

Permit No.	Date	Document ID No.
06-03	October 24, 2008	6097

Waste Relocation and Mitigation Plan

**Avery County C&D Landfill
Ingalls, North Carolina
NC Solid Waste Permit No. 06-03**

Prepared for:



Avery County
175 Linville Street
Newland, North Carolina 28657

October 2008

PERMIT ISSUE DOCUMENTS

Prepared by:



PRINTED ON 100% RECYCLED PAPER

Waste Relocation and Mitigation Plan

Avery County
C&D Landfill
(NC Solid Waste Permit No. 06-03)
Ingalls, North Carolina

Prepared for:



Avery County
175 Linville Street
Newland, North Carolina

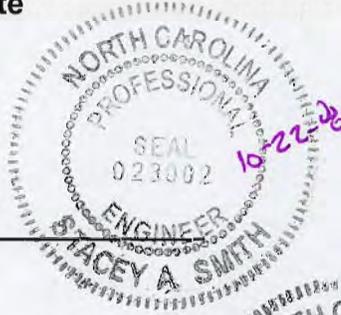
To the Attention of:

Mr. Buddy Norris
Avery County Solid Waste

RSG Project No. AVERY-08-7

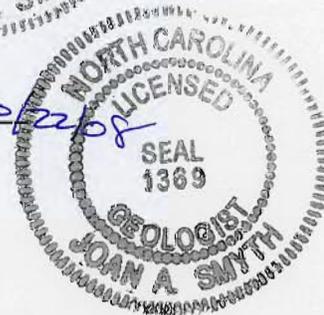
A handwritten signature in purple ink, appearing to read "Stacey A. Smith", is written over a horizontal line.

Stacey A. Smith, P.E.
Project Manager



A handwritten signature in blue ink, appearing to read "Joan A. Smyth", is written over a horizontal line.

Joan A. Smyth, P.G.
Hydrogeologist



October 2008



AVERY COUNTY C&D LANDFILL WASTE RELOCATION AND MITIGATION PLAN

1.0 OVERVIEW

This Waste Relocation and Mitigation Plan was prepared to define the steps which are proposed to be taken by Avery County (County) to correct historical waste boundary exceedances associated with the operations of the County's Construction and Demolition Debris (C&D) landfill operated under NC Solid Waste Permit No. 06-03 located at 2175 Brushy Creek Road in Ingalls, North Carolina as shown in **Figure 1**.

2.0 REGULATORY CORRESPONDENCE

On April 8, 2008, Mr. Robert Wiseman, Avery County Manager, provided notice (**Attachment A**) of discovery of waste boundary exceedances based on investigations by Richardson Smith Gardner & Associates, Inc. (RSG). Subsequently, a meeting was held on July 8, 2008 between the County, RSG, and the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Waste Management (DWM) to discuss options to resolve and mitigate this situation. A Compliance Order (**Attachment B**) was issued by NCDENR on September 22, 2008 by DWM which includes the following conditions for compliance:

1. *Within 30 days of receipt of this Compliance Order, submit a plan for the Section's approval to remove all of the waste that is outside the permitted disposal boundaries. All excavated waste shall be properly disposed of at a permitted facility. This plan shall include a timetable for implementation.*
2. *After waste that was disposed outside the permitted disposal boundaries has been removed, install permanent boundary markers to clearly define the limits of the permitted waste areas within 5 days.*
3. *Within 30 days of receipt of this Compliance Order, the County shall acquire the services of a N.C. licensed professional geologist with experience in assessment and remediation of groundwater contamination and submit a phased assessment plan to the Division to assess the impact of the disposal of waste outside the permitted waste boundaries. The professional geologist shall consult with Ms. Jaclyne Drummond, Solid Waste Section Hydrogeologist, about the site prior to developing the plan. The Section will review the submitted plan, approve, or request more information or amendments before implementation.*
4. *Within 30 days of completion of the approved waste removal plan, submit a report detailing the following:*
 - C The amount of waste that has been removed from outside the permitted waste area, and*
 - C Plans showing the as-built limits of the permitted waste areas.*

3.0 CONTACT INFORMATION

All correspondence and questions concerning this Waste Relocation and Mitigation Plan for the Avery County C&D Landfill should be directed to the appropriate company and regulatory personnel listed below.

3.1 The County of Avery (Owner)

Office of the County Manager
175 Linville Street
Newland, North Carolina 28657
Phone: (828) 733-8202
Fax: (828) 737-9395

Contact: Robert Wiseman
robert.wiseman@ncmail.net

3.2 Avery County Solid Waste (Operator)

Solid Waste Department
175 Linville Street
Newland, North Carolina 27615
Phone: (828) 737-5420
Fax: (828) 733-8293

Contact: Henry “Buddy” Norris
buddy.norris@ncmail.net

3.3 Richardson Smith Gardner & Associates, Inc. (Engineer)

Richardson Smith Gardner & Associates, Inc.
14 N. Boylan Avenue
Raleigh, North Carolina 27603
Phone: (919) 828-0577
Fax: (919) 828-3899

Contact: Stacey A. Smith, P.E.
stacey@rsgengineers.com

Joan A. Smyth, P.G.
joan@rsgengineers.com

3.4 North Carolina Department of Environment and Natural Resources

NCDENR - Asheville Regional Office
2090 U.S. Highway 70
Swannanoa, North Carolina 28778
Phone: (828) 296-4500
Fax: (828) 299-7043

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

Environmental Engineer II	Allen Gaither allen.gaither@ncmail.net
Compliance Hydrogeologist (Raleigh Central Office)	Jaclynne Drummond jaclynne.drummond@ncmail.net
Field Operations Branch Head:	Mark Poindexter mark.poindexter@ncmail.net
Western Regional Supervisor:	Deborah Aja deborah.aja@ncmail.net
Waste Management Specialist:	Bill Wagner bill.wagner@ncmail.net

4.0 WASTE BOUNDARY INVESTIGATION

4.1 Field Topographic Survey

On October 24, 2007, Surveying Solutions, P.C. (under contract with RSG) conducted a field topographic survey of the existing Phases 1 & 2 of the C&D landfill. This effort included updating control for the property boundary and converting the site to the NC State Plane coordinate system¹ in accordance with current solid waste regulations. Following receipt of this survey, RSG translated (~2,760 feet vertically) existing permit contours to match new field topography and Avery County GIS data to review the current state of filling operations. In this effort, potential waste placement outside permitted waste limits was identified. At that time, RSG recommended a field test pit investigation to verify the waste limits.

4.2 Field Test Pit Investigation

Since initial analysis of the field topographic survey only presented variations in topography, a field test pit investigation was cooperatively performed between Avery County and RSG staff during the week of December 3rd, 2007. The investigation included approximately 70 test pits which were advanced specifically to identify the horizontal (plan) limits of waste. The field test pit summary is provided in **Table 1**. On January 14, 2008, Surveying Solutions returned to survey the test pit locations whereby a

¹ Historically, the site was controlled under a site specific datum.

“limit of waste” boundary was established for overlay onto the facility permit drawings. The results of this investigation is presented on **Figure 2**.

4.3 Areas of Concern

As shown on **Figure 2**, the predominant lateral overfill occurs adjacent and south of the Phase 2 area of the landfill. Two (2) minor areas of lateral overfill (i.e. less than four feet in thickness) are located along the eastern waste limit. Additionally, exceedances of waste limits were found to exist vertically (i.e. above final, permitted contours), but remain within the permitted horizontal limits of the landfill. The areas of lateral overfill have been identified on **Figure 3** as “Areas 1 - 5”.

4.4 Waste Volumes

The anticipated waste volumes (outside permitted boundaries) were determined by field topographic survey as described in **Section 4.1** and compared to historical drawings prepared by Municipal Engineering Services Company, P.A.. Electronic files for these drawings were not available. Therefore, RSG digitized the pre-development contours from the permit application² and translated the elevations to NC State Plane (~2,760 feet vertically). The comparison of grading yielded a total overfill of approximately 43,000 cubic yards (bank). It is understood that this quantity is approximate and is limited by the accuracy between the test pit locations and the historical topographic files. For the purposes of discussion in this report, the referenced “overfills” are categorized as follows:

- C Vertical Overfills or areas of waste that exceed the permit contours within the original limits of waste; and
- C Lateral Overfills or areas of waste that exceed the permit limit of waste boundaries.

5.0 COMPLIANCE PLAN

Avery County will achieve compliance through the following actions as addressed in more detail throughout this section:

- C Property Purchase;
- C Vertical Expansion;
- C Lateral Expansion;
- C Waste Relocation; and
- C Environmental Monitoring.

² Avery County Solid Waste Management Facility Operation Plan Drawings prepared by Municipal Engineering Services Company, P.A., Project #G95115 dated October 21, 1995.

5.1 Property Purchase

Immediately south and southwest of monitoring well MW-1, a section of the Mark S. Lechler property is planned to be purchased by the County. Currently, Mr. Lechler has this property for sale. The County will purchase approximately one (1) acre which will create additional buffer between the proposed final, reclaimed waste limits as shown in **Figure 3** and the new property boundary, Brushy Creek Road, a state maintained road.

5.2 Potable Well

One (1) potable water well exists within the 500-foot private well buffer of the existing, permitted waste limits as shown in **Figure 3** on the Jim Frye property. However, based on drilling records by Braswell Welling Drilling, Inc. (**Attachment C**), this well was installed on January 30, 2006, post-dating the landfill permit. Therefore, NCDENR setback rules do not apply to this well. However, as proposed under this Waste Relocation and Mitigation Plan, this well will be monitored along with other site groundwater monitoring wells. In the event that it is determined to be impacted, Avery County will provide a permanent alternative water supply to the well owner (Frye or current owner/resident at the time).

5.3 Vertical Expansion

As described in **Section 4.4**, certain overfills exist vertically within the permitted waste footprint. RSG has reviewed the existing topography in conjunction with the C&D Transition Application³ and found that a portion of these overfills can be incorporated into the currently permitted footprint. The proposed vertical expansion will include approximately 13,000 cubic yards of additional capacity in the Phase 2 portion of the landfill as shown in **Figure 4**.

5.4 Waste Relocation (Partial)

In addition to the mitigation of vertical overfills described above, a portion of waste located laterally outside of the permitted waste limits is proposed to be excavated and removed while a portion of these overfills will remain in place in conjunction with the property purchase described in **Section 5.1** to maintain the 200 foot solid waste property buffer. All waste excavation, recovery and relocation will be conducted in accordance with **Section 6.0** of this plan. It is anticipated that waste volumes may exceed the capacity of the existing C&D landfill (vertically). In that event, C&D waste will be transferred via the on-site Transfer Station operated under NC Solid Waste Permit No. 06-02-T and transported to the Bristol Integrated Solid Waste Management Facility in Bristol, Virginia.

³ Correspondence dated June 26, 2008 regarding Transition Application Avery County Landfill to Mr. Allen Gaither, NCDENR from Mr. Stacey Smith, P.E., RSG.

5.5 Environmental Monitoring

In conjunction with the mitigation and relocation alternatives presented above, the site will be evaluated to assess any known or potential groundwater impacts caused by the overfills. Ms. Joan Smyth, P.G. of RSG contacted Ms. Jaclynne Drummond with the DWM prior to the development of this plan. Following this discussion, an assessment work plan has been included in **Section 15.0** of this plan. In summary, RSG proposes to replace monitoring well MW-1 by installing an additional monitoring well down gradient from the proposed limits of waste shown in **Figure 3** and the addition of the Frye well described in **Section 5.2** to the monitoring network.

5.6 Compliance Plan Volume Summary

The total overfill for the site is estimated at approximately 43,000 cubic yards. Each of the overfill areas are denoted on **Figure 3**. The following presents a summary of how the volume will be addressed by each mitigating activity:

Overfill Areas	Volume (CY)
Vertical Overfills (within footprint)	(9,000)
Lateral Overfills (outside footprint)	(34,000)
Total Overfills	(43,000)

Mitigating Activities	Volume (CY)
Waste Relocation: Lateral (Areas 1 - 4)	13,000
Waste Remain In Place: Vertical Expansion	9,000
Waste Remain In Place: Lateral (Area 5)	17,500
Waste Relocation: Transfer or Recovery (Areas 1 - 4)	3,500
Total Mitigation	43,000

6.0 WASTE EXCAVATION

During waste relocation/reclamation of the landfill, excavators and trucks owned and operated by Avery County are proposed as the primary means of moving waste. The excavator operator will be used as a spotter to monitor the excavation activities and identify the character and nature of wastes (re)moved. It is anticipated that the waste excavation volumes will consist of construction and demolition debris, land clearing debris, inert debris, and soil cover. When inert debris materials and soils are identified , these materials will be placed into a stockpile and re-used on the site for daily cover and/or in beneficial fill functions. In the event, that non-

acceptable wastes (not C&D wastes) are encountered, these wastes will be segregated, collected, hauled to the transfer station, and disposed at an appropriate, permitted facility. Generally, the process includes excavation, sorting and recovery of materials and re-incorporation of waste materials into Phase 2 to achieve the final cover lines and grades presented in the facility Closure Plan or any approved future expansions of the facility (currently under review).

7.0 WASTE DISPOSAL

7.1 Access

Construction and excavation traffic will follow the central access road through Phase 1 into the Phase 2 area. In general, excavated materials will generally be shifted from the southern end of Phase 2 to the northern end to achieve final cover contours. The location of access roads during waste placement will be determined by operations personnel in order to reflect waste placement strategy.

7.2 General Procedures

Operations at the working face will be conducted in a manner which will encourage the efficient movement of hauling vehicles to and from the working face.

The approach to the working face will be maintained such that two or more vehicles may safely unload side by side. A vehicle turn-around area large enough to enable vehicles to arrive and turn around safely with reasonable speed will be provided adjacent to the unloading area. The vehicles will back to a vacant area near the working face to unload. Upon completion of the unloading operation, the transportation vehicles will immediately leave the working face area. Personnel will direct traffic necessary to expedite safe movement of vehicles.

Waste unloading at the landfill will be controlled to prevent disposal in locations other than those specified by site management and the approved design. Such control will also be used to confine the working face to a minimum width, yet allow safe and efficient operations. The width and length of the working face will be maintained as small as practical in order to maintain the appearance of the site, control odors and windblown waste, and minimize the amount of cover required each day. In no case, shall the working face exceed ½ acre with all deposited waste areas covered by either periodic, intermediate, or final cover, as appropriate.

7.3 Periodic Cover

At the completion of waste placement each week, or sooner if the area of exposed waste exceeds ½ acre in size, a 6-inch-thick layer of earthen material or other acceptable alternate material (i.e. tarps, foam, etc.) as approved by the DWM will be placed over the exposed waste. This periodic cover is intended to control vectors, fire, odors, and blowing debris.

7.4 Intermediate Cover

A 12-inch -thick layer of soil cover should be placed on all waste surfaces that have not received waste in 30 days but are below final elevation. This intermediate cover should be seeded immediately and graded such that all precipitation run-off is channeled to the surface water systems.

7.5 Height Monitoring

Approximately every month, the landfill staff will monitor landfill top and side slope elevations/slopes with a level. When such elevations approach design grades, the final top-of-waste grades will be staked to prevent over-placement of waste.

8.0 SEVERE WEATHER CONDITIONS

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

8.1 Ice Storms

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

8.2 Heavy Rains

Exposed soil surfaces can create muddy conditions in some portions of the landfill during rainy periods, and, thus, may require closure of the landfill until the rains have subsided and access roads/work areas have dried sufficiently.

Intense rains can affect newly constructed drainage structures such as swales, diversions, cover soils, and vegetation. After such a rain event, inspection by landfill personnel will be initiated and corrective measures taken to repair any damage found before the next rainfall.

8.3 Electrical Storms

The open area of a landfill is susceptible to the hazards of an electrical storm. If necessary, landfilling activities will be temporarily suspended during such an event. To guarantee the safety of all field personnel, refuge will be taken in the on-site buildings or in rubber-tired vehicles.

8.4 Windy Conditions

The proposed operational sequence minimizes the occurrence of unsheltered operations relative to prevailing winds. If this is not adequate during a particularly windy period, work will be temporarily shifted to a more sheltered area. When this is done, the previously exposed face will be immediately covered with daily cover.

8.5 Violent Storms

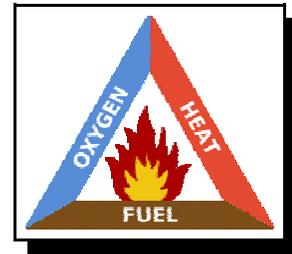
In the event of hurricane, tornado, or severe winter storm warning issued by the National Weather Service, landfill operations may be temporarily suspended until the warning is lifted. Daily cover will be placed on exposed waste and buildings and equipment will be properly secured.

9.0 FIRE SAFETY

The possibility of fire during waste removal must be anticipated in the daily operation of the facility. Potential fire hazards include both surface conditions and subsurface conditions. Surface conditions include equipment operations and visible stockpiles of excavated and relocated materials. Subsurface conditions include underground fires caused by decomposition of the existing construction and demolition debris materials previously landfilled.

9.1 Fire Triangle

The “triangle” illustrates the rule that in order to ignite and burn, a fire requires three (3) elements: heat, fuel, and oxygen. A fire is prevented or extinguished by “removing” any one of them. A fire naturally occurs when the elements are combined in the right mixture (e.g., more heat needed for igniting some fuels, unless there is concentrated oxygen). These principles are integral in the prevention and management of potential fire situations.



9.2 Equipment Safety

A combination of factory-installed fire suppression systems and/or portable fire extinguishers will be operational on all pieces of heavy equipment at all times. Potential fire hazards at the recycling center 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 and equipment should be cleaned periodically.

9.3 Excavation Management

Excavation of the existing landfill which can introduce air (oxygen) into the existing waste mass. Management of the excavation activities should be limited to a maximum of ½ acre open at any one time. A stockpile of soil should be maintained to immediately cover any areas that may ignite at a minimum of two (2) feet thick. For larger or more serious outbreaks, the local fire department will respond.

9.4 Fire Management Strategies

Each fire situation is site specific, however, general strategies for active fire management include the following (in no particular order):

- C Accelerated high temperature combustion (displacing fuel);
- C Covering of the landfill burn area with soil (reduce oxygen);
- C Covering of the burn area with foams (reduce oxygen);
- C Flooding the burn area with water (reduce heat);
- C Injecting an inert gas such as CO₂ (reduce oxygen); and
- C Excavating the burning material (displacing fuel) and then extinguishing it in small controlled areas.

9.5 Coordination

The facility is located in the Crossnore Fire District. A copy of the site Operations Plan and this Waste Relocation and Mitigation Plan will be filed with the local fire department including all contact information for the facility.

10.0 EQUIPMENT REQUIREMENTS

The facility will maintain on-site equipment required to perform the necessary excavation, recovery, and relocation 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.

11.0 PERSONNEL REQUIREMENTS

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

12.0 HEALTH AND SAFETY

Prior to commencement of waste relocation operations, 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 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 for the waste relocation at the Avery County C&D Landfill.

12.1 Personal Hygiene

The following items are recommended as a minimum of practice:

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

12.2 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.

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

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

12.3 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.

12.4 Employee Health and Safety

Some general safety rules are:

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

12.5 Physical Exposure

Facility personnel may come in contact with the fluids, solids, and airborne constituents found at recycling center. 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.

12.6 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 County. MSDS sheets shall be stored in a location with all other Right to Know information for the site.

13.0 ENVIRONMENTAL MANAGEMENT

This section reviews the overall environmental management tasks required for the successful operation of the landfill.

13.1 Surface Water Control

Erosion and sedimentation control measures have been included in the Waste Relocation and Mitigation Plan shown in **Figure 3**. The plan describes the short term engineered features and practices for preventing erosion and controlling sedimentation at this site. The following is a brief discussion of some of these features and practices.

13.2 Sedimentation Control

Stormwater run-off from the landfill excavation operations is conveyed to one of the on site temporary sediment traps. These traps should be inspected regularly for sediment build-up or erosion damage. The traps should be cleaned out when sediments fill the lower half of the basin.

13.3 Landfill Gas (LFG) Management

Due to the nature of the waste disposed in this landfill, landfill gases may be released upon excavation. Methane (CH₄) and hydrogen sulfide (H₂S) gases are known to be present at these types of facilities. Therefore, air monitors shall be present on-site to identify these explosive and harmful potentials as well as other indicator gas concentrations such as oxygen (O₂).

13.4 Vector Control

Due to the nature of the waste disposed in this landfill, vector control is not anticipated to be of concern. Note that the use of periodic cover will discourage animals from nesting in the waste.

13.5 Odor Control

Odors may be present during excavation and may be minimized by keeping the work face small. If odors become substantial operations may cease until conditions improve.

13.6 Dust Control

Dust related to waste hauler traffic on the access roads will be minimized by using a water truck to limit dust on the gravel portion of the road. Dust generated by excavation of cover soil will be limited by watering the cut soil areas if accessible to the water truck.

14.0 UTILITIES

Electrical power, water, telephone, and portable restrooms will be provided at the site offices adjacent to the transfer station.

15.0 GROUNDWATER ASSESSMENT PLAN

15.1 Site History

Avery County has been operated the C&D landfill between 1996 and 2008. During that time, the site accepted C&D waste for disposal in two Phases (Phase 1 and Phase 2). These two phases are separated by a stream (unnamed tributary to Brushy Creek). Brushy Creek is located along Brushy Creek Road just south of the landfill property.

Currently, the landfill is transferring waste to Bristol Virginia. No waste is being interred at the project site.

As stated in **Section 4.0**, RSG noted topographic anomalies while working with Avery County to prepare a revised landfill permit for the site. Further investigation indicated horizontal and vertical exceedances of permitted boundaries at the site. This Groundwater Assessment Plan is submitted to propose further evaluation of the impact of

these overfills on the site.

15.2 Groundwater Monitoring Network

One groundwater monitoring well, MW-1 is located approximately 125 feet downgradient of a portion of the southern edge of waste placement. It is also cross-gradient and adjacent to one of the areas of permit boundary exceedances. An additional downgradient groundwater monitoring well (MW-2) appears to be located approximately 125 feet from the waste and a cross-gradient monitoring well (MW-3) appears to be located approximately 60 feet from the waste. Therefore, these wells are still well situated to evaluate a potential release from the landfill. The location of MW-1 reduces its effectiveness as a monitoring well and does not adequately monitor the site for potential releases in the southern portion of the site. It should be noted that monitoring well MW-1 has not indicated impact from the landfill during the past two semi-annual monitoring events.

15.3 Groundwater Assessment Plan

At this time, Avery County plans to relocate monitoring well MW-1 to a location at least 100 feet (minimum) from the current edge of waste to the partial property purchase from Mr. Lechler as described in **Section 5.1**. Within this property, a natural gas line and overhead power transmission lines exist. The location of this well is approximate and will be influenced by these utilities. The proposed location of this well is shown on the attached **Figure 3**. Both monitoring well MW-1 and the new well will be monitored on a semi-annual basis for at least one event for the purpose of comparison in accordance with the facility Water Quality Monitoring Plan.

Additionally, surface water samples will be collected from upgradient and downgradient locations along the unnamed tributary that flows between Phases 1 and 2 and groundwater samples will be collected from the Frye well to evaluate water quality as shown on **Figure 3**.

15.4 Reporting

Upon completion of the well relocation and sampling, a report will be submitted to Ms. Jaclynne Drummond of NCDENR outlining the field work performed, and the results of all sampling and analysis.

16.0 COMPLIANCE SCHEDULE

The anticipated schedule to achieve compliance at the facility is presented below:

- C The Property Purchase and Closing of the property will proceed through normal County procurement and will be completed within 180 Days upon approval of this plan;
- C The Waste Excavation, Recovery, and Relocation efforts will be performed by Avery County staff consistent with operational rates during the active life of the landfill (~3,500 tons per year or ~7,000 cubic yards per year). Therefore, the site will complete the excavation, recovery, and relocation within approximately two (2) years upon approval of this plan.
- C A Final Report will be submitted within 30 days of the completion of the Waste Relocation and Mitigation efforts and include all documentation and final as-built surveys of the completed site.

17.0 RECORD KEEPING PROGRAM

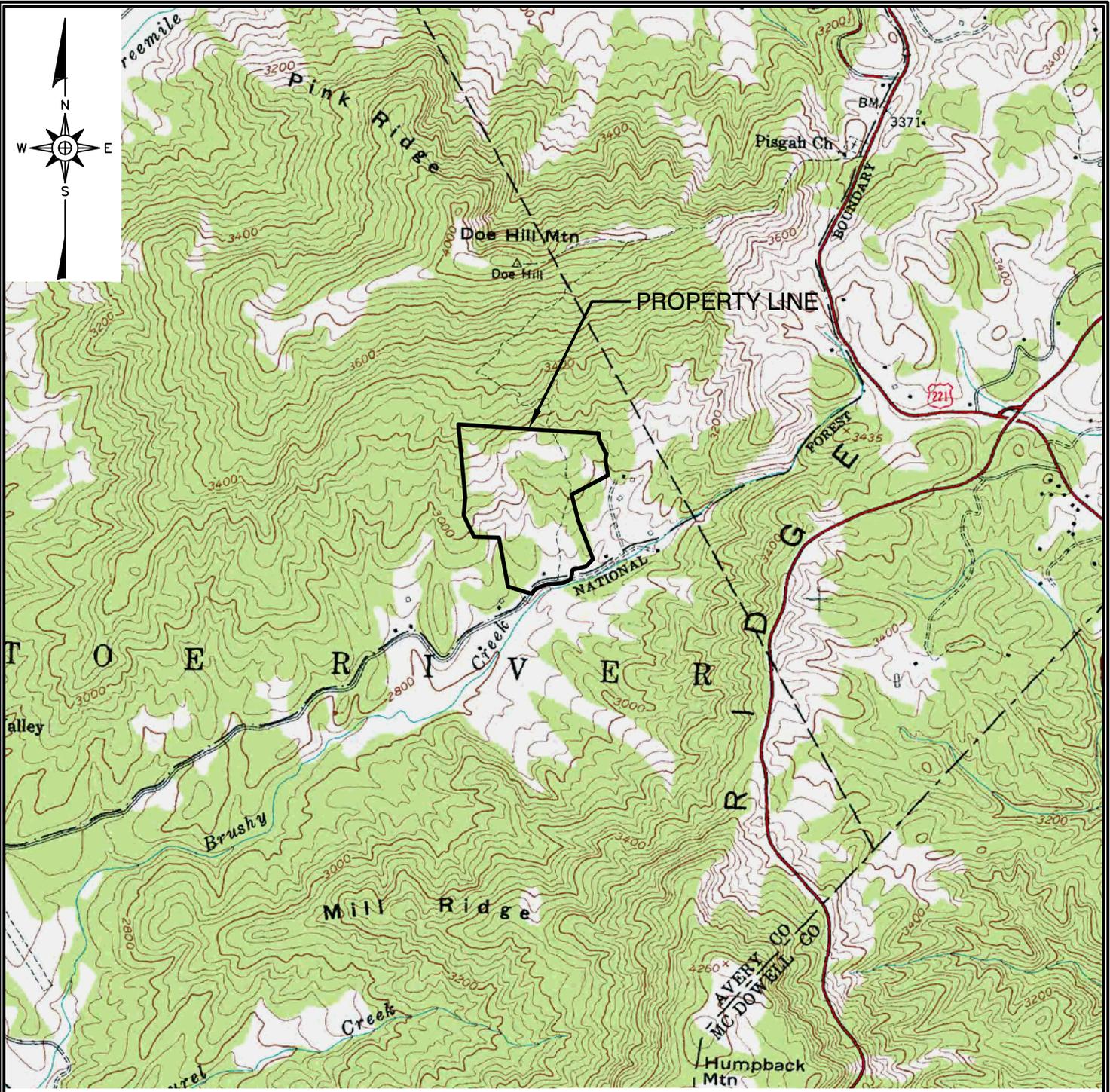
The facility shall maintain documents relating to the waste excavation, recovery, and relocation in an operating record at the facility by the Site Manager or his designee. These records shall include daily diaries, load counts, surveys, and/or any related documentation regarding this operation. It will be presented upon request to DWM for inspection. A copy of this Waste Relocation and Mitigation Plan will be kept at the facility and will be available for use at all times.

Tables

TABLE 1
Avery County C&D Landfill
Test Pit Descriptions

Test Pit No.	Depth (ft.)	Description
PHASE 1		
27	10	NO WASTE
27A	10	100' S OF NO.27 / NO WASTE
27B	10	150' S OF NO.27 / EDGE OF WASTE SEEN
28	10	NO WASTE / NO TRENCH
29	10	NO WASTE / NO TRENCH
30	10	EDGE OF WASTE SEEN
31	10	EDGE OF WASTE SEEN
32	10	NO WASTE / NO TRENCH
32A	10	60' E OF NO.32 / EDGE OF WASTE SEEN
33	10	EDGE OF WASTE SEEN
34	10	WASTE
34A	10	15' W OF NO.34 / EDGE OF WASTE SEEN
35	10	EDGE OF WASTE SEEN
36	10	EDGE OF WASTE SEEN
37	10	WASTE
37A	10	30' W OF NO.37 / EDGE OF WASTE SEEN
38	10	EDGE OF WASTE SEEN
39	10	EDGE OF WASTE SEEN
40	10	EDGE OF WASTE SEEN
41	10	EDGE OF WASTE SEEN
42	10	EDGE OF WASTE SEEN
43	12	NO WASTE
43A	10	40' W OF NO.43 / EDGE OF WASTE SEEN
44	10	EDGE OF WASTE SEEN
45	10	EDGE OF WASTE SEEN
46	10	WASTE
46A	10	70' E OF NO.46 / EDGE OF WASTE SEEN
47	10	NO WASTE
47A	10	20' W OF NO.47 / EDGE OF WASTE SEEN
48	10	WASTE
48A	10	30' E OF NO.48 / EDGE OF WASTE SEEN
49	10	NO WASTE
49A	10	10' W OF 49 / EDGE OF WASTE SEEN
PHASE 2		
50	10	NO WASTE
50A	10	EDGE OF WASTE SEEN
51	12	NO WASTE
51A	10	7' S OF 51 / WASTE
52	10	NO WASTE / NO TRENCH
52A	10	10' E OF 52 / EDGE OF WASTE SEEN
53	10	NO WASTE / NO TRENCH
53A	10	40' E OF 53 / EDGE OF WASTE SEEN
54	10	NO WASTE / NO TRENCH
54A	10	15' E OF 54 / EDGE OF WASTE SEEN
55	10	NO WASTE / NO TRENCH
55A	10	10' E OF 55 / EDGE OF WASTE SEEN
56	10	NO WASTE / NO TRENCH
56A	10	15' E OF 56 / EDGE OF WASTE SEEN
57	10	NO WASTE / NO TRENCH
57A	10	20' E OF 57 / EDGE OF WASTE SEEN
58	10	NO WASTE / NO TRENCH
58A	10	50' E OF 58 / EDGE OF WASTE SEEN
59	10	NO WASTE
60	10	WASTE TO TREE LINE / UNABEL TO CONTINUE
61	10	WASTE TO TREE LINE / UNABEL TO CONTINUE
62	10	UNABLE TO REACH / SLOPE TO STEEP
63	10	RIGHT AT EDGE OF WASTE
64	15	NO WASTE
65	15	NO WASTE
66	10	UNABLE TO REACH / SLOPE TO STEEP
67	15	NO WASTE
68	10	WASTE
68A	10	30' OUTSIDE NO.68 / NO WASTE
69	15	NO WASTE
70	10	WASTE
70A	10	15' OUTSIDE NO.70 / EDGE OF WASTE SEEN
71	10	EDGE OF WASTE SEEN

Figures



REFERENCES

1. U.S.G.S. QUADRANGLE "LINVILLE FALLS, NC" 1956, PHOTO INSPECTED 1984
2. SITE PROPERTY LINE FROM FIELD SURVEY DATED 1/14/08, BY SURVEYING SOLUTIONS, P.C.



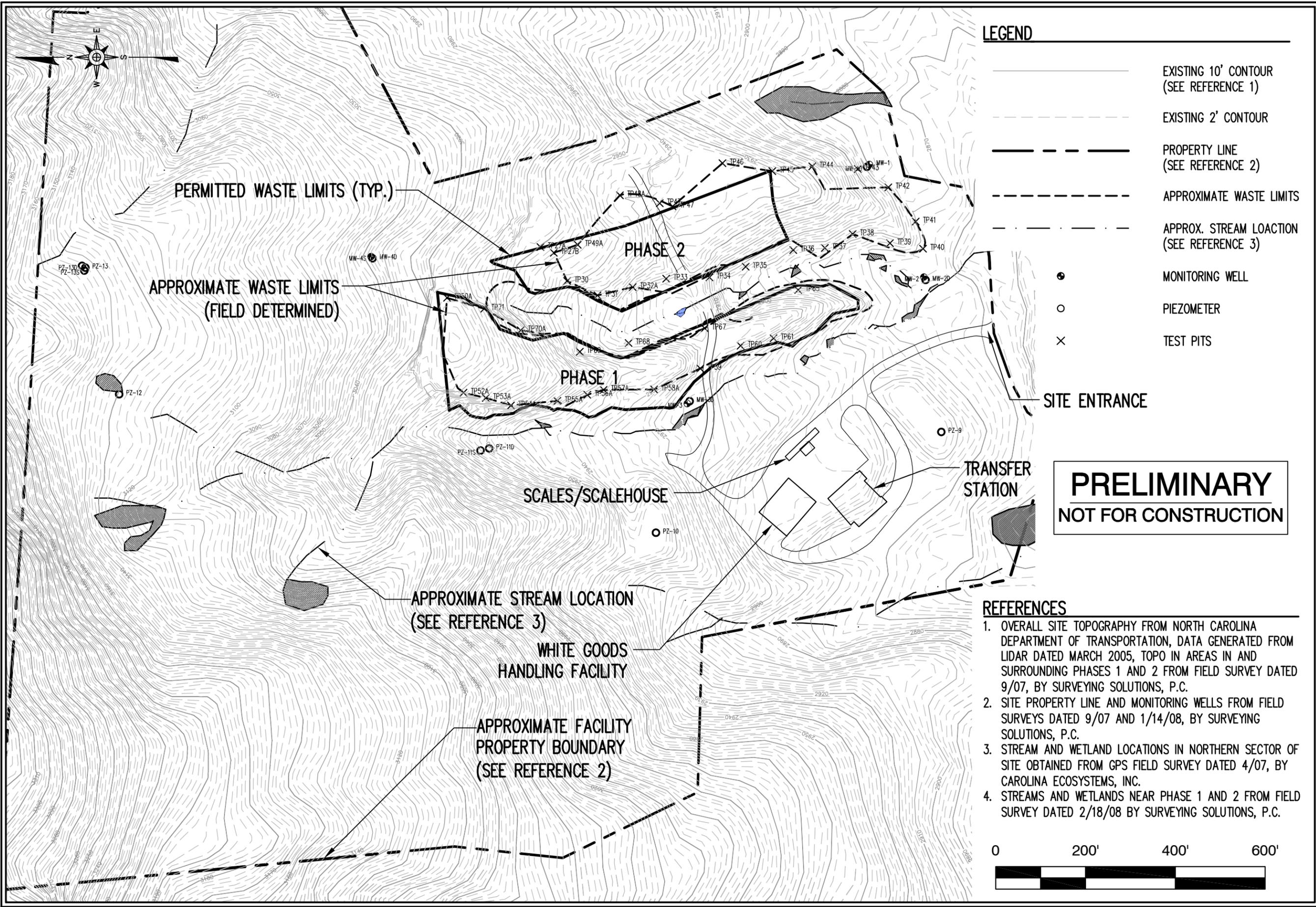
**AVERY COUNTY C&D LANDFILL
SITE VICINITY MAP**

**RICHARDSON SMITH GARDNER
& ASSOCIATES**
14 N. Boylan Ave.
Raleigh, N.C. 27603
www.rsgengineers.com
ph: 919-828-0577
fax: 919-828-3899

SCALE: AS SHOWN	DRAWN BY: J.A.L.	CHECKED BY: J.A.S.	DATE: Jul. 2008	PROJECT NO. AVERY 07-1	FIGURE NO. 1	FILE NAME AVERY-A0048
--------------------	---------------------	-----------------------	--------------------	---------------------------	-----------------	--------------------------

G:\CAD\Avery County\Avery 07-1\sheets\AVERY-A0048.dwg - 7/14/2008 11:08 AM

G:\CAD\Avery County\Avery 08-7\sheets\AVERY-B0059.dwg - 10/14/2008 3:08 PM



LEGEND

- EXISTING 10' CONTOUR (SEE REFERENCE 1)
- EXISTING 2' CONTOUR
- PROPERTY LINE (SEE REFERENCE 2)
- APPROXIMATE WASTE LIMITS
- APPROX. STREAM LOCATION (SEE REFERENCE 3)
- MONITORING WELL
- PIEZOMETER
- TEST PITS

SITE ENTRANCE

**PRELIMINARY
NOT FOR CONSTRUCTION**

REFERENCES

1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATA GENERATED FROM LIDAR DATED MARCH 2005, TOPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURVEYING SOLUTIONS, P.C.
2. SITE PROPERTY LINE AND MONITORING WELLS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
3. STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.

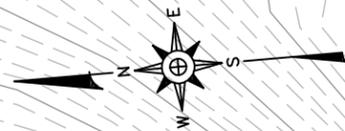


RICHARDSON SMITH GARDNER & ASSOCIATES
 14 N. Boylan Ave.
 Raleigh, N.C. 27603
 www.regengineers.com
 ph: 919-826-0577
 fax: 919-826-3899

FIGURE NO.	2	FILE NAME	AVERY-B0059
SCALE:	AS SHOWN	PROJECT NO.	AVERY 07-1
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

**AVERY COUNTY
WASTE RELOCATION
AND MITIGATION PLAN
TEST PITS & EXISTING WASTE LIMITS**

PRELIMINARY
NOT FOR CONSTRUCTION



LECHLER, MARK S
10.67 AC.
182100185065

SITE PROPERTY LINE

LECHLER, MARK S
4.92 AC.
182100177337

PROPOSED PARTIAL
PROPERTY PURCHASE
(0.97 ACRES)

PROPOSED NEW MONITORING WELL
LOCATION (APPROX.)

FRYE, JAMES C.
6.32 AC.
182100165990

PARTIAL WASTE
RELOCATION AND WASTE
REMAINING IN PLACE
(APPROX. 17,500 YD³)

PROPOSED
FINAL GRADING

TEMPORARY DIVERSION
CHANNEL W/ SILT FENCE
FIG.5

AREAS OF WASTE
RELOCATION
(16,500 YD³)

VERTICAL EXPANSION GRADES
(APPROX. 13,000 YD³)

BRUSHY CREEK RD

POTABLE WELL (FRYE)

GRINDSTAFF, HARRY
58.88 AC.
182100150863

TEMPORARY SEDIMENT TRAP
FIG.6

PHASE 2

PHASE 1

VERTICAL EXPANSION:
WASTE REMAINING IN PLACE
(APPROX. 9,000 YD³)

PERMITTED WASTE
LIMITS

NOTE

1. INSTALL LIMIT OF WASTE MARKERS IN ACCORDANCE WITH DETAIL.

REFERENCES

1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATA GENERATED FROM LIDAR DATED MARCH 2005, TOPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURVEYING SOLUTIONS, P.C.
2. SITE PROPERTY LINE AND MONITORING WELL LOCATIONS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
3. STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.
5. BRUSHY CREEK LOCATION FROM AVERY COUNTY GIS DEPARTMENT.
6. DRAWING ENTITLED "CONCEPTUAL DESIGN, SHEET 1 OF 1", DATED 6/22/95, PREPARED BY MUNICIPAL ENGINEERING SERVICES, P.A.

0 100' 200' 300'



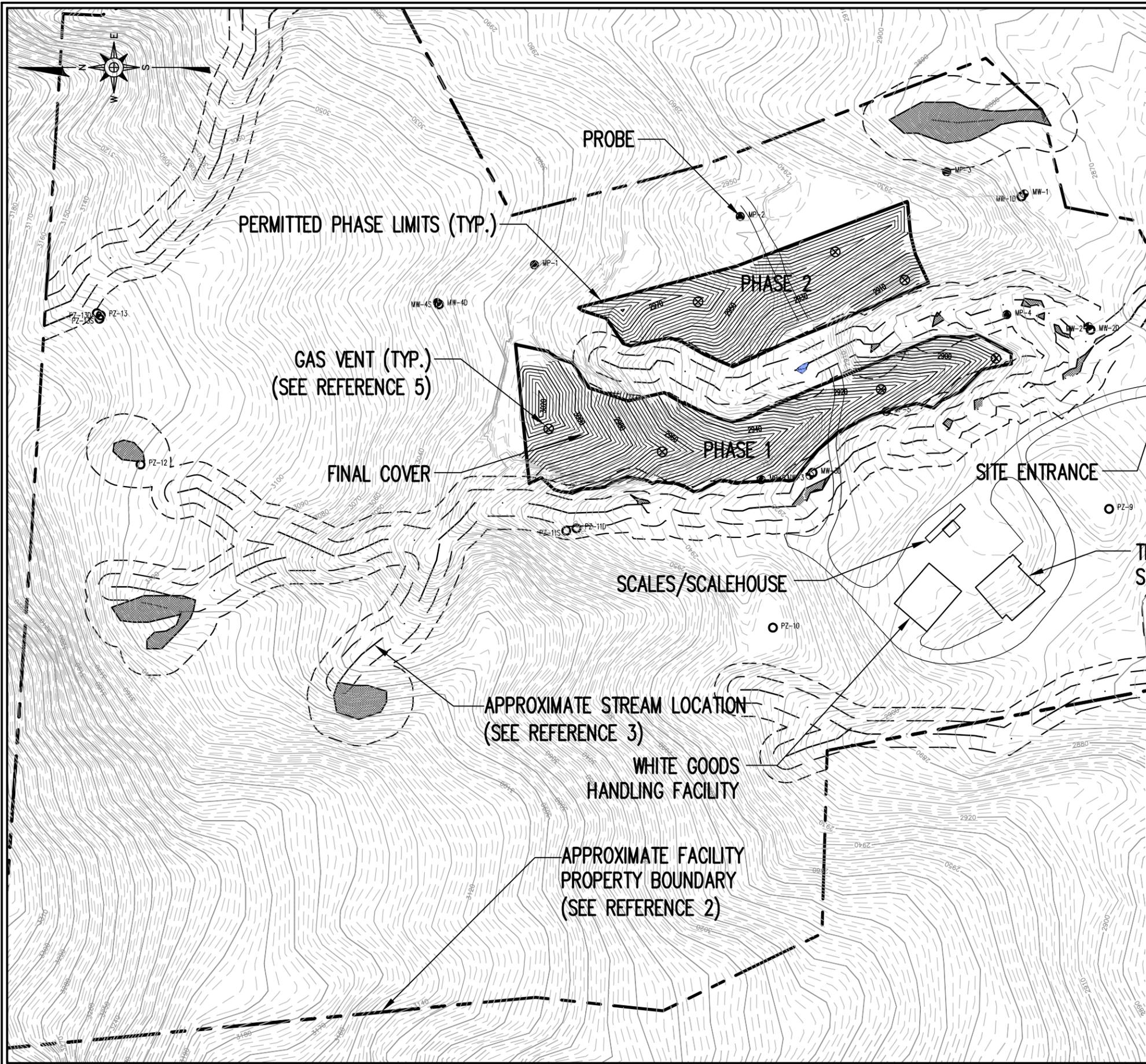
G:\CAD\Avery County\Avery 08-7\sheets\AVERY-B0056.dwg - 10/22/2008 5:14 PM

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

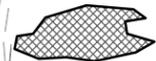
FIGURE NO.	3	FILE NAME	AVERY-B0056
SCALE:	AS SHOWN	PROJECT NO.	AVERY 08-7
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

TITLE:
**AVERY COUNTY
WASTE RELOCATION
AND MITIGATION PLAN**

G:\CAD\Avery County\Avery 08-7\sheets\AVERY-B0060.dwg - 10/14/2008 3:12 PM



LEGEND

-  EXISTING 10' CONTOUR (SEE REFERENCE 1)
-  EXISTING 2' CONTOUR
-  PROPERTY LINE (SEE REFERENCE 2)
-  APPROX. STREAM LOCATION (SEE REFERENCES 3, 4)
-  50-FOOT STREAM AND WETLAND BUFFER
-  25-FOOT TROUT STREAM BUFFER
-  WETLANDS (SEE REFERENCES 3, 4)
-  MONITORING WELL
-  PIEZOMETER
-  METHANE GAS MONITORING PROBE
-  GAS VENT

PRELIMINARY
NOT FOR CONSTRUCTION

REFERENCES

1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATA GENERATED FROM LIDAR DATED MARCH 2005, TOPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURVEYING SOLUTIONS, P.C.
2. SITE PROPERTY LINE AND MONITORING WELLS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
3. STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.
5. METHANE GAS MONITORING PROBE LOCATIONS AND GAS VENT LOCATIONS FROM DRAWING "PROPOSED METHANE PLAN" BY MUNICIPAL ENGINEERING SERVICES CO., PA, DATED JULY 12, 1996.



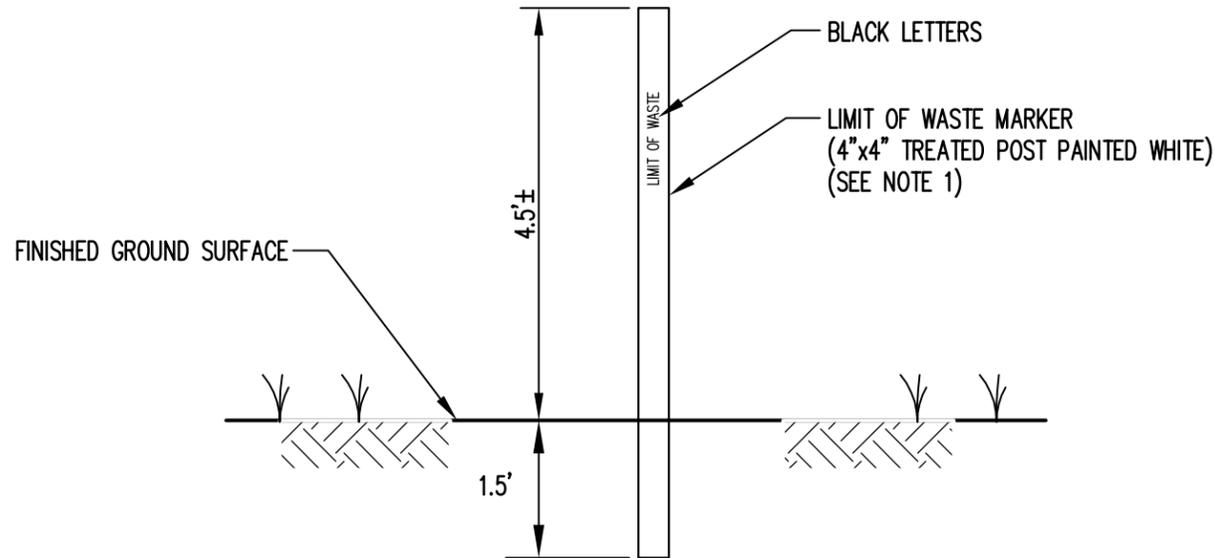
RICHARDSON SMITH GARDNER & ASSOCIATES
www.rsgengineers.com
14 N. Boylan Ave.
Raleigh, N.C. 27603
ph: 919-826-0577
fax: 919-826-3899

FIGURE NO.	4	FILE NAME	AVERY-B0060
SCALE:	AS SHOWN	PROJECT NO.	AVERY 08-7
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

**AVERY COUNTY
WASTE RELOCATION
AND MITIGATION
FINAL GRADING PLAN**

TITLE:

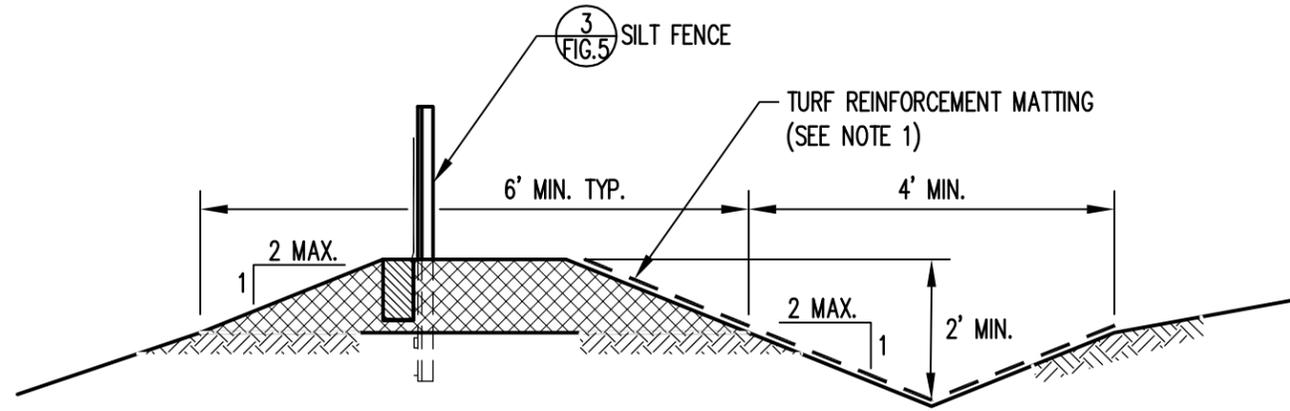
G:\CAD\Avery County\Avery 08-7\sheets\AVERY-B0057.dwg - 10/14/2008 2:45 PM



NOTES:
1. PLACE LIMIT OF WASTE MARKERS EVERY 100' ON-CENTER AND AT BREAK POINTS.

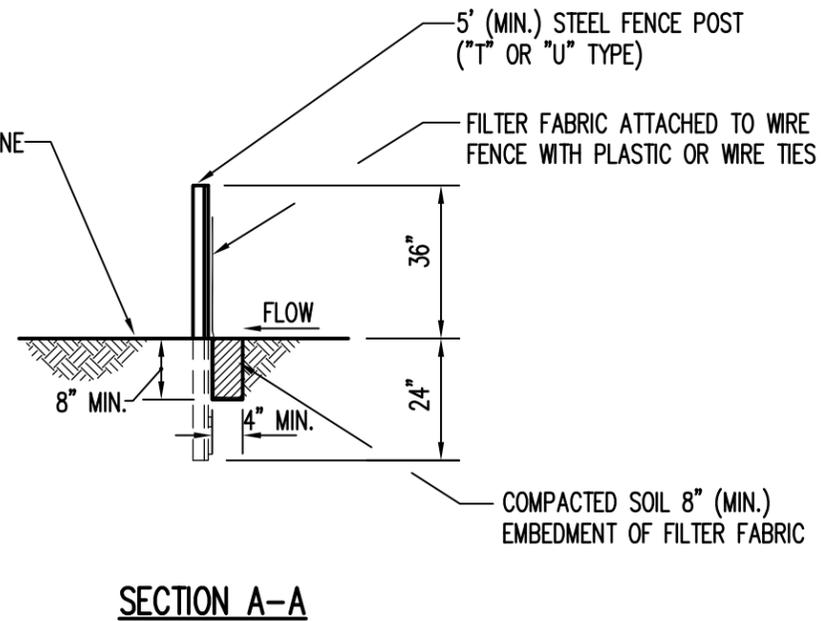
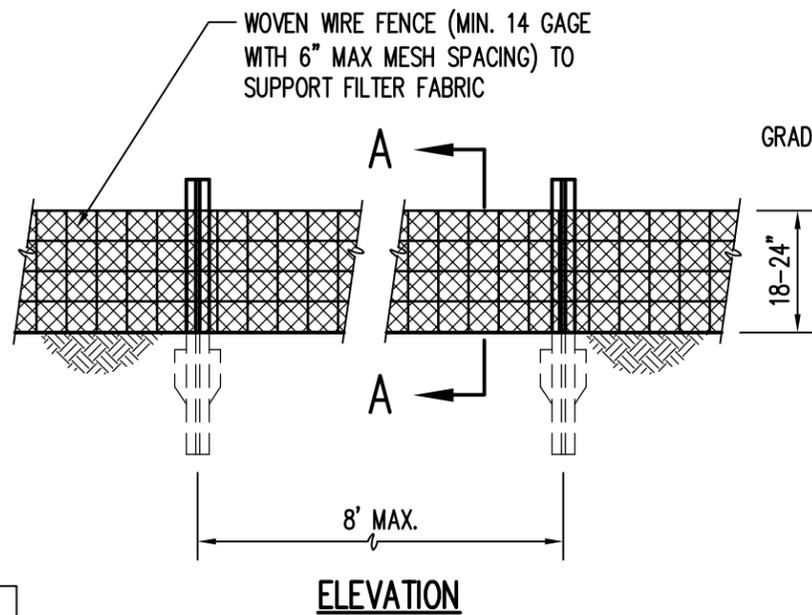
LIMIT OF WASTE MARKER

DETAIL 1 NOT TO SCALE FIG.5



TEMPORARY DIVERSION BERM

DETAIL 2 NOT TO SCALE FIG.5



SILT FENCE

DETAIL 3 NOT TO SCALE FIG.5

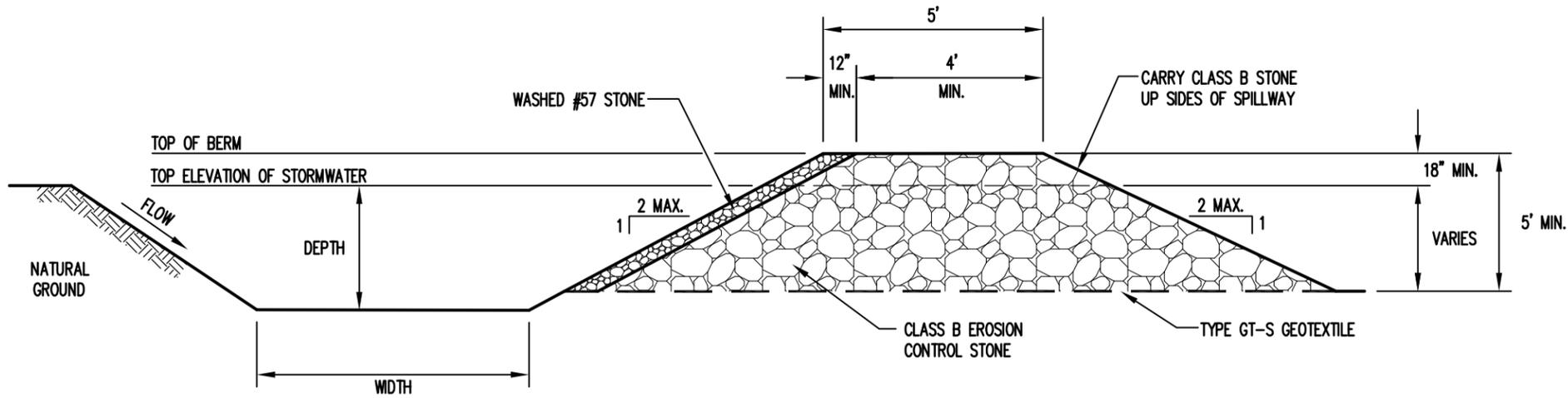
PRELIMINARY
NOT FOR CONSTRUCTION

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

FIGURE NO.	5	FILE NAME	AVERY-B0057
SCALE:	AS SHOWN	PROJECT NO.	AVERY 08-7
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

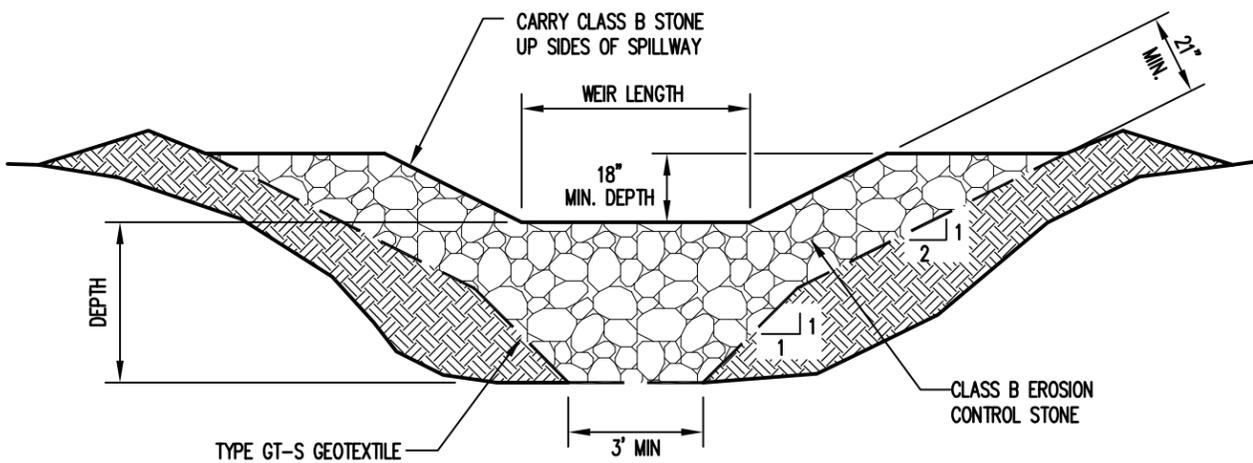
TITLE:
AVERY COUNTY
WASTE RELOCATION
AND MITIGATION DETAILS
(SHEET 1 OF 2)

G:\CAD\Avery County\Avery 08-7\sheets\AVERY-B0058.dwg - 10/14/2008 2:45 PM

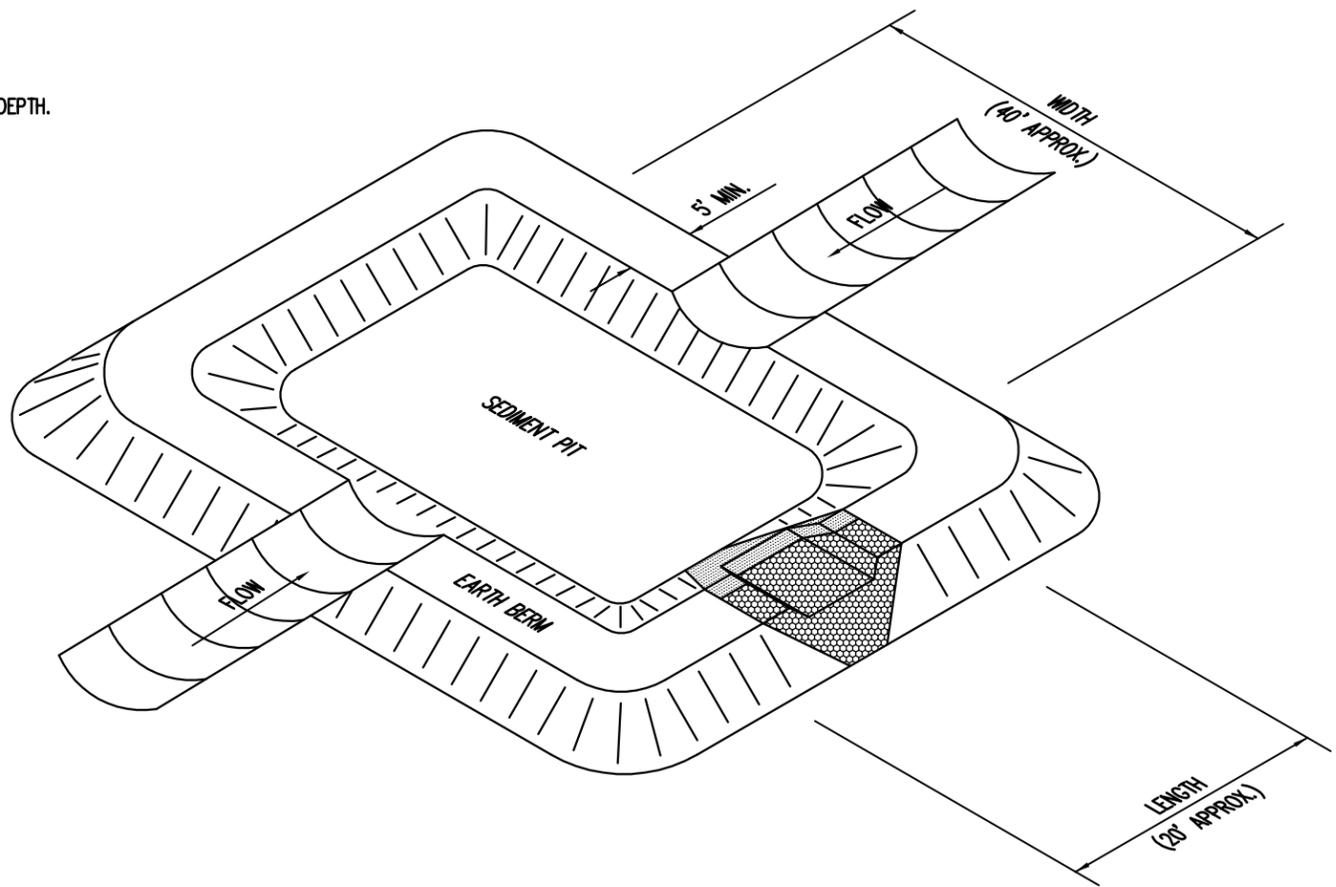


NOTE:
1. CLEAN TRAP WHEN SEDIMENT REACHES ONE-HALF OF THE DESIGN DEPTH.

SECTION THRU TRAP AND OUTLET



SECTION THRU BERM AND OUTLET



PERSPECTIVE VIEW

TEMPORARY SEDIMENT TRAP

PRELIMINARY
NOT FOR CONSTRUCTION

DETAIL NOT TO SCALE **1** FIG.6

RICHARDSON SMITH GARDNER & ASSOCIATES
www.regengineers.com
14 N. Boylan Ave. Raleigh, N.C. 27603
ph: 919-825-0577 fax: 919-825-3999

FIGURE NO.	6	FILE NAME	AVERY-B0058
SCALE:	AS SHOWN	PROJECT NO.	AVERY 08-7
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

TITLE:
**AVERY COUNTY
WASTE RELOCATION
AND MITIGATION DETAILS
(SHEET 2 OF 2)**

Attachment A

April 8, 2008 Notice of Waste Boundary Exceedance

Robert C. Wiseman
County Manager



P.O. Box 640
Newland, NC 28657
Phone: (828)733-8202
Fax (828)737-9395

COUNTY OF AVERY
Office of the County Manager

April 8, 2008

Ms. Deborah Aja
Western Regional Supervisor
North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Field Operations Branch
Asheville Regional Office
2090 U.S. Highway 70
Swannanoa, North Carolina 28778

RE: Notice of Waste Boundary Exceedance
Avery County C&D Landfill
Solid Waste Permit No. 06-03

Dear Ms. Aja:

We have prepared this letter to provide notice that our waste areas have exceeded our permitted boundaries. Our consultant, Richardson Smith Gardner & Associates, Inc. (RSG) has identified through field topographic survey and test pit survey that the existing Phase II area of the landfill has exceeded the approved waste limits as shown in **Figure 1**. Avery County intends to resolve this issue through one or a combination of the following options:

- Additional Property Purchase;
- Adjacent Owner Waivers;
- Waste Relocation; and/or
- Engineering Controls (ie. improved cover systems, etc.);

The airspace study prepared by RSG further revealed that our permitted facility has no remaining capacity. However, we are currently preparing an updated Site Study Report for expansion of the existing C&D landfill and plan to submit the report to the department for review.

We are currently reviewing our options regarding the above discovery and would like to meet with the Division at its earliest convenience to receive your input and discuss a final solution.

Ms. Deborah Aja
Page Two
April 8, 2008

We appreciate your attention in this matter and are prepared to promptly respond to any questions or concerns regarding this request. Should you have any questions or require clarification, please contact us at (828) 733-8202 or by email at robert.wiseman@ncmail.net.

Regards,

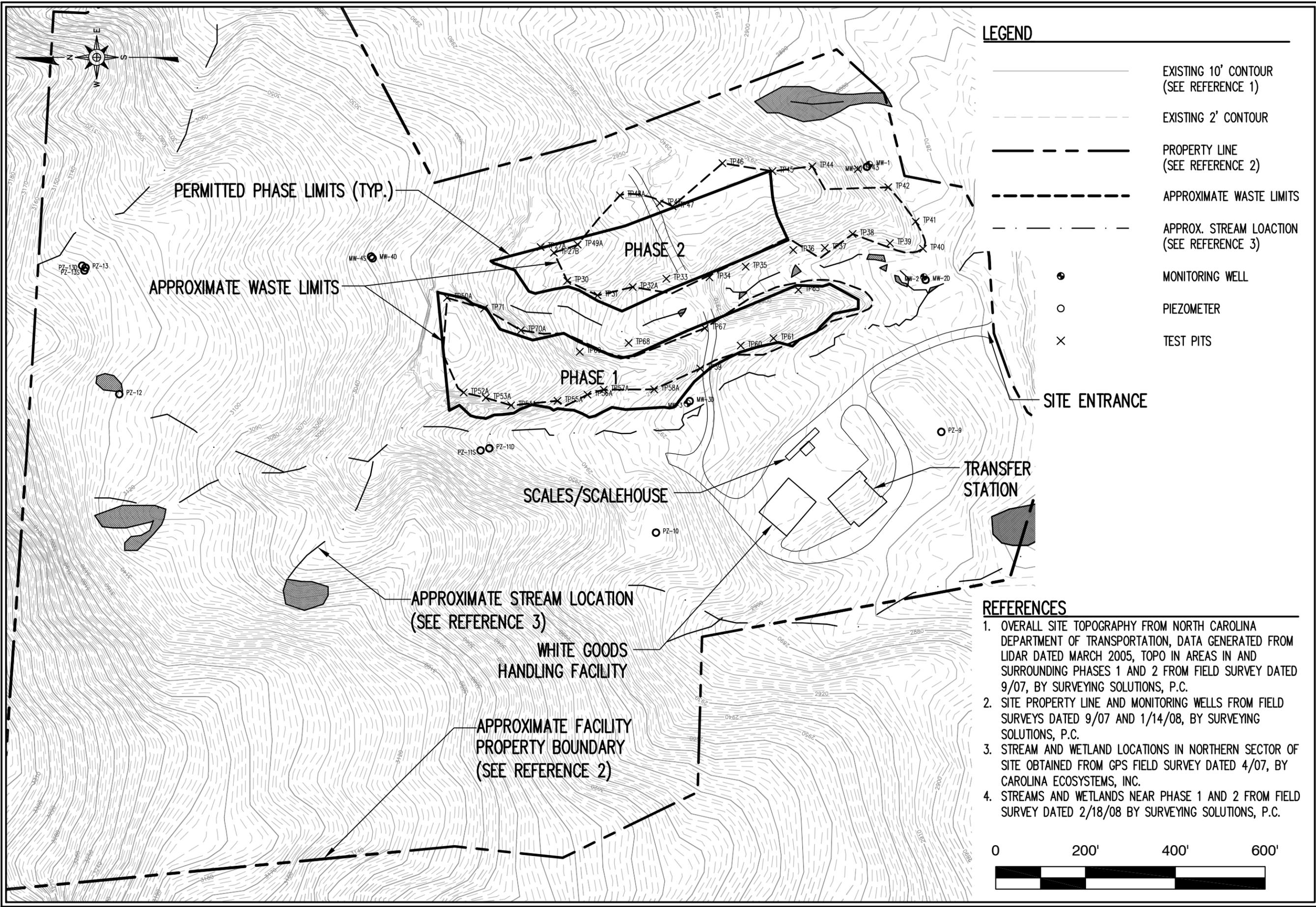


Robert Wiseman
County Manager

Attachments

cc: Bill Wagner, NCDENR
Allen Gaither, NCDENR
Stacey A. Smith, P.E., RSG
Buddy Norris, Avery County
File

G:\CADD\Avery\Avery 07-1\sheets\AVERY-B0031.dwg - 4/9/2008 9:26 AM



LEGEND

-  EXISTING 10' CONTOUR (SEE REFERENCE 1)
-  EXISTING 2' CONTOUR
-  PROPERTY LINE (SEE REFERENCE 2)
-  APPROXIMATE WASTE LIMITS
-  APPROX. STREAM LOCATION (SEE REFERENCE 3)
-  MONITORING WELL
-  PIEZOMETER
-  TEST PITS

SITE ENTRANCE

REFERENCES

1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATA GENERATED FROM LIDAR DATED MARCH 2005, TOPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURVEYING SOLUTIONS, P.C.
2. SITE PROPERTY LINE AND MONITORING WELLS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
3. STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.



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

FIGURE NO.	1	FILE NAME	AVERY-B0031
SCALE:	AS SHOWN	PROJECT NO.	AVERY 07-1
CHECKED BY:		DATE:	Apr. 2008
DRAWN BY:	J.A.L.		

TITLE:
AVERY COUNTY
SOLID WASTE DEPARTMENT
AVERY COUNTY C&D LANDFILL
EXISTING CONDITIONS

Attachment B

September 22, 2008 Compliance Order

State of North Carolina
Department of Environment
and Natural Resources



Michael F. Easley, Governor
William G. Ross, Jr., Secretary
Dexter R. Matthews, Director

THE DIVISION OF WASTE MANAGEMENT

September 22, 2008

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Avery County
c/o Robert Wiseman, County Manager
P.O. Box 640
Newland, NC 28657

Re: Compliance Order
Avery County Construction and Demolition Landfill (Permit Number 06-03)

Dear Mr. Wiseman:

Enclosed is a Compliance Order issued to Avery County because of certain violations of the North Carolina Solid Waste Management Act (N.C. General Statute 130A, Article 9) and of the North Carolina Solid Waste Management Rules (15A N.C. Administrative Code 13B) which implements the Act. This Compliance Order describes the violations of concern and the actions required by Haywood County to come into compliance with both the General Statutes and the Administrative Code.

I encourage Haywood County to schedule an informal conference at once with my staff to discuss this Compliance Order. Please contact Mr. Bill Wagner at the Asheville Regional Office at (828) 296-4705.

Sincerely,

Paul S. Crissman, Chief
Solid Waste Section
Division of Waste Management

Enclosure

cc: Teresa Townsend, Assistant Attorney General
Deborah Aja, Western District Supervisor
Bill Wagner, Environmental Senior Specialist
Mark Poindexter, Supervisor, Field Operations Branch
Jaclynne Drummond, Compliance Hydrogeologist
Central Files, Solid Waste

COMPLIANCE ORDER

Page 1

**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION**

In Re: Avery County
c/o Robert Wiseman, County Manager
P.O. Box 640
Newland, NC 28657

COMPLIANCE ORDER

PRELIMINARY STATEMENT

This Compliance Order is issued under N.C. General Statutes 130A-22, the Solid Waste Management Act (N.C.G.S. 130A, Article 9), and the Solid Waste Management Rules (15A N.C. Admin. Code 13B). Title 15A of the N.C. Admin. Code, Chapter 13B contains standards and requirements applicable to the proper management of solid waste.

On March 1, 1971, the State of North Carolina, Department of Human Resources, Division of Health Services, Solid Waste Section, implemented a Solid Waste Management Program under the Solid Waste Management Act, N.C.G.S. 130A, Article 9 and Rules codified at 15A N.C. Admin. Code 13B. Solid Waste Management is now regulated under the Solid Waste Section of the Division of Waste Management of the Department of Environment and Natural Resources. Mr. Paul S. Crissman, Chief of the Solid Waste Section, Division of Waste Management, Department of Environment and Natural Resources, has been delegated the authority to implement both the Act and the Rules. Based upon information available, the Division has determined that Avery County is in violation of certain requirements of the Act and/or Rules, as set forth below.

STATEMENT OF FACTS

1. The Avery County Construction and Demolition (C&D) Landfill and Land Clearing and Inert Debris (LCID) Landfill (Permit #06-03) is located at 2175 Brushy Creek Road, in Ingalls, N.C. Permit #06-03 was issued by the Division to Avery County to construct and operate the facility on October 25, 1996. The C&D Landfill is governed by Title 15A N.C. Administrative Code 13B .0505, as specified in General Condition No. 12 of Permit #06-03.
2. General Condition #4 of Permit #06-03 states, "the approved plan is described by Attachment 1, 'Approved Documents'."
3. Attachment 1 (Approved Documents) of the permit contains the "Construction/Demolition Landfill & Land Clearing and Inert Debris Landfill, Permit Application, dated October 1995" (herein "the approved application"). The approved application contains maps that delineate the approved waste area.
4. On April 15, 2008, Ms. Deborah Aja, Western District Supervisor, Division of Waste Management, Solid Waste Section, received a written notification from Mr. Robert Wiseman, Avery County

COMPLIANCE ORDER

Page 2

Manager, of a waste boundary exceedance at the Avery County C&D Landfill. The notice stated that Avery County's consultant, Richardson Smith Gardner and Associates, Inc. (RSG) "identified through field topographic survey and test pit survey that the existing Phase II area of the landfill has exceeded the approved waste limits". Based on the attached April 2008 landfill map prepared by RSG (Attachment A), waste was placed outside of the permitted limits of Phase I and Phase II of the C&D Landfill.

STATEMENT OF VIOLATIONS

The above facts constitute violations of the following Sections of Title 15A N.C. Admin. Code Subchapter 13B:

1. Section .0505(1)(a), which states:

Construction plans shall be approved and followed.

Avery County has violated this rule in that it did not follow the approved construction plans as detailed in the "Construction/Demolition Landfill & Land Clearing and Inert Debris Landfill, Permit Application, dated October 1995".

2. Section .0534(b)(2)(A), which states:

The permittee must comply with all conditions of the permit.

Avery County has violated this rule in that Avery County did not follow General Condition #4 of their permit and exceeded the permitted waste boundaries of their Construction and Demolition landfill.

CONDITIONS FOR COMPLIANCE

Based on the foregoing, you are hereby ordered to take the following actions:

1. Within 30 days of receipt of this Compliance Order, submit a plan for the Section's approval to remove all of the waste that is outside of the permitted disposal boundaries. All excavated waste shall be properly disposed of at a permitted facility. This plan shall include a timetable for implementation. This plan shall be submitted to:

Bill Wagner
Environmental Senior Specialist
Asheville Regional Office
2090 US Hwy 70
Swannanoa, NC 28778

COMPLIANCE ORDER

Page 3

2. After waste that was disposed outside the permitted disposal boundaries has been removed, install permanent boundary markers to clearly define the limits of the permitted waste areas within 5 days.

3. Within 30 days of receipt of this Compliance Order, the County shall acquire the services of a N.C. licensed professional geologist with experience in assessment and remediation of ground water contamination and submit a phased assessment plan to the Division to assess the impact of the disposal of waste outside the permitted waste boundaries. The professional geologist shall consult with Ms. Jaclynne Drummond, Solid Waste Section Hydrogeologist, about the site prior to developing the plan. The Section will review the submitted plan, approve, or request more information or amendments before implementation.

Ms. Jaclynne Drummond
Compliance Hydrogeologist
Division of Waste Management
1646 Mail Service Center
Raleigh, NC 27699-1646

4. Within 30 days of completion of the approved waste removal plan, submit a report detailing the following:
 - The amount of waste that has been removed from outside the permitted waste area, and
 - Plans showing the as-built limits of the permitted waste areas.

This report shall be submitted to:

Bill Wagner
Environmental Senior Specialist
Asheville Regional Office
2090 US Hwy 70
Swannanoa, NC 28778

POTENTIAL CONSEQUENCES OF FAILURE TO COMPLY

You are hereby advised that, pursuant to N.C.G.S. 130A-22, each day of continued violation of any requirement of the act, the rules, or any order issued under the act or rules constitutes a separate violation for which a penalty of up to \$15,000.00 per day may be imposed. If the violation(s) continue, you may also be subject to further enforcement actions including Injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

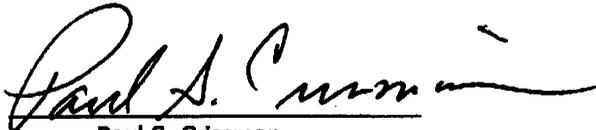
COMPLIANCE ORDER

Page 4

INFORMAL CONFERENCE

The Division encourages you to schedule an informal conference to discuss this matter and to give you an opportunity to provide additional information, including any actions you have taken to correct the violation(s). If you desire an informal conference, please contact:

Bill Wagner
Environmental Senior Specialist
Asheville Regional Office
2090 US Hwy 70, Swannanoa, NC 28778
828-296-4705

By: 

Paul S. Crissman
Chief, Solid Waste Section
Division of Waste Management
Department of Environment and Natural Resources

COMPLIANCE ORDER

Page 4

CERTIFICATE OF SERVICE

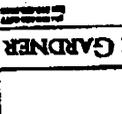
I hereby certify that I have caused a copy of the foregoing Compliance Order to be served upon the person designated below, at the last known address, causing said copy to be deposited in the U.S. Mail, First Class (certified mail postage prepaid, and return receipt requested) in an envelope addressed to:

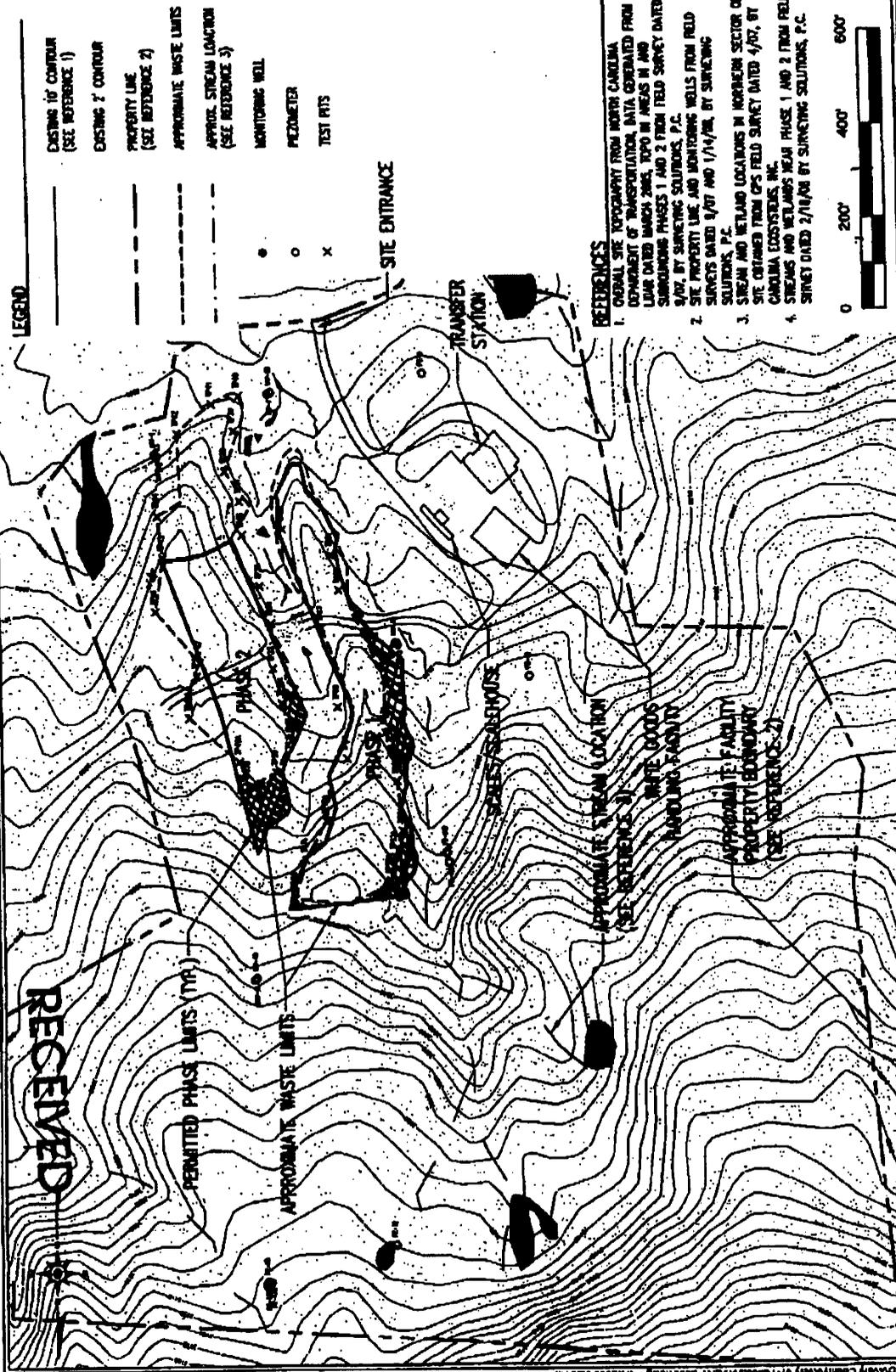
Avery County
c/o Robert Wiseman, County Manager
P.O. Box 640
Newland, NC 28657

Dated this 22 day of September, 2008



Compliance Officer
Division of Waste Management
Department of Environment and Natural Resources

 RICHARDSON SMITH GARDNER & ASSOCIATES 1000 W. MAIN ST. SUITE 200 ASHEVILLE, NC 28702		PROJECT NO. AVEW-07-1	DATE Apr. 2008
DRAWER NO. JTL	SHEET NO. 1	SCALE AS SHOWN	PROJECT NO. AVEW-07-1
AVERY COUNTY SOLID WASTE DEPARTMENT EXISTING CONDITIONS			



- LEGEND**
- EXISTING 10' CONTOUR (SEE REFERENCE 1)
 - EXISTING 2' CONTOUR
 - PROPERTY LINE (SEE REFERENCE 2)
 - APPROXIMATE WASTE LIMITS
 - APPROX. STREAM LOCATION (SEE REFERENCE 3)
 - MONITORING WELL
 - PIEZOMETER
 - TEST PITS

- REFERENCES**
1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DATA GENERATED FROM LIDAR DATED MARCH 2002, TPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURKETING SOLUTIONS, P.C.
 2. SITE PROPERTY LINE AND MONITORING WELLS FROM FIELD SURVEYS DATED 8/07 AND 1/14/08, BY SURKETING SOLUTIONS, P.C.
 3. STREAM AND WETLAND LOCATIONS IN NORTHEAST SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
 4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURKETING SOLUTIONS, P.C.

RECEIVED
 APR. 18 2008
 SOLID WASTE SECTION
 ASHEVILLE REGIONAL OFFICE

Attachment C

Jim Frye Potable Well Construction Record

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources - Division of Water Quality - Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) David Braswell CERTIFICATION # 2133
 WELL CONTRACTOR COMPANY NAME Braswell Well Drilling PHONE # (828) 933-2607
 STATE WELL CONSTRUCTION PERMIT# _____ ASSOCIATED WQ PERMIT# _____
 (if applicable) (if applicable)

1. WELL USE (Check Applicable Box): Residential Municipal/Public Industrial Agricultural
 Monitoring Recovery Heat Pump Water Injection Other If Other, List Use Private

2. WELL LOCATION: Linville Falls
 Nearest Town: Linville Falls County Ashe
Hobb - Nob RD Altamont Acres
 (Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting
 Ridge Slope Valley Flat
 (check appropriate box)
 Latitude/longitude of well location

3. OWNER: Jim Frye
 Address _____
 (Street or Route No.)

(degrees/minutes/seconds)
 Latitude/longitude source: GPS Topographic map
 (check box)

City or Town State Zip Code

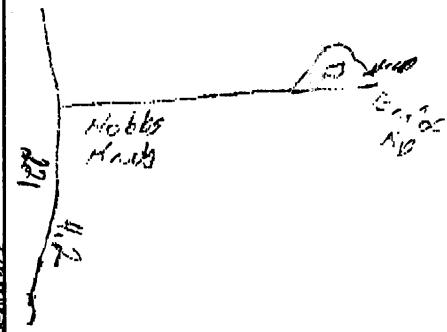
 Area code- Phone number

DEPTH		DRILLING LOG
From	To	Formation Description
<u>0</u>	<u>54</u>	<u>Drummed</u>
<u>54</u>	<u>180</u>	<u>granite</u>
<u>180</u>	<u>182</u>	<u>concrete</u>
<u>182</u>	<u>230</u>	<u>granite</u>

4. DATE DRILLED 1-30-06
 5. TOTAL DEPTH: 220
 6. DOES WELL REPLACE EXISTING WELL? YES NO
 7. STATIC WATER LEVEL Below Top of Casing: 30 FT.
 (Use "+" if Above Top of Casing)
 8. TOP OF CASING IS 1 FT. Above Land Surface*
 *Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118.
 9. YIELD (gpm): 25 METHOD OF TEST Pin
 10. WATER ZONES (depth): 180-182

LOCATION SKETCH

Show direction and distance in miles from at least two State Roads or County Roads. Include the road numbers and common road names.



11. DISINFECTION: Type HTH Amount 302
 12. CASING: Wall Thickness

From	To	Depth	Diameter	or Weight/Ft.	Material
<u>1</u>	<u>62</u>	<u>6</u>	<u>3/8"</u>	<u>PVC</u>	
From _____	To _____	Ft. _____			
From _____	To _____	Ft. _____			

13. GROUT: Material Method

From	To	Depth	Material	Method
<u>0</u>	<u>20</u>	<u>20</u>	<u>Cement</u>	<u>Grout</u>
<u>20</u>	<u>62</u>	<u>42</u>	<u>Granite</u>	<u>Grout</u>

14. SCREEN: Diameter Slot Size Material

From	To	Depth	Diameter	Slot Size	Material
From _____	To _____	Ft. _____	in. _____	in. _____	
From _____	To _____	Ft. _____	in. _____	in. _____	

15. SAND/GRAVEL PACK: Size Material

From	To	Depth	Size	Material
From _____	To _____	Ft. _____		
From _____	To _____	Ft. _____		

16. REMARKS: _____

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER

David Braswell 1-30-06
 SIGNATURE OF PERSON CONSTRUCTING THE WELL DATE