

LOCATION MAP

REFERENCE:
USGS QUADRANGLE: GRIFTON QUAD, N.C.



LIST OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE
1	TITLE SHEET
2	LEGEND AND NOTES
3	EXISTING CONDITIONS
4	EROSION AND SEDIMENT CONTROL PLAN
5	EROSION AND SEDIMENT CONTROL DETAILS
6	GRADING PLAN FOR C & D LANDFILL
7	SEDIMENT BASIN PLAN & DETAILS

SOIL COVER CONSTRUCTION PROJECT KINSTON C AND D LANDFILL KINSTON, NORTH CAROLINA

PREPARED FOR

DUPONT CORPORATE REMEDIATION GROUP



NO.	REVISIONS	BY	DATE	DESIGNED	INITIALS	 Corporate Remediation Group <i>An Alliance between</i> DuPont and URS Diamond Barley Mill Plaza, Building 27 Wilmington, Delaware 19880-0027 	TITLE SHEET		
				HEATHER DORSEY	HCD		DuPont KINSTON SOIL COVER CONSTRUCTION PROJECT KINSTON C & D LANDFILL		
				DRAWN					
				WAYNE CARR	WC				
				CHECKED					
				CHRIS T. CURRAN	CTC	SCALE AS NOTED DATE 11/08/02 DRAWING NO. SHEET 1 OF 7			
				APPROVED(DESIGN)					
				A. MAC BONNER	AMB				
				APPROVED(CONSTRUCTION)					

I:\WCD\KINSTON\KINSTON\COVER.dwg, Model, 11/08/2002 04:26:13 PM, wcarroll, KIP 2002.rvt, Arch D (24 x 36 Inches), 1:1



EXISTING GRADES HAVE BEEN MODIFIED IN THIS AREA SUBSEQUENT TO OCTOBER, 2002 SURVEY

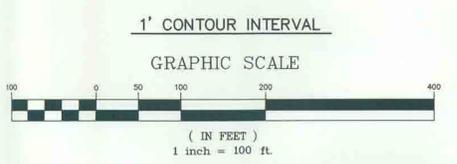
ASH LANDFILL
APPROXIMATE SLUDGE POND BOUNDARY

① SLUDGE POND

C & D LANDFILL

SPECIFIC NOTES:

① SLUDGE POND GRADES HAVE BEEN ESTIMATED FROM SLUDGE POND PERIMETER SPOT ELEVATIONS.



NO.	REVISIONS	BY	DATE

DESIGNED	INITIALS
HEATHER C. DORSEY	HCD
DRAWN	
WAYNE CARR	WC
CHECKED	
CHRIS T. CURRAN	CTC
APPROVED(DESIGN)	
A. MAC BONNER	AMB
APPROVED(CONSTRUCTION)	

DU PONT
Corporate Remediation Group
*An Alliance between
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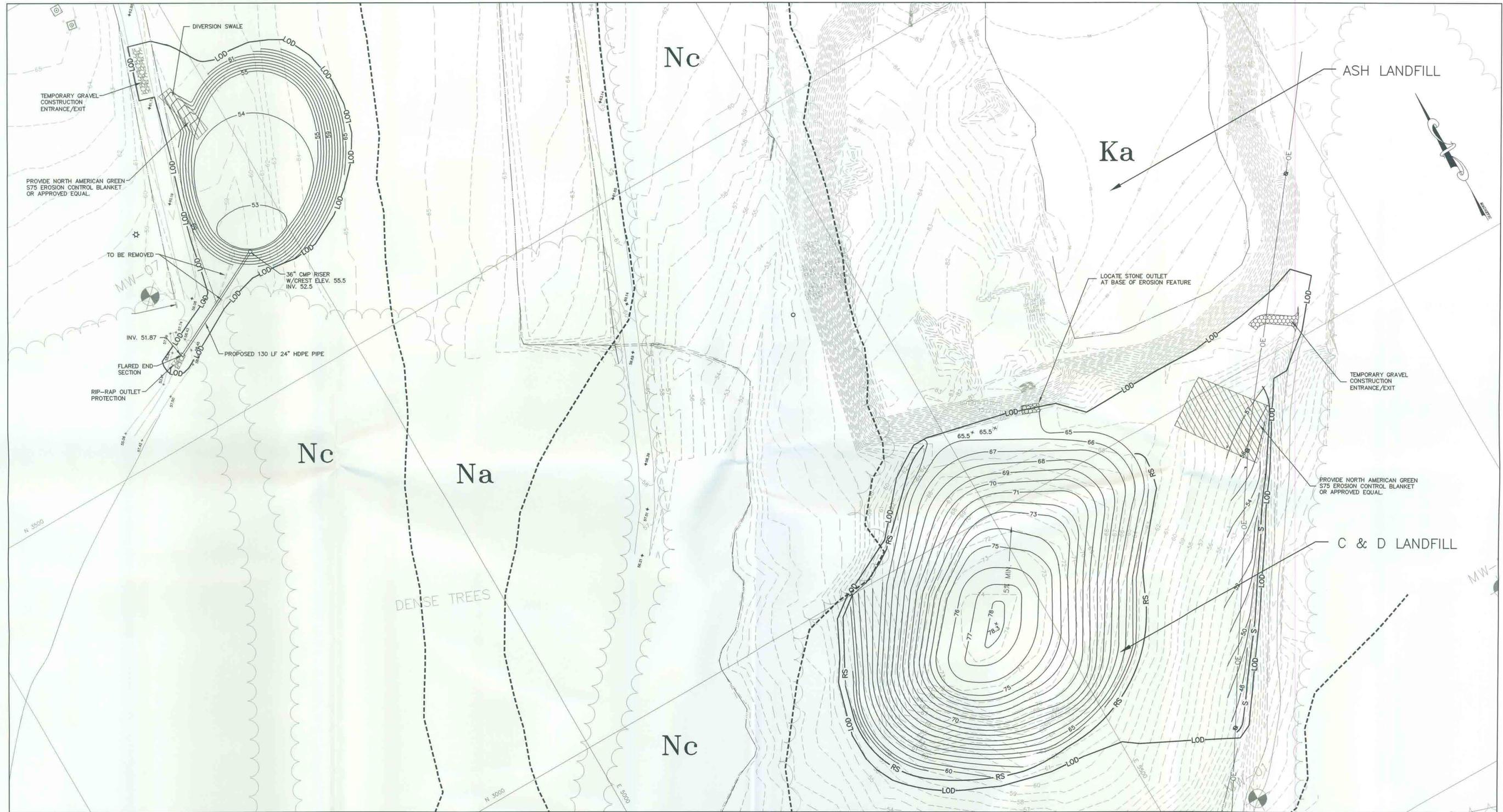
URS
1200 Philadelphia Pike
Wilmington, DE 19809
Tel: 302.791.0700
Fax: 302.791.0708

EXISTING CONDITIONS

SOIL COVER CONSTRUCTION PROJECT
KINSTON C & D LANDFILL
KINSTON, N.C.

SCALE: 1" = 100'
DATE: 11/08/02
DRAWING NO.:
SHEET: 3 OF 7

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1' CONTOUR INTERVAL

GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

SOIL LEGEND:
Na NORFOLK, LOAMY SAND, SANDY CLAY LOAM
Nc NORFOLK, LOAMY SAND, SANDY CLAY LOAM
Ka KALMIA, LOAMY SAND, SANDY CLAY LOAM, SANDY LOAM OR SAND

NO.	REVISIONS	BY	DATE

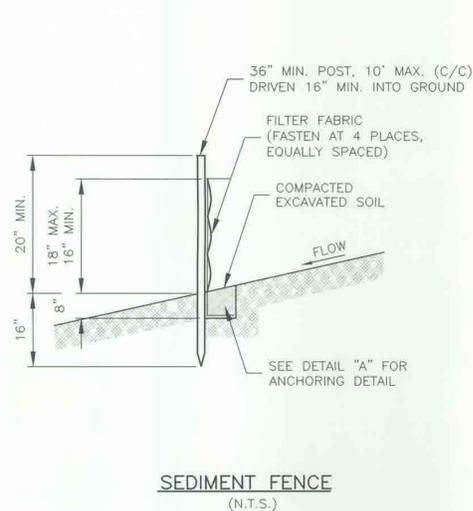
DESIGNED	INITIALS
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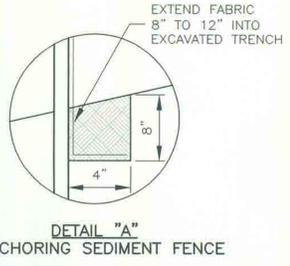
E & S CONTROL PLAN
SOIL COVER CONSTRUCTION PROJECT
KINSTON C & D LANDFILL
KINSTON, N.C.

SCALE: 1" = 50'
 DATE: 11/08/02
 DRAWING NO. []
 SHEET: 4 OF 7

I:\WCD\KINSTON\KINSTON\ESPlan.dwg, E:\Plan_11/08/2002_12:42:28 PM, wcarroll, KIP 2052, 8x3, Arch D (24 x 36 inches), 1:50



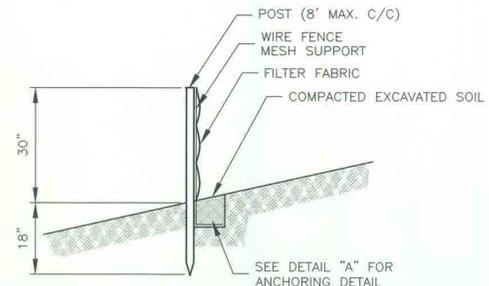
SEDIMENT FENCE
(N.T.S.)



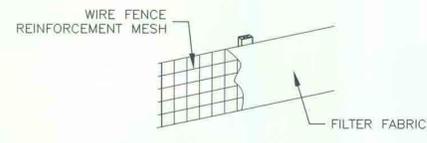
DETAIL "A"
ANCHORING SEDIMENT FENCE



DETAIL "B"
JOINING SECTIONS OF SEDIMENT FENCE



CUTAWAY VIEW



SPECIFIC NOTES:

- USE A SYNTHETIC FILTER FABRIC OR A PERVIOUS SHEET OF POLYPROPYLENE, NYLON, POLYESTER, OR POLYETHYLENE YARN, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	89% (MIN.)
TENSILE STRENGTH AT 20% (MAX.) ELONGATION	STANDARD STRENGTH—30 LB/LIN. IN. (MIN.) EXTRA STRENGTH—50 LB/LIN. IN. (MIN.)
SLURRY FLOW RATE	0.3 GAL/SQ.FT./MIN. (MIN.)
GRAB ELONGATION	15%
PERMITTIVITY	0.05 SEC ⁻¹
APPARENT OPENING SIZE	US STD. SIEVE NO. 50 70% MIN. STRENGTH RETAINED
UV RESISTANCE @ 500 HOURS	ASTM D 4632 ASTM D 4491 ASTM D 4751 ASTM D 4355

SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120°F.

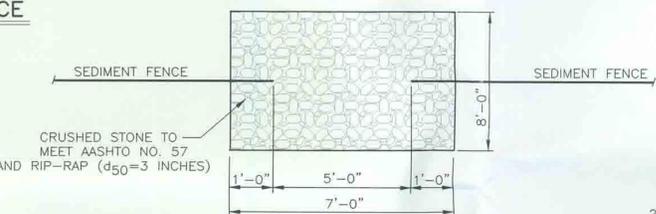
- ENSURE THAT POSTS FOR SEDIMENT FENCES ARE EITHER 4-INCH DIAMETER PINE, 2-INCH DIAMETER OAK, OR 1.33 LB/INCH FT. STEEL WITH A MINIMUM LENGTH OF 4 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
- FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.
- SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, OR TIE WIRES. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH.
- WHEN TWO SECTIONS OF GEOTEXTILE MATERIAL ADJOIN EACH OTHER, THE GEOTEXTILE SHALL OVERLAP BY 6 INCHES AND BE WRAPPED AROUND THE TWO STAKES. THE TWO STAKES SHALL BE DRIVEN INTO THE GROUND AS ONE UNIT. SEE DETAIL "B".
- WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND TO A MINIMUM OF 18 INCHES.
- EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACINGS DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. STAPLE OR WIRE THE FILTER FABRIC DIRECTLY TO POSTS.
- EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM BARRIER.
- BACKFILL THE TRENCH WITH COMPACTED SOIL OR GRAVEL PLACED OVER THE FILTER FABRIC.
- DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

MAINTENANCE

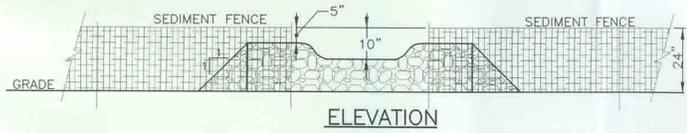
- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

REINFORCED SEDIMENT FENCE (30" HIGH)
(N.T.S.)

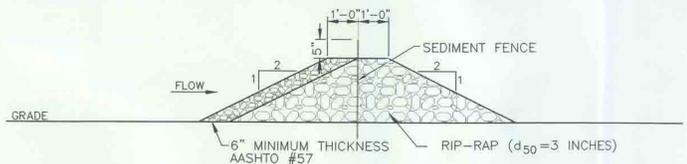
DETAIL 1
SEDIMENT FENCE
(N.T.S.)



PLAN



ELEVATION

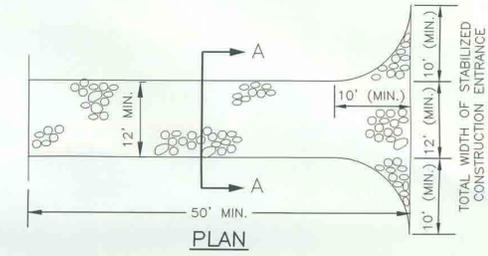


TYPICAL SECTION

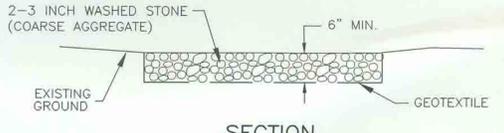
DETAIL 2
TYPICAL STONE OUTLET DETAIL
(N.T.S.)

GENERAL NOTES:

- SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
- STONE OUTLETS TO BE INSTALLED AT LOCATIONS WHERE SEDIMENT FENCE HAS BEEN UNDERMINED OR OVERTOPPED.



PLAN

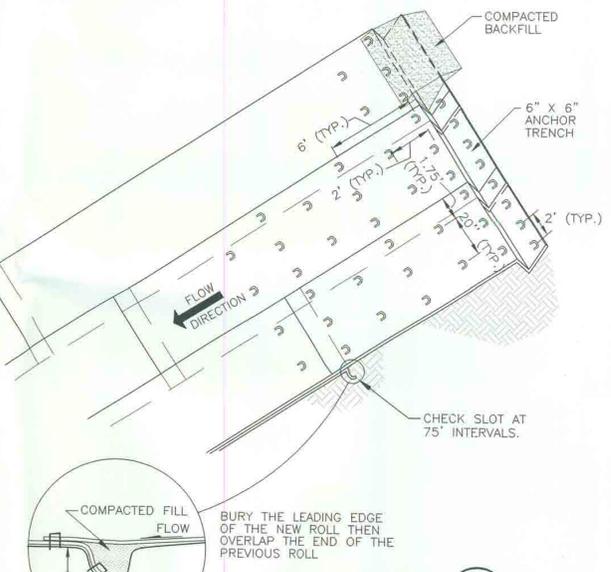


SECTION

DETAIL 3
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
(N.T.S.)

SPECIFIC NOTES:

- TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED TO THE MINIMUM DIMENSIONS SHOWN ON THIS DETAIL.
- TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED OF 2-3 INCH COARSE WASHED AGGREGATE.
- AN 8 OZ. NONWOVEN GEOTEXTILE FABRIC UNDERLAYMENT SHALL BE PLACED OVER THE ENTIRE AREA AS PER SECTION GEOTEXTILE OF THE SPECIFICATIONS.
- IF CONDITIONS AT THE SITE ARE SUCH THAT MOST OF THE MUD AND SEDIMENT ARE NOT REMOVED BY VEHICLES TRAVELING OVER THE GRAVEL, THE TIRES SHOULD BE WASHED. WASHING SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO A SEDIMENT TRAP OR OTHER SUITABLE DISPOSAL AREA. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
- MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED OR TRACKED ONTO PUBLIC ROADWAYS.



DETAIL 4
EROSION CONTROL BLANKET SLOPE PROTECTION
(N.T.S.)

GENERAL NOTES:

- EROSION CONTROL BLANKETS SHALL BE AS SPECIFIED IN SECTION: EROSION CONTROL MEASURES.
- BLANKETS SHALL BE PLACED IN A MANNER WHICH WILL NOT CAUSE THE BLANKET TO BRIDGE OR TENT OVER OBSTRUCTIONS.
- BLANKETS SHALL BE STAPLED AS SHOWN ON THE DETAIL OR IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) USING A MINIMUM NO. 11 GAUGE STAPLE BETWEEN 8 AND 12 INCHES IN LENGTH. USE A 9 GAUGE STAPLE IF HARD SOILS ARE ENCOUNTERED.
- BLANKETS SHALL BE PLACED PARALLEL TO SLOPE DIRECTION, MINIMIZING THE SEAMS. IF SEAMING IS NECESSARY, A MINIMUM 4" OVERLAP SHALL BE USED, ENSURING THAT THE UPSLOPE SEAM OVERLAPS THE DOWNSLOPE SEAM.
- STAPLES IN THE ANCHOR TRENCH SHALL BE PLACED, AT A MINIMUM, EVERY 2 FEET EXTENDING THE ENTIRE LENGTH OF THE TRENCH.

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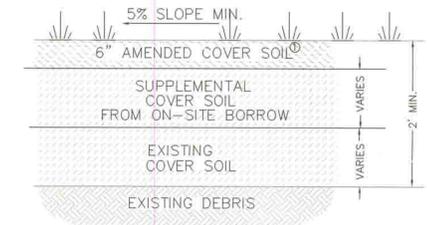
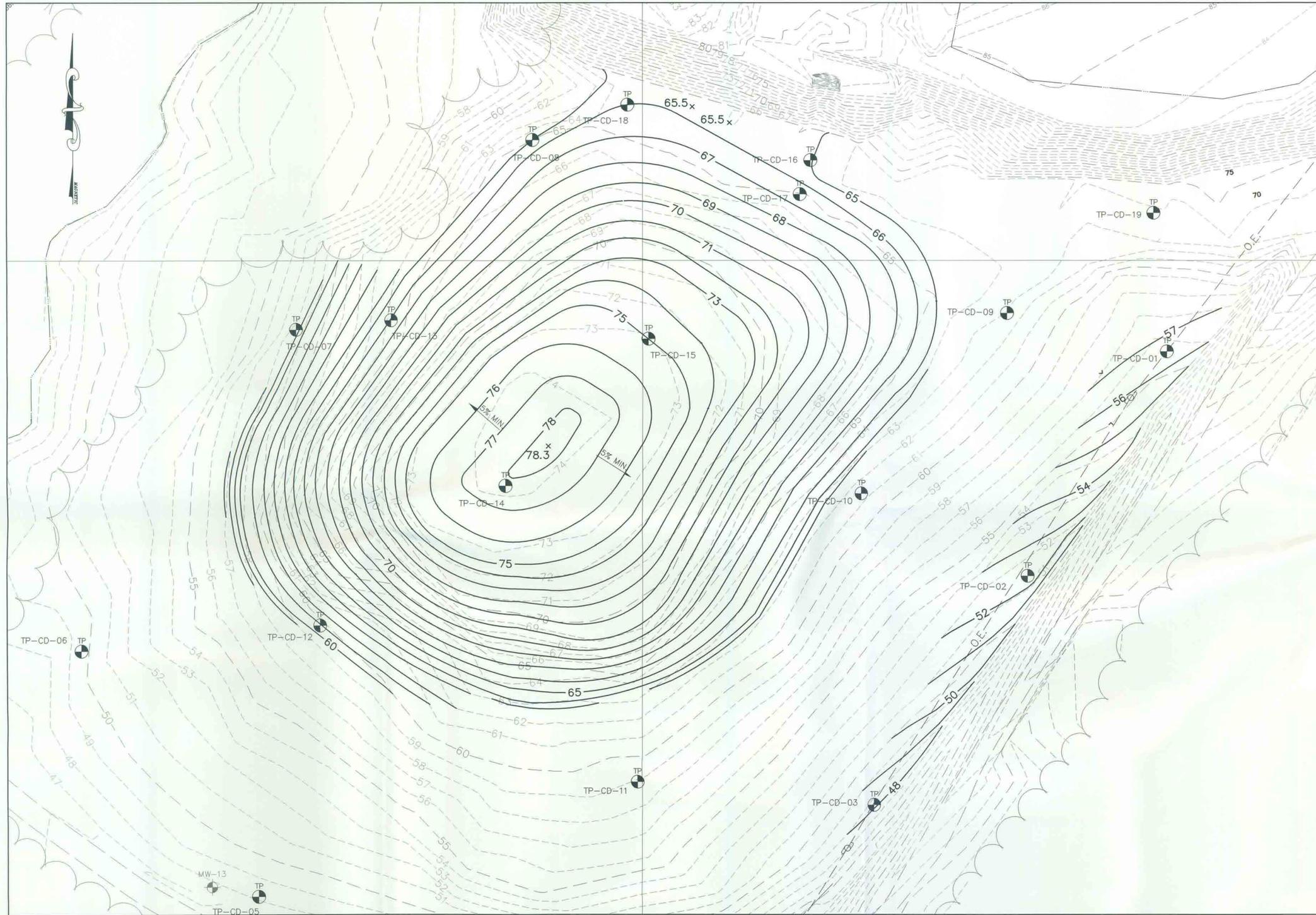
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DRAWN	
WAYNE CARR	WC
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CHRIS T. CURRAN	CTC
APPROVED(DESIGN)	
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APPROVED(CONSTRUCTION)	

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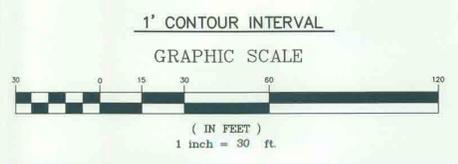
EROSION AND SEDIMENT CONTROL DETAILS			
DuPont KINSTON SOIL COVER CONSTRUCTION PROJECT KINSTON C & D LANDFILL			
SCALE	DATE	DRAWING NO.	SHEET
AS NOTED	11/08/02		5 OF 7



DETAIL 1
C & D LANDFILL SOIL COVER
 NOT TO SCALE

① AMEND COVER SOIL FROM EITHER ON-SITE OR OFF-SITE AMENDMENTS AS PER SECTION: EARTHWORK OF THE SPECIFICATIONS.

GENERAL NOTE:
 1. CONTRACTOR SHALL COORDINATE PROTECTION OR RELOCATION OF OVERHEAD ELECTRIC OR OTHER UTILITIES WITH PLANT PERSONNEL DURING SOIL PLACEMENT/GRADING.



NO.	REVISIONS	BY	DATE

DESIGNED	INITIALS
HEATHER DORSEY	HCD
DRAWN	
SEAN C. DALY	SCD
CHECKED	
CHRIS T. CURRAN	CTC
APPROVED (DESIGN)	
A. MAC BONNER	JEW
APPROVED (CONSTRUCTION)	

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GRADING PLAN
FOR C & D LANDFILL

SOIL COVER CONSTRUCTION PROJECT
KINSTON C&D LANDFILL
KINSTON, NC

SCALE: 1" = 30'
 DATE: 11/8/02
 DRAWING NO.:
 SHEET: 6 OF 7

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