evergreen packaging

Canton Office
175 Main Street • Canton, NC 28716

November 20, 2012

JAG 92-12
Certified Mail 7008 3230 0002 2595 1645
Return Receipt Requested

Ms. Christine Ritter
NCDENR
1646 Mail Service Center
Raleigh, NC 27699-1646

Mr. Allen Gaither
NCDENR
2090 U.S. Highway 70
Swannanoa, NC 28778

Subject: Evergreen Packaging
Landfill #6, Area D North Amendment, Permit # 44-06
Canton, North Carolina

Dear Ms. Ritter and Mr. Gaither:

Per our discussions with Mr. Gaither, we are submitting to the North Carolina Department of Environment and Natural Resources (NCDENR) a work plan related to permitting a new landfill cell, 6D North, at our Canton facility. Evergreen owns and operates a landfill to dispose of its papermaking residuals. The current cell, referred to as 6D South, will be full by the end of 2014. Based on our past experience, we will need approximately two years to permit and construct a new cell. Therefore, we have developed a Work Plan describing field data that will need to be collected to begin the design of the new cell.

The data that will be collected associated with the 6D North Work Plan will supplement the 2007 site investigation which was performed to permit the adjoining area 6D South. The field work will include drilling activities to install piezometers for groundwater levels and bedrock depths. Our consultant, Sevee & Maher Engineers, Inc. will also conduct geophysical work related to evaluating the competency of the bedrock in the area of the new cell.

We would be pleased to meet or arrange a conference call with you and our consultants, Sevee & Maher Engineers, Inc. to review the Work Plan at your convenience. Also, if you would like to arrange a site visit, now or during the field work, please let us know and we can coordinate a meeting date. Our goal is to begin the field activities the beginning of January 2013. This is necessary to keep the overall schedule for development of the landfill area 6D North on schedule and avoid disruption to mill operation.

We look forward to working with the Department to permit a new cell at our Landfill #6. If you have any questions or need additional information, please do not hesitate to contact us.

Very truly yours,

BLUE RIDGE PAPER PRODUCTS INC.
DOING BUSINESS AS EVERGREEN PACKAGING

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Attachment: Work Plan

cc: G. Cote, SME
L. Williams

File:6d north 112012

WORK PLAN

LANDFILL NO. 6
SITE INVESTIGATION
AREA D-NORTH

Prepared for
BLUE RIDGE PAPER PRODUCTS INC. –
CANTON MILL
DBA EVERGREEN PACKAGING

CANTON, NORTH CAROLINA

November 2012

SME
Sevee & Maher Engineers, Inc.

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BLUE RIDGE PAPER PRODUCTS
CANTON, NORTH CAROLINA

1.0 PROJECT LOCATION AND DESCRIPTION

Blue Ridge Paper Products (Blue Ridge) owns and operates a landfill in Canton, North Carolina for deposit of their solid waste generated by the papermaking process. The landfill, referred to as Landfill No. 6, is located approximately three miles north of Canton. Blue Ridge operates the landfill in discrete areas and has one active area, Area D - South, and nine closed areas. The approved solid waste footprint for Landfill No. 6 includes two undeveloped areas, Area D – North and Area E.

Blue Ridge is proposing to develop Area D - North to meet future waste disposal demands resulting from operations at their mill in Canton, North Carolina. Area D - North creates an additional solid waste footprint of approximately 15 acres. Area D - South was constructed in 2009 and is currently active. Blue Ridge has retained Sevee & Maher Engineers, Inc. (SME) to prepare a Permit to Construct this Work Plan for additional data in Area D - North.

The purpose of this proposed site investigation is to gather additional hydrogeologic information to supplement the "Design Hydrogeologic Report – Landfill Areas D and E" (SME, 2008). In the 2007 SME investigation, 52 piezometers were installed in 28 borings. During the development of Landfill No. 6, several additional hydrogeologic studies have been performed. To date, there have been approximately 75 borings in and around the vicinity of Areas 6D – South, 6D North, and 6E. The 2007 hydrogeologic report presented a bedrock contour plan, groundwater contour plans, three-dimensional groundwater flow nets, and a groundwater flow regime report for Landfill No. 6 Areas D and E.

This investigation along with the completed investigations shall provide a minimum coverage of one piezometer per acre of the Area D – North solid waste footprint. The site investigation shall also provide and confirm adequate information to demonstrate compliance required by Rule 15A

NCAC 13B.0503 of the North Carolina Department of Environment and Natural Resources (NCDENR) for a minimum groundwater separation from the base of the landfill.

The primary objective of the proposed field work is to obtain sufficient hydrogeologic data to prepare a design for the development of Area D - North. The various components of the site investigation and reporting are discussed in the following sections.

2.0 SITE INVESTIGATION

2.1 Piezometer Installations

In order to monitor groundwater levels in the area of the proposed Area D - North, 12 new borings (designated B-13-101 through B-13-112) are planned at the locations shown in Figure 1 in Appendix A. Three borings and their associated piezometers that were installed previously as part of the 2008 Hydrogeologic Report for Areas D and E[1] will be utilized to provide the spatial coverage of one boring per acre required by NCDENR regulations. NCDENR requires a minimum 4-foot separation between the bottom of the liner beneath a landfill, and the seasonal high water table. Therefore, the new borings will be located within the footprint of Area D - North, north of the active Area D - South.

It is estimated that the borings will range from about 25 feet to 90 feet in total depth. Interpretive geologic mapping using historical information from previously drilled borings indicates a bedrock high in the northeastern portion of the site. The bedrock rock surface generally slopes downward from northeast to the southwest. Most of the borings will be drilled to about 20 feet below the interpreted high water table as presented in the 2008 Hydrogeologic Report for Areas D and E, to allow for the installation of a shallow piezometer. It is not anticipated that multi-level piezometers will be installed. Gradients and flow nets for Area 6D – North were provided in the "Design Hydrogeologic Report Landfill No. 6 Areas D and E" (SME, 2002). The new piezometers will be used to supplement and confirm earlier data.

[1] "Hydrogeologic Report, Landfill No. 6 Areas D and E"; Blue Ridge Paper Products, Inc. – Canton Mill Division of Evergreen Packaging, Canton, North Carolina; prepared by Sevee & Maher Engineers, Inc.; November, 2008.

The overburden will be drilled using either hollow-stem-augers and/or water rotary drilling techniques. Split-spoon soil samples will be collected at 5-foot intervals in each boring following ASTM D 1586 procedures for standard penetration testing. The grain size distribution and moisture content of the overburden will be determined in selected borings in accordance with ASTM D 422 and ASTM D 2216, respectively. The remolded hydraulic conductivity of selected soil samples will also be determined in laboratory testing following ASTM D 5084. Bedrock will be cored with a double-tube core barrel equipped with either HQ (2.5-inch diameter) or NQ-2 (2.0-inch diameter) diamond coring bit in accordance with ASTM D 2113. Descriptive soil boring and bedrock core logs will be prepared from visual logging of the retrieved soil and rock core samples.

Each boring will be completed as a piezometer having either a ¾-inch or 2-inch diameter flush-joint Schedule 40 polyvinylchloride (PVC) riser and a 5 to 10-foot-long PVC 0.01-inch slotted well screen per ASTM D 5092. A washed filter sand pack will extend 1 to 2 feet above the top of the well screen and the remaining annular space will be sealed with either solid bentonite chips or a hydrated powdered bentonite grout. A piezometer installation detail is shown in Appendix B. A steel protective surface casing secured with a keyed padlock will be installed around the portion of the riser pipe extending above the ground surface. Slug tests will be conducted in selected piezometers to determine the in situ hydraulic conductivity of the overburden and bedrock in the area investigated. Rising- or falling-head test methods will be used and the hydraulic conductivity calculated following the methods of Cooper et al. (1967), Bouwer and Rice (1973), or Hvorslev (1951). Water for drilling will be obtained from the Blue Ridge mill.

2.2 Seismic Refraction Survey

To augment the information gathered by the borings, a seismic refraction survey will be performed to aid in assessing the approximate depth to saprolite rippability. The seismic refraction survey will consist of several lines through the Area D - North. The location of the lines will be determined based on access, subsurface conditions encountered in the borings and proposed landfill base grades.

Upon completion of the data acquisition, elevation data will be collected along each of the refraction seismic spreads and will be incorporated into the data processing. Data will be evaluated using commercially available software by a geophysicist familiar with regional geology.

2.3 Survey

The ground surface elevation and horizontal coordinates of each piezometer and the ends of each seismic spread will be surveyed to the nearest 0.1 foot and 1 foot, respectively, using existing site benchmarks and control points. The top of the PVC riser pipe will also be surveyed to the nearest 0.01 foot. Elevations will be referenced to National Geodetic Vertical Datum (NGVD). Horizontal locations will be reported relative to the site grid coordinates.

2.4 Water Level Monitoring

Groundwater levels will be measured during the drilling program, and periodically after all the new piezometers are installed to ensure that a static water level condition has been attained. Thereafter, water level monitoring in the new piezometers and several existing site wells will continue on a monthly basis for about six months, through the end of June 2013. The water level data from 2007 showed the seasonal high water levels in the spring. Therefore, water levels will be monitored weekly throughout the spring season at selected piezometer locations. A graph of all the water levels was merged with an overage trend line to depict the seasonal high water during the spring (see Figure 2 in Appendix A). Groundwater levels will be measured to the nearest 0.01 foot from the top of the PVC riser pipe, and referenced to NGVD. One year of water level data was obtained from the 52 wells and piezometers installed for the Landfill No. 6 Areas D and E hydrogeologic report during 2007/2008. The new water level data will be used to confirm the seasonal high water elevation in the Area 6D – North area.

2.5 Piezometer Abandonments

Most of the piezometers planned for the field investigation will be situated within the boundary of the proposed Area D - North footprint. They will eventually have to be abandoned once

construction proceeds. The PVC well material will be pulled from the boring or removed by grinding, to the greatest extent possible. The boring will then be backfilled with either solid bentonite or a bentonite grout sealant.

3.0 REPORTING

The findings from the Area D - North field investigation will be documented in a Permit to Construct report. The submittal will contain SME's interpretive boring logs, driller logs, piezometer installation details, water level measurements, seismic refraction findings, and a plan showing surveyed locations of the installed piezometers and seismic spreads. Results from physical property testing of the overburden and in situ hydraulic conductivity testing will also be summarized. An interpretive groundwater phreatic surface map will be generated for the wet-season conditions based on the data collected from water level monitoring. An interpretive bedrock surface contour map for the area beneath proposed Area D - North will also be prepared. This information will be used to develop a design for landfill construction.

4.0 SCHEDULE

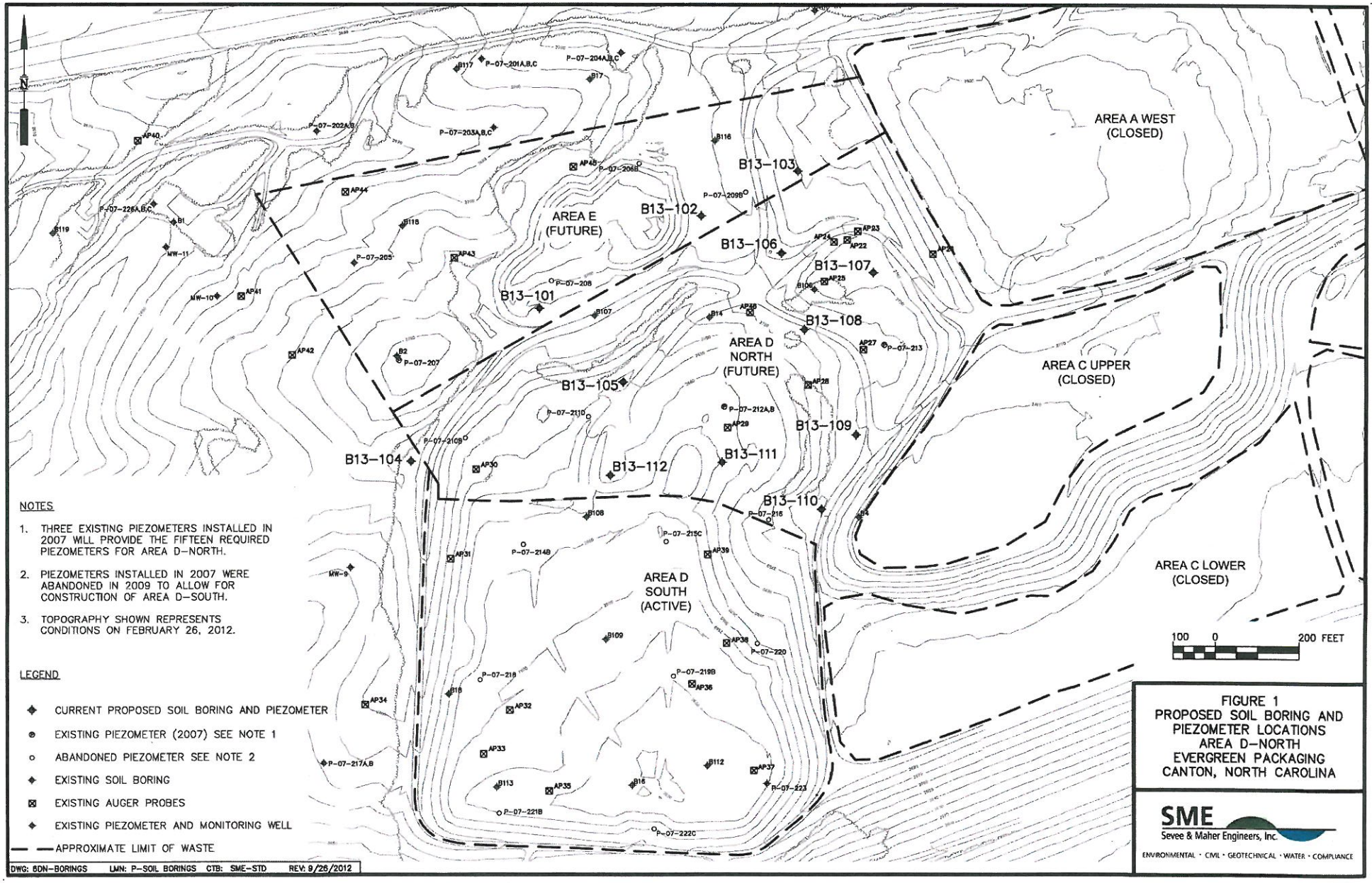
The start of the Area D - North field investigation is contingent on receiving NCDENR approval of the Work Plan herein, and authorization from Blue Ridge to proceed. SME estimates the drilling, piezometer installation, seismic refraction survey and field investigation program will take 3 to 4 weeks to complete once the field investigation is initiated. Thereafter, water levels will be monitored monthly for six months.

The landfill design will be based on the site investigation findings and will take 15 to 18 weeks to complete. A Permit to Construct application will follow the design to the NCDENR, which is expected to be submitted in the third quarter of 2013. The permit process would be followed by construction, contingent on receiving NCDENR approval.

APPENDIX A

FIGURE 1
PROPOSED SOIL BORING AND PIEZOMETER LOCATIONS

FIGURE 2
WATER LEVEL DATA



NOTES

1. THREE EXISTING PIEZOMETERS INSTALLED IN 2007 WILL PROVIDE THE FIFTEEN REQUIRED PIEZOMETERS FOR AREA D–NORTH.
2. PIEZOMETERS INSTALLED IN 2007 WERE ABANDONED IN 2009 TO ALLOW FOR CONSTRUCTION OF AREA D–SOUTH.
3. TOPOGRAPHY SHOWN REPRESENTS CONDITIONS ON FEBRUARY 26, 2012.

LEGEND

- CURRENT PROPOSED SOIL BORING AND PIEZOMETER
- EXISTING PIEZOMETER (2007) SEE NOTE 1
- ABANDONED PIEZOMETER SEE NOTE 2
- EXISTING SOIL BORING
- EXISTING AUGER PROBES
- EXISTING PIEZOMETER AND MONITORING WELL
- APPROXIMATE LIMIT OF WASTE

DWG: 6DN–BORINGS LWN: P–SOIL BORINGS CTB: SME–STD REV: 9/26/2012

FIGURE 1
PROPOSED SOIL BORING AND PIEZOMETER LOCATIONS
AREA D–NORTH
EVERGREEN PACKAGING
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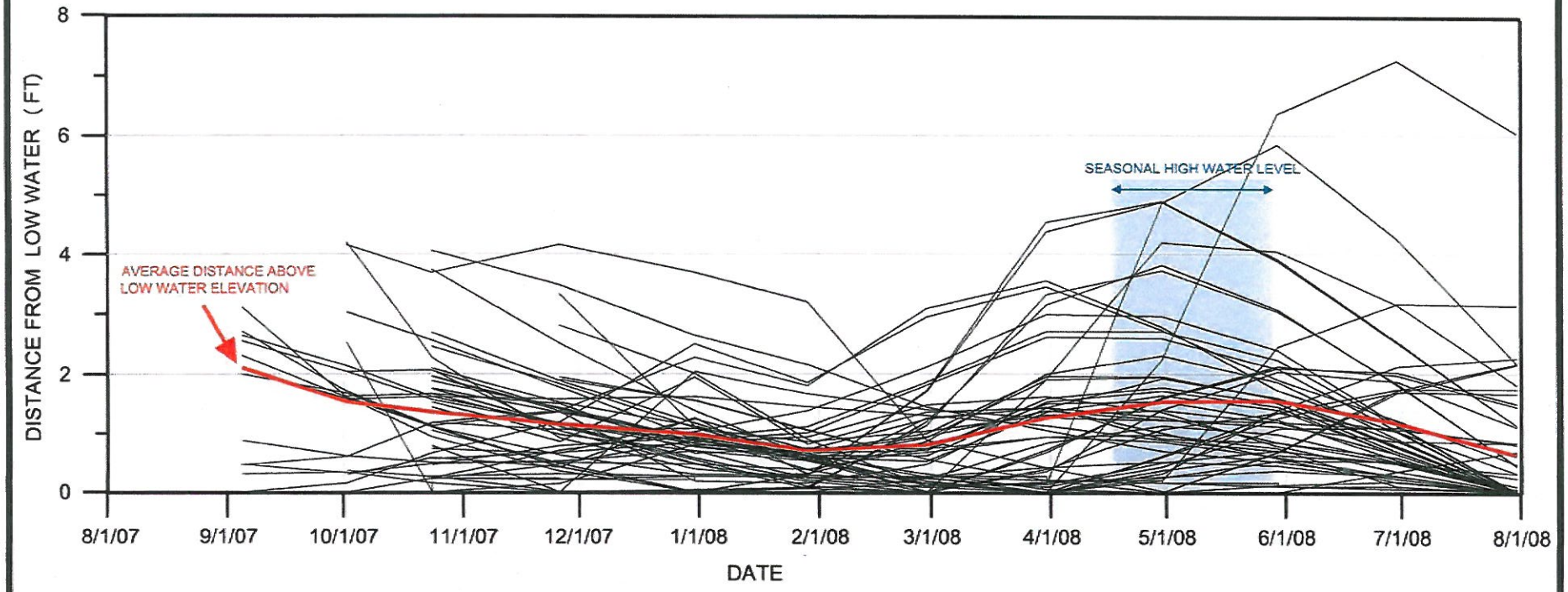

FIGURE 2
WATER LEVEL DATA
AREA D–NORTH
EVERGREEN PACKAGING
CANTON, NORTH CAROLINA

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DWG: 6Dsouthwaterleveldata LMN: LMN CTB: SME–STD REV: 11/8/12

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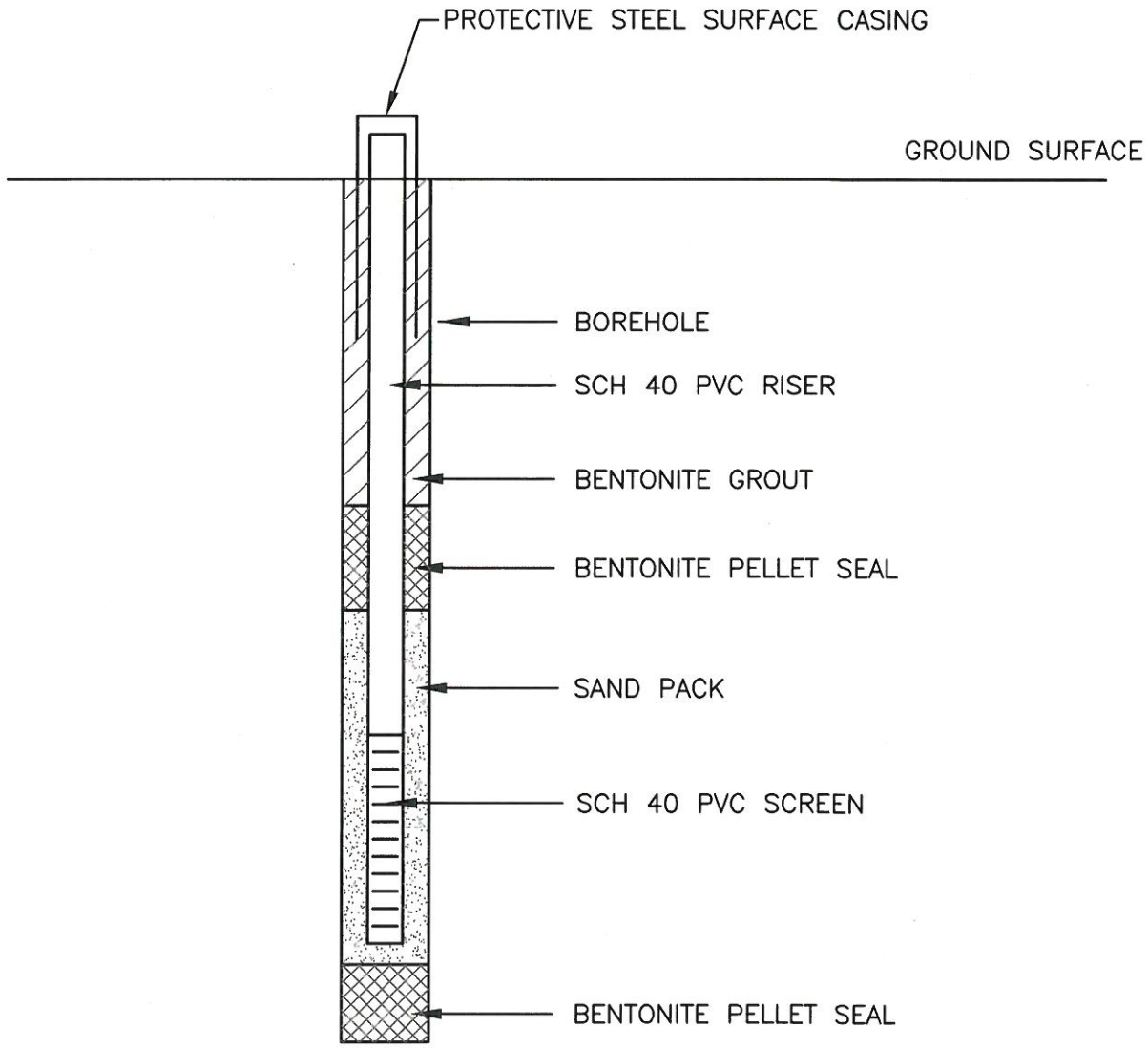
APPENDIX B

TYPICAL PIEZOMETER INSTALLATION DETAIL



TYPICAL PIEZOMETER
INSTALLATION DETAIL
EVERGREEN PACKAGING
CANTON, NORTH CAROLINA

NOT TO SCALE

DWG:PIEZOMETER INSTALLATION LMN: LMN CTB: SME-STD REV: 8/24/12

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