



February 22, 2011

Permit No.	Date	Document ID No.
32-01	February 23, 2011	13013

Mr. Joel Idol
 Environmental Specialist
Division of Land Resources
 Raleigh Regional Office
 1628 Mail Service Center
 Raleigh, NC 27699-1628

RECEIVED
February 23, 2011 via an e-mail
 Solid Waste Section
 Raleigh Central Office

RE: Response to Comments - Erosion and Sedimentation Control Plan
 Gas Collection and Control System Expansion
 Durham Municipal Solid Waste Landfill Facility

Dear Mr. Idol:

On behalf of MP Durham, LLC, Richardson Smith Gardner & Associates (RSG) is submitting revisions to the erosion and sedimentation control plan for the referenced project in response to the "Erosion and Sedimentation Control Plan Preliminary Review Checklist" dated February 8, 2011 (**attached**). This document was received by RSG via USPS on February 17, 2011. Each "checklist" comment is presented below followed by a description of how it has been addressed on the revised drawings.

Comment 1: Either provide detailed sequencing such that all trench be backfilled and matted at end of each day OR provide SF along all lower limits.

Response: Refer to revised Sheet 10, first column, below "General Erosion and Sedimentation Control Notes." A section entitled "Construction Sequence Notes" has been added, which includes the following note: "At the end of each work day, trenches must be backfilled and matted."

Comment 2: Provide construction entrance, staging, laydown, and storage areas onsite..

Response: Refer to revised Sheet 3, where a construction entrance and a staging, laydown and storage area are shown.

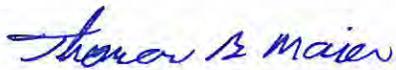
Comment 3: Provide construction details of SF and Wattles in more adequate level of detail. Wattles should be a minimum of 14". Specify wattle product to be used.

Response: Refer to revised Sheet 10. The silt fence detail, which already includes complete information regarding materials and dimensions, now includes a note stating, "Sediment shall be removed when it reaches half the height of the fence." The wattle detail now includes dimensions for the spacing of wattle rows and the spacing of stakes. Notes have been added to specify the wattle product and the dimensions of stakes to be used. Local sources of wattles indicated that 14" wattles are not readily available and can only be obtained by special order of full shipping containers, requiring approximately 6 weeks for delivery. Therefore, 12" wattles, which are readily available, are specified.

Mr. Joel Idol
February 22, 2011
Page 2 of 2

I trust that these responses and the **enclosed** revised drawings (Sheets 3 and 10) adequately address your comments. If you require additional information or clarification, please contact us at (919) 828-0577.

Sincerely,
Richardson Smith Gardner & Associates, Inc.



Thomas B. Maier, P.E. (ext. 128)
Senior Project Engineer

Attachment (2/8/11 correspondence from Land Quality Section)
Enclosures (revised Sheets 3 and 10)

Copy to: Amy Ratliff, P.E., Methane Power
Simon Lobdell, City of Durham
Ming Chao, P.E., NCDENR
File



RECEIVED FEB 17 2011

North Carolina Department of Environment and Natural Resources
Division of Land Resources

Land Quality Section

James D. Simons, PG, PE
Director and State Geologist

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

February 08, 2011

LETTER OF RECEIPT OF EROSION CONTROL PLAN

RE: Project Name: Durham MSW Landfill-Landfill Gas Expansion System
Project ID: Durha-2011-005
County: Durham, Durham, Durham
River Basin: Neuse Stream Classification: Other
Submitted By:
Date Received by LQS: January 26, 2011
Plan Type: New

Dear Sir or Madam:

This office has received a soil erosion and sediment control plan for the project listed above which was submitted as required by the North Carolina Sedimentation Pollution Control Act (G.S. 113A-57 (4)).

The Act requires that all persons disturbing an area of one or more acres of land must obtain approval of a soil erosion control plan prior to the commencement of the land-disturbing activity (G.S. 113A-54(d) (4)). The Act further states that this plan must be filed a minimum of 30 days prior to the activity and the approving authority must approve or disapprove the submitted plan within 30 days of receipt. Failure of the approving authority to approve or disapprove the submitted plan within the 30-day period will be deemed approval of the plan.

Commencement or continuation of a land-disturbing activity under the jurisdiction of this Act prior to the approval of an erosion and sediment control plan is a violation of the Act.

We have performed a preliminary review of your submitted plan and have determined that

Raleigh Regional Office
1628 Mail Service Center, Raleigh, North Carolina 27699 Phone: (919) 791-4200 / Fax: (919) 571-4718

Letter of Receipt

Project :- Durham MSW Landfill-Landfill Gas Expansion System

February 08, 2011

Page 2 of 2

information will be necessary before a final review can be completed. Enclosed is a checklist of items that must be submitted before we can complete the review process. Failure to provide the additional information may result in disapproval of your plan.

The approval of an erosion and sediment control plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations and rules.

If you have questions please do not hesitate to contact this office. Your cooperation in this matter is

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Idol", enclosed within a hand-drawn oval.

Joel Idol

Environmental Specialist
Land Quality Section

cc: Thomas B. Maier, PE
14 N Boylan Ave
Raleigh, NC 27603
Fax: 919-828-0577

**NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL
RESOURCES**

**EROSION and SEDIMENTATION CONTROL PLAN PRELIMINARY REVIEW
CHECKLIST**

PROJECT NAME: Durham MSW Landfill-Landfill Gas
Expansion System
PROJECT NO.: Durha-2011-005

DATE: February 08, 2011

COUNTY: Durham

To expedite the approval process, a cursory review of your submitted Erosion and Sediment Control Plan application has been made and has shown the need for additional information as specified below. **To meet our review schedule, any additional information should be received by this office no later than (February 16, 2011). Failure to meet this schedule may result in disapproval of your plan.**

The following items shall be incorporated with respect to specific site conditions, in an erosion & sediment control plan:

Comments: *Either provide detailed sequencing such that all trench be backfilled and matted at end of each day OR provide SF along all lower limits.

*Provide Construction entrance, staging, laydown, and storage areas onsite.

*Provide sonstruction details of SF and Wattles in more adequate level of detail.

*Wattles should be a minimum of 14"

*Specify wattle product to be used.

DATA REQUIRED BY E&S CHECKLIST:

RIVER BASIN: NEUSE

NAME AND CLASSIFICATION OF RECEIVING WATER COURSE:
ELERBE CREEK, WS-IV, NSW

NATURE AND PURPOSE OF THE CONSTRUCTION ACTIVITY:
A RENEWABLE ENERGY PRODUCTION SYSTEM CURRENTLY OPERATES AT THE LANDFILL, WHICH INCLUDES LANDFILL GAS EXTRACTION WELLS, LANDFILL GAS CONVEYANCE PIPES, AND LANDFILL-GAS-POWERED GENERATORS. THE CONSTRUCTION ACTIVITY CONSISTS PRIMARILY OF INSTALLING NEW LANDFILL GAS CONVEYANCE PIPES IN SHALLOW TRENCHES AND BACKFILLING TO ORIGINAL GRADES. DISTURBED AREAS ARE GENERALLY LIMITED TO A 25-FOOT WIDTH ALONG TRENCH ALIGNMENTS. ALL WORK WILL OCCUR WITHIN THE LANDFILL'S EXISTING PERIMETER DRAINAGE CHANNELS, WHICH CONVEY RUNOFF TO ONE OF THREE EXISTING SEDIMENTATION PONDS. THE PROJECT WILL NOT AFFECT RUNOFF RATES AND DRAINAGE PATTERNS.

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

- ALL EROSION AND SEDIMENTATION CONTROL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AS WELL AS APPLICABLE REGULATIONS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO, OR AS SOON AS PRACTICAL THEREAFTER, ANY LAND CLEARING OR CONSTRUCTION ACTIVITIES MAY BEGIN.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED ACCORDING TO THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD AND APPROPRIATE MAINTENANCE CONDUCTED. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
 - THE REMOVAL AND SATISFACTORY DISPOSAL OF TRAPPED OR DEPOSITED SEDIMENTS FROM BASINS, TRAPS, BARRIERS, FILTERS, AND/OR DRAINAGE FEATURES/DEVICES;
 - REPLACEMENT OF FILTER FABRICS USED FOR SILT FENCES UPON LOSS OF EFFICIENCY; AND
 - REPLACEMENT OF ANY OTHER COMPONENTS WHICH ARE DAMAGED OR CANNOT SERVE THE INTENDED USE.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY OR PERMANENT GROUND COVER (OR OTHER ACCEPTABLE MEASURES) IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL ADEQUATE TO RESTRAIN EROSION ON ERODIBLE SLOPES OR OTHER AREAS WITHIN 21 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF DISTURBANCE. THE CONTRACTOR SHALL PROVIDE PERMANENT GROUND COVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 21 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING THE COMPLETION OF CONSTRUCTION.
- CONTROL SEDIMENT TRACKING ON ROADS AND STREETS BY USE OF CONSTRUCTION ENTRANCES, SWEEPING AND/OR TRUCK WASHES.
- REMOVE ANY SEDIMENT THAT IS TRANSPORTED FROM DISTURBED AREAS TO EXISTING CHANNELS AND SEDIMENTATION PONDS.
- INSTALL EROSION CONTROL BLANKET AND ESTABLISH PERMANENT VEGETATIVE STABILIZATION ON ALL DISTURBED SURFACES.
- INSTALL STRAW WATTLES WHEREVER SEDIMENT TRANSPORT BEYOND LIMITS OF DISTURBANCE IS OBSERVED.
- AFTER SURFACES ARE STABILIZED, REMOVE SILT FENCE.

CONSTRUCTION SEQUENCE NOTES

- INSTALL PERIMETER EROSION AND SEDIMENTATION CONTROLS.
- AT THE END OF EACH WORK DAY, TRENCHES MUST BE BACKFILLED AND MATTED.

TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES:

MOUNTAINS	ABOVE 2500 FEET: FEB. 15 - MAY 15
	BELOW 2500 FEET: FEB. 1 - MAY 1
PIEDMONT	JAN. 1 - MAY 1
COASTAL PLAIN	DEC. 1 - APR. 15

SOIL AMENDMENTS:

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

SEEDING DATES:

MOUNTAINS:	MAY 15 - AUG. 15
PIEDMONT:	MAY 1 - AUG. 15
COASTAL PLAIN:	APR. 15 - AUG. 15

SOIL AMENDMENTS:

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

SEEDING DATES:

MOUNTAINS	AUG. 15 - DEC. 15
COASTAL PLAIN AND PIEDMONT	AUG. 15 - DEC. 30

SOIL AMENDMENTS:

FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:

REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

SEEDING NO. 1P FOR: STEEP SLOPES OR POOR SOILS- LOW MAINTENANCE

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
TALL FESCUE	100
SERICEA LESPEDEZA	30
KOBE LESPEDEZA	10

SEEDING NOTES:

- IN EASTERN PIEDMONT, ADD 25 LB/ACRE PENSACOLA BAHIAGRASS OR 10 LB/ACRE COMMON BERMUDAGRASS. USE COMMON BERMUDAGRASS ONLY WHERE IT IS UNLIKELY TO BECOME A PEST.
- AFTER AUG. 15, USE UNSCARIFIED SERICEA SEED.
- WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND SUBSTITUTE 40 LB/ACRE BAHIAGRASS OR 15 LB/ACRE BERMUDAGRASS.
- TO EXTEND SPRING SEEDING DATES INTO JUNE, ADD 15 LB/ACRE HULLED BERMUDAGRASS. HOWEVER, IT IS PREFERABLE TO SEED TEMPORARY COVER AND SEED FESCUE IN SEPT.

NURSE PLANTS:

BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 40 LB/ACRE RYE (GRAIN).

SEEDING DATES:

FALL:	BEST: AUG. 25 - SEPT. 15	POSSIBLE: AUG. 20 - OCT. 25
LATE WINTER:	FEB. 15 - MAR. 21	FEB. 1 - APR. 15

FALL IS BEST FOR TALL FESCUE, AND LESPEDEZAS IN LATE WINTER. OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE. USE UNHULLED BERMUDAGRASS SEED IN FALL.

SOIL AMENDMENTS:

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS OR APPLY 4,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000-5,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING, OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

MAINTENANCE:

REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. MAY BE MOWED ONCE OR TWICE A YEAR, BUT MOWING IS NOT NECESSARY. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

SEEDING NO. 2P FOR: GENTLE SLOPES, AVERAGE SOIL- LOW MAINTENANCE

SEEDING MIXTURE SPECIES	RATE (LB/ACRE)
TALL FESCUE	80
SERICEA LESPEDEZA	20
KOBE LESPEDEZA	10

SEEDING NOTES:

- AFTER AUG. 15, USE UNSCARIFIED SERICEA SEED.
- WHERE PERIODIC MOWING IS PLANNED OR A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND INCREASE KOBE LESPEDEZA TO 40 LB/ACRE.
- TO EXTEND SPRING SEEDING DATES INTO JUNE, ADD 15 LB/ACRE HULLED BERMUDAGRASS. HOWEVER, AFTER MID-APR. IT IS PREFERABLE TO SEED TEMPORARY COVER.

NURSE PLANTS:

BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 40 LB/ACRE RYE (GRAIN).

SEEDING DATES:

FALL:	BEST: AUG. 25 - SEPT. 15	POSSIBLE: AUG. 20 - OCT. 25
LATE WINTER:	FEB. 15 - MAR. 21	FEB. 1 - APR. 15

FALL IS BEST FOR TALL FESCUE AND LATE WINTER FOR LESPEDEZAS. OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE.

SOIL AMENDMENTS:

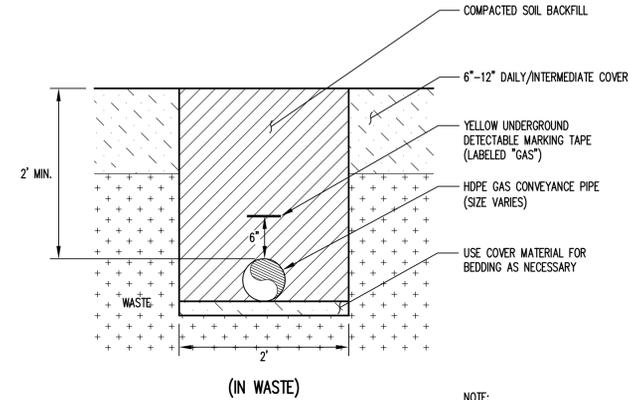
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 4,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROVING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

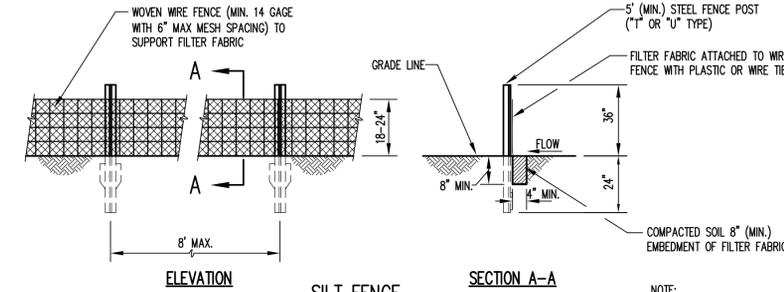
MAINTENANCE:

REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. MAY BE MOWED ONCE OR TWICE A YEAR, BUT MOWING IS NOT NECESSARY. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.



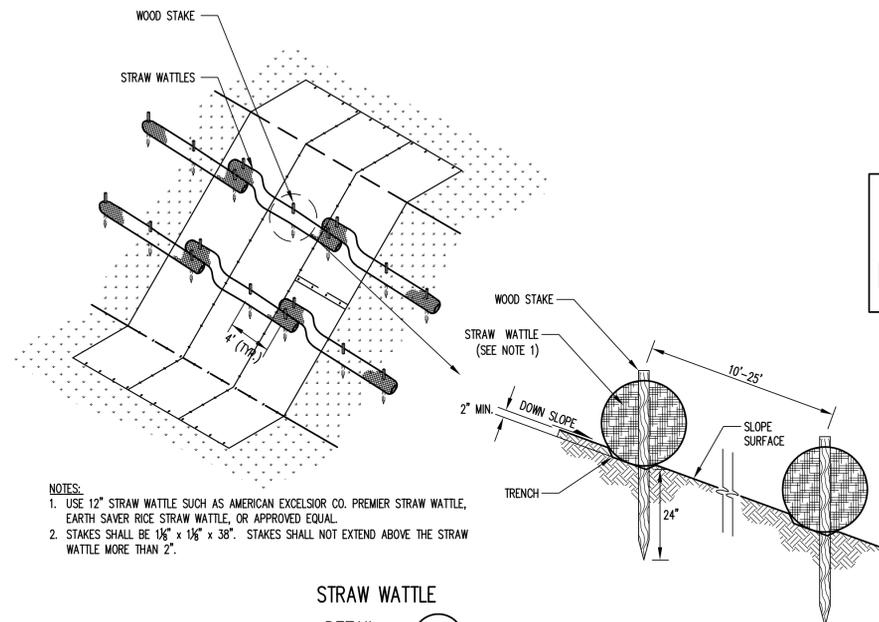
GAS CONVEYANCE PIPE TRENCH

DETAIL 1
NOT TO SCALE EC2



SILT FENCE

DETAIL 2
NOT TO SCALE EC2



STRAW WATTLE

DETAIL 3
NOT TO SCALE EC2

NOTE:
1. WHERE AIR OR CONDENSATE ARE SHOWN, ALL PIPING CAN BE PLACED IN THE SAME TRENCH.

NOTE:
1. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE FENCE.

- NOTES:
- USE 12" STRAW WATTLE SUCH AS AMERICAN EXCELSIOR CO. PREMIER STRAW WATTLE, EARTH SAVER RICE STRAW WATTLE, OR APPROVED EQUAL.
 - STAKES SHALL BE 1/2" x 1/2" x 38". STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLE MORE THAN 2".

PERMIT ISSUE
NOT FOR CONSTRUCTION

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.

NO.	DATE	REVISION
2	12/17/10	ADDED E&S MEASURES
1	02/21/2011	RESPONSE TO INDEAR E&S COMMENTS

RICHARDSON SMITH GARDNER & ASSOCIATES
14 N. Boylan Ave.
Raleigh, N.C. 27603
www.rsgengineers.com
ph: 919-228-0577
fax: 919-228-3889

PROJECT TITLE:
DURHAM MUNICIPAL SOLID WASTE LANDFILL FACILITY GAS COLLECTION AND CONTROL SYSTEM EXPANSION

DRAWING TITLE:
EROSION AND SEDIMENTATION CONTROL DETAILS (SHEET 2 OF 2)

DESIGNED BY:	DRAWN BY:
CHECKED BY:	PROJECT NO.:
SCALE:	DATE:
AS SHOWN	DEC. 2010
FILE NAME:	MPD-D0011A
SHEET NO.	DRAWING NO.
10	EC2

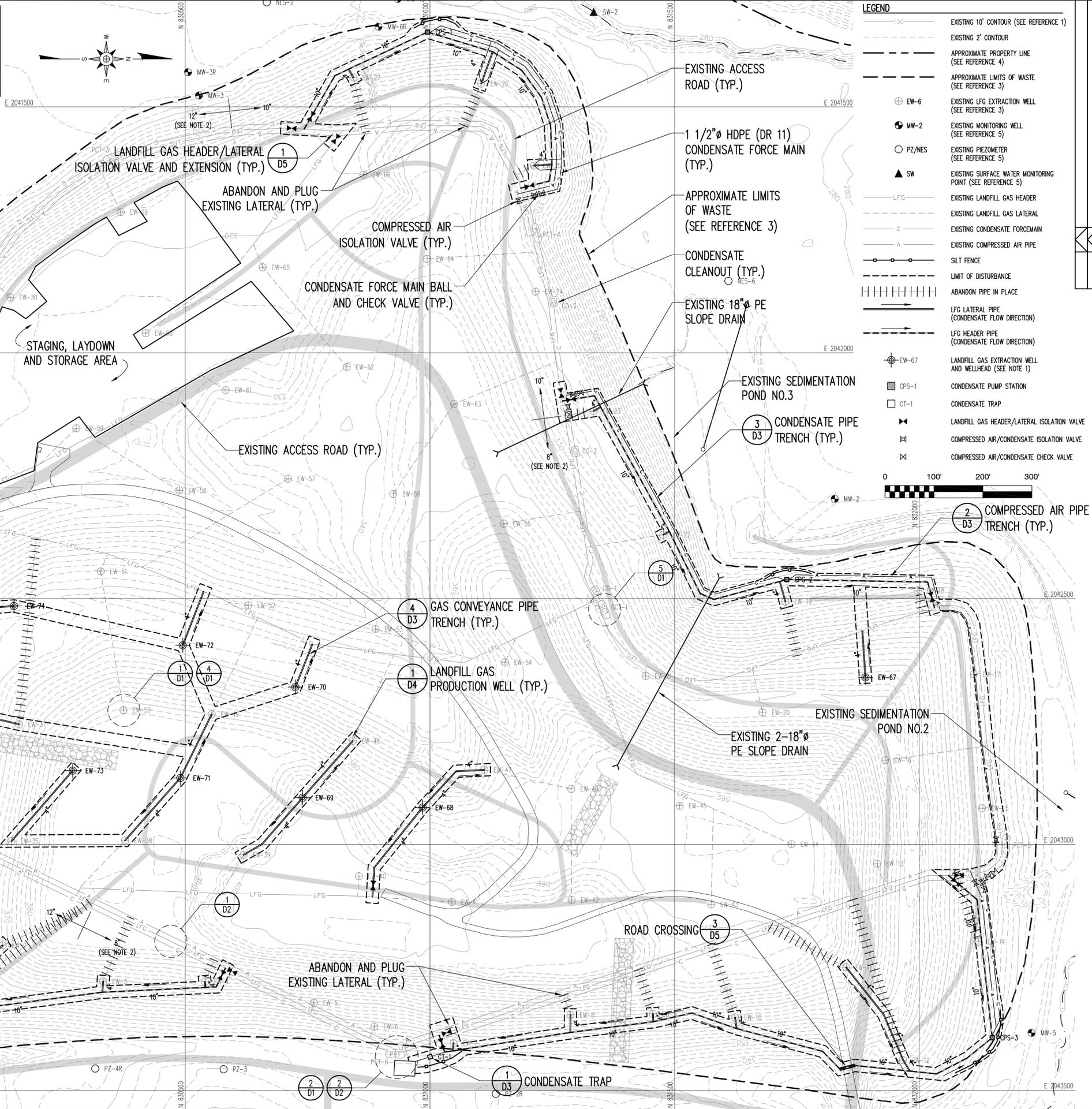
- REFERENCES**
- SITE BASE TOPOGRAPHY PROVIDED DURHAM COUNTY GIS DEPARTMENT. ALL DATA BASED ON AERIAL PHOTOGRAPHY FROM MARCH 1994.
 - COORDINATE SYSTEM IS NORTH CAROLINA STATE PLANE NAD 83, NGVD 29 VERTICAL DATUM.
 - WELL LOCATIONS, LANDFILL GAS PIPE LOCATIONS, AND LIMITS OF WASTE FROM DRAWING "PHASE II GAS EXTRACTION PLAN", SHEET 3 OF 10 FROM THE DURHAM MUNICIPAL SOLID WASTE LANDFILL FACILITY CLOSURE PLANS, DATED JUNE 1998, PREPARED BY MALCOLM PIRNIE, INC.
 - PROPERTY INFORMATION PROVIDED BY DURHAM COUNTY GIS DEPARTMENT. THE PROPERTY LINE SHOWN REPRESENTS THE BOUNDARY OF A GROUP OF INDIVIDUAL PARCELS OWNED BY THE CITY OF DURHAM.
 - MONITORING WELL, PIEZOMETER, AND SURFACE WATER POINTS FROM DRAWING "GROUNDWATER POTENTIOMETRIC MAP MAY 20, 2010", FIGURE 3 IN THE MAY 2010 SEMI-ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT, PREPARED BY S&ME.

- NOTE**
- CONTRACTOR SHALL CONDUCT SURVEY OF EXISTING GAS SYSTEM TO DETERMINE AREAS OF CONDENSATE BLOCKAGE ON AREAS THAT MAY HAVE SETTLED. EACH AREA SHALL BE IDENTIFIED TO THE ENGINEER AND AN APPROPRIATE REPAIR PLAN IMPLEMENTED.
 - CONTRACTOR SHALL VERIFY EXISTING HEADER LINE SIZES.

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.

**PERMIT ISSUE
NOT FOR CONSTRUCTION**

PIPING NOTE:
ALL GAS PIPING IS SHOWN FOR GENERAL ARRANGEMENT. FIELD ADJUSTMENTS SHALL BE CONDUCTED AS DIRECTED BY THE ENGINEER TO MAINTAIN MINIMUM 3% PIPE SLOPE AND TO PROMOTE CONDENSATE DRAINAGE TO SYSTEM LOW POINTS.



- LEGEND**
- 150' EXISTING 10' CONTOUR (SEE REFERENCE 1)
 - EXISTING 2' CONTOUR
 - APPROXIMATE PROPERTY LINE (SEE REFERENCE 4)
 - APPROXIMATE LIMITS OF WASTE (SEE REFERENCE 3)
 - EW-6 EXISTING LFG EXTRACTION WELL (SEE REFERENCE 3)
 - MW-2 EXISTING MONITORING WELL (SEE REFERENCE 5)
 - PZ/NES EXISTING PIEZOMETER (SEE REFERENCE 5)
 - SW EXISTING SURFACE WATER MONITORING POINT (SEE REFERENCE 5)
 - LFG EXISTING LANDFILL GAS HEADER
 - C EXISTING LANDFILL GAS LATERAL
 - A EXISTING CONDENSATE FORCE MAIN
 - EXISTING COMPRESSED AIR PIPE
 - SILT FENCE
 - LIMIT OF DISTURBANCE
 - ABANDON PIPE IN PLACE
 - LFG LATERAL PIPE (CONDENSATE FLOW DIRECTION)
 - LFG HEADER PIPE (CONDENSATE FLOW DIRECTION)
 - EW-67 LANDFILL GAS EXTRACTION WELL AND WELLHEAD (SEE NOTE 1)
 - CPS-1 CONDENSATE PUMP STATION
 - CT-1 CONDENSATE TRAP
 - LANDFILL GAS HEADER/LATERAL ISOLATION VALVE
 - COMPRESSED AIR/CONDENSATE ISOLATION VALVE
 - COMPRESSED AIR/CONDENSATE CHECK VALVE



DATE	NO.	REVISION
12/17/10	2	ADDED E&S FEATURES
2/21/2011	2	RESPONSE TO NOIDAR E&S COMMENTS

RICHARDSON SMITH GARDNER & ASSOCIATES
14 N. Boylan Ave.
Raleigh, N.C. 27603
www.rsgengineers.com
ph: 919-228-0577
fax: 919-228-3889

PROJECT TITLE:
DURHAM MUNICIPAL SOLID WASTE LANDFILL FACILITY GAS COLLECTION AND CONTROL SYSTEM EXPANSION

DRAWING TITLE:
PROPOSED MODIFICATIONS TO EXISTING LANDFILL GAS TO COLLECTION SYSTEM

DESIGNED BY: S.A.S.	DRAWN BY: C.T.J.
CHECKED BY:	PROJECT NO.: MPD 10-1
SCALE: AS SHOWN	DATE: DEC. 2010
FILE NAME: MPD-D0007B	SHEET NO.: 3
	DRAWING NO.: S3

G:\CAD\MP Durham County\MPD 10-1\resend\022111\resend\MPD-D0007B.dwg - 2/21/2011 12:22 PM

Chao, Ming-tai

From: Tom Maier [tom@rsgengineers.com]
Sent: Tuesday, February 22, 2011 5:22 PM
To: Idol, Joel
Cc: stacey@rsgengineers.com; amy@methanepower.net; Chao, Ming-tai; simon.lobdell@durhamnc.gov
Subject: Response to Comment - E&S Control Plan for Durham Landfill Gas System Expansion
Attachments: letter.Idol.E&S resubmittal.pdf

Joel:

Attached for your review is an electronic copy of a response letter and revised drawings for the erosion and sedimentation control plan for the Durham Landfill Gas System Expansion. Hard copies of these documents, including two signed full-size sets of the revised drawings will be delivered to your office shortly. We appreciate your efforts in reviewing these documents. Please contact me if you need additional information or clarification.

Thomas B. Maier
Senior Project Engineer
Richardson Smith Gardner & Associates
14 N. Boylan Ave., Raleigh, NC 27603
O: 919-828-0577
C: 919-815-0813