book 1212, Page 48, Durham County Registry "DCR") said iron also being located in the eastern boundary line of the property owned now or formerly by Kathleen M. Rigsbee (Tax Parcel 641-2A; Deed Book 115, Page 539, DCR); thence running along and with said eastern Rigsbee boundary North 03° 24' 22" East 365.13 feet to a point; thence continuing with said eastern Rigsbee boundary North 56° 08' 27" West 96.08 feet to a point; thence running a traverse line across the centerline of a creek (centerline of creek is actual property line) the following courses and distances: North 02° 03' 28" West 75.02 feet to a point; North 59° 40' 07" East 76.66 feet to a point; North 83° 13' 51" East 133.12 feet to a point; North 39° 46' 13" East 86.88 feet to a point; South 88° 50' 02" East 87.75 feet to a point; North 13° 54' 37" East 100.23 feet to a point; North 80° 21' 57" East 83.59 feet to a point; North 50° 30' 37" East 115.83 feet to a point; North 55° 08' 55" East 106.54 feet to a point; North 64° 46' 03" East 178.35 feet to a point; North 71° 28' 51" East 177.60 feet to a point; North 38° 55' 33" East 97.31 feet to a point; North 69° 33' 30" East 108.09 feet to a point; and North 58° 47' 02" East 171.05 feet to an angle iron; thence leaving said angle iron and running South 86° 02' 20" East 1581.17 feet along and with the southern boundary of property owned now or formerly by Joven Five Group (Tax Parcel 639-10; Deed Book 1278, Page 668, DCR) to a point; thence leaving said Joven line and running South 06° 37' 36" West 489.19 feet to a point in the northern margin of the right-of-way of the proposed Stone Park Court; thence running along and with the said right-of-way the following courses and distances: North 80° 04' 57" West 197.97 feet; thence in a curve to the left having a radius of 430.00 feet and an arc length of 247.53 feet and a chord bearing and distance of South 83° 25' 35" West 244.13 feet; thence South 66° 56' 06" West 180.44 feet; thence in a curve to the right having a radius of 670.00 feet, an arc length of 354.40 feet and a chord bearing and distance of South 82° 05' 19" West 350.29 feet; thence in a curve to the right having a radius of 25.00 feet, an arc length of 21.42 feet and a chord bearing and distance of North 58° 12' 36" West 20.77 feet; thence in a curve to the left having a radius of 55 feet, an arc length of 134.90 feet, and a chord bearing and distance of South 76° 04' 22" West 103.54 feet to a point; thence leaving the right-of-way of Stone Park Court and running North 77° 38' 22" West 267.69 feet to a point in southeastern boundary of the existing 50' Public Service Gas company easement; thence running along with said easement South 48° 15' 27" West 653.44 feet to a point; thence continuing with said easement South 48° 06' 06" West 223.37 feet to a point in the northern property line of

Leonard B. Shaffer; thence running with the Shaffer property line
North 85° 30' 00" West 513.80 feet to the POINT AND PLACE OF
BEGINNING, containing 37.197 acres and being all of Tract 2, Oak
Grove Township, Durham County, according to survey by Harold
"Todd" Smith entitled "Stone Road Industrial Park Phase One,"
dated June 27, 1996 and recorded in Plat Book 137, Page 48,
Durham County Registry.

18-203

NORTH CAROLINA

Lee COUNTY

I, the undersigned Notary Public, do hereby certify that John M. Corcoran personally appeared before me this day and acknowledged that he/she is the Secretary of Cherokee Sanford, Inc., a North Carolina corporation, and that by authority duly given and as the act of the corporation the foregoing instrument was signed by its Chairman of the Board of Directors of Cherokee Sanford, Inc., sealed with its corporate seal and attested by him/her as its _____ Secretary.

Handwritten initials

WITNESS my hand and notarial seal this 31 day of _____, 1997.

Handwritten signature
NOTARY PUBLIC
LINDA O. GAY
My Commission Expires: 9-11-2000

Linda O. Gay
Notary Public

State of North Carolina - Durham County

The foregoing or annexed certificate(s) of Linda O. Gay
A Notary(Notaries) Public for the Designated Governmental units is(are) certified to be correct.

This the 4 day of Feb AD. 19 97
WILLIE L. COVINGTON Sharon A. Druce
Register of Deeds By: Assistant / Deputy Register of Deeds



Maile-Wyrick, Robbins, Yates & Pantow
PO Drawer 17803
Raleigh, NC 27619

NORTH CAROLINA

BOOK 2280 PAGE 204

FILED
BOOK 2280 PAGE 204-208

'97 FEB 4 PM 4 47

WAKE COUNTY

WILLIE L. COVINGTON
REGISTER OF DEEDS

DURHAM COUNTY, N.C.
DEED OF EASEMENT AND AGREEMENT

This Deed of Easement and Agreement ("Easement") by and between Cherokee Sanford, Inc. ("Grantor") and Waste Industries, Inc. ("Grantee"):

W I T N E S S E T H

WHEREAS, Grantor is the fee simple owner of those two tracts of land identified for "Future Development" within Stone Road Industrial Park (the "Cherokee Tracts"), as shown on a map recorded in Book of Maps 137 at Page 48, Durham County Registry (the "Map"); and

WHEREAS, Grantee is the owner of Tract 2 (37.197 acres), as shown on the Map (the "Waste Tract"); and

WHEREAS, Grantor desires to grant and convey to Grantee the easement rights set out below for ingress, egress, regress and access to Tract 2 and for construction of all roadways and utility infrastructure, as shown on the Map and in that certain set of construction plans for Stone Road Industrial Park prepared by Sungate Design Group, P.A., dated February, 1996 and last revised October 24, 1996, (as such plans are finally approved by the City of Durham, the "Plans");

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) in hand paid by Grantee to Grantor, the receipt and adequacy of which is acknowledged by Grantor, the granting of the easement rights set out below being a material inducement for Grantee to purchase Tract 2 from Grantor, and in consideration of the covenants and promises contained herein, Grantor hereby agrees as follows:

1. The recitals above are incorporated herein by reference.
2. Grantor hereby grants and conveys to Grantee, its successors and assigns: (i) a permanent non-exclusive easement across and upon the Cherokee Tracts for ingress, egress, regress, and access to and from Tract 2 across and upon Stone Park Court and Cross Park Drive, as shown on the Map (the "Roadway Easement"); (ii) a permanent non-exclusive easement for utility installation within said Roadway Easement and over and upon the Cherokee Tracts as required by the Plans (the "Utility Easement"); and (iii) a temporary non-exclusive construction easement across and upon the Cherokee Tracts as necessary for

construction of all said roadways and utilities. Exhibit A, attached hereto and made a part hereof, sets out the approximate location of any portions of the Utility Easement which will lie outside of the Roadway Easement. Upon completion of construction of the utility improvements, including any drainage improvements, this Easement shall be amended, if necessary, to revise such Exhibit A to show the actual location of any portions of the Utility Easement lying outside the Roadway Easement.

TO HAVE AND TO HOLD the above described easements and all privileges and appurtenances thereto belonging to Grantee forever.

3. The easements and covenants contained herein shall run with the land and shall inure to and benefit Grantee, its successors and assigns, and shall burden the Cherokee Tracts, and shall be binding upon Grantor, its heirs, successors and assigns until such time as said roadways and utilities are dedicated to and accepted for maintenance by the City of Durham.
4. Grantor covenants with Grantee that Grantor is the fee simple owner of the Cherokee Tracts and has the right to convey the easements contained herein, and shall warrant and defend the title to the easements conveyed herein against all persons whomsoever.

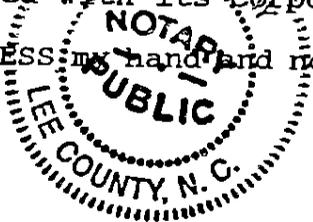
[The following page is the signature page]

NORTH CAROLINA

Lee COUNTY

I, the undersigned Notary Public, do hereby certify that John M. Carson personally appeared before me this day and acknowledged that she/he is the _____ Secretary of CHEROKEE SANFORD, INC., a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed by its Chairman of the Board sealed with its corporate seal and attested by its _____ Secretary.

WITNESS my hand and notarial seal, this 31 day of January, 1997.



Linda O. Gay
Notary Public

My Commission Expires:

4-11-2000

NORTH CAROLINA

Wake COUNTY

I, the undersigned Notary Public, do hereby certify that JIM W. PERRY personally appeared before me this day and acknowledged that he/she is PRESIDENT of WASTE INDUSTRIES, INC., a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed by its PRESIDENT sealed with its corporate seal and attested by its SECRETARY.
WITNESS my hand and notarial seal, this 3rd day of ~~January~~, 1997.

February

Connie L. McKown
Notary Public

My Commission Expires:

2-25-98

State of North Carolina - Durham County

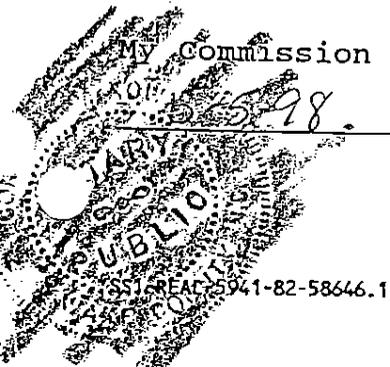
The foregoing or annexed certificate(s) of Linda O Gay
Connie L. McKown

A Notary(Notaries) Public for the Designated Governmental units is(are) certified to be correct.

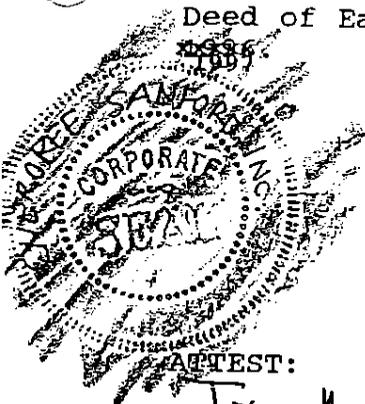
This the 4 day of Feb AD. 1997

WILLIE L. COVINGTON
Register of Deeds

By: Shirley A. Burrell
Assistant / Deputy
Register of Deeds



IN WITNESS WHEREOF, Grantor and Grantee have executed this Deed of Easement and Agreement as of this 31 day of ~~December~~,
January



GRANTOR:

CHEROKEE SANFORD ⁸⁹⁸~~GROVES~~, INC.

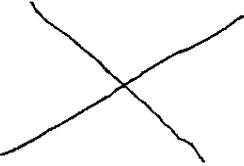
By: *Tom F. [Signature]*

Title: Chairman of the Board of Directors

ATTEST:

John M. Corcoran
Secretary

(AFFIX CORPORATE SEAL)



GRANTEE:

WASTE INDUSTRIES, INC.

By: *John [Signature]*

Title: President



ATTEST:

Albert [Signature]
Secretary

(AFFIX CORPORATE SEAL)

STATE OF NORTH CAROLINA

WAKE COUNTY

AGREEMENT

THIS AGREEMENT (the "Agreement") made as of this 31 day of January, 1997 by and between Waste Industries, Inc., a North Carolina corporation (hereinafter "Waste") and Cherokee Sanford, Inc. ("Cherokee").

WHEREAS, Cherokee owns that certain 65 acre tract of land (consisting of a 37.197 acre tract as well as two tracts identified for "Future Development" on the below referenced Map) located in Durham County, North Carolina, as more particularly shown on the map recorded at Book 137, Page 48, Durham County Registry (the "Map"), which Map is incorporated herein by reference ("Entire Property"); and

WHEREAS, Cherokee intends to sell to Waste and Waste intends to purchase from Cherokee the 37.197 acre "Tract 2," as shown on the Map, pursuant to an Offer to Purchase and Contract dated September 3, 1996 (the "Purchase Contract") (hereinafter the "Waste Tract") (The Entire Property, less the Waste Tract, as well as the area within Cross Park Drive and Stone Park Court, as shown on the Map, are hereinafter referred to as the "Cherokee Tracts"); and

WHEREAS, Cherokee and Waste intend to enter into this Agreement (i) in order to provide that Waste shall pay to Cherokee certain additional consideration pursuant to the terms of this Agreement in the event that Waste does not complete certain Improvements, as defined below, on the Cherokee Tracts as provided in this Agreement and (ii) in order to provide certain easement rights across the Cherokee Tracts for the benefit of the Waste Tract;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Waste and Cherokee hereby agree as follows:

1. The recitals above are incorporated by reference into this Agreement.
2. Waste intends to construct on the Waste Tract a solid waste management facility, and, in connection therewith, Waste intends to construct upon a portion of the Entire Property and/or Cherokee Tracts certain road improvements (identified on the Map as Cross Park Drive and Stone Park Court), together with utility improvements, all as shown on the Map and on that certain set of construction drawings for Stone Road Industrial Park prepared by Sungate Design Group, P.A., dated February, 1996 and last revised October 24, 1996 (in such form as finally approved by the City of Durham, the "Plans"), which Plans are incorporated herein by this

reference, which will not only serve the Waste Tract but also the Cherokee Tracts (such road and utility improvements are hereinafter referred to as the "Improvements"). Such Improvements shall be constructed at the sole cost and expense of Waste in substantial compliance with the Map and the Plans.

3. In order to facilitate the construction of the Improvements by Waste, Cherokee shall grant to Waste and its successors and assigns for the benefit of the Waste Tract such rights-of-way, access, ingress, egress, regress, utility, construction and other easements as are shown on the Map and the Plans or as may otherwise reasonably be required by Waste and reasonably approved by Cherokee in order to develop the Waste Tract for the purposes set out herein and in order to construct the Improvements. In connection with the Closing on the conveyance of the Waste Tract to Waste, Cherokee will execute such deeds of easements as are reasonably required by counsel for Waste in order to create for the benefit of the Waste Tract such easement rights. Waste shall indemnify Cherokee from and against any mechanics' and materialmen's liens attaching to the Cherokee Tracts.

4. In the event that at the end of three (3) years from the date of this Agreement (the "Construction Period") Waste has not Substantially Completed, as defined below, the Improvements subject to the terms of this Agreement, Waste shall make a payment to Cherokee in an amount as calculated below (the "Reimbursement Payment.") For purposes of this Agreement, "Substantial Completion" shall be defined as completion of the Improvements in substantial compliance with the Map and the Plans so that they may be dedicated to and accepted by the City of Durham subject to the City's inspection punchlist. Waste may make reasonable and practical changes in the design of the Improvements provided that such changes are approved by the City of Durham and that the overall cumulative effect of such changes does not materially adversely affect the services provided to the Cherokee Tracts by the Improvements (hereinafter, "Changes to Improvements"). Additionally, Waste may make any changes to the design of the Improvements which are required by the City of Durham. In the calculation of any time periods in this Agreement, such time periods shall be extended for up to but not longer than one (1) year by any delays not within the control of Waste, such as inclement weather, riots, strikes, acts of God, war, and other *force majeure*, including without limitation delays caused by or arising out of delays by the City of Durham relating to permits, inspections, and other matters required of the City of Durham, or delays caused by Cherokee. Waste will provide Cherokee with notice of any such delays.

5. The amount of the Reimbursement Payment, if any, shall be calculated as follows:

\$500,000.00

- [hard and reasonable soft costs of Improvements completed or in progress toward completion including work for which Waste has entered into a contract under which Waste has paid for, or is obligated to pay for, materials, labor, or services, provided that such work or materials will be supplied under such contract(s)].

= Reimbursement Payment

If, at the time of the Reimbursement Payment, the Deed of Trust from Cherokee to Lindsay C. Warren, Jr., Trustee as recorded in Book 1872, Page 418, Durham County Registry, is still of record, Waste and Cherokee agree that the Reimbursement Payment shall be payable to said Trustee for disbursement in accordance with said Deed of Trust.

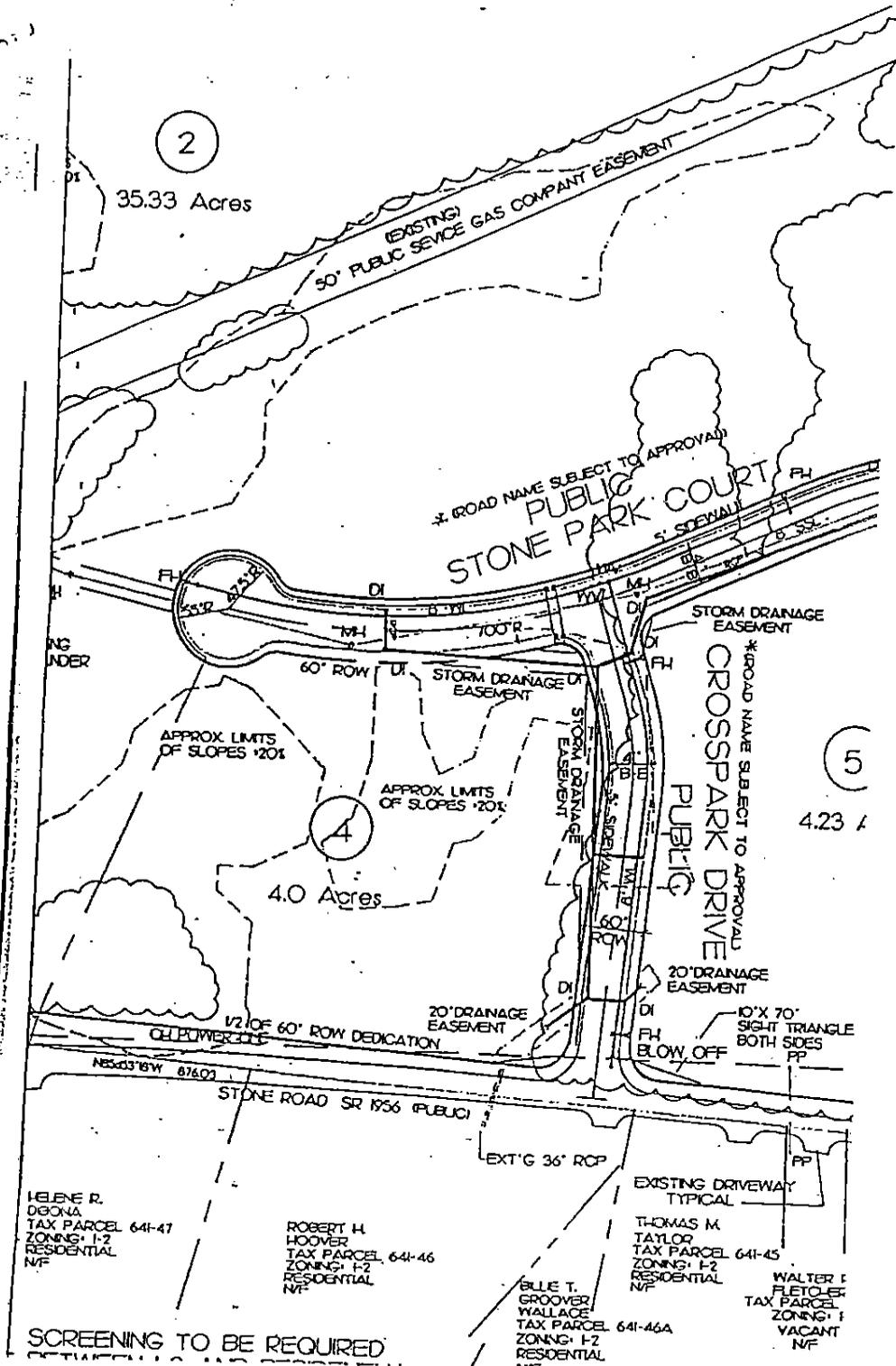
6. Waste and Cherokee enter into this Agreement for the mutual benefit of the Waste Tract and the Cherokee Tracts and agree to cooperate with one another in good faith to give effect to this Agreement.

7. This Agreement shall be construed in accordance with the laws of the State of North Carolina. This Agreement represents the entire agreement of the parties hereto, except for the Purchase Agreement, and all prior agreements and negotiations are merged herein. This Agreement shall inure to the benefit of and shall bind the heirs, successors and assigns of the parties hereto.

8. The determination that any provision of this Agreement shall be unenforceable for any reason shall not affect the enforceability and validity of the other provisions of this Agreement.

[The following page is the signature page]

* THIS EXHIBIT IS NOT A SURVEY AND IS FOR INFORMATIONAL USE ONLY. NO PARTY MAY RELY ON ITS ACCURACY.



STATE OF NORTH CAROLINA

COUNTY OF DURHAM

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (the "Indemnification Agreement") is made this the 31 day of January, 1997 by and between CHEROKEE SANFORD, INC. ("Seller") and WASTE INDUSTRIES, INC. ("Buyer").

W I T N E S S E T H:

WHEREAS, Seller intends to sell to Buyer and Buyer intends to buy from Seller all of the property identified as Tract 2, Stone Road Industrial Park, 37.197 acres, Durham, North Carolina (the "Property", as described in Exhibit A attached)

WHEREAS, in connection with such sale, Seller and Buyer do not intend that Buyer will assume any liability for the debts evidenced and secured by the Durham County Tax Collector for tax year 1997, listed under Parcel ID #641-02-051 (64.852 acres), and Seller is responsible for such 1997 Durham County taxes ("Taxes"), except for the amount of \$1522.11, representing the prorated amount of 1997 ad valorem taxes, based on the 1996 value and rate, attributed to the Property ("Buyer's Taxes"); and

WHEREAS, in order to assure Buyer that it shall not assume or become liable for any of the Taxes except Buyer's Taxes, and that Seller shall timely pay the Taxes, Seller desires to provide Buyer with this Indemnification; and

WHEREAS, in order to assure Seller that it shall only be responsible for the Taxes less the amount of Buyer's Taxes and that Buyer shall pay to Seller the amount of Buyer's Taxes at such time as Seller pays the Taxes, Buyer desires to provide Seller with this Indemnification;

NOW, THEREFORE, for and in consideration of the sale of the Property and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Buyer and Seller hereby agree as follows:

1. Seller shall pay all Taxes before January 5, 1998;
2. Buyer shall pay to Seller upon demand and after notice the amount of the Buyer's Taxes at such time as Seller is prepared to pay the Taxes. In the event that the 1997 tax rate or value attributable to the Property differs from the 1996 tax rate or value, the amount paid by the Buyer shall be adjusted accordingly.
3. Seller indemnifies Buyer from and against any loss, claim or liability arising out of the Taxes (excluding Buyer's

Taxes) including without limitation the payment of any amounts due thereunder and the cost of defending against any such claims, including reasonable attorneys' fees, and Seller agrees that it shall remain fully responsible for payment of any amounts owing under the Taxes (excluding Buyer's Taxes) and for any and all liabilities arising thereunder.

4. Buyer indemnifies Seller from and against any loss, claim or liability arising out of the Buyer's Taxes, including without limitation the payment of any amounts due thereunder and the cost of defending against any such claims, including reasonable attorneys' fees, and Buyer agrees that it shall remain fully responsible for payment of any amounts owing under the Buyer's Taxes and for any and all liabilities arising thereunder.

5. This Indemnification shall survive the sale of the Property and shall remain in full force and effect until such time as the Taxes are paid in full, at which time this Indemnification shall terminate.

IN WITNESS WHEREOF, Buyer and Seller have executed this Indemnification as of the day and year first above written.

SELLER:

CHEROKEE SANFORD, INC.

By: John M. Corcoran

Title: Vice President

BUYER:

WASTE INDUSTRIES, INC.

By: John M. Berry

Title: President

IN WITNESS WHEREOF, the parties hereto have executed this Agreement under seal the day and year first above written.

WASTE INDUSTRIES, INC.

By: *J. M. Gerry* President

ATTEST:

Robert Hibel
Secretary
(CORPORATE SEAL)

CHEROKEE SANFORD GROUP, INC.

By: *J. P. Hill*

ATTEST:

John M. Concoran
Secretary
(CORPORATE SEAL)

Attachment C

Ground Water Evaluation

May 9, 1997

Sungate Design Group, P.A.
915 Jones Franklin Road
Raleigh, NC 27606

ATTENTION: Mr. Frank Braxton

**Report of Subsurface Investigation and
Ground Water Evaluation
Stone Road Industrial Park
Raleigh, North Carolina
Our Project Number 121-97-07381**

Gentlemen:

TerraTech Engineers, Inc. has completed the requested subsurface investigation and groundwater evaluation for the above referenced project. The results of our field investigation and evaluations are enclosed herewith.

Scope of Services

The main objective of the study was to evaluate the groundwater conditions at the subject site. A site plan, indicating the location of the three requested borings, is provided as Figure 1 in the Appendix.

Investigative Procedures

The subsurface investigation consisted of the requested three soil test borings at the site. The borings were performed at the approximate locations indicated on Figure 1, included in the Appendix. The soil test borings were performed to a depth 10 feet below the existing ground surface. The borings were located in the field by a representative of TerraTech Engineers, Inc. by measuring distances and angles from existing site reference points. Ground surface elevations were not provided to us. In general, the locations of the test borings should be considered approximate.

Our field examinations consisted of auger drilling techniques using truck-mounted drilling equipment. Hand augering was performed in boring B-2 to restore the integrity of the hole, due to caving-in of the hole. Observation wells were installed in each boring to provide a more accurate recording of ground water levels. Figure 2 in the Appendix illustrates the well construction used. Ground water readings in each of the borings were recorded at periodic intervals and are included in Table 1 in the Appendix.

General Site Conditions

Site Location and Description

The subject site is an approximately 35.5 acre tract located north of Stone Road in Durham County, North Carolina. The property itself contains no buildings or structures but has several dirt roads running throughout. Site topography is generally sloping downwards to the south and southwest towards a small creek which forms part of the western property line. A majority of the site is eroded

and gullied with outcroppings of sandstone and siltstone. Relief across the property is on the order of 30 to 40 feet mainly due to previous excavations of the western portion of the site.

Regional Geology

The site is located in the Piedmont Physiographic Province of North Carolina. Based on a review of geologic maps, it appears that the site is located within a geologic unit known as the Chatham Group of the Durham Triassic Basin.

The Durham Triassic Basin, one of several trough shaped basins in the Piedmont, was created approximately 200 million years ago when faulting activity caused long, narrow areas to drop several thousands of feet relative to the surrounding area. Soil and rock materials were then eroded from the surrounding areas and deposited in fresh water lakes within the basin to form sedimentary rocks. The sedimentary rocks in this area typically consist of sandstones, siltstones, shales, conglomerates, and fanglomerates. Isolated calcareous zones are present in the fine-grained rocks, and occasional coal beds are interbedded with the shales and siltstones. Conglomerates and fanglomerates are typically found along the western and eastern edges of the basin.

Soils in the Durham Triassic Basin have been formed by the in-place weathering of the underlying rock, which accounts for their classification as "residual" soils. The residual soils typically consist of clayey silts, sandy silts, and silty sands. However, pockets of relatively plastic silts and clays have been encountered within less plastic, coarser grained soils, in many instances. Boulders are commonly encountered within the residual soil mass in this area.

General Subsurface Conditions

From the ground surface, all of the test borings encountered residual soils, consisting generally of sandy silts and clayey silts, to the depth of boring termination.

Auger refusal was not encountered in the test borings. Auger refusal is the depth at which the boring cannot be further advanced using conventional soil drilling techniques.

Based on review of the soil survey of Durham County, the surface soils at the site exhibit moderate infiltration and very low permeability.

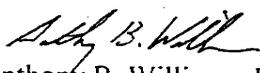
Ground Water Conditions

Ground water was not encountered in the test borings at the time of our field investigation. Ground water levels were recorded at various intervals during a three week period, April 22 through May 9, 1997. These are provided in the attached Table 1. According to the City of Durham Storm Water Management Department, rainfall for the southeast Durham totaled 2.92 inches during this period of time. It should be noted that ground water levels will fluctuate depending on seasonal variations of precipitation and other factors, and may occur at higher or lower elevations at some time in the future.

you have any questions about this report, or if we can be of additional service, please do not hesitate to contact us.

Sincerely,

TerraTech Engineers, Inc.


Anthony B. Williams, E.I.T.
Project Manager

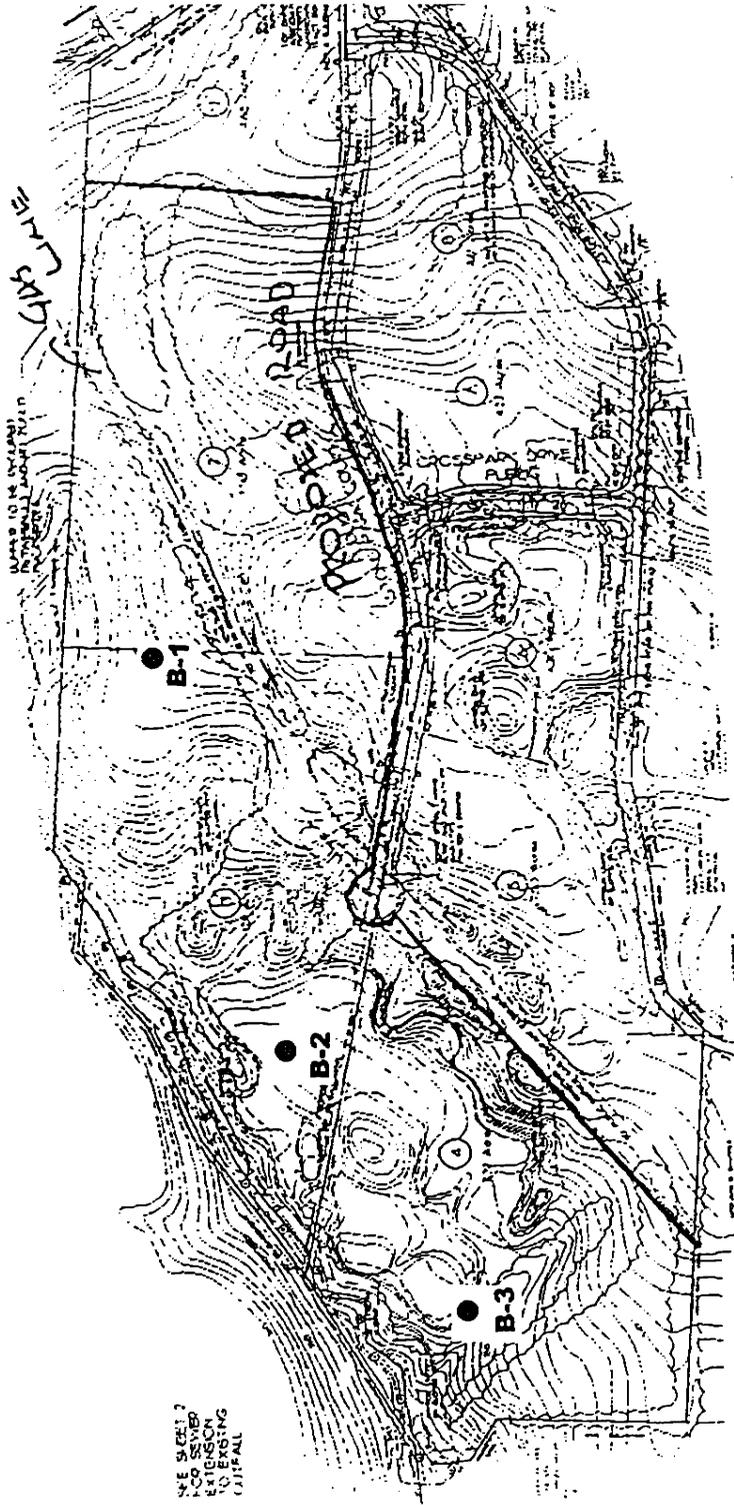
ABW/bb

Enclosures


Erwin T. Williams III, P.E.
Senior Geotechnical



APPENDIX



SEE SHEET 2
FOR SEWER
EXTENSION
TO EXISTING
CELFALL

Not to Scale

Figure 1. Boring Location Plan

Legend: ● Soil test boring

Project: Stone Road Industrial Park
Durham County, North Carolina
Our Project Number 121-97-07381

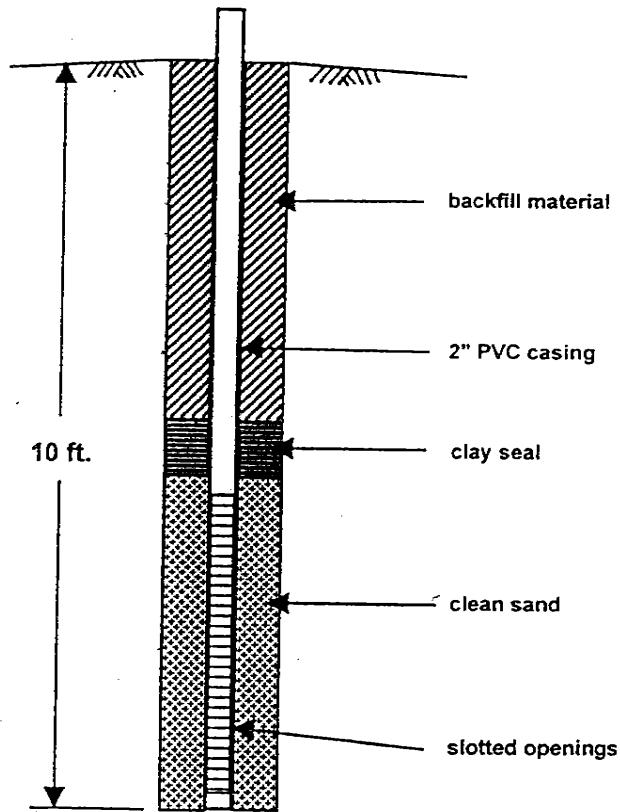


Figure 2. Observation Well Construction

Not to Scale

Legend:

Project: Stone Road Industrial Park
Durham County, North Carolina
Our Project Number 121-97-07381

TABLE 1

**Summary of Ground Water Levels
Stone Road Industrial Park
Our Project Number 121-97-07381**

Boring Number	Depth to Boring Termination (feet)	Depth to Ground Water TOB (feet)	Depth to Ground Water 24 hours (feet)	Depth to Ground Water 16 days** (feet)	Depth to Ground Water 18 days (feet)
B-1	10.0	N.E.	N.E.	3.3	3.9
B-2	10.0	N.E.	*	3.3	3.0
B-3	10.0	N.E.	6.0	4.3	4.9

* Boring opening damaged by surface drainage. Repaired by hand augering.

**Temporary observation wells installed 8 days after borings drilled.

TOB – Time of boring

N.E. - Not encountered

Attachment D

Natural Heritage Program Letter

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF PARKS AND RECREATION

September 15, 1998



NCDENR

JAMES B. HUNT, JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

DR. PHILIP K. MCKENNEY
DIRECTOR

Mr. J. Frank Braxton, RLA
Sungate Design Group, P.A.
915-A Jones Franklin Road
Raleigh, NC 27606

SUBJECT: Rare Species, High Quality Natural Communities, and
Significant Natural Heritage Areas at the Proposed LCID
Project Site, Durham, Durham County, North Carolina

Dear Mr. Braxton:

The North Carolina Natural Heritage Program (NC NHP) has no records of high quality natural communities, rare species, scenic river, state park, recreational or scenic areas, or Significant Natural Heritage Areas at or within a 1.0 mile radius of the proposed LCID site, Durham, Durham County, North Carolina.

Enclosed is a list of rare species and high quality natural communities that are known to occur in Durham County. If suitable habitat for any of these species occurs in the project area, then those species may be present at the project site and a survey may be necessary.

Please do not hesitate to contact me at the address below or call me at (919) 715-8703 if you have any questions or need further information.

Sincerely,



Susan Reece Giles
Information Specialist
Natural Heritage Program

Enclosure

NC NATURAL HERITAGE PROGRAM COUNTY SPECIES LIST COVER SHEET

The county species list from the NC Natural Heritage Program is a listing of the elements (rare species, natural communities, and special animal habitats) known to occur in a county. The information on this printout is compiled from a variety of sources, including field surveys, museums and herbaria, literature, and personal communications. The Heritage Program's Biological and Conservation Database (BCD) is dynamic, with new records being added and old records being revised as new information is received. The BCD was developed and is maintained using methodology developed by The Nature Conservancy. The enclosed list cannot be considered a definitive record of natural heritage elements, and it should not be considered a substitute for field surveys. When this information is used in any document, we request that the printout date be given and that the NC Natural Heritage Program be credited.

This cover sheet explains the four columns of status codes that are given on the right-hand side of the county list printout.

STATE STATUS

CODE	STATUS	CODE	STATUS
E	Endangered	P	Proposed (E, T, or C)
T	Threatened	SR	Significantly Rare
SC	Special Concern	EX	Extirpated
C	Candidate		

Plant statuses are determined by the Plant Conservation Program (NC Department of Agriculture) and the Natural Heritage Program (NC Department of Environment and Natural Resources). E, T, and SC species are protected by state law (Plant Protection and Conservation Act, 1979). C and SR designations indicate rarity and the need for population monitoring and conservation action.

Animal statuses that indicate state protection (E, T, and SC) are published in *Endangered Wildlife of North Carolina*, March 16, 1992, Nongame and Endangered Wildlife Program (NC Department of Environment and Natural Resources). SR and EX statuses are Natural Heritage Program designations. SR indicates rarity and the need for population monitoring and conservation action.

FEDERAL STATUS

This status is designated by the US Fish and Wildlife Service. Federally listed Endangered and Threatened species are protected under the provisions of the Endangered Species Act of 1973, as amended through the 100th Congress. Unless otherwise noted, definitions are taken from the *Federal Register*, Vol. 56, No. 225, November 21, 1991 (50 CFR Part 17).

CODE	STATUS	DEFINITION
E	Endangered	A taxon "in danger of extinction throughout all of a significant portion of its range."
T	Threatened	A taxon "likely to become an endangered species within the foreseeable future throughout all of a significant portion of its range."
P	Proposed	A taxon proposed for official listing as endangered or threatened.
C	Candidate	A taxon under consideration for which there is sufficient information to support listing. This category was formerly designated as a Candidate 1 (C1) species.
FSC		Federal "Species of Concern" (also called "Species at Risk"). Formerly defined as a taxon under consideration for which there is insufficient information to support listing; formerly designated as a Candidate 2 (C2) species. Currently, the US Fish and Wildlife Service does not recognize this as an official designation.
T(S/A)		Threatened due to Similarity of Appearance. Species with this designation are not considered biologically endangered or threatened and are listed for trade purposes. [The American Alligator has this designation due to similarity of appearance to other rare crocodylians. The Bog Turtle (southern population) has this designation due to similarity of appearance to Bog Turtles in the threatened northern population.]

Please note that the US Fish and Wildlife Service no longer recognizes the following categories:

3A	Candidate 3A	A taxon formerly under consideration for listing, but for which there is "persuasive evidence of extinction."
	Candidate 3B	A taxon formerly under consideration for listing, but which current taxonomic understanding does not support as a distinct entity meeting the Endangered Species Act's definition of "species."
3C	Candidate 3C	A taxon formerly under consideration for listing, but which has been "proven to be more abundant or widespread than previously believed and/or [which is] not subject to any identifiable threat."

SCIENTIFIC NAME	COMMON NAME	STATE STATUS	FED. STATUS	STATE RANK	GLOBAL RANK
Durham					
Vertebrates					
Accipiter cooperii	Cooper's Hawk	SC	-	S3B, S3N	G5
Ambloplites cavifrons	Roanoke Bass	SR	-	S3	G3
Haliaeetus leucocephalus	Bald Eagle	E	T	S2B, S2N	G4
Hemidactylum scutatum	Four-toed Salamander	SC	-	S3	G5
Necturus lewisi	Neuse River Waterdog	SC	-	S3	G3
Noturus furiosus pop 1	Carolina Madtom - Neuse River Population	SC	-	S2	G3T2Q
Invertebrates					
Alasmidonta undulata	Triangle Floater	T	-	S2	G4
Erynnis martialis	Mottled Dusky Wing	SR	-	S3	G4
Fusconaia masoni	Atlantic Pigtoe	T	FSC	S1	G2
Gomphus septima	Septima's Clubtail	SR	FSC	S1	G2
Lampsilis cariosa	Yellow Lampmussel	T	FSC	S1S2	G4
Lampsilis radiata	Eastern Lampmussel	SC	-	S1S2	G5
Lasmigona subviridis	Green Floater	E	FSC	S1	G3
Somatogyrus virginicus	Panhandle Pebblesnail	SR	FSC	S1?	G1G3
Strophitus undulatus	Squawfoot	T	-	S2S3	G5
Tachopteryx thoreyi	Gray Petaltail	SR	-	S3?	G4
Villosa constricta	Notched Rainbow	SR	-	S2S3	G3G4
Villosa delumbis	Eastern Creekshell	SR	-	S3?	G4
Vascular plants					
Agalinis decemloba	Piedmont Gerardia	SR	-	S2?	G4Q
Aster laevis var concinnus	Narrow-leaved Aster	C	-	S2	G5T4
Baptisia minor	Prairie Blue Wild Indigo	C/PT	-	S2	G4
Berberis canadensis	American Barberry	SR	-	S2	G3
Cardamine dissecta	Dissected Toothwort	C	-	S2	G4?
Cardamine douglassii	Douglass's Bittercress	SR	-	S2	G5
Carex bushii	Bush's Sedge	SR	-	SH	G4
Carex jamesii	James's Sedge	SR	-	S1	G5
Carex meadii	Mead's Sedge	SR	-	S1	G4G5
Carex vestita	Velvet Sedge	C	-	SH	G5
Delphinium exaltatum	Tall Larkspur	E-SC	FSC	S1	G3
Echinacea laevigata	Smooth Coneflower	E-SC	E	S1	G2
Enemion biternatum	Eastern Isopyrum	SR	-	S2	G5
Eupatorium godfreyanum	Godfrey's Thoroughwort	SR	-	S1	G4
Eupatorium incarnatum	Pink Thoroughwort	SR	-	S2	G5
Hexalectris spicata	Crested Coralroot	SR	-	S2	G4?
Hexastylis lewisii	Lewis's Heartleaf	SR	-	S3	G4
Liatris squarrulosa	Earle's Blazing Star	SR	-	S2	G4G5
Lithospermum canescens	Hoary Puccoon	SR	-	S1	G5
Matelea decipiens	Glade Milkvine	SR	-	S2	G5
Monotropsis odorata	Sweet Pinesap	C	FSC	S3	G3
Panax trifolius	Dwarf Ginseng	SR	-	S3	G5
Parthenium auriculatum	Glade Wild Quinine	C	-	S1	G3?Q
Platanthera peramoena	Purple Fringeless Orchid	C	-	S1	G5
Porteranthus stipulatus	Indian Physic	SR	-	S2	G5
Prunus pumila var susquehanae	Susquehanna Cherry	C	-	SH	G3T4
Rhus michauxii	Michaux's Sumac	E-SC	E	S2	G2
Ruellia humilis	Low Wild-petunia	T	-	S1	G5
Ruellia purshiana	Pursh's Wild-petunia	SR	-	S2	G5
Scirpus pendulus	Rufous Bulrush	SR	-	S1	G5
Scutellaria leonardii	Shale-barren Skullcap	C	-	S1	G4
Scutellaria nervosa	Veined Skullcap	SR	-	S1	G5
Silphium terebinthinaceum	Prairie Dock	C	-	S2	G4G5
Solidago rigida ssp glabrata	Southeastern Bold Goldenrod	SR	-	S2	G5T4
Natural communities					
Basic Mesic Forest (Piedmont subtype)	-	-	-	S2	G5T3
Basic Mesic Oak--Hickory Forest	-	-	-	S3	G4
Basic Mesic Oak--Hickory Forest	-	-	-	S5	G5
Floodplain Pool	-	-	-	S2	G3?
Mesic Mixed Hardwood Forest (Piedmont Subtype)	-	-	-	S4	G5T5
Piedmont Monadnock Forest	-	-	-	S4	G5
Piedmont/Coastal Plain Heath Bluff	-	-	-	S3	G4?

SCIENTIFIC NAME	COMMON NAME	STATE STATUS	FED. STATUS	STATE RANK	GLOBAL RANK
Piedmont/Low Mountain Alluvial Forest	-	-	-	S5	G5
Piedmont/Mountain Bottomland Forest	-	-	-	S3?	G5
Piedmont/Mountain Levee Forest	-	-	-	S3?	G5
Piedmont/Mountain Semipermanent Impoundment	-	-	-	S4	G5
Piedmont/Mountain Swamp Forest	-	-	-	S1	G2
Upland Depression Swamp Forest	-	-	-	S2	G3
Upland Pool	-	-	-	S1	G1
Xeric Hardpan Forest	-	-	-	S3	G3G4
Durham*					
Vascular plants					
Panicum flexile	Wiry Panic Grass	SR	-	S1	G4G5
Thermopsis mollis sensu stricto	Appalachian Golden-banner	SR	-	S2	G3G4
Durham**					
Vertebrates					
Etheostoma collis	Carolina Darter	SC	-	S3	G3

Attachment E

Approval Letter

DURHAM CITY - COUNTY BUILDING PERMIT

PERMIT NO.: 0302280

DATE ISSUED: 07/08/2003

ADDRESS: 0148 STONE PARK CT

TYPE PAYMENT: CASH

ADDRESS DESCRIPTION:

JURISDICTION: CITY

OWNER: WASTE INDUSTRIES

James A. Morgan

Chief Building Inspector

ARCHITECT:

PHONE NUMBER:

TYPE OCCUPANCY: MODERATE HAZARD

TYPE APPLICATION: TEMPORARY USE

ESTIMATED COST OF CONSTRUCTION

ZONING: I3

HD:

BOA:

GENERAL.....	WASTE INDUSTRIES	COST:		IP: N	LS: N
PLUMBING.....		COST:		CWS: N	FF: N
ELECTRICAL.....		COST:		MTC: N	SB: N
MECHANICAL.....		COST:		FD: N	SP: N
OTHER.....		COST:		WP: N	
TOTAL BUILDING COST:					

NUMBER OF BATHS:	TYPE OF CONSTRUCTION:	TSB OTHER	
NUMBER OF BEDROOMS:	TYPE OF HEAT:	NOT APPLICABLE	
NUMBER OF ROOMS:	TYPE OF ROOF:	NOT APPLICABLE	
NUMBER OF STORIES:	SQ. FT. LAND AREA:	RS:	
NUMBER OF UNITS:	SQ. FT. FLOOR AREA:	R:	
NUMBER OF HANDICAP UNITS:	NO. PARKING SPACES:	HT:	
BASEMENT: N	NO. HANDICAP PARKING SPACES:	TOTAL BUILDING PERMIT:	42.00

TAX MAP REFERENCE: 840-03-20-8957

JOB DESCRIPTION: TEMP DEMOLITION LANDFILL- 7/7/03-6/30/13
INSP: DAVID COWARD- 560-4203

WASTE INDUSTRIES
3301 BENSON DR
RALEIGH NC 27609

STATE LICENSE NO.:
PHONE NUMBER: 919 325 3000

This permit is hereby granted subject to compliance with the North Carolina State Building Code, the Durham City/County Zoning Ordinance, and all other applicable state and local laws.

Attachment F

Drawings

PROJECT: WASTE INDUSTRIES, INC. DURHAM DISTRICT CAMPUS TEMPORARY L.C.I.D. LANDFILL

OWNER:

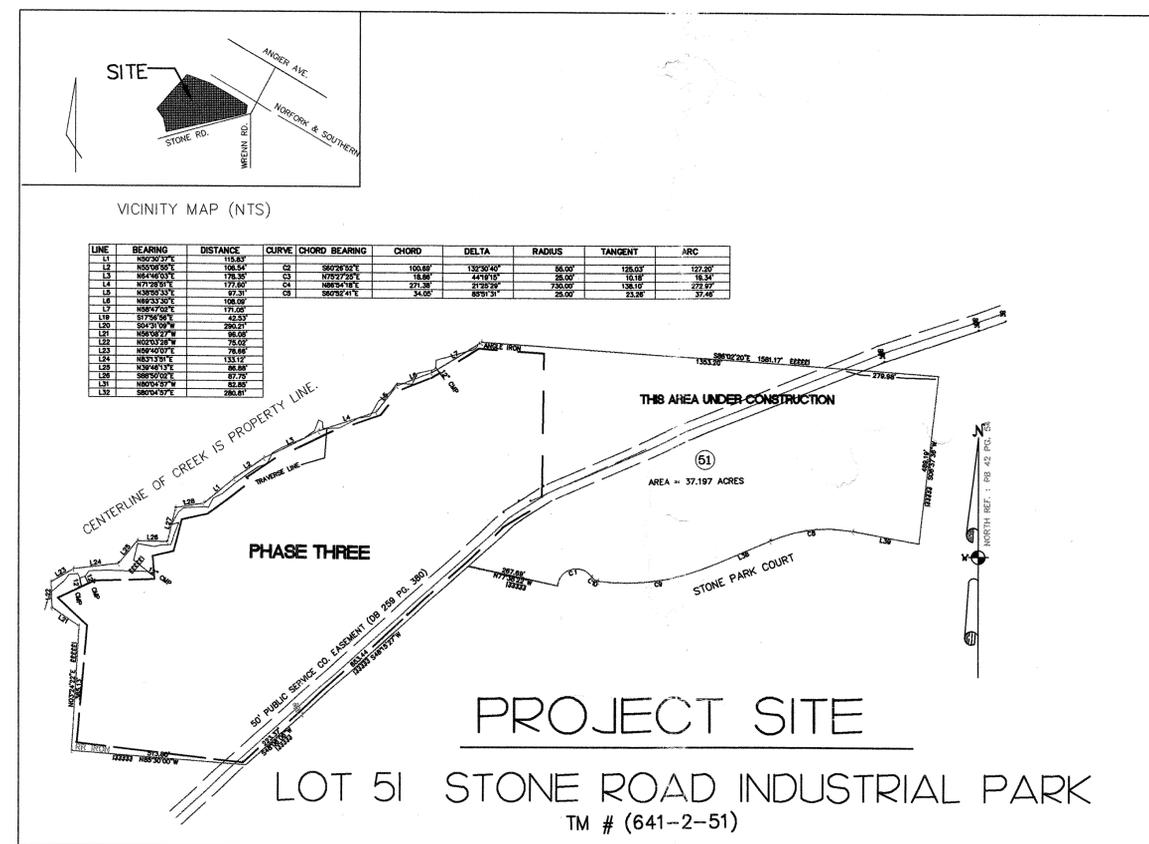
WASTE INDUSTRIES, INC.
3949 BROWNING PLACE
RALEIGH, NC 27609
919-782-0095

DESIGNER:

SUNGATE DESIGN GROUP, P.A.
915A JONES FRANKLIN ROAD
RALEIGH, NC 27606
919-859-2243

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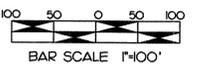
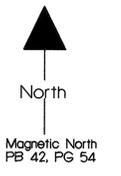
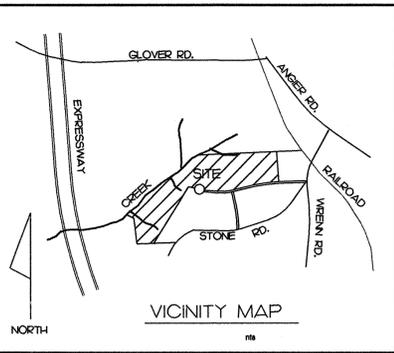


APPROVAL STAMPING

SPECIAL CONDITIONS
OF APPROVAL



DURHAM CITY/COUNTY PLANNING
CASE # D98-389, TM. # 641-2-51



PHASE TWO (PROPOSED)

PHASE ONE (UNDER CONSTRUCTION)

PHASE THREE BOUNDARY OVERLAPS WITH PHASE TWO BOUNDARY TO ALLOW ACCESS

JOVEN FIVE GROUP
DB 1278 PG 668
TAX PARCEL 639-10
ZONING: RD
VACANT

JOVEN FIVE GROUP
DB 1278 PG 668
TAX PARCEL 639-10
ZONING: RD
VACANT

WETLAND DATA
CREEK AS REFERENCED PROPERTY LINE ARE WATERS OF THE UNITED STATES AS CERTIFIED BY THE UNITED STATES ARMY CORPS OF ENGINEERS ON A SURVEY BY LEWIS, BRENNAN AND ASSOCIATES, DATED 11/3/98.

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK, NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

STORMWATER IMPOUNDMENT

MATERIALS INSPECTION & PROCESSING

PROPOSED PROCESSING AND TRANSFER STRUCTURE

DISTRICT OFFICE AND TRUCK TERMINAL
UNDER CONSTRUCTION

STONE PARK COURT
60' ROW PUBLIC UNDER CONSTRUCTION

TEMPORARY L.C.I.D. DEMOLITION LANDFILL

SOLID WASTE BUFFER
50 FEET FROM THE WASTE BOUNDARY TO SURFACE WATERS, 100 FEET FROM THE DISPOSAL AREA TO PROPERTY LINES, RESIDENTIAL DWELLINGS, COMMERCIAL OR PUBLIC BUILDINGS AND WELLS.

NOTE:
ITEMS DESIGNATED AS UNDER CONSTRUCTION ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

PHASE THREE

SANITARY SEWER EASEMENTS:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 150, PAGE 958. NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.

BUFFER RELATIONSHIP
THE 40' ZONING BUFFER INCLUDES THE 25' STREAM BUFFER. THE 100' SOLID WASTE BOUNDARY WILL PROVIDE A 60' SEPARATION BETWEEN THE ACTIVE DISPOSAL AREA AND THE REQUIRED LOCAL GOVERNMENTAL BUFFERS.

SITE DATA	
SUBDIVISION/LOT	LOT 51 STONE ROAD INDUSTRIAL PARK
ZONING	HEAVY INDUSTRIAL I-3 (DURHAM COUNTY) TM# (64-2-5)
LOT SIZE	37.197 ACRES
RECORD DATA	BOOK 137, PAGE 48
PHASE ONE (UNDER CONSTRUCTION)	
AREA	14.18 ACRES
LANDUSE	DISTRICT OFFICE AND TRUCK TERMINAL
PHASE TWO (PROPOSED)	
AREA	11.20 ACRES
LANDUSE	PROCESSING AND RECYCLING CENTER
PHASE THREE (THIS SUBMITTAL)	
AREA	10.30 ACRES
LANDUSE	TEMPORARY LCID & DEMOLITION LANDFILL
AREA	15 ACRES
LANDUSE	WOODWASTE PROCESSING
PHASE 3 IMPERVIOUS COVERAGE	
GRAVEL HALL ROAD SF	2,996 SF
PERCENTAGE OF PHASE AC.	4.28%

REV. NO.	DESCRIPTIONS	DATE
1	SEWER EASEMENT WIDTH TO 40' (M# #14 - M# #15) PER CITY OF DURHAM REQUEST	5/22/98



LEONARD B. SHAFFER
PB 97 PG 31
DB 1212 PG 48
TAX PARCEL 641-50
ZONING: I-2
VACANT

DESIGNED: SDG
DRAWN: SDG
CHECKED: SDG
PROJ. ENG. WHW

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919) 859-6258

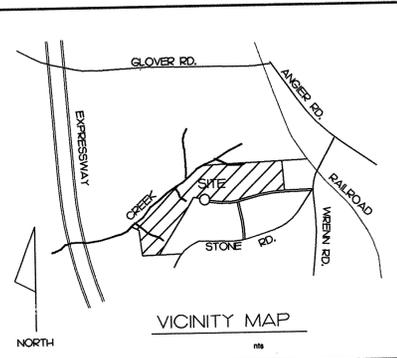
PHASE THREE TEMPORARY L.C.I.D. LANDFILL

WASTE INDUSTRIES DURHAM DISTRICT CAMPUS

PRELIMINARY MASTER PLAN

DATE: MAY 1998
SDG PROJ. # 05-971
DWG FILE# WIDURLPMP01A

SCALE
HORIZONTAL: 1"=100'
VERTICAL:
SHEET NO. **MP1**
OF: 8



STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED. BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

SOLID WASTE BUFFER
50 FEET FROM THE WASTE BOUNDARY TO SURFACE WATERS. 100 FEET FROM THE DISPOSAL AREA TO PROPERTY LINES, RESIDENTIAL DWELLINGS, COMMERCIAL OR PUBLIC BUILDINGS AND WELLS.

40' ZONING BUFFER
REQUIRED BY LOCAL GOVERNMENT

TEMPORARY HAUL ROAD LOCATION TO VARY WITH OPERATION NEEDS AND L.C.I.D. LANDFILL RESTORATION SEQUENCE.

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

TREE PROTECTION FENCING TO BE INSTALLED 2 FEET OUTSIDE OF THE 40 FEET BUFFER BOUNDARY FOR THE ENTIRE LENGTH

TEMPORARY FIRE HYDRANT FLOW = 2600 GPM. FIRE HYDRANT TO BE REMOVED AT CLOSE OF L.C.I.D. LANDFILL

JOVEN FIVE GROUP
PB 1278 PG 668
TAX PARCEL 639-10
ZONING: RD
VACANT

THE EXISTING SEDIMENT BASINS SHALL BE EXCAVATED, LINKED AND RISERS REPAIRED TO SERVE AS BOTH A TEMPORARY SEDIMENT CONTROL AND PERMANENT STORMWATER DEVICE.

100 YEAR STORM ELEVATION CAUSED BY BACKWATER FROM CULVERT UNDER NC 147

PROJECT AREA IS OUTSIDE OF FEMA FLOOD BOUNDARIES. PANEL 178 OF 280, 3706300178G, DATED 2/2/96.

100' SOLID WASTE BUFFER

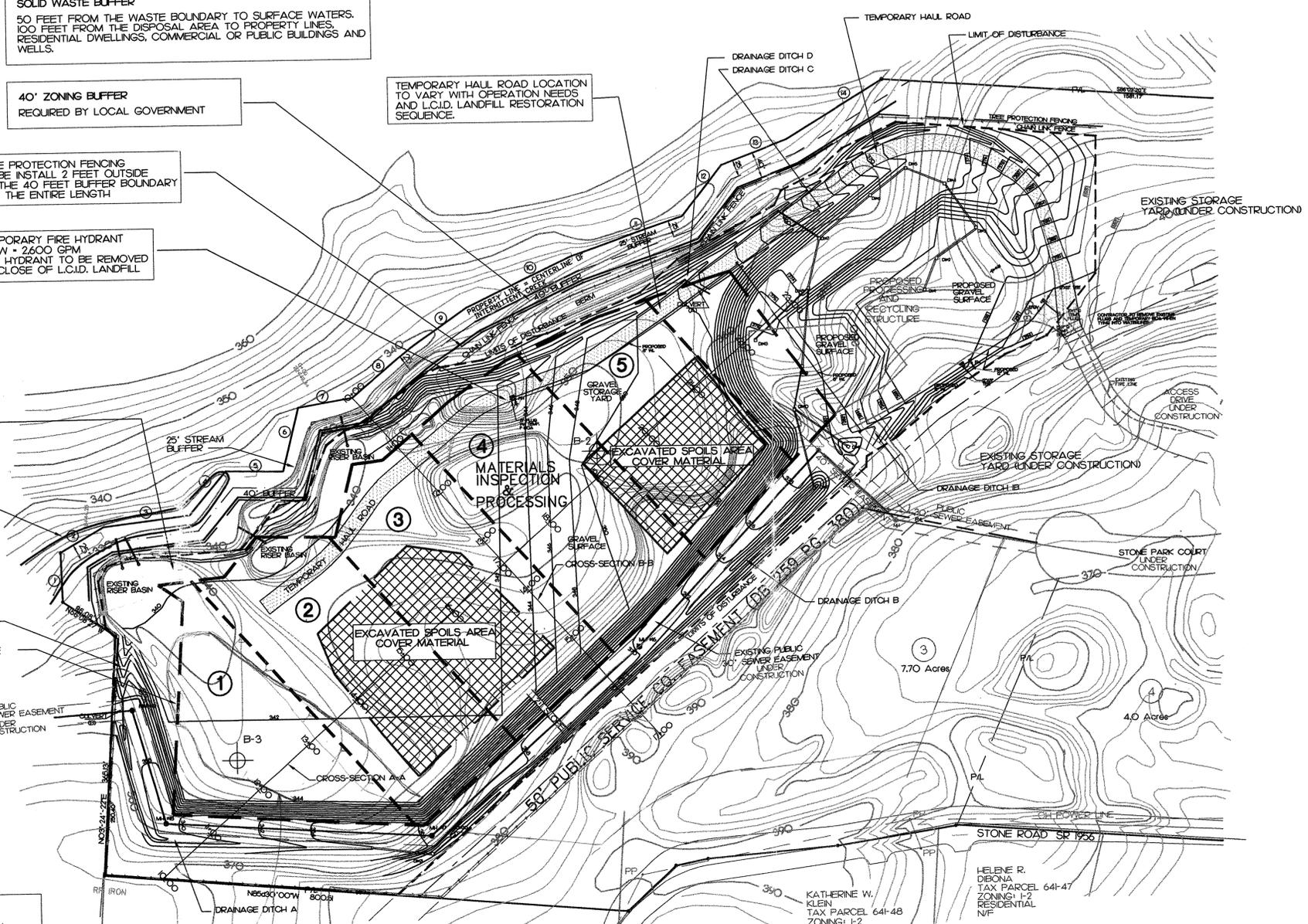
KATHLEEN RIGSBEE
DB 115 PG 539
TAX PARCEL 641-2A
ZONING: I-2
VACANT

SANITARY SEWER EASEMENTS:
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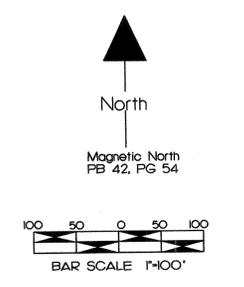
SOLID WASTE BUFFER
50 FEET FROM THE WASTE BOUNDARY TO SURFACE WATERS. 100 FEET FROM THE DISPOSAL AREA TO PROPERTY LINES, RESIDENTIAL DWELLINGS, COMMERCIAL OR PUBLIC BUILDINGS AND WELLS.

*Waste Limit of 4/10/00
Per II*

NOTE:
ITEMS DESIGNATED AS UNDER CONSTRUCTION ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

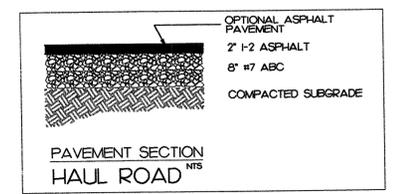


LINE	BEARING	DISTANCE
1	N02°03'28"W	75.02'
2	N59°40'07"E	76.66'
3	N83°13'51"E	133.12'
4	N38°46'13"E	86.88'
5	S89°00'02"E	87.75'
6	N80°04'57"W	82.85'
7	S80°04'57"E	280.81'
8	N50°30'37"E	115.83'
9	N55°08'55"E	106.54'
10	N64°46'03"E	178.35'
11	N71°28'51"E	177.80'
12	N38°55'33"E	97.31'
13	N69°33'30"E	108.09'
14	N58°47'02"E	171.05'

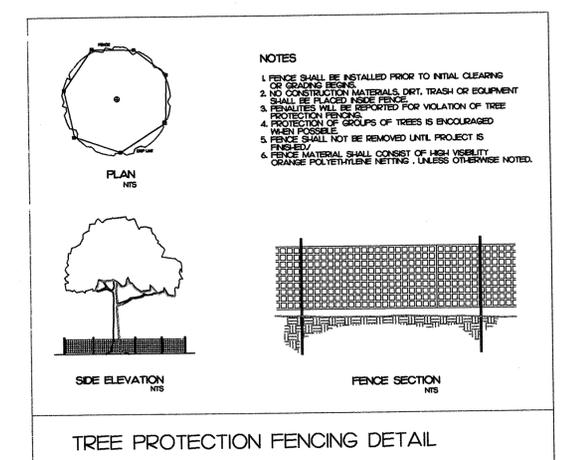
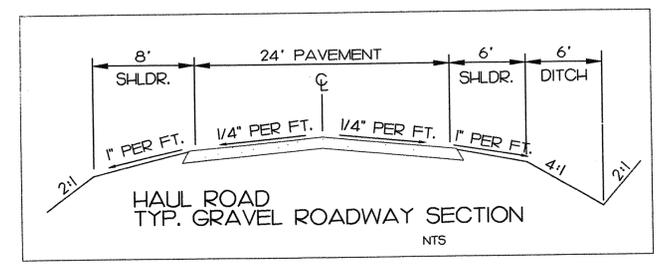


B-2 GROUND WATER BORING DATA

BORING NUMBER	GROUND ELEVATION	DEPTH TO GROUND WATER	MIN. WASTE ELEV.	PROPOSED WASTE ELEV.
#2	348.60	3.0 FT	349.60	350.00
#3	342.11	4.9 FT	341.21	342.25



NOTES:
GEO-TECH ENGINEER TO EVALUATE HAUL ROAD BASED ON FIELD CONDITIONS.



- NOTES:**
- BOUNDARY DATA OBTAINED FROM A SURVY BY TODD SMITH SURVEYOR.
 - TOPOGRAPHIC DATA OBTAINED FROM FIELD SURVEY BY TODD SMITH SURVEYOR AND CITY OF DURHAM TOPOGRAPHIC MAPS.
 - ALL GRADING OPERATIONS SHALL BE IN ACCORDANCE WITH THE DURHAM COUNTY SEDIMENTATION AND EROSION CONTROL REGULATIONS.
 - ALL DENUDED AREAS OUTSIDE OF THE WORKING SURFACES SHALL BE STABILIZED AND/OR GRASSED.
 - A PERMIT FROM THE NORTH CAROLINA DIVISION OF SOLID WASTE MANAGEMENT IS REQUIRED PRIOR TO THE OPERATION OF A L.C.I.D. TEMPORARY LANDFILL.
 - NO SITE AREA LIGHTING IS PROPOSED FOR THIS PHASE OF THE WASTE INDUSTRIES DURHAM DISTRICT CAMPUS.

REV. NO.	DESCRIPTIONS	DATE
1	GRADING REVISION AND P.L. SITE LIGHTING NOTE	9/22/98
2	SEWER EASEMENT WIDTH TO 40' (NH #14 - NH #15) PER CITY OF DURHAM REQUEST	9/22/98

Professional Engineer Seal for W. J. B. (WJB) No. 9334, State of North Carolina. Date: 2/10/99.

DESIGNED: SDG
DRAWN: JFB
CHECKED: SDG
PROJ. ENG.

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919) 859-6258

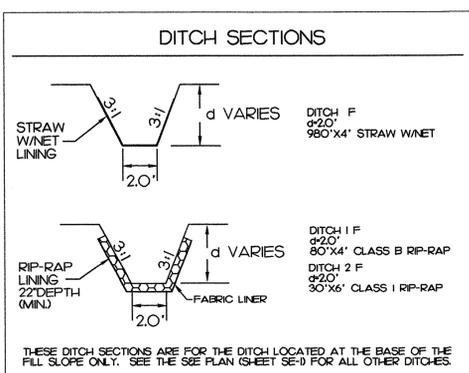
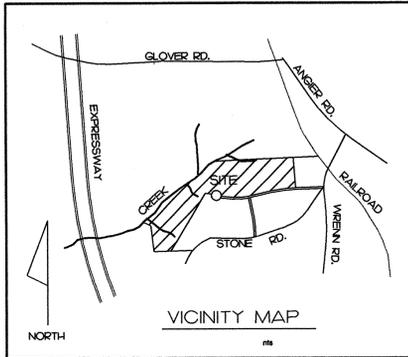
WASTE INDUSTRIES DURHAM DISTRICT CAMPUS

TEMPORARY LCID LANDFILL EXCAVATION PLAN

DATE: JAN 1999
SDG PROJ. # 05-9711
DWG FILE # WDURLF901A

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

SHEET NO. **G-1**
OF: 8



STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

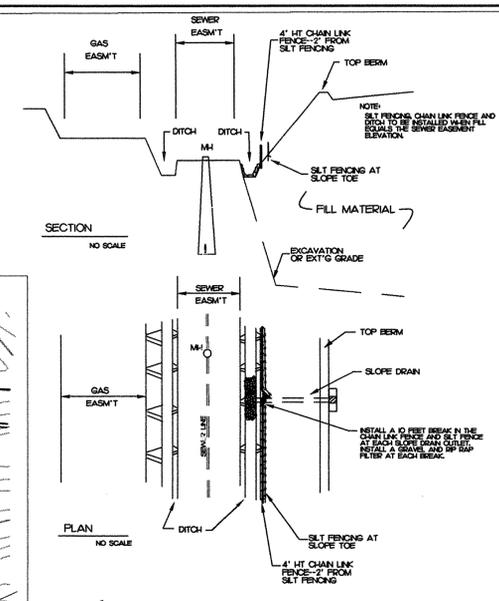
SOLID WASTE BUFFER
50 FEET FROM THE WASTE BOUNDARY TO SURFACE WATERS. 100 FEET FROM THE DISPOSAL AREA TO PROPERTY LINES. RESIDENTIAL DWELLINGS, COMMERCIAL OR PUBLIC BUILDINGS AND WELLS.

40' ZONING BUFFER
40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

HALL ROAD SHALL BE REMOVED AS PART OF THE RESTORATION PLAN

NOTES FOR FILL SLOPE RESPONSIBILITY:
1. THE OWNER SHALL BE RESPONSIBLE FOR ALL FILL SLOPES IN ACCORDANCE WITH THE NORTH CAROLINA DIVISION OF PUBLIC WORKS AND THE NORTH CAROLINA DIVISION OF WASTE MANAGEMENT.
2. THE FILL SHALL BE APPLIED MONOLY. WHEN THE ACTIVE FILL IS APPLIED TO A SLOPE, THE FILL SHALL BE APPLIED TO THE SLOPE TO PREVENT OVER SPILLING AND TO MAINTAIN THE SLOPE TO THE DESIGN GRADE.
3. THE FILL SHALL BE APPLIED TO THE SLOPE TO PREVENT OVER SPILLING AND TO MAINTAIN THE SLOPE TO THE DESIGN GRADE.
4. THE FILL SHALL BE APPLIED TO THE SLOPE TO PREVENT OVER SPILLING AND TO MAINTAIN THE SLOPE TO THE DESIGN GRADE.
5. THE FILL SHALL BE APPLIED TO THE SLOPE TO PREVENT OVER SPILLING AND TO MAINTAIN THE SLOPE TO THE DESIGN GRADE.
6. THE FILL SHALL BE APPLIED TO THE SLOPE TO PREVENT OVER SPILLING AND TO MAINTAIN THE SLOPE TO THE DESIGN GRADE.

SLOPE PROTECTION DETAIL



LINE	BEARING	DISTANCE
1	N02°03'28"W	75.02'
2	N59°40'07"E	76.66'
3	N83°13'51"E	133.12'
4	N39°46'13"E	86.88'
5	S88°50'02"E	87.75'
6	N80°04'57"W	82.85'
7	S80°04'57"E	280.81'
8	N50°30'37"E	115.83'
9	N55°08'55"E	106.54'
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11	N71°28'51"E	177.60'
12	N38°55'33"E	87.51'
13	N69°33'30"E	108.09'
14	N58°47'02"E	171.05'

TREE PROTECTION FENCING TO BE INSTALL 2 FEET OUTSIDE OF THE 40 FEET BUFFER BOUNDARY FOR THE ENTIRE LENGTH

EXISTING RISER BASINS SHALL BE EXCAVATED TO CREATE A PERMANENT STORMWATER CONTROL POND

100 YEAR STORM ELEVATION CAUSED BY BACKWATER FROM CULVERT UNDER NO 147

PROJECT AREA IS OUTSIDE OF FEMA FLOOD BOUNDARIES. PANEL 178 OF 280, 37063CO178G, DATED 2/2/96.

100' SOLID WASTE BUFFER

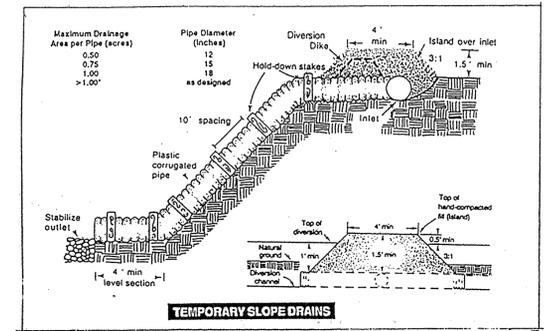
KATHLEEN RIGSBEE
DB 15 PG 539
TAX PARCEL 641-2A
ZONING: I-2
VACANT

SANITARY SEWER EASEMENTS:
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NOTE:
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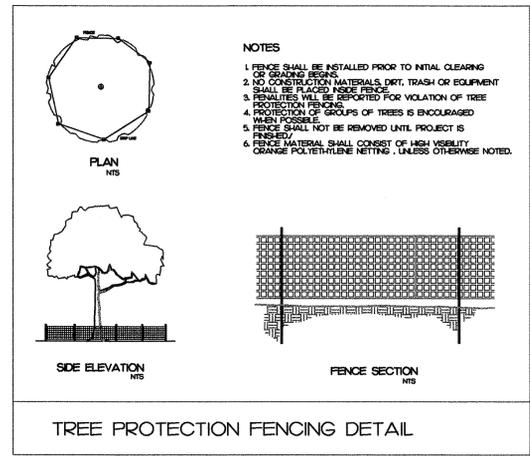
FUTURE BUILDING SITE AREA TO RECEIVE BENEFICIAL FILL ONLY. SITE PLAN APPROVAL SHALL BE OBTAINED FROM THE CITY OF DURHAM FOR ANY PROPOSED BUILDING.

- NOTES:**
- BOUNDARY DATA OBTAINED FROM A SURVEY BY TODD SMITH SURVEYOR.
 - TOPOGRAPHIC DATA OBTAINED FROM FIELD SURVEY BY TODD SMITH SURVEYOR AND CITY OF DURHAM TOPOGRAPHIC MAPS.
 - ALL GRADING OPERATIONS SHALL BE IN ACCORDANCE WITH THE DURHAM COUNTY SEDIMENTATION AND EROSION CONTROL REGULATIONS.
 - ALL DENUDED AREAS OUTSIDE OF THE WORKING SURFACES SHALL BE STABILIZED AND/OR GRASSED.
 - A PERMIT FROM THE NORTH CAROLINA DIVISION OF SOLID WASTE MANAGEMENT IS REQUIRED PRIOR TO THE OPERATION OF A L.C.I.D. TEMPORARY LANDFILL.
 - FILL MATERIAL WITHIN THE FUTURE BUILDING SITE SHALL SELECTIVE INERT BENEFICIAL FILL.
 - NO SITE AREA LIGHTING IS PROPOSED FOR THIS PHASE OF THE WASTE INDUSTRIES DURHAM DISTRICT CAMPUS.

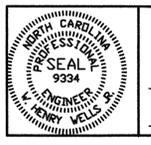


B-2 GROUND WATER BORING DATA

BORING NUMBER	GROUND ELEVATION	DEPTH TO GROUND WATER	MIN. WASTE ELEV.	PROPOSED WASTE ELEV.	FINAL COVER ELEVATION
#2	348.60	3.0 FT	349.60	350.00	382.50
#3	342.11	4.9 FT	341.21	342.25	381.50



REV. NO.	DESCRIPTIONS	DATE
1	REVISED GRADING, CLARIFIED TREE PROTECTION, ADDED SITE LIGHTING NOTE	04/05
2	PER CITY OF DURHAM 2ND REVIEW - MOVE BLDG PAD & DITCH OUT OF SS EASEMENT	5/16/98
3	SEWER EASEMENT WIDTH TO 42" (DB 151 - 141) PER CITY OF DURHAM REQUEST	8/22/98
4	ADD 4' CHAIN LINK FENCE AT SEWER EASEMENT PER CITY REQUEST	10/22/98
5	ADD 4' CHAIN LINK FENCE SLOPE PROTECTION DETAIL	10/22/98



DESIGNED: SDG
DRAWN: JFB
CHECKED: SDG
PROJ. ENG.
DATE: 2/10/99

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919) 859-6258

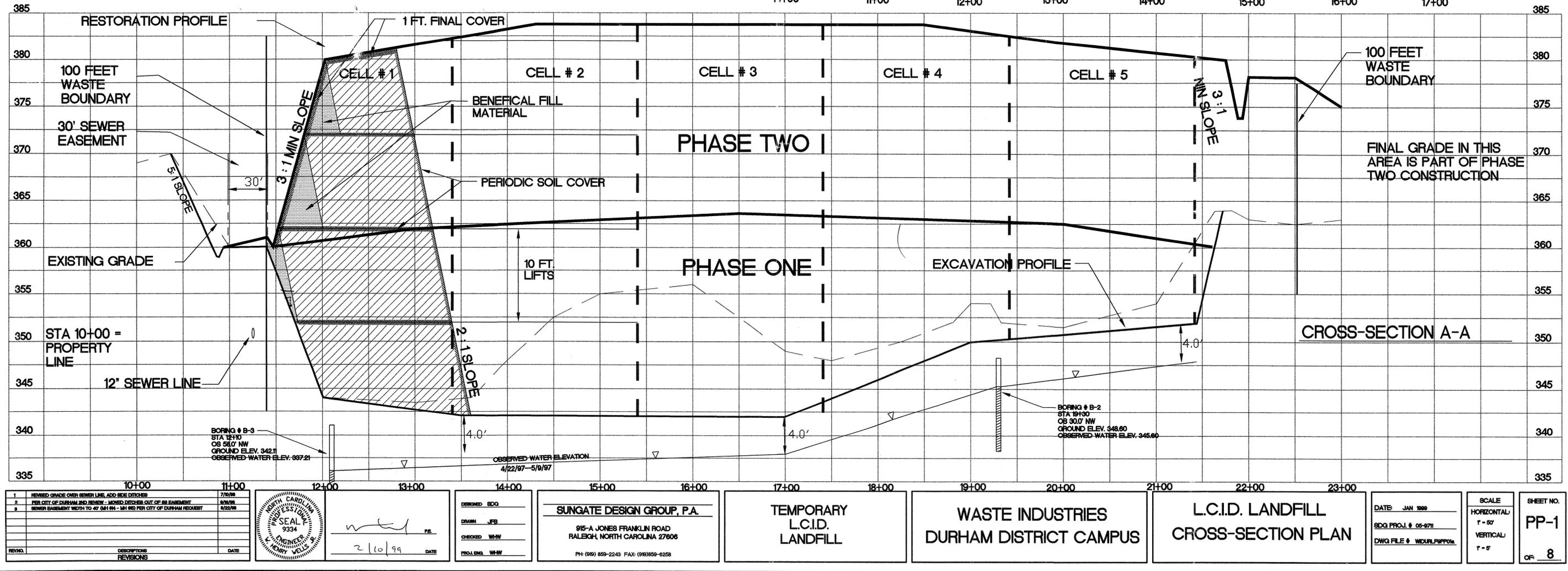
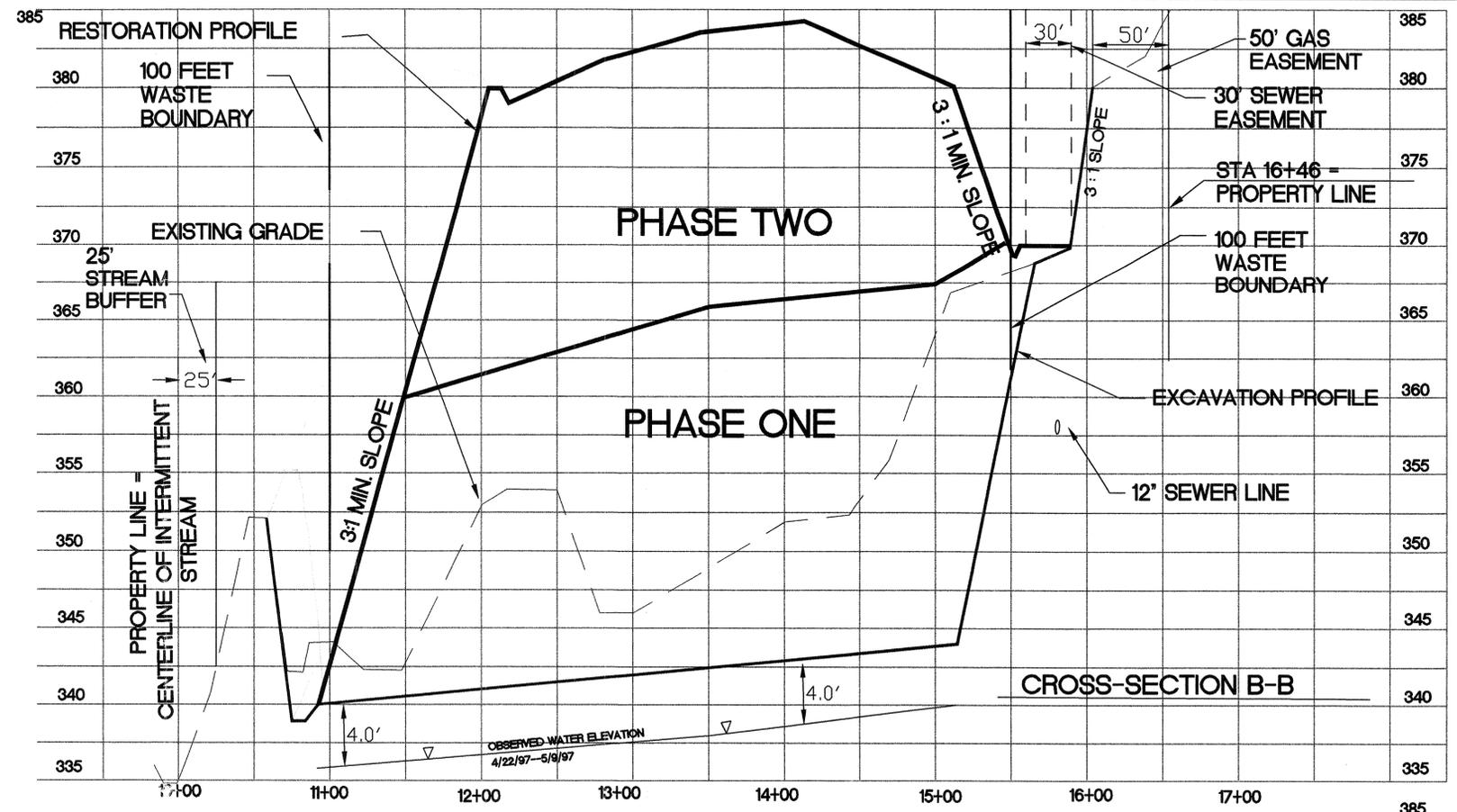
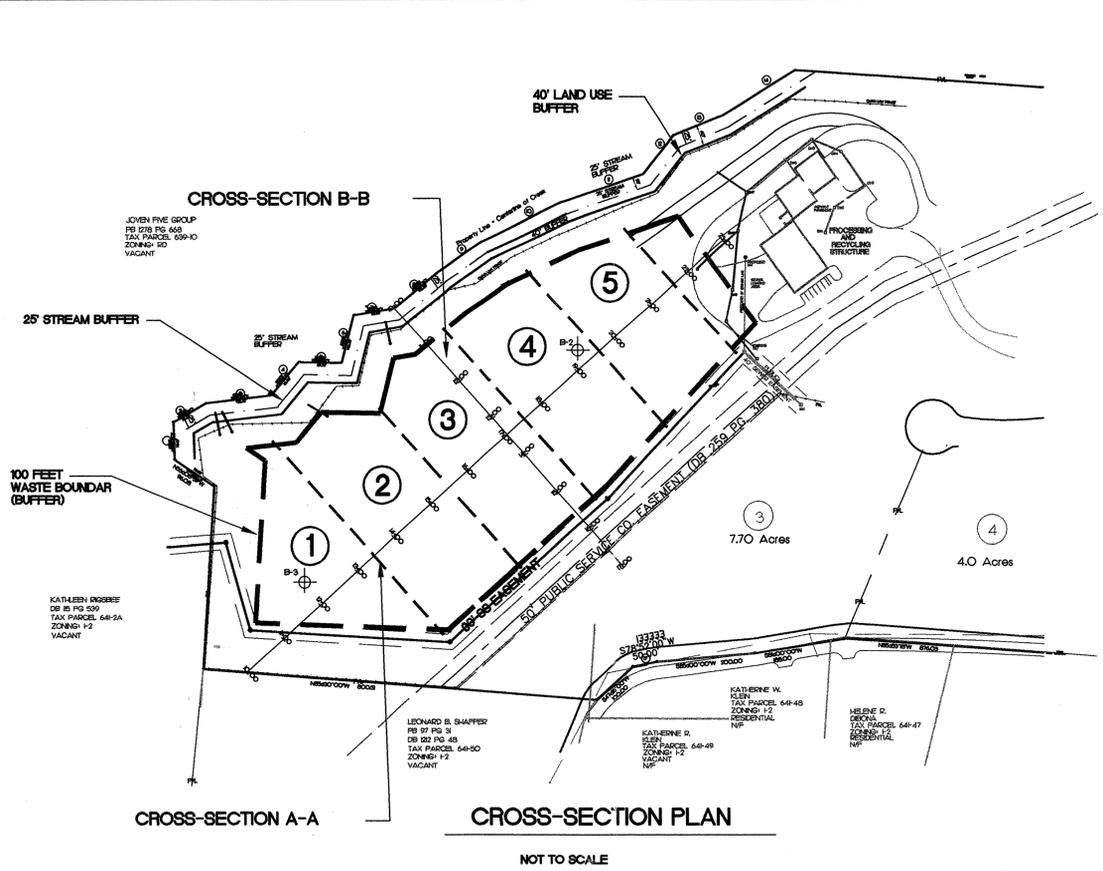
HELENE R. DIBONA
TAX PARCEL 641-47
ZONING: I-2
RESIDENTIAL
N/F

**WASTE INDUSTRIES
DURHAM DISTRICT CAMPUS**

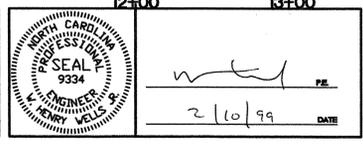
**TEMPORARY
LCID LANDFILL
RESTORATION PLAN**

DATE: JAN 1999
SDG PROJ. # 05-9711
DWG FILE # WDIRLF9022A

SCALE
HORIZONTAL: 1"=100'
VERTICAL:
SHEET NO. **G-2**
OF: 8



NO.	DESCRIPTION	DATE
1	REVISED GRADE OVER SEWER LINE, ADD SIDE DITCHES	7/20/98
2	PER CITY OF DURHAM 2ND REVIEW - MOVED DITCHES OUT OF 80' EASEMENT	8/26/98
3	SEWER EASEMENT WIDTH TO 47' 0" (4" - 14" PER CITY OF DURHAM REQUEST)	9/22/98



SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919) 859-0258

DESIGNED: SOG
DRAWN: JFB
CHECKED: WHW
PROJECTED: WHW

DATE: 2/10/99

TEMPORARY L.C.I.D. LANDFILL

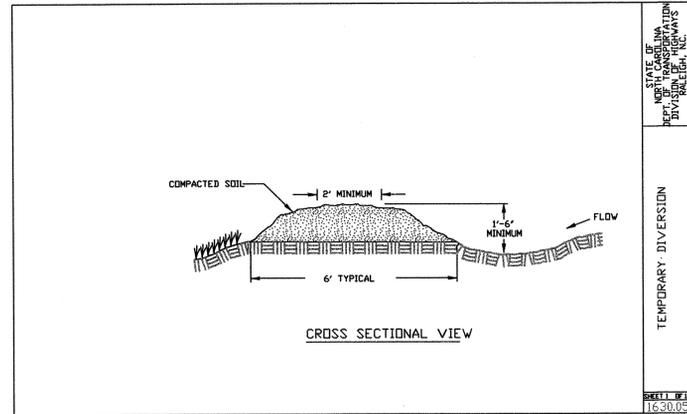
WASTE INDUSTRIES DURHAM DISTRICT CAMPUS

L.C.I.D. LANDFILL CROSS-SECTION PLAN

DATE: JAN 1999
SDG PROJ. # 05-971
DWG FILE # WIDLURLPP01a

SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

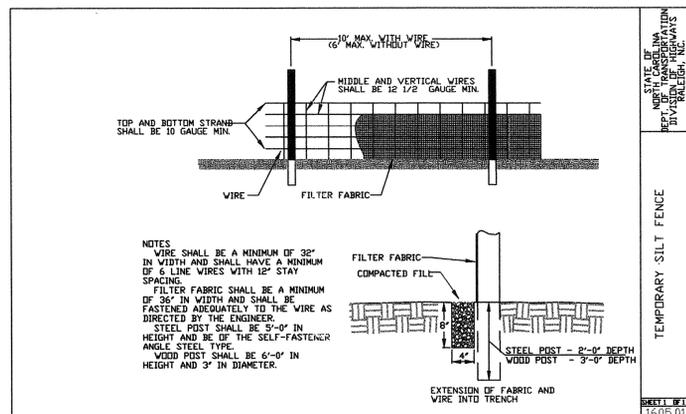
SHEET NO. **PP-1**
OF 8



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

TEMPORARY DIVERSION

SHEET # 1
16-30.05



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

TEMPORARY SILT FENCE

SHEET # 1
16-05.01

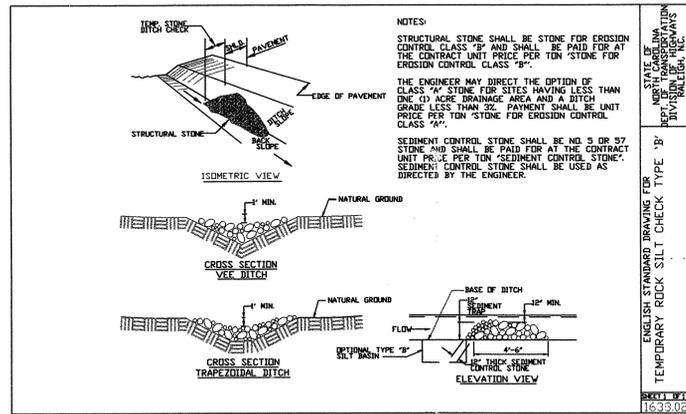
SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES AND SLOPES (3:1 TO 2:1)

DATE	TYPE	PLANTING RATE
MARCH - JUNE 1	SERICEA LESPEDEZA (SCARIFIED)	50 LBS/ACRE
MARCH 1 - APRIL 15	AND TALL FESCUE	120 LBS/ACRE
MARCH 1 - JUNE 30	ADD KEEPING LOVEGRASS	10 LBS/ACRE
MARCH 1 - JUNE 30	ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUNE 1 - SEPTEMBER 1	***TALL FESCUE AND ***BROWNTOP MILLET	120 LBS/ACRE
	AND SERICUM-SUBAN HYBRIDS	25 LBS/ACRE
SEPTEMBER 1 - MARCH 1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED)	70 LBS/ACRE
	AND TALL FESCUE	120 LBS/ACRE
	ADD ABRUZZI RYE	25 LBS/ACRE

CONSULT EROSION CONTROL ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENIED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

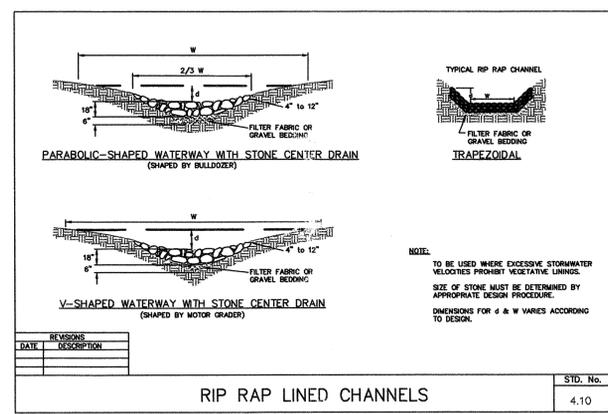
***TEMPORARY RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOVING. OTHERWISE FESCUE MAY BE SHAVED OUT.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

ENGLISH STANDARD DRAWING FOR
TEMPORARY ROCK SILT CHECK TYPE 'B'

SHEET # 1
16-33.02



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

TEMPORARY SILT FENCE

SHEET # 1
16-05.01

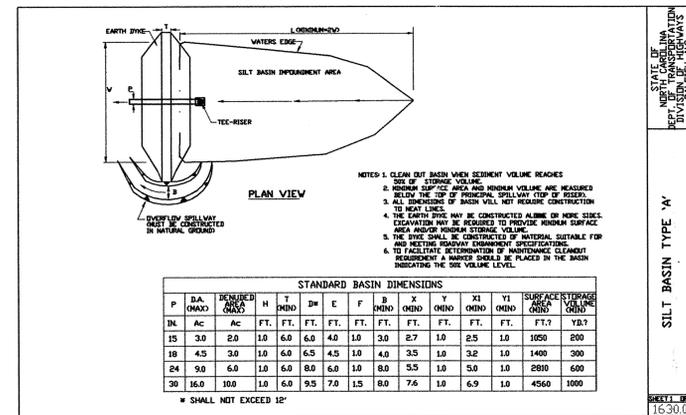
SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES AND SLOPES (SLOPES MAX. 3:1)

DATE	TYPE	PLANTING RATE
AUGUST 15 - NOVEMBER 1	TALL FESCUE	300 LBS/ACRE
NOVEMBER 1 - MARCH 1	TALL FESCUE AND ABRUZZI RYE	300 LBS/ACRE
MARCH 1 - APRIL 15	TALL FESCUE	300 LBS/ACRE
APRIL 15 - JUNE 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JULY 15 - AUGUST 15	TALL FESCUE AND *** BROWNTOP MILLET	25 LBS/ACRE

CONSULT EROSION CONTROL ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENIED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOVING. OTHERWISE FESCUE MAY BE SHAVED OUT.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

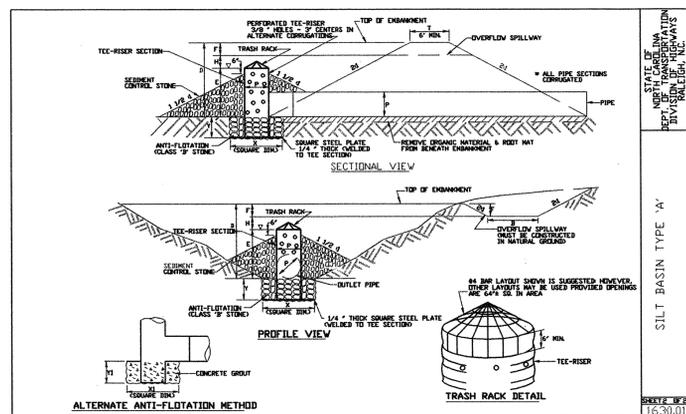
SILT BASIN TYPE 'A'

SHEET # 2
16-30.01

STANDARD BASIN DIMENSIONS

P	DA	RESURFACE AREA	H	T	D	E	F	B	X	Y	X1	Y1	SURFACE STORAGE VOLUME	YIELD
DL	Ac	Ac	Ft.	Ft. ³	YD ³									
15	3.0	2.0	1.0	6.0	4.0	1.0	3.0	2.7	1.0	2.5	1.0	1050	200	
18	4.5	3.0	1.0	6.0	4.5	1.0	4.0	3.5	1.0	3.2	1.0	1400	300	
24	9.0	6.0	1.0	6.0	6.0	1.0	8.0	5.5	1.0	5.0	1.0	2800	600	
30	16.0	10.0	1.0	6.0	9.5	1.5	8.0	7.6	1.0	6.9	1.0	4560	1000	

* SHALL NOT EXCEED 12'



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC

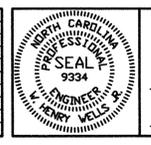
SILT BASIN TYPE 'A'

SHEET # 2
16-30.01

- SEEDBED PREPARATION FOR GRADED DEVELOPMENT AREAS**
1. CHISEL COMPACTED AREAS AND SPREAD AVAILABLE TOPSOIL 3" DEEP OVER ADVERSE SOIL CONDITIONS AS A FINAL OPERATION IN GRADING. WHERE CONVENTIONAL SEEDING EQUIPMENT IS TO BE USED, RIP THE ENTIRE AREA.
 2. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS FROM THE SURFACE THAT WILL INTERFERE WITH ESTABLISHMENT AND MAINTENANCE OF VEGETATION. LEAVE SURFACE REASONABLY SMOOTH AND UNIFORM FOR FINAL SEEDBED PREPARATION.
 3. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (IN ABSENCE OF A SOIL TEST, SEE RATES BELOW)
 - APPLY AGRICULTURAL LIMESTONE - 2 TONS/ACRE (3 TONS/ACRE FOR CLAY SOILS)
 - FERTILIZER - 1000 LBS/ACRE - 10-10-10
 - SUPERPHOSPHATE - 500 LBS/ACRE - 20% ANALYSIS
 - MULCH - 2 TONS/ACRE - SMALL GRAIN STRAW
 4. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH IN CRITICAL AREAS.
 5. INSPECT ALL SEEDING AREAS AND MAKE THE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RECOMMENDATIONS.

- CONSTRUCTION SEQUENCE**
1. SCHEDULE AN ON-SITE MEETING WITH THE DURHAM COUNTY SEDIMENTATION AND EROSION CONTROL INSPECTOR PRIOR TO THE START OF LAND DISTURBANCE.
 2. INSTALL THE TREE PROTECTION FENCING AS NOTED ON THE PLANS.
 3. INSTALL THE SILT FENCING AS ILLUSTRATED ON THE PLANS AND AS REQUIRED BY FIELD CONDITIONS.
 4. EXCAVATE AND SHAPE THE EXISTING SEDIMENTATION BASINS TO FORM A CONTINUOUS BASIN. REMOVE THE EXISTING GRAVEL FILTER FROM AROUND THE RISER BARRELS AND REPLACE WITH NEW GRAVEL AND RIP-RAP FILTER.
 5. ADD A RIP-RAP DISSIPATER AT THE OUTLET OF EACH RISER BARREL.
 6. CONSTRUCT AN EMERGENCY SPILLWAY NEAR THE CENTER OF THE DAM AND RIP-RAP FROM THE BASIN TO THE ADJACENT CREEK.
 7. BEGIN EXCAVATION AND SPOILS AREA OPERATIONS.
 8. STABILIZE ALL WORKING FACES, SLOPES AND EXPOSED SURFACES THAT ARE NOT INCLUDED WITHIN THE MONTHLY OPERATIONAL AREAS.
 9. OPERATE THE TEMPORARY LIQUID LANDFILL IN ACCORDANCE WITH THE APPROVED DURHAM PERMIT AND THE PERMIT ISSUED BY THE NORTH CAROLINA SOLID WASTE DIVISION.

REVNO.	DESCRIPTIONS REVISIONS	DATE



DESIGNED SDG
DRAWN SDG
CHECKED JFB
PROJ. ENG.

DATE 2/10/99

SUNGATE DESIGN GROUP, P.A.
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RALEIGH, NORTH CAROLINA 27606
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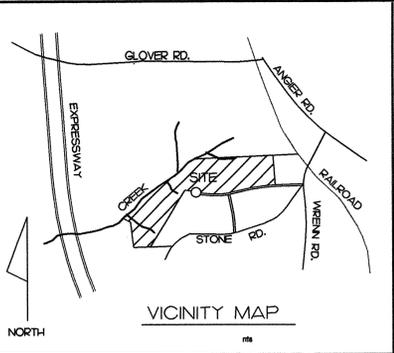
PHASE THREE
TEMPORARY
L.C.I.D.
LANDFILL

SEDIMENTATION
&
EROSION CONTROL
DETAILS

DATE: JAN 1999
SDG PROJ. # 05-9711
DWG FILE # WDURLF9SE02A

SCALE
HORIZONTAL:
VERTICAL:

SHEET NO.
SE-2
OF 8



STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK, NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

SOLID WASTE BUFFER
50 FEET FROM THE WASTE BOUNDARY TO SURFACE WATERS.
100 FEET FROM THE DISPOSAL AREA TO PROPERTY LINES, RESIDENTIAL DWELLINGS, COMMERCIAL OR PUBLIC BUILDINGS AND WELLS.

40' ZONING BUFFER
40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

HALL ROAD SHALL BE REMOVED AS PART OF THE RESTORATION PLAN

PROPOSED LOBLOLLY PINES IN THIS AREA ARE SUBJECT TO REVISIONS PENDING PHASE 2 PROCESSING AND RECYCLING CENTER DEVELOPMENT APPROVAL.

TREE PROTECTION FENCING TO BE INSTALLED 2 FEET OUTSIDE OF THE 40 FEET BUFFER BOUNDARY FOR THE ENTIRE LENGTH

JOVEN FIVE GROUP
PB 1278 PG 668
TAX PARCEL 639-10
ZONING: RD
VACANT

LINE	BEARING	DISTANCE
1	N02°03'28"W	75.02'
2	N59°40'07"E	76.66'
3	N83°13'51"E	133.12'
4	N39°46'13"E	86.88'
5	S88°50'02"E	87.75'
6	N80°04'57"W	82.85'
7	S80°04'57"E	280.81'
8	N50°30'37"E	115.83'
9	N55°08'55"E	106.54'
10	N84°46'03"E	178.35'
11	N71°28'51"E	177.60'
12	N38°55'33"E	97.31'
13	N89°33'30"E	108.09'
14	N58°47'02"E	171.05'

EXISTING RISER BASINS SHALL BE EXCAVATED TO CREATE A PERMANENT STORMWATER CONTROL POND

100 YEAR STORM ELEVATION CAUSED BY BACKWATER FROM CULVERT UNDER NC 147

PROJECT AREA IS OUTSIDE OF FEMA FLOOD BOUNDARIES. PANEL 178 OF 280, 37063COI78G, DATED 2/2/96.

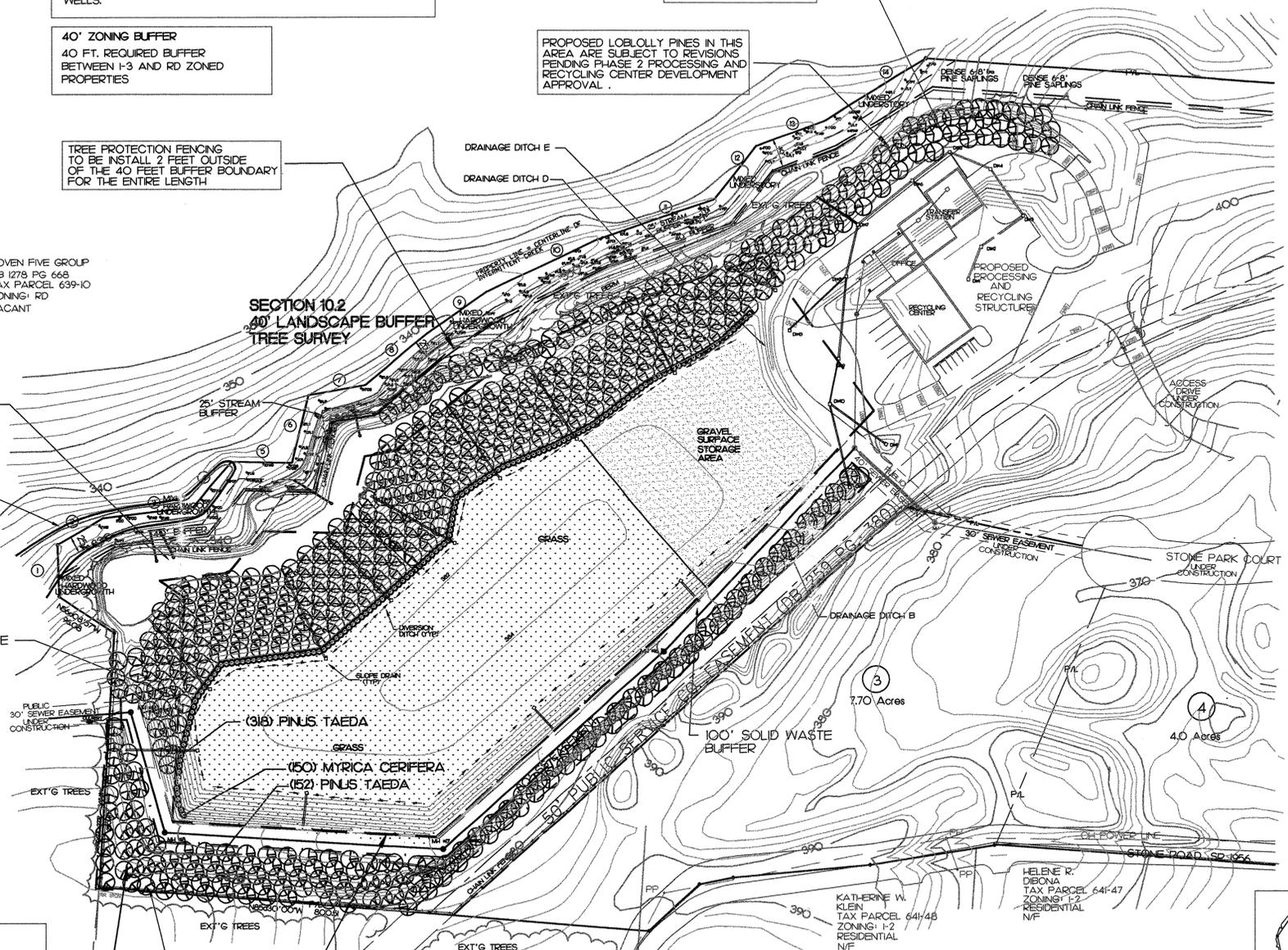
100' SOLID WASTE BUFFER

KATHLEEN RIGSBEE
DB 15 PG 539
TAX PARCEL 641-2A
ZONING: I-2
VACANT

SANITARY SEWER EASEMENTS:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 150, PAGE 958, NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.

NOTE:
THESE PLANTS SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF THE TEMPORARY USE PERMIT 52 LOBLOLLY PINES

NOTE:
ITEMS DESIGNATED AS UNDER CONSTRUCTION ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.



PLANT LIST

BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	REMARKS	QUANTITY	SYMBOLS
TREES						
PINUS TAEDA	LOBLOLLY PINE	3 GAL	24'-36"	5' O.C.	525	PT
SHRUBS						
MYRTICA CERIFERA	WAX MYRTLE	3 GAL	24'-30"	8' O.C.	150	MC

SEEDING
SEED ALL GRADED AREAS, INCLUDING SLOPES THAT ARE TO BE PLANTED WITH LANDSCAPE MATERIAL, WITH FESCUE ACCORDING TO SPECIFICATION RATES.
TOTAL SEEDING AREA = 502,630 SF

GRAVEL
(GRAVEL SURFACE STORAGE AREA)
6" ABC GRAVEL • 6" DEPTH = 1208 CY

- LANDSCAPE NOTES**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY.
 - CONTRACTOR SHALL NOT SUBSTITUTE FOR ANY OF THE PLANT MATERIAL THAT IS SPECIFIED WITHOUT PRIOR APPROVAL OF SUNGATE DESIGN GROUP.
 - VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - TREE PROTECTION FENCING SHALL BE INSTALLED BEFORE GRADING.
 - PLANT SIZES INDICATED SPECIFY MINIMUM ALLOWABLE SIZES AT PLANTING. WHERE CONTAINER AND HT. SIZES ARE INDICATED FOR A SINGLE SPECIES, BOTH SIZE REQUIREMENTS MUST BE MET.
 - NO STORAGE OF MATERIALS, FILL OR EQUIPMENT SHALL BE ALLOWED WITHIN THE PROTECTED AREA AND NO TRESPASSING SHALL BE ALLOWED WITH THE BOUNDARY OF THE PROTECTED AREA. THIS NOTICE SHALL BE POSTED ON THE TREE PROTECTION FENCE.
 - CONTRACTOR SHALL KEEP THE AREA CLEAN THROUGHOUT THE JOB. ALL DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, REMOVED FROM THE PROPERTY AND SHALL BE DISPOSED OF IN A LEGAL MANNER.

LANDSCAPE CALCULATIONS

40' LANDSCAPE BUFFER

REQUIREMENTS:

- TREES: 77,200 SF DIVIDED BY 1 TREE/350 SF = 220 TREES
- SMALL TREE/LARGE SHRUB: 0 SM TREES/LG SHRUBS
- NET LARGE TREES (SEE LANDSCAPE WORKSHEETS): 220 TREES
- EVERGREEN SHRUBS: 13,200 SF ÷ 1 SHRUB/25 SF = 528 SHRUBS

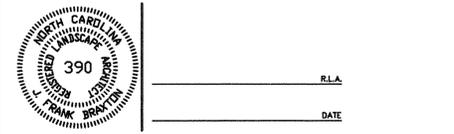
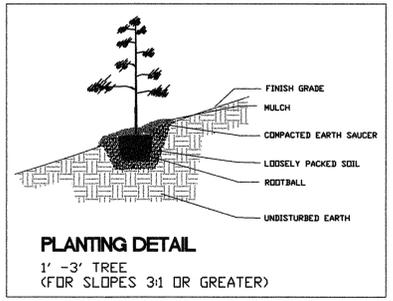
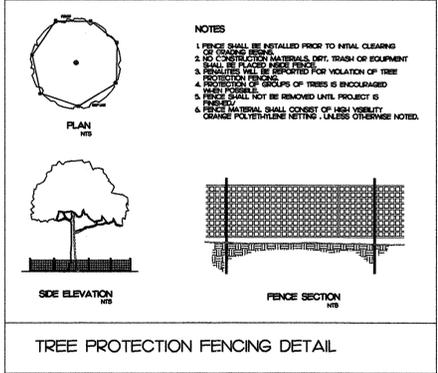
CREDIT FOR EXISTING VEGETATION: 463 CREDITS
OF REQUESTED TREE CREDITS: 463 CREDITS
(SEE TREE SURVEY FOR SIZE, LOCATIONS AND SPECIES)

NO ADDITIONAL VEGETATION IS REQUIRED FOR LANDSCAPE BUFFER. SEE TREE SURVEY AND LANDSCAPE WORKSHEET FOR EXISTING LANDSCAPE CREDITS.

REQUEST SMALL TREES/LARGE SHRUBS, EVERGREENS AND SHRUB REQUIREMENTS BE WAIVED DUE TO SUFFICIENT SCREENING PROVIDED BY EXISTING VEGETATION IN BUFFER.

DESCRIPTION OF EXISTING TREES UNDER 4" DIA. AND UNDERGROWTH: AREAS OF DENSE 6-8" PINE SAPLINGS AND SMALLER UNDERGROWTH OF PINE, MAPLE, SWEETGUM AND OTHER HARDWOODS WITH VARIOUS TYPICAL WOODLAND HERBACEOUS VEGETATION.

- NOTES:**
- BOUNDARY DATA OBTAINED FROM A SURVEY BY TODD SMITH SURVEYOR.
 - TOPOGRAPHIC DATA OBTAINED FROM FIELD SURVEY BY TODD SMITH SURVEYOR AND CITY OF DURHAM TOPOGRAPHIC MAPS.
 - ALL GRADING OPERATIONS SHALL BE IN ACCORDANCE WITH THE DURHAM COUNTY SEDIMENTATION AND EROSION CONTROL REGULATIONS.
 - ALL DENuded AREAS OUTSIDE OF THE WORKING SURFACES SHALL BE STABILIZED AND/OR GRASSED.
 - A PERMIT FROM THE NORTH CAROLINA DIVISION OF SOLID WASTE MANAGEMENT IS REQUIRED PRIOR TO THE OPERATION OF A L.C.I.D. TEMPORARY LANDFILL.
 - FILL MATERIAL WITHIN THE FUTURE BUILDING SITE SHALL SELECTIVE INERT BENEFICIAL FILL.
 - NO SITE AREA LIGHTING IS PROPOSED FOR THIS PHASE OF THE WASTE INDUSTRIES DURHAM DISTRICT CAMPUS



REVNO.	DESCRIPTIONS	DATE
1	SEWER EASEMENT WIDTH TO 40' (NH #14 - MH #15) PER CITY OF DURHAM REQUEST	9/22/98

DESIGNED: SDG
DRAWN: JFB
CHECKED: SDG
PROJ. ENG.

SUNGATE DESIGN GROUP, P.A.
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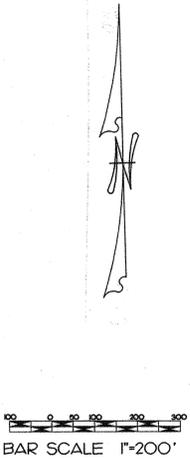
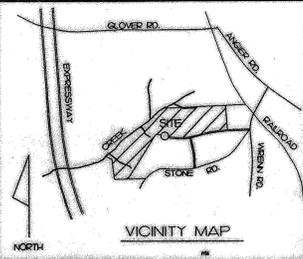
WASTE INDUSTRIES DURHAM DISTRICT CAMPUS

LCID LANDFILL LANDSCAPE PLAN

DATE: JAN 1999
SDG PROJ. # 05-9711
DWG FILE # WIDURL9L01A

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

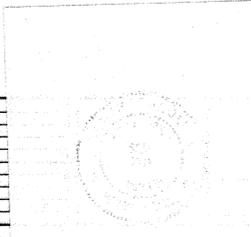
SHEET NO. L-1
OF: 8



PROJECT AREA IS OUTSIDE OF FEMA FLOOD BOUNDARIES.
 PANEL 178 OF 280, 37063CO178G, DATED 2/2/96.

ORTHOPHOTO MAPS # 0749.01 AND # 0840.03 OF DURHAM COUNTY BY LANDMARK GEOGRAPHIC INFORMATION SERVICES, DATE MARCH 1988.

REVNO.	DESCRIPTIONS	REVISIONS



110199 DATE

DESIGNED: SDG
 DRAWN: WBH
 CHECKED: JFB
 PROJ. ENG.: WHW

SUNGATE DESIGN GROUP, P.A.
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PHASE THREE
 TEMPORARY
 L.C.I.D.
 LANDFILL

WASTE INDUSTRIES
 DURHAM DISTRICT CAMPUS

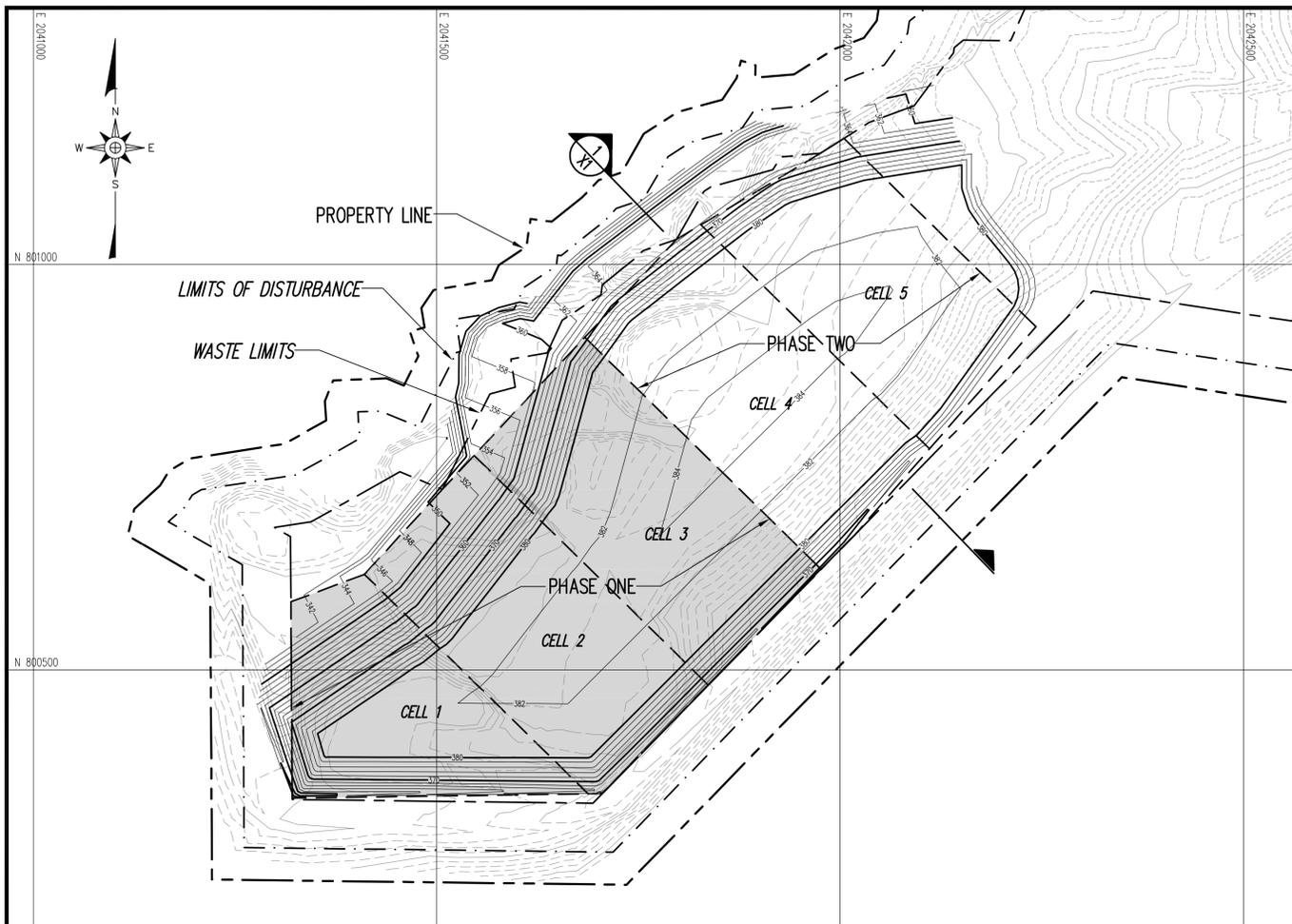
LOCATION
 MAP

DATE: JAN. 1999
 SDG PROJ. # 05-9711
 DWG FILE # WIDURLF99S01

SCALE
 HORIZONTAL:
 1" = 200'
 VERTICAL:

SHEET NO.
S-1
 OF: 8

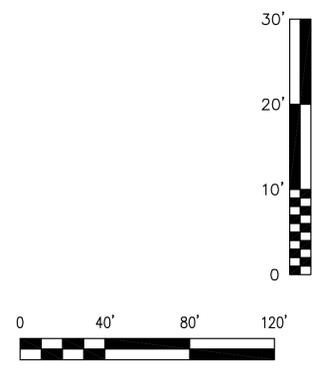
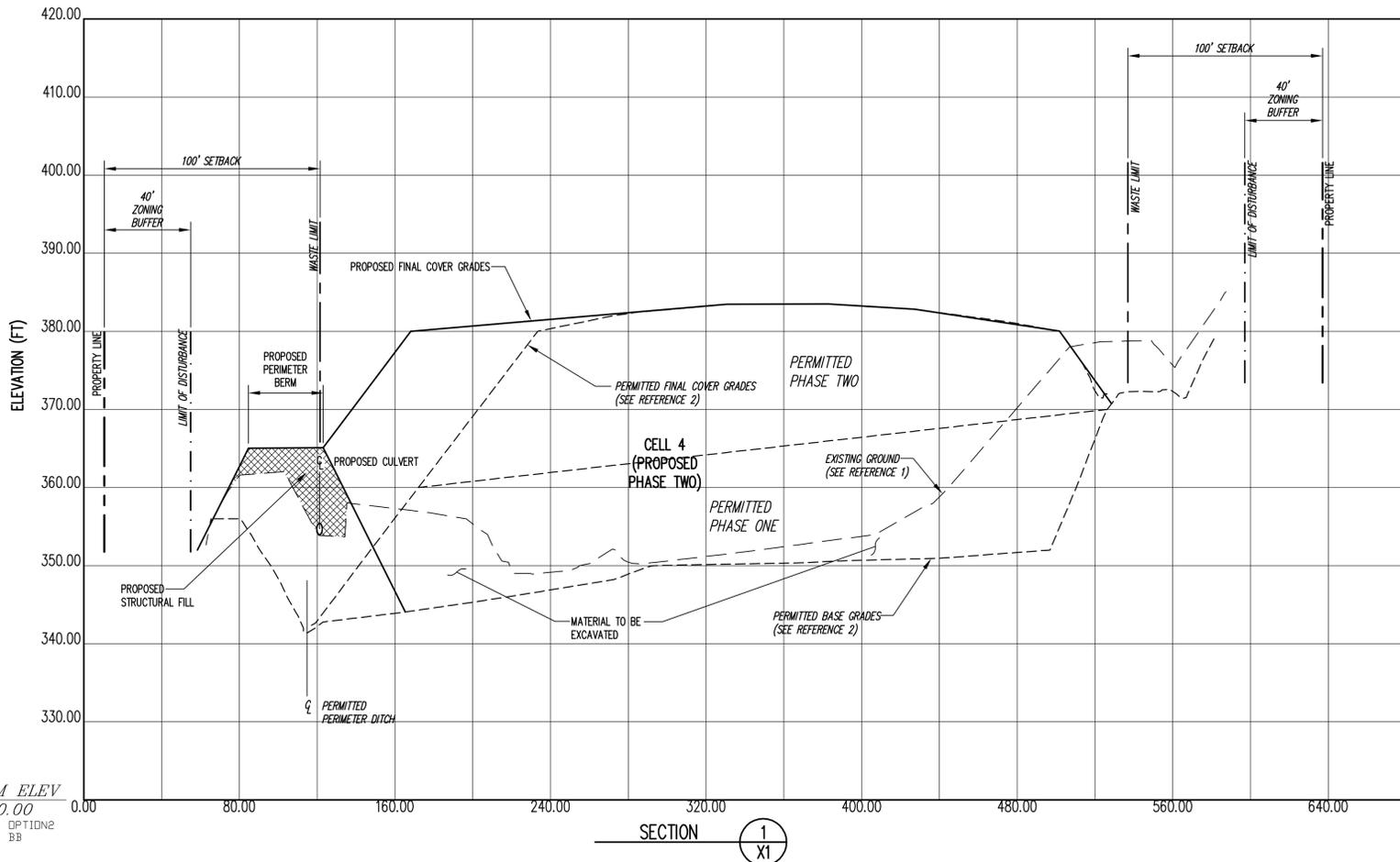
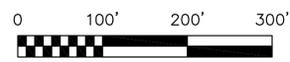
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- LEGEND**
- 150- EXISTING 10' CONTOUR
 - 170- EXISTING 2' CONTOUR
 - 170- PROPOSED FINAL COVER 10' CONTOUR
 - 170- PROPOSED FINAL COVER 2' CONTOUR
 - - - APPROXIMATE PROPERTY LINE
 - - - WASTE LIMITS
 - - - LIMIT OF DISTURBANCE
 - - - CELL BOUNDARY

- NOTES**
1. THE PROPOSED FINAL COVER GRADES MEET ALL OF THE PREVIOUSLY PERMITTED SETBACK REQUIREMENTS OF DURHAM CITY/COUNTY PLANNING.
 2. THE SHADED AREA REPRESENTS THE PHASE ONE AREA PROPOSED FOR OPERATIONS OVER THE NEXT 5 YEARS.
 3. EXISTING FEATURES AND THOSE PREVIOUSLY PERMITTED ARE SHOWN IN ITALICS.

- REFERENCES**
1. TOPOGRAPHY IS GENERATED FROM COMPOSITED SURVEYS PROVIDED BY SURVEY SOLUTIONS, P.C., BETWEEN 5/11/00 AND 4/3/02.
 2. PERMITTED DESIGN WAS PREPARED BY SINGATE DESIGN GROUP, P.A., AS PROVIDED IN DRAWINGS TITLED "WASTE INDUSTRIES, INC., DURHAM DISTRICT CAMPUS, TEMPORARY LCID LANDFILL", 9 SHEETS, DATED 2/10/99.



DATE	NO.	REVISION

RICHARDSON SMITH GARDNER & ASSOCIATES
 14 N. Boylan Ave.
 Raleigh, N.C. 27603
 www.rsgengineers.com
 ph: 919-228-0577
 fax: 919-228-3899

PROJECT TITLE:
DURHAM LCID LANDFILL

DRAWING TITLE:
PLAN AND TYPICAL CROSS SECTION

DESIGNED BY: J.M.G.	DRAWN BY: C.T.J.
CHECKED BY: G.N.R.	PROJECT NO.: DURHAM 08-2
SCALE: AS SHOWN	DATE: JULY 2008
FILE NAME: DURHAM-D0061	SHEET NO. DRAWING NO.
1	X1

G:\CAD\Durham\08-2\Durham\08-2.dwg DATE: JUL 18, 2008 TIME: 3:35 PM