



Permit No.	Scan Date	DIN
P1239	February 28, 2012	16169

RECEIVED
February 21, 2012
Solid Waste Section
Asheville Regional Office

2211 W. Meadowview Rd
Suite 101
Geensboro, NC 27407

tel: 336/323-0092
fax: 336/323-0093

www.JoyceEngineering.com

February 16, 2012

Mr. Larry Frost
Erosion and Sedimentation Control Technician

Re: Crest Road Recycling LLC-Transfer, Recycle Resource Recovery and Processing Facility Henderson County, DIN 15768

Dear: Mr. Frost,

The responses to the comments that you provided on 12/15/2011 are bulleted below each corresponding comment in ***bold italic*** text.

Operations Plan

1. The Plan must include a service area for the Facility, a list of counties from which the Facility will receive waste.
 - ***Service area information added to Introduction in Operations Plan.***
2. The Plan must include a list of the specific disposal facilities (by facility name and permit number) that the proposed Transfer, Recycle Resource Recovery and Processing Facility will transfer waste to.
 - ***Disposal facilities added to Section A) 2) Waste Disposal Sites.***
3. The Plan must include a description of the equipment, scales, structures, tipping floor, water source for cleaning, picking line, and compactor and hopper.
Note: Tipping floors, mixed waste sorting floors and elevated mixed waste picking lines must be covered in a building.
 - ***Section A) 6) revised to include more detail. Equipment listed in Section F).***
4. The Plan must include a description of site security and access control.
 - ***Site Features section added to Operations Plan.***
5. The Plan must include Facility operating hours.
 - ***Operating hours added to Introduction in Operations Plan.***
6. The Plan must include a description of signs to be posted at the entrance and within the site to direct traffic.
Note: Signs must provide a description of the types of waste received, the types of waste prohibited, operating hours, permit number, and emergency contact phone numbers.
 - ***Section A) 1) revised to include more detail.***
7. The Plan must indicate that a trained employee must be onsite at all times the site is open, overseeing the loading and unloading of waste.
 - ***Added statement to Section A) 1).***

8. The Plan must include a description of surface water control features, including run-on and run-off.
 - *Site Features section added to Operations Plan.*
9. Any water that has come in contact with wastes must be collected and disposed of as leachate. Describe the collection, storage, and disposal of leachate, contaminated wash water, and contaminated rainfall runoff. Runoff from recyclable storage areas should be collected and properly treated prior to disposal.
 - *A trench drain and holding tank have been added to the Operations Plan and drawing.*
10. The Plan must include procedures for cleaning and washing down the tipping floor.
 - *Section A) 6) revised to include more detail.*
11. The Plan must include procedures for maintaining the Facility in a sanitary condition, including actions to be taken to minimize noise, vectors, and odors.
 - *Added statement to Section A) 1).*
12. The Plan must include a procedure stating, the tipping floor will be clear of waste at the end of each operating day.
 - *Section A) 6) revised to include more detail.*
13. The Plan must include a procedures for litter and dust control, to prevent blowing litter from leaving the onsite management areas and from leaving the property.
 - *Site Features section added.*
14. The Plan must include a description of the storage of each separated recyclable and waste on site.
 - *Section A) 6) revised to include more detail.*
15. The Plan must include information on fire prevention and actions to be taken in the event of an accidental fire.
 - *Section G) revised to include more detail.*

Traffic Study

The Facility must submit the documentation required by North Carolina General Statute 130A-295.5.

- *Certification letter from NC DOT attached.*

Signature Page

The Owner/Operator should submit the attached signature page, completed and signed.

- *Completed, signed Signature Page attached.*

Drawings

The permit applicant must provide drawings showing the Transfer, Recycle Resource Recovery and Processing Facility's;

1. gates/fences or other access control features (access roads must be of all weather construction),
 - *8' fence already proposed on drawing, Access gate added*

2. utilities (wastewater system and stormwater drains),
 - ***Proposed water and sewer main extensions are shown in R.O.W.***
3. any recyclable storage areas indicating types and sizes of containers,
 - ***Containers added to drawing***
4. leachate and runoff collection details,
 - ***Site Operations Plan revised and E&S Plan and details provided.***
5. buildings (existing and proposed), picking lines and scales/scale house, and
 - ***Shown on drawing***
6. concrete foundations/pads and all other ground cover for the site operation.
 - ***Shown on drawing***

Asphalt Shingles

The applications does not indicate the Facility plans to recycle asphalt shingles, however many facilities are requesting information on shingle recycling. I have attached a copy of the CAPA Best Practices Guide for your consideration.

- ***Client currently has no plans to recycle shingles. Note added under Section E).***

Financial Assurance

- ***No response required***

Compliance Review

- ***Noted***

I hope that the responses provided are sufficient to satisfy the existing comments. Please feel free to contact me with any questions or comments.

Sincerely,
JOYCE ENGINEERING, INC.

Heather Wilburn, E.I.T
Project Consultant

Attachments:
Operations Plan- Revised January 2012
Signature Page
DOT letter
E&S Plans



Signature page of applicant –

Name of facility Crest Road Recycling LLC

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

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

Signature

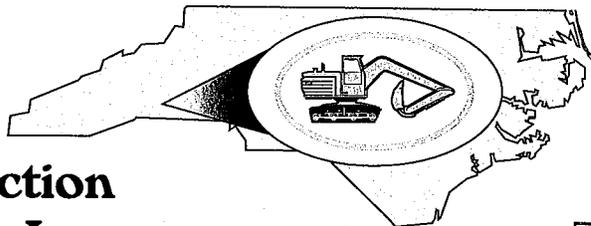
Print Name

Date

Title

Business or organization name

Covering Western North Carolina



RECEIVED

JAN 11 2012

SOLID WASTE SECTION
ASHEVILLE REGIONAL OFFICE

Pace Construction & Excavation, Inc.

625 South Grove Street
Hendersonville, NC 28792

Office: (828) 696-9118
Fax: (828) 696-3411

- Complete Demolition
- Mobile Crusher Service
- Material Screening
- Recycled Concrete Aggregate
- Complete Site Work
- Roll Off Containers
- Scrap Metal Processing

Fac/Perm/Co ID #	Date	Doc ID#
P1239	1/11/12	15900

Jan.10, 2012

To: Larry Frost
Environmental Engineer--NCDENR
Re: Crest Rd C&D Material Recovery Facility

Mr. Frost,

In regards to N.C. General Statute 130A-295.5 concerning the traffic study requirement on material recovery facilities, we are submitting the attached letter as provided to us by the NCDOT. The letter which was written by Steve Cannon, District Engineer, outlines the DOT's reasons for not requiring a Traffic Impact Analysis nor a turn lane on SR 1803 in granting the driveway permit. We are submitting this cover letter and the attached letter from NCDOT in the hope that they will prove sufficient in meeting NCDENR's requirements. We are trying to provide Henderson County with a much needed recycling option, and are trying to do so with limited financial resources, so any help in this matter would be greatly appreciated. Thank you for your time and your consideration in this matter.

Sincerely,

Mark B. Pace
Pace Construction



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
Governor

EUGENE A. CONTI, JR.
Secretary

January 5, 2012

Mr. Barry Bonnett
Pace Construction
625 South Grove St.
Hendersonville, NC 28792

Dear Mr. Bonnett:

The NCDOT requires a driveway permit for new projects that will access a state roadway. In reviewing your request for the construction of the recycling facility on Crest Road (SR 1803), we asked you to provide us the anticipated volume of traffic (basically large trucks) that will be using the facility on a daily basis. Using the number of vehicles anticipated and the location of the proposed driveway, we found that a) the anticipated volume of traffic did not meet the threshold for requiring a Traffic Impact Analysis, b) the anticipated volume of traffic did not warrant the need for a left turn lane, and c) the sight distance requirement in both directions could be met from the proposed driveway location with grading improvements.

For the DOT to approve your driveway permit, we required you to improve the sight distance in both directions. After you completed this requirement, driveway permit #4511016 was issued for the access to Crest Road.

Should you have any questions or need additional information, please let us know.

Sincerely,

A handwritten signature in cursive script that reads "Steve Cannon".

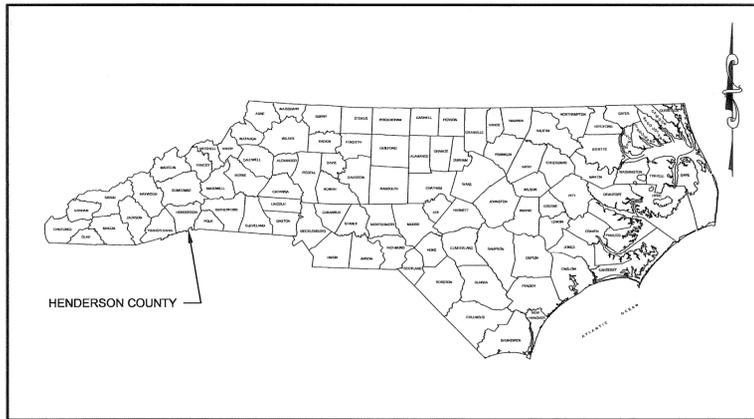
Steve L. Cannon, PE
District Engineer

cc: driveway file #4511016

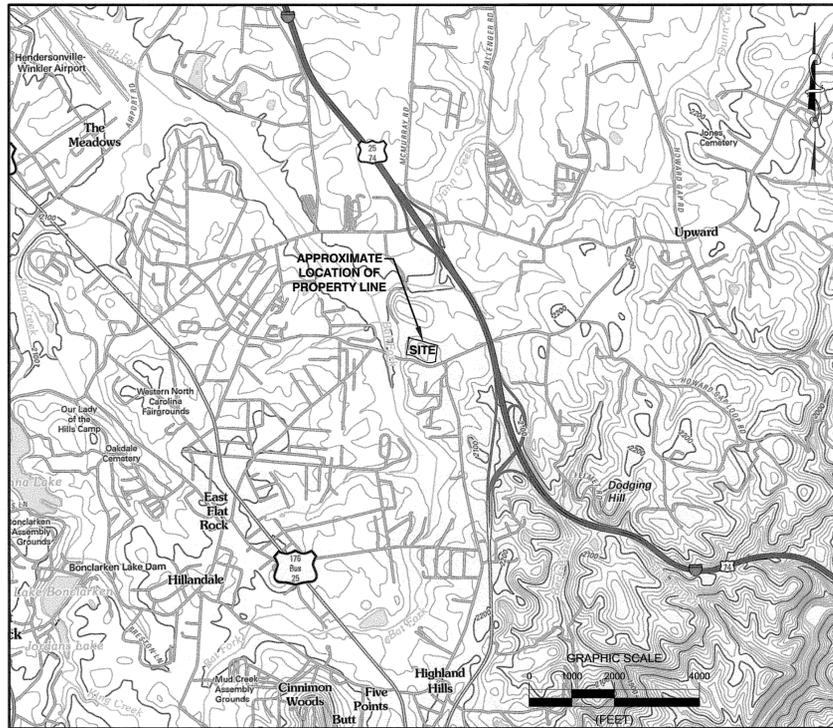
CREST ROAD C&D MATERIAL RECOVERY FACILITY

EROSION AND SEDIMENT CONTROL PLAN

EAST FLAT ROCK, NC



STATE
COUNTY LOCATION MAP



VICINITY MAP

DRAWING INDEX	
SHEET	DESCRIPTION
EP-T	TITLE SHEET
EP-L	LEGEND AND GENERAL NOTES
EP-01	EXISTING CONDITIONS
EP-02	EROSION AND SEDIMENT CONTROL PLAN
EP-03	EROSION AND SEDIMENT CONTROL DETAILS
EP-04	EROSION AND SEDIMENT CONTROL DETAILS

OWNER INFORMATION	
PREPARED FOR:	PACE CONSTRUCTION & EXCAVATION, INC.
ADDRESS:	625 SOUTH GROVE STREET HENDERSONVILLE, NC 28792
CONTACT:	MARK PACE (828) 696-9118
PROPERTY INFORMATION	
ADDRESS:	420 CREST ROAD EAST FLAT ROCK, NC
PARCEL NUMBER:	0200874
ACREAGE:	6.72
ZONING:	I

SEPTEMBER 2011

REVISED NOVEMBER 2011



DESIGNED	HRW
DRAWN	HRW
CHECKED	EEA
APPROVED	EEA
DATE	8/20/11

JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0082
NC CORP. LIC. C-0782

PACE CONSTRUCTION
HENDERSON COUNTY, NC
TITLE SHEET

PROJECT NO.
854.1101.11

SCALE
AS SHOWN

DRAWING NO.
EP-T

11/20/11	REVISED TO REFLECT DEEDED ACREAGE	NO	BY	CK/APP
10/10/11	REVISED PER HENDERSON COUNTY COMMENTS			
	REVISIONS AND RECORD OF ISSUE			

CONVENTIONAL SYMBOLS AND GENERAL NOTES

SURVEY FEATURES

	BENCHMARK
	CONTROL POINT
	PROPERTY LINE
	EASEMENT
	RIGHT OF WAY
	FENCE LINE
	RAILROAD
	GUARDRAIL
	RESOURCE PROTECTION AREA

UTILITIES

	UTILITY POLE
	HYDRANT
	LIGHT POLE
	TANK (SIZE VARIES)
	TRANSFORMER
	MANHOLE
	CLEANOUT
	VALVE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	OVERHEAD TELEPHONE
	UNDERGROUND TELEPHONE
	LEACHATE FORCE MAIN
	DUAL CONTAINED LEACHATE FORCE MAIN
	SANITARY SEWER
	PROCESS SEWER
	LANDFILL GAS LINE
	NATURAL GAS LINE
	POTABLE WATER
	SOLID PIPE (TYPE NOTED)
	PERFORATED PIPE (TYPE NOTED)
	CULVERT (SIZE NOTED)

HATCHING

	WETLANDS
	RIPRAP
	WASHED STONE
	BUFFER AREA
	PROPOSED ROAD
	COMPACTED BACKFILL

LANDFILL AND ROAD FEATURES

	PAVED ROAD
	GRAVEL/DIRT ROAD
	EDGE OF PAVEMENT
	LIMIT OF WASTE/EDGE OF LINER
	FACILITY BOUNDARY/CELL LIMITS/PHASE LIMITS

BUILDINGS AND STRUCTURES

	BUILDING
	DAM
	FOUNDATION

HYDROLOGY

	APPROXIMATE 100 YEAR FLOOD PLAIN
	DITCH FLOW
	STREAM OR RIVER

VEGETATION

	SINGLE TREE
	TREE LINE
	SHRUB

EROSION AND SEDIMENT CONTROL FEATURES

	SILT FENCE
	INLET PROTECTION
	OUTLET PROTECTION (SIZE VARIES)
	DIVERSION BERM

TOPOGRAPHICAL FEATURES

	EXISTING 10' TOPO CONTOUR
	EXISTING 2' TOPO CONTOUR
	PROPOSED 10' TOPO CONTOUR
	PROPOSED 2' TOPO CONTOUR
	SPOT ELEVATION

SURVEY NOTES:

- TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET, UNLESS INDICATED OTHERWISE.
- ON-SITE TOPOGRAPHY PROVIDED BY WAGGONER & RHODES LAND SURVEYORS, PLLC 545 SOUTH GROVE STREET HENDERSONVILLE, NC 28792 PH:(828) 693-1022
- APPROXIMATE 100-YR FLOODPLAIN TAKEN FROM U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION, FLOOD INSURANCE RATE MAP, 37200 HENDERSON COUNTY, NC, PANEL NO. 8700J, EFFECTIVE 10/2/2008.
- THIS MAP WAS PREPARED BY DATA COMPILED FROM RECORDED SUBDIVISION PLATS, PARCEL PLATS, DEEDED DESCRIPTION DATA, AND OTHER PUBLIC RECORDS OWNED BY HENDERSON COUNTY. THE COUNTY ASSUMES NO LEGAL RESPONSIBILITY OR LIABILITY FOR ANY OF THE INFORMATION CONTAINED ON THIS MAP.
- PROPERTY BOUNDARY BEARING AND DISTANCES PROVIDED BY WAGGONER & RHODES, 2011.
- SITE CONTROL INFORMATION PROVIDED BY WAGGONER & RHODES, 2011.
- THE SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND ALL EASEMENTS AND ENCUMBRANCES MAY NOT BE SHOWN.

GENERAL NOTES:

- ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND INCLUDING ELECTRIC, TELEPHONE, AND CATV, UNLESS NOTED OTHERWISE.
- SITE LIGHTING IS PROPOSED FOR THIS PROJECT.
- LANDSCAPING IS PROPOSED FOR THIS PROJECT. THE BUFFER AREA SHOWN ON DRAWINGS WILL REMAIN UNDISTURBED EXCEPT FOR THE INSTALLATION OF UTILITIES, STORMWATER DRAINAGE FEATURES AND ACCESS TO THE SITE. WHEN POSSIBLE CLEARING WITHIN THE BUFFER WILL BE ALIGNED TO MINIMIZE VISUAL IMPACTS.
- SOIL STOCKPILE AREAS WILL BE ESTABLISHED TO FACILITATE PHASED CONSTRUCTION. STOCKPILE LOCATIONS AND SIZE MAY VARY AND MAY NOT BE LIMITED TO THE AREAS SHOWN. SILT FENCE WILL BE INSTALLED AROUND THE BASE OF THE STOCKPILE.
- 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, AND TO THE PROTECTION OF PERSONS OR PROPERTY FROM DAMAGE, INJURY, OR LOSS, AND SHALL ERRECT AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR SUCH SAFETY AND PROTECTION.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL DESIGN MANUAL.
- THE COUNTY INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING FOR THE ISSUANCE OF A LAND DISTURBING PERMIT. THE CERTIFIED RESPONSIBLE LAND DISTURBER (CRLD) MUST ATTEND THE PRE-CONSTRUCTION MEETING.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE ENVIRONMENTAL ENGINEERING DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY AS DETERMINED BY THE ENVIRONMENTAL ENGINEERING DEPARTMENT.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE A FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- EXPOSED SLOPES SHALL BE STABILIZED WITH TWENTY-DAY CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING; PERMANENT GROUND COVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - RESTALLIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
 - APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- ALL OFF-SITE DRAINAGE EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT FOR THIS PROJECT.
- ALL ON-SITE DRAINAGE EASEMENTS INCLUDING SWM/BMP DRAINAGE EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THIS PROJECT.
- ACCUMULATED SILT MUST BE REMOVED FROM SEDIMENT BASINS PRIOR TO CONVERSION TO A PERMANENT SWM/BMP.
- THE SWM/BMP FACILITY MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER PRIOR TO ISSUANCE OF ANY OCCUPANCY CERTIFICATES.
- AN NCDOT DRIVEWAY ENCROACHMENT PERMIT IS REQUIRED FOR THIS PROJECT PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT.
- AT THE TIME OF THE PRE-CONSTRUCTION MEETING, TWO STANDARD SIGNS MUST BE INSTALLED ON EACH SIDE OF THE CONSTRUCTION ACCESS. THESE SIGNS MAY BE INSTALLED ON TRIPOD DEVICES AND SHOULD STATE EITHER "CONSTRUCTION ENTRANCE AHEAD" OR "TRUCKS ENTERING HIGHWAY".
- IN THE EVENT THAT MANHOLE STRUCTURES ARE CAST-IN-PLACE, INLET PROTECTION IS REQUIRED FOR ALL DROP INLETS OR BETWEEN DIFFERENT STORM SEWER RUNS DURING INSTALLATION.

CONSTRUCTION SEQUENCE:

- OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS;
- FLAG THE LIMITS OF CONSTRUCTION;
- CLEAR AND GRUB THE AREA AS NEEDED, STOCKPILE TOPSOIL, STABILIZE DISTURBED AREAS;
- INSTALL TEMPORARY DIVERSIONS AND SEDIMENT FENCING;
- CONSTRUCT SEDIMENT BASIN;
- CONSTRUCT AND STABILIZE ALL STORMWATER CONVEYANCE FEATURES;
- PROCEED WITH ROUGH GRADING OF THE PROPOSED LANDFILL BASEGRADES;
- SEED AND STABILIZE DENUDED AREAS IMMEDIATELY AFTER GRADING IS COMPLETED;
- INSPECT ALL EROSION AND CONTROL FEATURES WEEKLY AND FOLLOWING EACH SIGNIFICANT RAINFALL. MAKE REPAIRS IMMEDIATELY; AND
- AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND ESTABLISH PERMANENT VEGETATION ON THE DISTURBED AREAS

PROPERTY NOTES:

OWNER'S NAME: MARK PACE
 OWNER'S ADDRESS: 415 SABINE DR
 HENDERSONVILLE, NC 28739
 PHONE NO.: (828) 696-9118

PHYSICAL LOCATION: 420 CREST ROAD
 HENDERSON COUNTY, NORTH CAROLINA

PARCEL NUMBER: 0200874
 TOTAL ACREAGE: 6.72 ACRES/FUTURE SUBDIVISION 4.00 ACRES

DISTURBED ACREAGE: 2.40 ACRES

ZONING: I

ZONING OF SUBJECT PROPERTY IS INDUSTRIAL. PROPERTIES SOUTH OF SUBJECT PROPERTY AND CREST ROAD ARE RESIDENTIAL-1.

SETBACKS: 20' FRONT
 20' SIDE
 20' REAR

MAXIMUM BUILDING HEIGHT: 72'

BUFFER: B-2 (30')

EX. NATURAL VEGETATION WILL SERVE AS A BUFFER BETWEEN SITE AND ADJACENT PROPERTY OWNER ON EAST SIDE OF PROPERTY.

EXISTING LAND USE: CONCRETE CRUSHING AND BORROW OPERATIONS
 PROPOSED LAND USE: C&D MATERIAL RECOVERY FACILITY

THE OWNER IS PROPOSING TO INSTALL A SCALE HOUSE, SCALE AND 11'-9"x20' PARKING SPACES, ONE OF WHICH IS DESIGNATED AS HANDI-CAP ACCESSIBLE AS PART OF THE SITE PLAN.

SITE LIGHTING WILL BE FULL CUT-OFF FIXTURE TO AVOID LIGHT TRESPASS ONTO ADJOINING PROPERTIES.

EXISTING CITY OF HENDERSONVILLE WATER AND SEWER MAINS WILL BE EXTENDED WITHIN CREST RD TO PROVIDE SERVICE TO THIS FACILITY.

THIS PROPERTY DOES NOT LIE WITHIN A 100-YEAR FLOOD ZONE PER FEMA MAP NUMBER 37200958700J DATED 10/2/08.

ENGINEERING CONSULTANT:
 JOYCE ENGINEERING
 2211 W MEADOWVIEW RD. -SUITE 101
 GREENSBORO, NC 27407
 (336)323-0092

TOPOGRAPHY SURVEY PROVIDED BY:
 WAGGONER & RHODES LAND SURVEYORS, PLLC.
 545 SOUTH GROVE STREET
 HENDERSONVILLE, NC 28792
 (828) 693-1022



DESIGNED	HRW
DRAWN	HRW
CHECKED	EEA
APPROVED	EEA
DATE	8/20/11

JOYCE ENGINEERING
 2211 W. MEADOWVIEW ROAD
 GREENSBORO, NC 27407
 PHONE: (336) 323-0092
 NC CORP LIC: C-0782

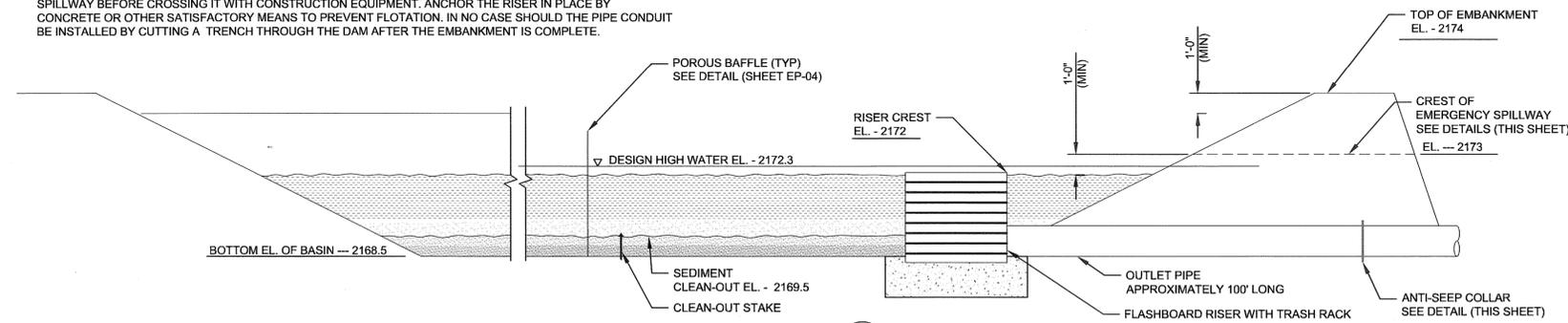
PACE CONSTRUCTION
 HENDERSON COUNTY, NC
 CREST ROAD C&D MATERIAL RECOVERY FACILITY
 CONVENTIONAL SYMBOLS AND GENERAL NOTES

PROJECT NO. 854.1101.11
SCALE AS SHOWN
DRAWING NO. EP-L

NO	BY	DATE	REVISIONS AND RECORD OF ISSUE
1/23/11		10/01/11	REVISED PER HENDERSON COUNTY COMMENTS
			REVISED TO REFLECT DEEDED ACREAGE

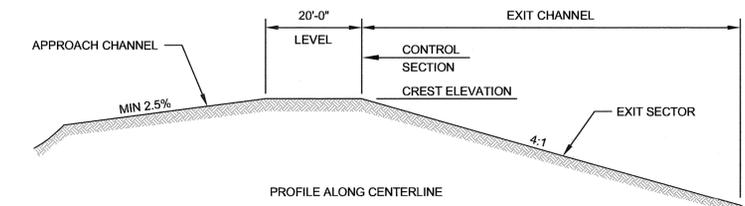
CONSTRUCTION NOTES:

- CONDUIT SPILLWAYS - SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATERTIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN BARREL SECTIONS BY APPROVED WATERTIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON A FIRM FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MIN. OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR OTHER SATISFACTORY MEANS TO PREVENT FLOTATION. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
- EMERGENCY SPILLWAYS - INSTALL THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE WIDTH, AND ENTRANCE AND EXIT SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF AN EMERGENCY SPILLWAY.



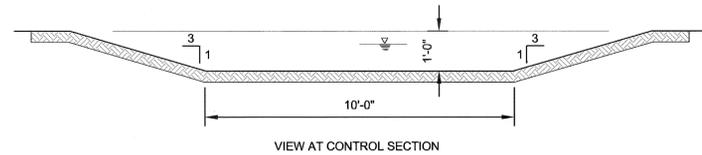
PARTIAL SECTION SB-1
N.T.S.

BOARDS WILL BE REMOVED AFTER A MINIMUM OF 2 DAYS BUT NO MORE THAN 5 DAYS AFTER A STORM EVENT TO EMPTY POND.

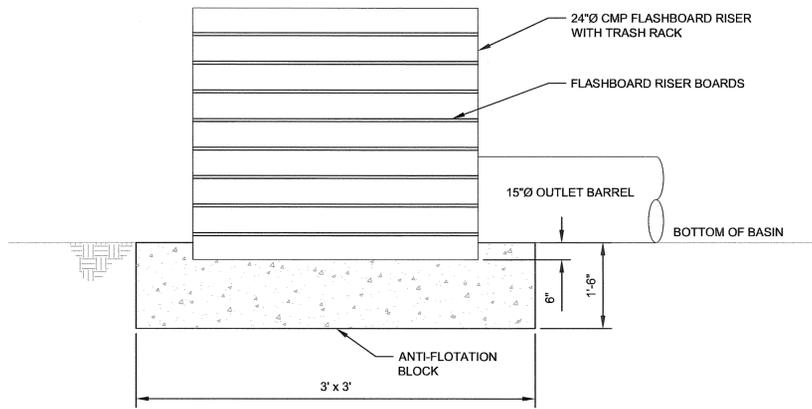


NOTES:

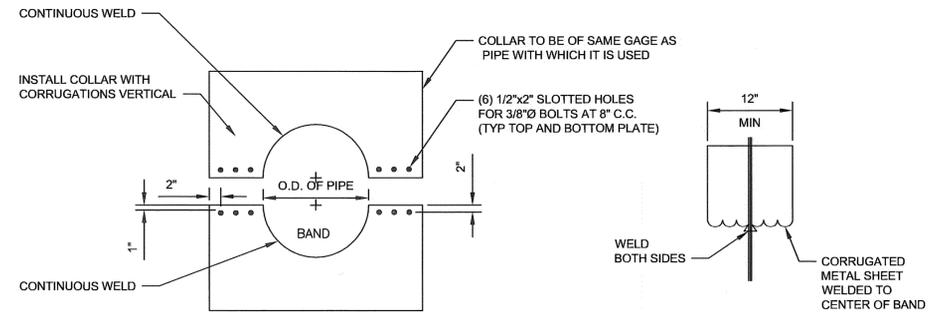
- CONSTRUCT THE ENTIRE FLOW AREA OF THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL.



EMERGENCY SPILLWAY DETAILS
N.T.S.



FLASHBOARD RISER
N.T.S.



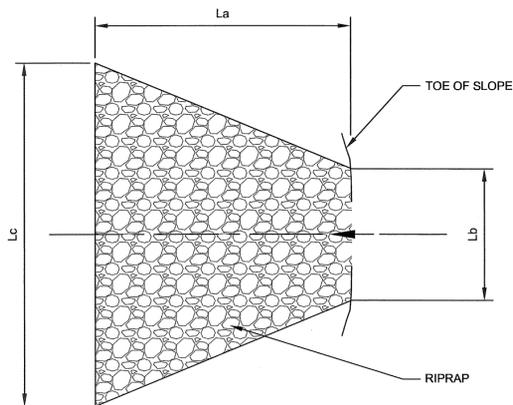
ELEVATION OF UNASSEMBLED COLLAR

PROFILE

NOTES:

- ALL MATERIAL TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.
- WHEN SPECIFIED ON THE PLANS, COATING OF COLLARS SHALL BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFIED.
- UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
- THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND CONNECTING BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.
- EACH COLLAR SHALL BE FURNISHED WITH TWO 1/2\"/>
- THE COLLAR SHALL BE INSTALLED DOWNSTREAM FROM THE EMBANKMENT CENTERLINE.

CORRUGATED METAL ANTI-SEEP COLLAR

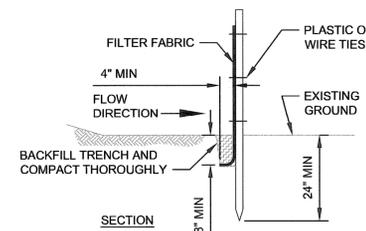
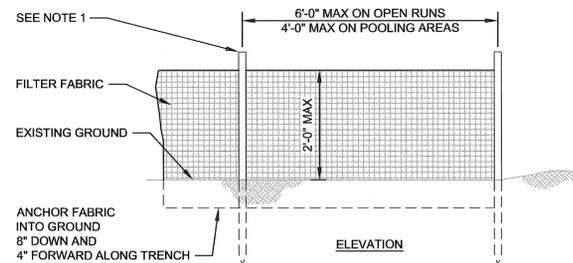


CONSTRUCTION NOTES:

- INSTALL FILTER FABRIC BETWEEN RIPRAP AND SOIL FOUNDATION.
- Lb EQUALS 3x DIAMETER OF PIPE OR FULL WIDTH OF RECEIVING CHANNEL (WHICHEVER IS LARGER).
- MAXIMUM STONE SIZE = 1.5 * d50
- APRON THICKNESS = 1.5 * MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.
- RIPRAP SHOULD BE A WELL-GRADED MIXTURE WITH 50% BY WEIGHT LARGER THAN THE SPECIFIED DESIGN SIZE. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHOULD BE 1.5 TIMES THE D50 SIZE WITH SMALLER SIZES GRADING DOWN TO 1 INCH.
- STONE FOR RIPRAP MAY CONSIST OF FIELD STONE OR QUARRY STONE. THE STONE SHOULD BE HARD, ANGULAR, OF SUCH QUALITY THAT IT WILL NOT BREAK DOWN ON EXPOSURE TO WATER OR WEATHERING, AND SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE SPECIFIC GRAVITY OF THE INDIVIDUAL STONES SHOULD BE AT LEAST 2.5.
- PLACEMENT OF RIPRAP SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER. PLACE RIPRAP SO THAT IT FORMS A DENSE, WELL-GRADED MASS OF STONE WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY, AND CONTROLLED DUMPING DURING FINAL PLACEMENT. PLACE RIPRAP TO ITS FULL THICKNESS IN ONE OPERATION. DO NOT PLACE RIPRAP BY DUMPING THROUGH CHUTES OR OTHER METHODS THAT CAUSE SEGREGATION OF STONE SIZES. TAKE CARE NOT TO DISLODGE THE UNDERLYING BASE OR FILTER WHEN PLACING THE STONES. THE TOE OF THE RIPRAP SLOPE SHOULD BE KEPT TO A STABLE FOUNDATION AT ITS BASE. THE TOE SHOULD BE EXCAVATED TO A DEPTH ABOUT 1.5 TIMES THE DESIGN THICKNESS OF THE RIPRAP, AND SHOULD EXTEND HORIZONTALLY FROM THE SLOPE. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL STONE OR CLUSTERS OF LARGE STONES. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF STONE SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE RIPRAP SHOULD BLEND WITH THE SURROUNDING AREA. NO OVERFALL OR PROTRUSION OF RIPRAP SHOULD BE APPARENT.

OUTLET PROTECTION SCHEDULE				
OUTLET NO	La	Lc	d50 RIPRAP	Lb
OP-1	8'	9.25'	0.25'	3.75'

OUTLET PROTECTION DETAIL - TYPE II
N.T.S.



SEDIMENT FENCE DETAIL
N.T.S.

CONSTRUCTION NOTES:

- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM 6461. SYNTHETIC FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE 0° TO 120° F.
- ENSURE THAT POSTS ARE 1.33 LB/LF STEEL WITH A MIN. LENGTH OF 5 FT. MAKE SURE STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
- FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MIN. 14 GAUGE AND A MAX. MESH SPACING OF 6 INCHES. FASTEN SECURELY TO THE UPSLOPE SIDE OF POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MIN. 50 LB TENSILE STRENGTH.
- ENSURE THAT THE HEIGHT OF THE FENCE DOES NOT EXCEED 24\"/>
- CONSTRUCT THE FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FABRIC ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP.
- WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAX. OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MIN. OF 24 INCHES.
- EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MIN. 50 LB TENSILE STRENGTH.
- EXCAVATE A TRENCH APPROX. 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
- PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
- DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

NO	BY	DATE	REVISIONS AND RECORD OF ISSUE
1	CK	11/23/11	REVISED TO REFLECT DEEDED ACREAGE
2	APP	10/01/11	REVISED PER HENDERSON COUNTY COMMENTS



DESIGNED	HRW	8/20/11
DRAWN	HRW	
CHECKED	EEA	
APPROVED	EEA	
DATE		

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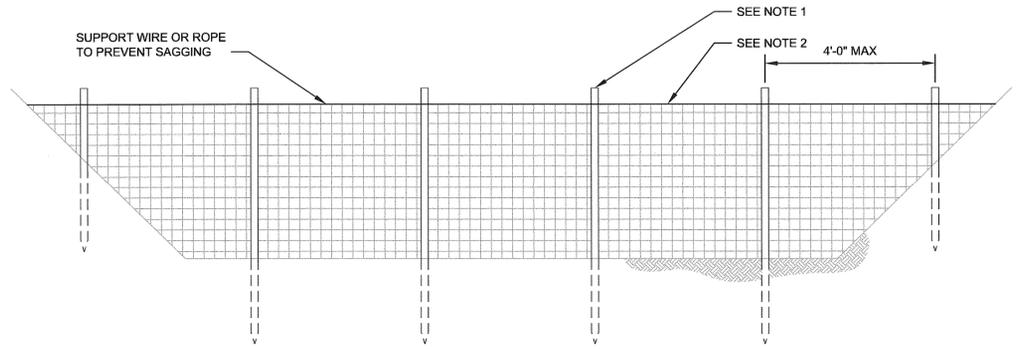
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GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP. LIC. C-0762

PACE CONSTRUCTION
HENDERSON COUNTY, NC
CREST ROAD C&D MATERIAL RECOVERY FACILITY
EROSION CONTROL DETAILS

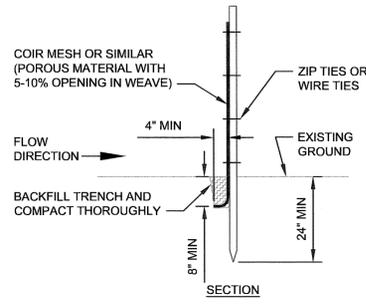
PROJECT NO.
854.1101.11

SCALE
AS SHOWN

DRAWING NO.
EP-03



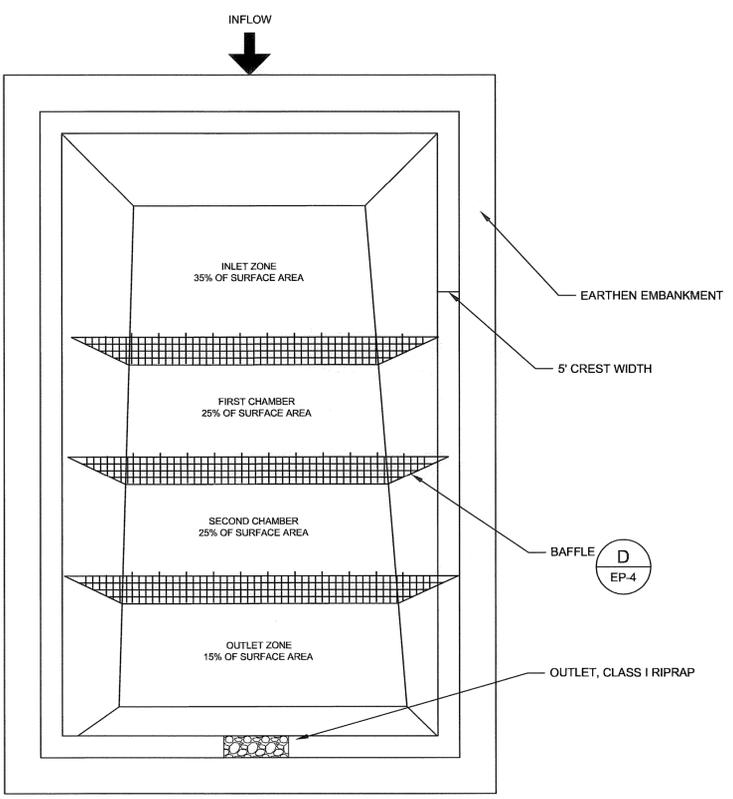
ELEVATION



POROUS BAFFLE DETAIL
N.T.S.

NOTES:

1. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERM.
2. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES.
3. WHEN USING POSTS, ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
4. WRAP POROUS MATERIAL, LIKE JUTE BACKED COIR MATERIAL, OVER A SAWHORSE OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS FOR ANCHORING. THE FABRIC SHOULD HAVE FIVE TO TEN PERCENT OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE OR STAPLES.
5. THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8-INCH EROSION CONTROL MATTING STAPLES.
6. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.



TYPICAL POROUS BAFFLE LAYOUT
N.T.S.

SELF INSPECTION PROGRAM:

1. THIS PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES AND APPLIES TO ALL PROJECTS. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTION SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
2. THE INSPECTION MUST BE CONDUCTED BY THE LANDOWNER, FINANCIALLY RESPONSIBLE PARTY OR THEIR AGENT. THE GOAL IS TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED, INCLUDING THE INSTALLATION AND MAINTENANCE OF MEASURES, AND THE PROVISION OF GROUND COVER IN A TIMELY MANNER.
3. ALL OF THE EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING SEDIMENTATION CONTROL BASINS, SEDIMENTATION TRAPS, SEDIMENTATION PONDS, ROCK DAMS, TEMPORARY DIVERSIONS, TEMPORARY SLOPE DRAINS, ROCK CHECK DAMS, SEDIMENT FENCE OR BARRIERS, ALL FORMS OF INLET PROTECTION, STORM DRAINAGE FACILITIES, ENERGY DISSIPATORS, AND STABILIZATION METHODS OF OPEN CHANNELS MUST BE INSPECTED.
4. THE NEED FOR GROUND COVER SHOULD BE CHECKED. TEMPORARY OR PERMANENT GROUND COVER MUST BE PROVIDED ON EXPOSED GRADED SLOPES AND FILLS WITHIN 21 CALENDAR DAYS OF THE COMPLETION OF A PHASE OF GRADING. PERMANENT GROUND COVER MUST BE PROVIDED WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (60 DAYS IN HQW ZONES), WHICHEVER TERM IS SHORTER, UPON THE COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
5. THE ACTUAL DIMENSIONS OF THE BASINS HAVE TO BE CHECKED, USUALLY WITH A TAPE MEASURE, AND COMPARED TO THE DIMENSIONS ON THE APPROVED PLAN. A LEVEL AND SURVEY ROD MAY BE USEFUL IN CHECKING THE DEPTH OF A BASIN. ONLY RELATIVE ELEVATIONS, COMPARING THE BOTTOM AND TOP ELEVATIONS ARE NECESSARY.
6. A SIGNIFICANT DEVIATION MEANS AN OMISSION, ALTERATION OR RELOCATION OF AN EROSION OR SEDIMENTATION CONTROL MEASURE THAT PREVENTS THE MEASURE FROM PERFORMING AS INTENDED. IF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN CANNOT BE FOLLOWED, A REVISED PLAN SHOULD BE SUBMITTED FOR REVIEW.
7. A "SELF-INSPECTION REPORT FOR LAND DISTURBING ACTIVITY AS REQUIRED BY NCGS 113A-54.1" IS AVAILABLE FOR USE. IT CAN BE COMPLETED BY HAND OR COMPLETED AS AN EXCEL SPREADSHEET. AN ALTERNATIVE IS TO MAKE NOTATIONS ON THE COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN THAT IS KEPT ON THE PROJECT SITE. RULE 15A NCAAC 04B.0131 STATES THAT "... DOCUMENTATION SHALL BE ACCOMPLISHED BY INITIALING AND DATING EACH MEASURE OR PRACTICE SHOWN ON A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR BY COMPLETING, DATING AND SIGNING AN INSPECTION REPORT THAT LISTS EACH MEASURE, PRACTICE OR DEVICE SHOWN ON THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN."
**THE SELF-INSPECTION REPORT FORM CAN BE FOUND AT NC DENR'S WEBSITE:
HTTP://WWW.DLRENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTML**
8. THE NPDES SELF-MONITORING REPORT MAY ONLY BE USED TO REPORT THAT THE MAINTENANCE AND REPAIR REQUIREMENTS FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES, PRACTICES AND DEVICES HAVE BEEN PERFORMED.
9. UNLIKE THE NPDES SELF-MONITORING REPORT, THE SELF-INSPECTION REPORT FOR LAND-DISTURBING ACTIVITY DOES NOT HAVE TO BE WEEKLY. RATHER, THIS REPORT IS COMPLETED AFTER EACH PHASE OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS COMPLETE. NOT EVERY PROJECT WILL HAVE ALL THE POSSIBLE PHASES, BUT THE LIST OF PHASES INCLUDES THE FOLLOWING:
INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL MEASURES;
CLEARING AND GRUBBING OF EXISTING GROUND COVER;
COMPLETION OF ANY PHASE OF GRADING OF SLOPES OR FILLS;
INSTALLATION OF STORM DRAINAGE FACILITIES;
COMPLETION OF CONSTRUCTION OR DEVELOPMENT;
ESTABLISHMENT OF PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION.
10. DO NOT MAIL THE REPORT. THE RECORDS MUST BE MADE AVAILABLE TO THE EROSION CONTROL INSPECTOR AT THE SITE. ANY DOCUMENTATION OF INSPECTIONS THAT OCCUR ON A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN SHALL OCCUR ON A SINGLE COPY OF THE PLAN AND THAT PLAN SHALL BE MADE AVAILABLE ON THE SITE. ANY INSPECTION REPORTS SHALL ALSO BE MADE AVAILABLE ON THE SITE.

MAINTENANCE:

1. MAINTENANCE OF EROSION AND SEDIMENT CONTROL FEATURES, AS DESCRIBED BELOW, IS THE RESPONSIBILITY OF THE COUNTY.
2. THE SEDIMENT BASINS SHALL BE INSPECTED REGULARLY DURING LAND DISTURBING ACTIVITIES AND AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT SHALL BE REMOVED, AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. THE EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED REGULARLY FOR SIGNS OF PIPING AND SETTLEMENT. REPAIRS SHALL BE MADE IMMEDIATELY. THE RISER AND POOL AREA SHALL BE KEPT FREE OF TRASH AND OTHER DEBRIS.
3. INSPECT THE BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND STABILIZE IT.
4. INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE. IN GENERAL, ONCE A RIPRAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE. RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.
5. INSPECT SEDIMENT FENCES WILL BE CHECKED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL FOR OVERTOPPING, UNDERMINING, STRUCTURAL FAILURE, AND DETERIORATION OF THE FABRIC. MAKE ANY REPAIRS IMMEDIATELY. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALFWAY TO THE TOP OF THE BARRIER OR AS NECESSARY.
6. THE SEEDED AREAS WILL BE INSPECTED REGULARLY TO ENSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. AREAS WITHOUT ESTABLISHED VEGETATION SHOULD BE FERTILIZED AND RESEEDED ANNUALLY.
CONTACT PERSON RESPONSIBLE FOR MAINTENANCE: MARK PACE (OWNER)
CELL# (828) 696-9118

NPDES NOTES:

THE NORTH CAROLINA DIVISION OF WATER QUALITY ISSUED A NEW NPDES GENERAL STORMWATER PERMIT NCG 010000 CONSTRUCTION ACTIVITIES ON AUGUST 3, 2011. THE MAJOR CHANGE IN THE PERMIT FROM THE PREVIOUS ONE IS THE SHORTER TIMES TO APPLY GROUND STABILIZATION SUCH AS CH, WHEAT STRAW, OR GRASSES. THE NC LAWS AND RULES RELATING TO THE SEDIMENT ACT REQUIRE, IN MOST PLACES, GROUND STABILIZATION WITHIN 21 DAYS, BASED ON THE NEW EPA REQUIREMENTS AND 9-MONTHS' WORK WITH A PERMIT ADVISORY GROUP. CTAG, THE DIVISION AND EPA-DEVELOPED PERMIT, NOW CONTAINS REQUIREMENTS FOR GROUND COVER WITHIN 14, AND IN SOME PLACES, 7 DAYS. SEVERAL OTHER CHANGES WERE MADE. THEREFORE, THE COMPLETE PERMIT SHOULD BE USED TO ASSURE FULL IMPLEMENTATION. SEE WEBSITE:
[HTTP://PORTAL.NC DENR.ORG/WEB/WQMS/SU/CONSTRUCTION](http://portal.ncdenr.org/web/wqms/su/construction)

SEEDING SPECIFICATIONS:

- FERTILIZER AND LIME
- A. APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY LIME AT THE RATE OF 90 LBS/1000 SQ.FT. AND FERTILIZER AT THE RATE OF 90 LBS/1000 SQ.FT.
 - B. MIX THOROUGHLY INTO UPPER 4 INCHES OF TOPSOIL.
 - C. LIGHTLY WATER TO AID THE DISSIPATION OF FERTILIZER AND LIME.

- SEEDBED PREPARATION
- A. PREPARE SEEDBED TO A DEPTH OF 4 TO 6 INCHES.
 - B. REMOVE LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS SO THAT THEY WILL NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION.

- TEMPORARY SEEDING
- A. PROVIDE TEMPORARY SEEDING ON ANY CLEARED, UN-VEGETATED, OR SPARSELY VEGETATED SOIL SURFACE WHERE VEGETATIVE COVER IS NEEDED FOR LESS THAN ONE YEAR OR WHEN SEEDING DAMAGES WILL PREVENT THE ESTABLISHMENT OF VEGETATIVE COVER IF PERMANENT SEEDING IS ATTEMPTED.
 - B. SEED IN ACCORDANCE WITH THE GUIDELINES BELOW:

TEMPORARY SEEDING RECOMMENDATIONS:

- A. LATE WINTER, EARLY SPRING
SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
RYE (GRAIN) 120
KOBE LESPEDEZA 50
SEEDING DATES: JANUARY 1 - MAY 1
- B. SUMMER
SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
GERMAN MILLET 40
A SMALL-STEMMED SUNDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.
SEEDING DATES: MAY 1 - AUGUST 15
- C. FALL
SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
RYE (GRAIN) 120
SEEDING DATES: AUGUST 15 - DECEMBER 30
- D. SOIL AMENDMENTS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
- E. MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
- F. MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

PERMANENT SEEDING RECOMMENDATIONS:

- A. STEEP SLOPES (3:1)
SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, SPECIFICATIONS, AND APPLICATION RATES:
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
FEBRUARY 1 - APRIL 15 TALL FESCUE 100
AUGUST 25 - SEPTEMBER 15 SERICEA LESPEDEZA 30
KOBE LESPEDEZA 10
 - B. GRASSED CHANNELS
SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, SPECIFICATIONS, AND APPLICATION RATES:
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
FEBRUARY 1 - APRIL 15 TALL FESCUE 200
MAY 1 - AUGUST 15 TALL FESCUE 200
GERMAN MILLET 10
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
APRIL 15 - MAY 1 TALL FESCUE 200
AUGUST 15 - AUGUST 25 RYE (GRAIN) 40
 - C. LOW MAINTENANCE AREAS
SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE, SPECIFICATIONS, AND APPLICATION RATES:
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
FEBRUARY 1 - APRIL 15 TALL FESCUE 80
AUGUST 20 - OCTOBER 25 SERICEA LESPEDEZA 20
KOBE LESPEDEZA 10
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
APRIL 1 - MAY 1 TALL FESCUE 80
AUGUST 15 - AUGUST 25 SERICEA LESPEDEZA 20
KOBE LESPEDEZA 10
RYE (GRAIN) 40
SEEDING DATES SEEDING MIXTURE SPECIES RATE (LBS/ACRE)
MAY 1 - AUGUST 15 TALL FESCUE 80
SERICEA LESPEDEZA 20
KOBE LESPEDEZA 10
GERMAN MILLET 10
 - D. COMPACT SEEDED AREAS BY MEANS OF A ROLLER OR OTHER APPROVED EQUIPMENT IMMEDIATELY AFTER SOWING.
 - E. MULCH IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND APPLICATION RATES STEEP SLOPES (3:1): APPLY 4,000 - 5,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKLING WITH ASPHALT, ROVING, OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.
1. GRASSED CHANNELS: INSTALL EXCELSIOR MAT IN THE CHANNEL TO THE TOP OF THE CHANNEL, AND SECURE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
 2. LOW MAINTENANCE AREAS: APPLY 4,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF OTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKLING WITH ASPHALT, ROVING, OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.
 3. REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, REFERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

DESIGNED: HRW
DRAWN: HRW
CHECKED: EEA
APPROVED: EEA
DATE: 8/20/11

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PACE CONSTRUCTION
HENDERSON COUNTY, NC

CREST ROAD C&D MATERIAL RECOVERY FACILITY
EROSION CONTROL DETAILS

PROJECT NO.
854.1101.11

SCALE
AS SHOWN

DRAWING NO.
EP-04

REVISIONS AND RECORD OF ISSUE

NO	DATE	REVISIONS AND RECORD OF ISSUE
1	10/20/11	REVISED PER HENDERSON COUNTY COMMENTS
2	11/29/11	REVISED TO REFLECT DEEDED ACREAGE

NO BY CK/APP