

Permit No.	Date	Document ID No.
06-03	January 25, 2010	9416

Design Clarification No. 2



<b>Project:</b>	Avery County C&D Landfill Phase III - Cell 1 Construction Avery County, North Carolina
<b>Owner:</b>	Avery County Solid Waste Attn: Buddy Norris 175 Linville Street Newland, North Carolina 28657
<b>Contractor:</b>	Blue Ridge Grading & Trucking, Inc. ATTN: Russell Fox 20 E. US Hwy 19E Bypass Burnsville, North Carolina 28714

**Regulatory Review Required (Y/N):** N  
 \*If Yes, see below.

**Reference(s):**  
 Underdrain Profile and Cross-Sections Drawing No. X1 and X2

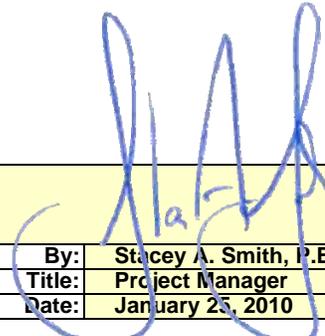
**Description of Clarification(s):**  
 The existing topography has been updated in the plan view and within the profile and sections to correspond with a recent field update by Appalachian Surveying.

**Reason for Clarification(s):**  
 Upon construction staking by Blue Ridge Grading, a few locations were found to be significantly lower than shown on the drawings. Following review of these shots, RSG had Appalachian Surveying provide specific field surveying of this area of the channel between Phases 1 and 2. This area was previously surveyed through aerial photography. Our review of this new topo with the original topo determined that areas were different but there was not net difference between the two, but the drawings were updated to include the most up to date topography.

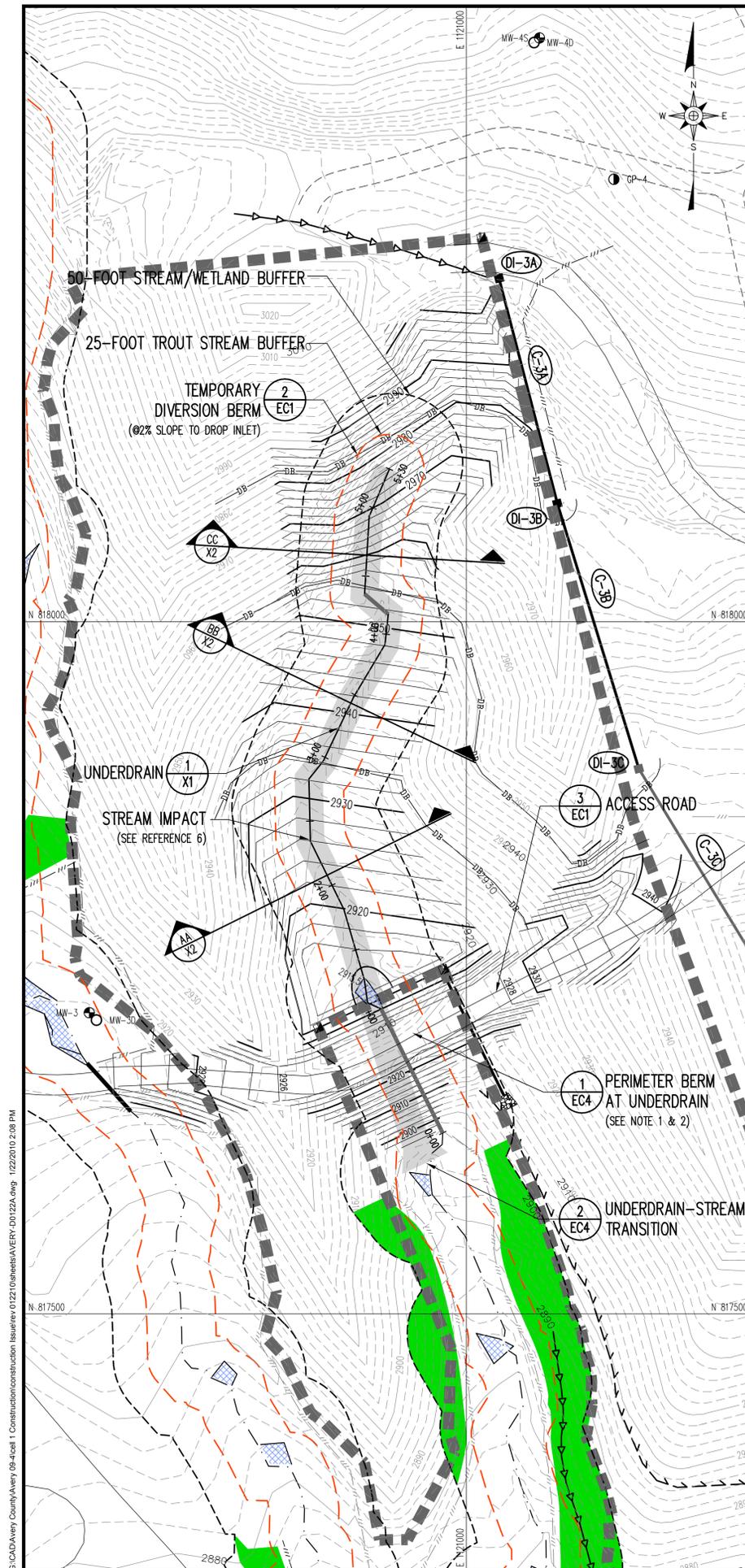
**Attachments:**  
 Drawings X1 and X2.

**Comments:**

**Regulatory Agency:** NCDENR - Division of Waste Management  
 ATTN: Allen Gaither  
 Asheville Regional Office  
 Swannanoa, North Carolina

  
**By:** Stacey A. Smith, P.E.  
**Title:** Project Manager  
**Date:** January 25, 2010

**Distribution:**  Owner  Contractor  Field  File  Regulatory Agency



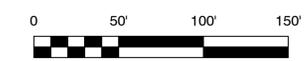
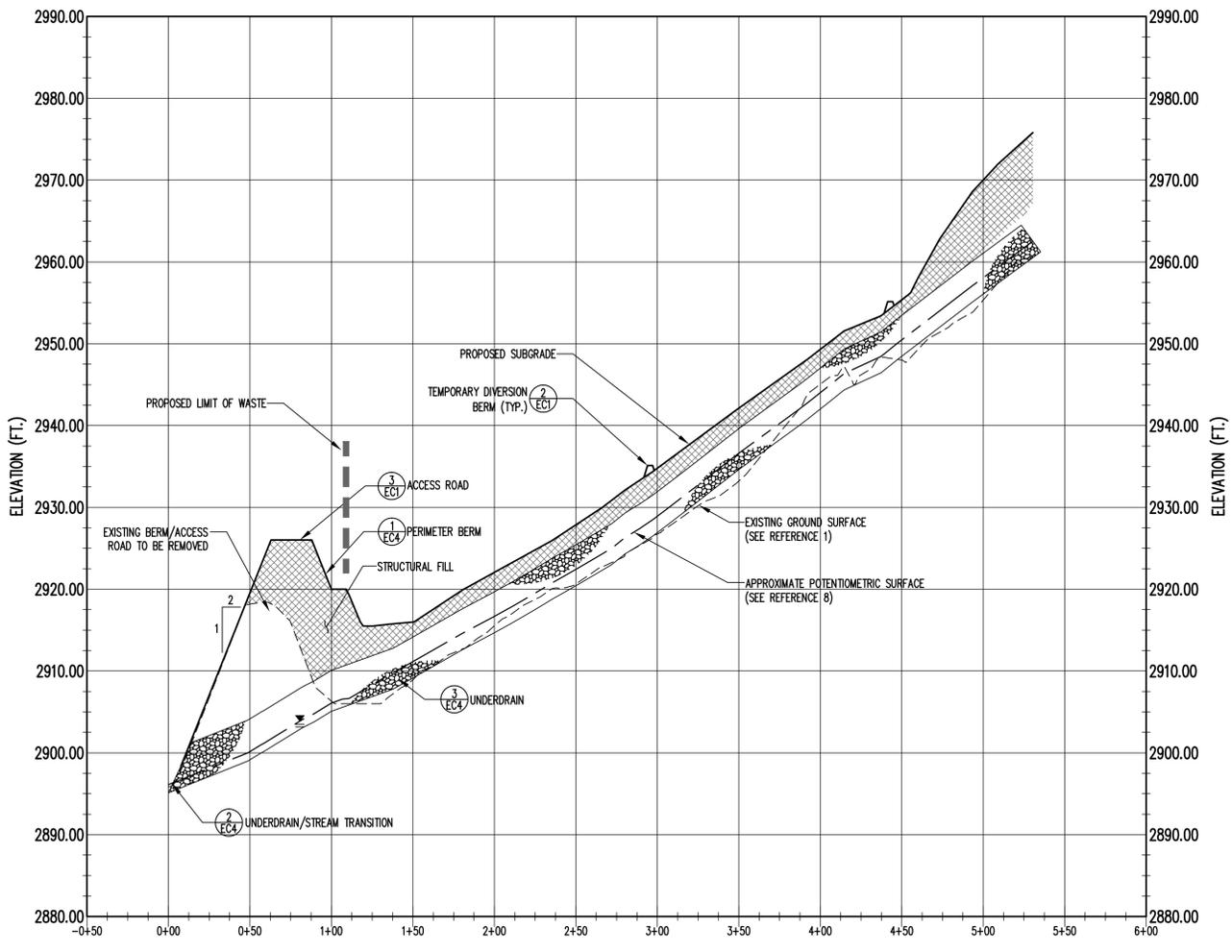
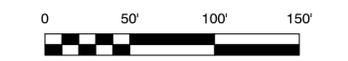
**LEGEND**

	EXISTING 10' CONTOUR (SEE REFERENCE 1)
	EXISTING 2' CONTOUR
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPERTY LINE (SEE REFERENCE 2)
	WASTE LIMITS
	SILT FENCE
	SILT FENCE (EXISTING)
	DIVERSION BERM
	DIVERSION CHANNEL
	SIDE SLOPE SWALE
	APPROX. STREAM LOCATION (SEE REFERENCE 3, 5)
	WETLANDS (SEE REFERENCE 3)
	50-FOOT STREAM AND WETLAND BUFFER
	25-FOOT TROUT STREAM BUFFER
	PROPOSED BUFFER RESTORATION AREAS
	MONITORING WELL
	PIEZOMETER
	PROPOSED GAS PROBE
	CULVERT
	DROP INLET
	PROPOSED LIMIT OF WASTE MARKER

**NOTE**

- CONTRACTOR SHALL PREPARE PIPE REMOVAL, UNDERDRAIN INSTALLATION, AND BACKFILL WORK PLAN PRIOR TO DISTURBANCE OF THIS AREA. NO WORK SHALL OCCUR UNTIL APPROVAL IS GRANTED BY THE ENGINEER.
- WATER DISCHARGED FROM DISTURBED AREAS DURING INSTALLATION OF THE UNDERDRAIN SYSTEM SHALL BE TREATED WITH FLOCCULANT BEFORE DISCHARGING INTO A SPECIAL STILLING BASIN (OR SEDIMENT BASIN NO. 3) FOLLOWING THE DESIGN CRITERIA IN THE NC EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, "PRACTICE STANDARD AND SPECIFICATION 6.86, FLOCCULANTS."

- REFERENCES**
- 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. PHASE 1 AREA NORTH OF GRAVEL ACCESS ROAD TOPOGRAPHY FROM FIELD SURVEY BY SURVEYING SOLUTIONS, P.C., DATED 10/8/09. PHASE 1 AREA SOUTH OF GRAVEL ACCESS ROAD AND PHASE 2 TOPOGRAPHY FROM FIELD SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, P.A., DATED 1/11/10 AND REVISED 1/19/10.
  - SITE PROPERTY LINE AND MONITORING WELL LOCATIONS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
  - STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
  - STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.
  - BRUSHY CREEK LOCATION FROM AVERY COUNTY GIS DEPARTMENT.
  - ALL IMPACT AREAS ARE UNDER APPROVAL OF ACTION ID 2008-03130 NATIONWIDE PERMIT NO. 39 BY THE US ARMY CORE OF ENGINEERS DATED NOVEMBER 9, 2008 AND NC DIVISION OF WATER QUALITY DATED NOVEMBER 21, 2008 DWQ PROJECT NO. #08-1464.
  - POTABLE WELL LOCATIONS ARE APPROXIMATE.
  - POTENTIOMETRIC SURFACE SHOWN WAS OBTAINED FROM DRAWING, AVERY COUNTY C&D LANDFILL POTENTIOMETRIC MAP SPRING '09, CREATED BY RICHARDSON SMITH GARDNER AND ASSOCIATES IN JULY 2009.



**LEGEND**

	EXISTING GROUND SURFACE (SEE REFERENCE 1)
	PROPOSED SUBGRADE
	POTENTIOMETRIC SURFACE (SEE REFERENCE 8)

**SAFETY NOTE:**  
Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

**ISSUED FOR CONSTRUCTION**

DESIGN CLARIFICATION NO. 2	DATE	NO.	REVISION
1/22/10	12/13/09	3	CONSTRUCTION ISSUE

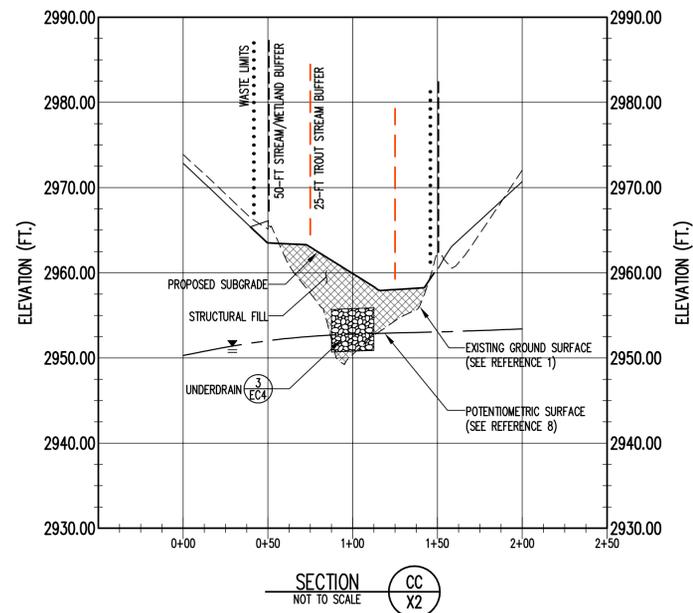
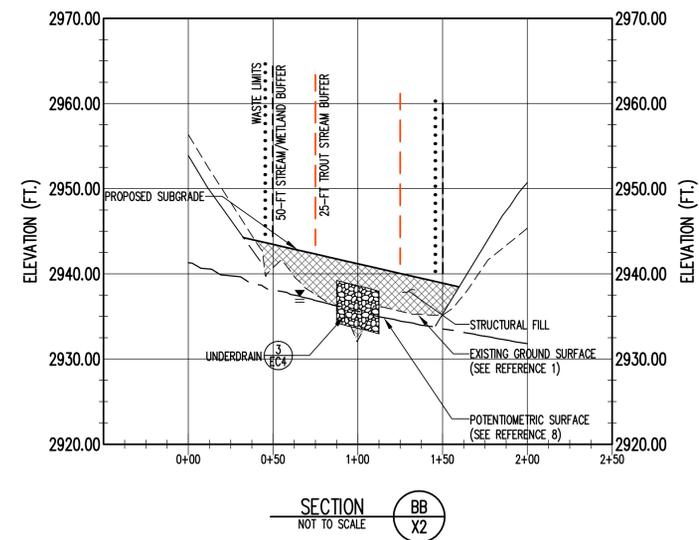
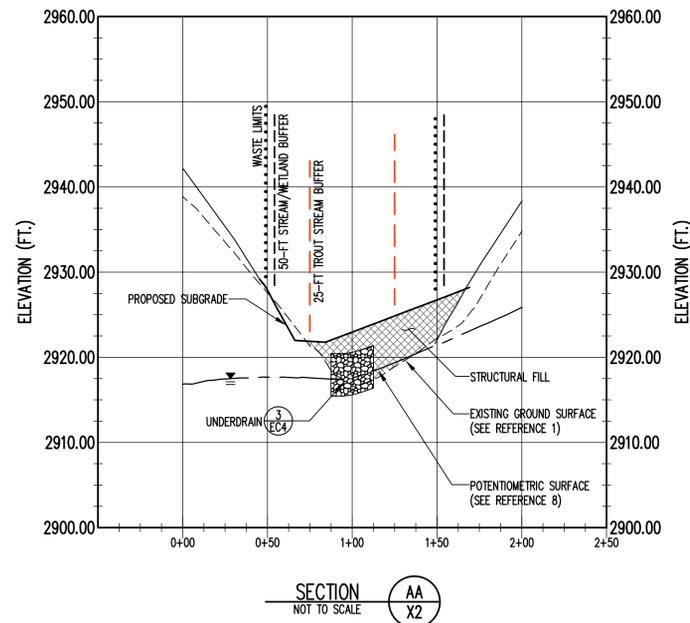
**RICHARDSON SMITH GARDNER & ASSOCIATES**  
 14 N. Boylan Ave.  
 Raleigh, N.C. 27603  
 ph: 919-828-0577  
 fax: 919-828-3899  
 www.rsgengineers.com

PROJECT TITLE:  
**AVERY COUNTY  
 C&D LANDFILL  
 PHASE III - CELL 1  
 CONSTRUCTION DRAWINGS**

DRAWING TITLE:  
**UNDERDRAIN PROFILE**

DESIGNED BY: S.A.S.	DRAWN BY: C.T.J.
CHECKED BY:	PROJECT NO.: AVERY 09-4
SCALE: AS SHOWN	DATE: OCT. 2009
FILE NAME: AVERY-D0122A	SHEET NO.: 5
SHEET NO.:	DRAWING NO.: X1

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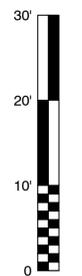
- LEGEND**
- EXISTING GROUND SURFACE (SEE REFERENCE 1)
  - PROPOSED FINAL GRADE
  - PROPOSED SUBGRADE
  - - - POTENTIOMETRIC SURFACE

**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. PHASE 1 AREA NORTH OF GRAVEL ACCESS ROAD TOPOGRAPHY FROM FIELD SURVEY BY SURVEYING SOLUTIONS, P.C., DATED 10/08/08. PHASE 1 AREA SOUTH OF GRAVEL ACCESS ROAD AND PHASE 2 TOPOGRAPHY FROM FIELD SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, P.A., DATED 1/11/10 AND REVISED 1/19/10.
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DESIGN CLARIFICATION NO. 2	REVISION
1/22/10	NO.
12/3/09	DATE

**RICHARDSON SMITH GARDNER & ASSOCIATES**  
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 fax: 919-228-3899

PROJECT TITLE:  
**AVERY COUNTY  
 C&D LANDFILL  
 PHASE III - CELL 1  
 CONSTRUCTION DRAWINGS**

DRAWING TITLE:  
**CROSS SECTIONS**

DESIGNED BY: S.A.S.	DRAWN BY: C.T.J.
CHECKED BY:	PROJECT NO.: AVERY 09-4
SCALE: AS SHOWN	DATE: OCT. 2009
FILE NAME: AVERY-D0123A	SHEET NO. / DRAWING NO. 6 / X2