WASHINGTON COUNTY LANDFILL

WASHINGTON COUNTY NORTH CAROLINA

LANDFILL C & D PLAN

PROPOSED CDLF EXPANSION

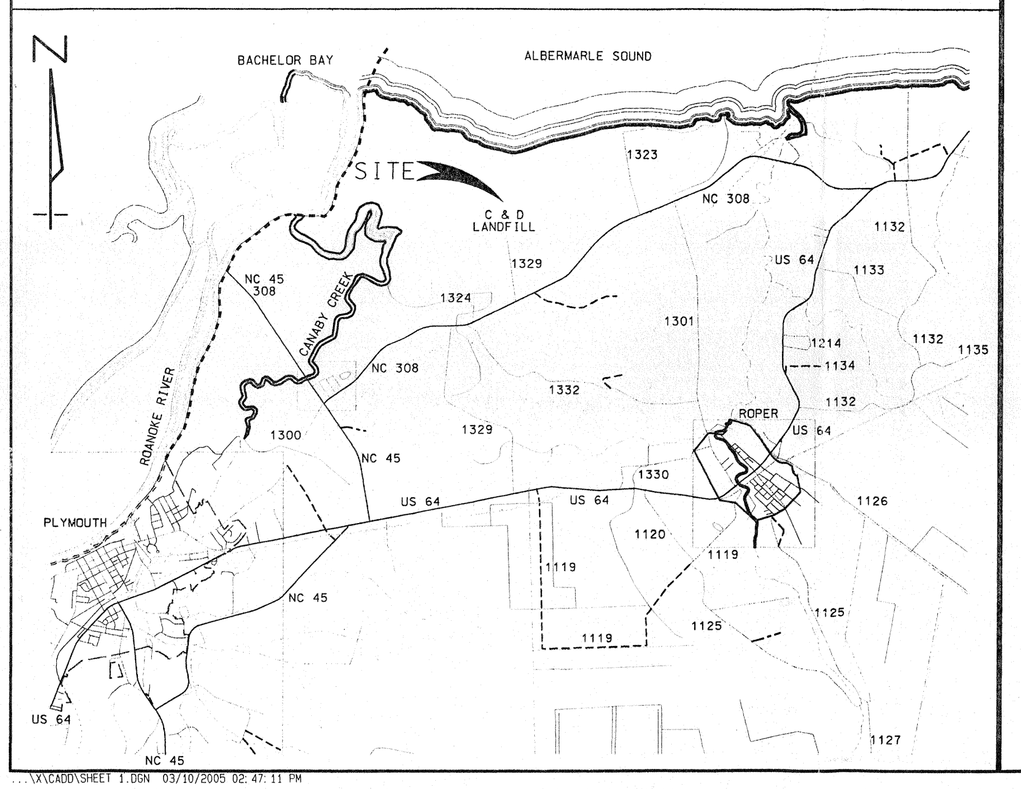
DEC. , 2004

DM 6500

NORTH CAROLINA PROFESSIONAL SEAL 17469 ENGINEER TODD ALAN TRIPP

3/16/05

VICINITY MAP



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THE WOOTEN COMPANY

ENGINEERING | PLANNING | ARCHITECTURE

301 West 14th Street Greenville NC 27834

252.757.1096 fax 252.757.3221

INDEX TO DRAWINGS

1. TITLE SHEET
2. LOCATION PLAN
3. MISCELLANEOUS DETAILS

Received MAR 2005 Solid Waste Section

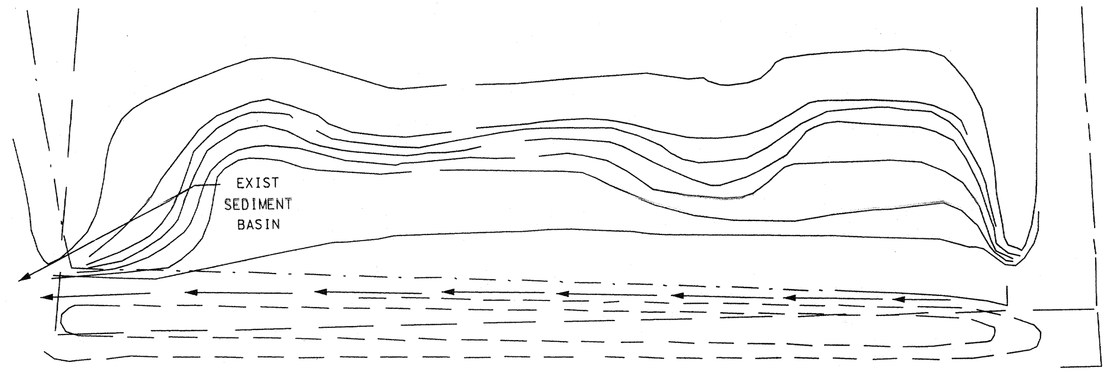
C&D landfill expansion

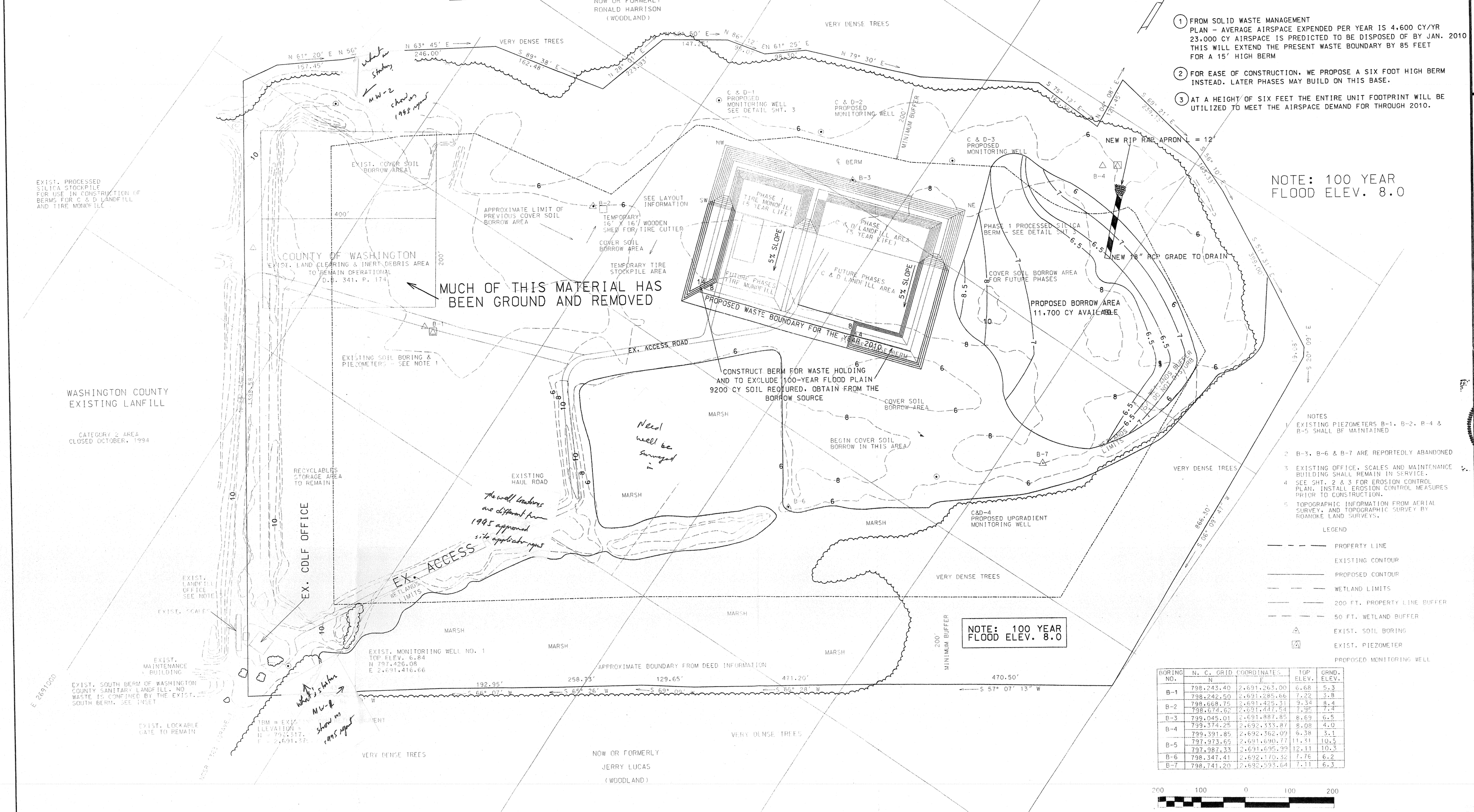
BERM LAYOUT INFORMATION

	N.C. GRID COORDINATES NORTH	EAST
NE	799129.42	2692127.62
NW	798951.34	2691587.23
SE	798995.89	2692174.18
SW	798816.29	2691629.17
℄ CENTER BERM @ NORTH TOE	799024.73	2691809.93

MONITORING WELLS

	N.C. GRID COORDINATES NORTH	EAST
C&D-1	799030	2691517
C&D-2	799101	2691759
C&D-3	799209	2692042
C&D-4	798596	2692409





1. FROM SOLID WASTE MANAGEMENT PLAN – AVERAGE AIRSPACE EXPENDED PER YEAR IS 4,600 CY/YR 23,000 CY AIRSPACE IS PREDICTED TO BE DISPOSED OF BY JAN. 2010 THIS WILL EXTEND THE PRESENT WASTE BOUNDARY BY 85 FEET FOR A 15' HIGH BERM
2. FOR EASE OF CONSTRUCTION, WE PROPOSE A SIX FOOT HIGH BERM INSTEAD. LATER PHASES MAY BUILD ON THIS BASE.
3. AT A HEIGHT OF SIX FEET THE ENTIRE UNIT FOOTPRINT WILL BE UTILIZED TO MEET THE AIRSPACE DEMAND FOR THROUGH 2010.

NOTES

1. EXISTING PIEZOMETERS B-1, B-2, B-4 & B-5 SHALL BE MAINTAINED
2. B-3, B-6 & B-7 ARE REPORTEDLY ABANDONED
3. EXISTING OFFICE, SCALES AND MAINTENANCE BUILDING SHALL REMAIN IN SERVICE.
4. SEE SHT. 2 & 3 FOR EROSION CONTROL PLAN. INSTALL EROSION CONTROL MEASURES PRIOR TO CONSTRUCTION.
5. TOPOGRAPHIC INFORMATION FROM AERIAL SURVEY, AND TOPOGRAPHIC SURVEY BY ROANOKE LAND SURVEYS.

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WETLAND LIMITS
- 200 FT. PROPERTY LINE BUFFER
- 50 FT. WETLAND BUFFER
- EXIST. SOIL BORING
- EXIST. PIEZOMETER
- PROPOSED MONITORING WELL

BORING NO.	N. C. GRID COORDINATES N	E	TOP ELEV.	GRND. ELEV.
B-1	798,243.40	2,691,263.00	6.68	5.3
	798,242.50	2,691,285.66	7.22	3.8
B-2	798,668.75	2,691,425.51	9.34	8.4
	798,674.62	2,691,447.64	7.95	7.4
B-3	799,045.01	2,691,887.85	8.69	6.5
B-4	799,374.25	2,692,333.87	8.08	4.0
	799,391.85	2,692,362.09	6.38	3.1
B-5	797,973.65	2,691,690.77	11.41	10.5
	797,987.33	2,691,695.99	12.11	10.3
B-6	798,347.41	2,692,170.52	7.76	6.2
B-7	798,741.20	2,692,593.64	7.11	6.3

NOTE: BASE INFORMATION IS TAKEN FROM PLANS BY DIEHL & PHILLPIS, PA ENTITLED "CONSTRUCTION AND DEMOLITION WASTE LANDFILL/TIRE MONOFILL SITE APPLICATION"

REVISIONS

PROJECT NO. 2451 – X
DATE: DEC. .2004
SCALE: AS SHOWN
DES. BY: T.A.T.
DWN. BY: J.W.D.
CHK'D. BY: T.A.T.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17460 TODD ALAN TILLETT

WASHINGTON COUNTY LANDFILL
WASHINGTON COUNTY NORTH CAROLINA
LANDFILL C & D PLAN
PROPOSED CDLF CAP SECTION

THE WOOTEN COMPANY
ENGINEERING | PLANNING | ARCHITECTURE
301 West 14th Street Greenville NC 27834
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SHEET NO. 2 OF 3 SHEETS

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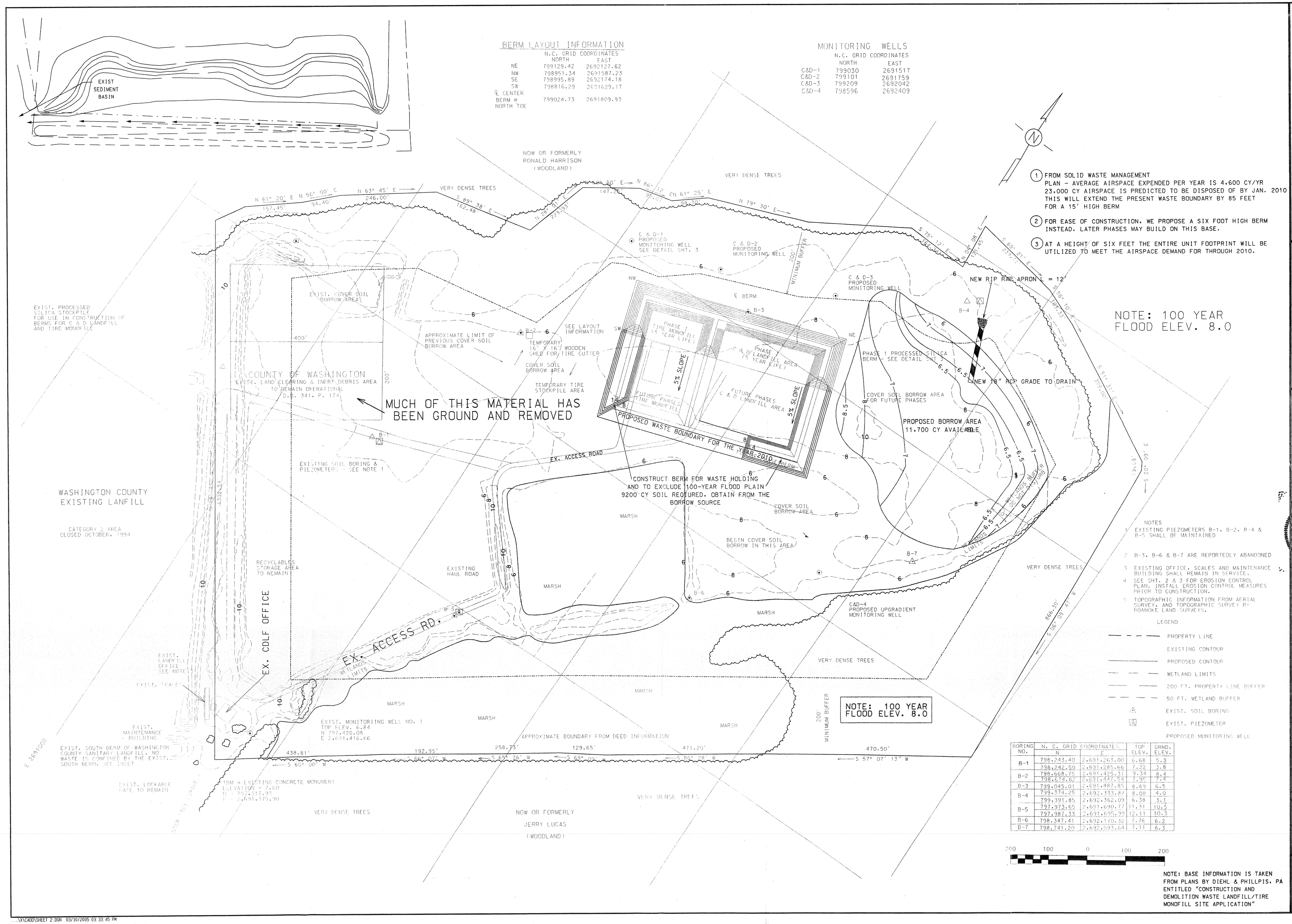

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REVISIONS

DES. BY: T.A.T.
DWN. BY: J.W.D.
CHK'D. BY: T.A.T.
PROJECT NO. 2451 - X
DATE: DEC., 2004
SCALE: AS SHOWN

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17480 TODD ALAN TRIPP

WASHINGTON COUNTY LANDFILL
WASHINGTON COUNTY NORTH CAROLINA
LANDFILL C & D PLAN

PROPOSED CDLF CAP SECTION

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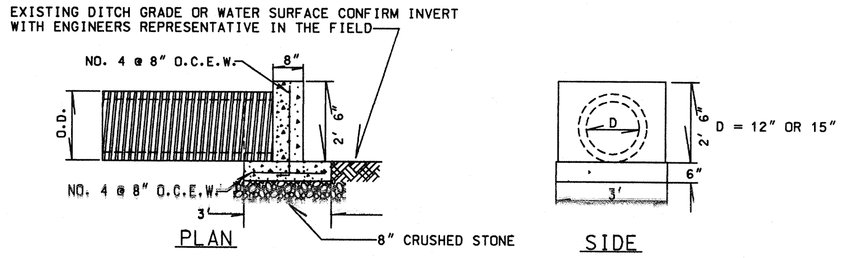
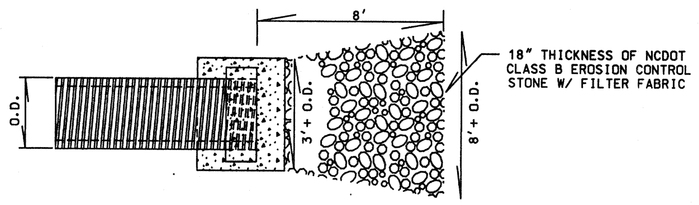


OUTLET OF SLOPE DRAINS



OUTLET PROTECTION

1. ALL SLOPE DRAIN OUTLETS SHALL INCLUDE A CONCRETE ENDWALL.
2. OUTLET PROTECTION SHALL BE REQUIRED FOR ALL SLOPE DRAINS.
3. A FILTER BLANKET OR FILTER FABRIC SHALL BE INSTALLED BETWEEN THE RIP-RAP AND SOIL FOUNDATION.

OUTLET PROTECTION DETAIL FOR PERMANENT SLOPE DRAINS

NOT TO SCALE

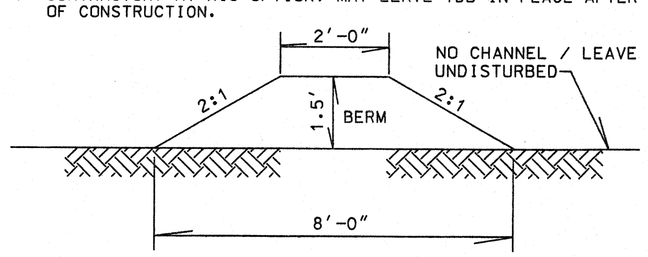
TEMPORARY SEEDING SCHEDULE

SEED: SHOULD DISTURBED AREAS BE INTENDED TO BE LEFT FOR A PERIOD OF MORE THAN 15 DAYS YET REQUIRE FUTURE DISTURBANCE. CONTRACTOR MAY USE THE TEMPORARY SEEDING MIXTURE TO MEET CONTRACT REQUIREMENTS UNTIL SUCH TIME AS ADDITIONAL GRADING AND PERMANENT SEEDING IS PERFORMED.

1. SEPT 1 - APRIL 1
   48 POUNDS/ACRE COMMON RYE GRASS
2. APRIL 1 - SEPT 1
   20 POUNDS/ACRE KOBE LESPEDEZA OR GERMAN MILLET

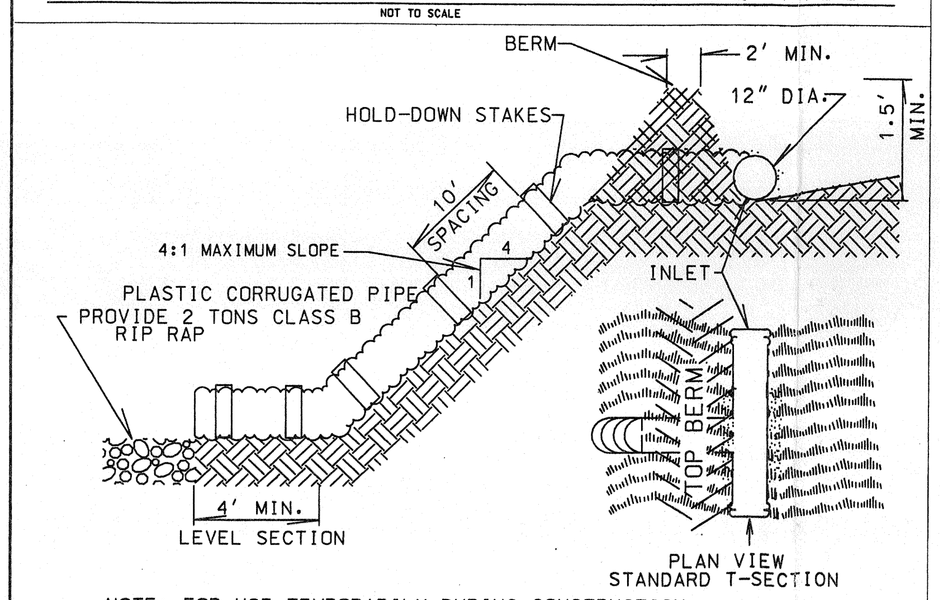
ALL SEEDED AREAS SHALL BE CULTIPACKED TO FIRM SEED BED AND COVER SEED.
SEE THE SPECIFICATIONS FOR PERMANENT SEEDING MIXTURES.

NOTES:
1. REMOVE ALL TREES, BRUSH & STUMPS FROM DIVERSION FOUNDATION.
2. CONSTRUCT BERM TO FULL DIMENSIONS SHOWN - ALLOW 10% FOR SETTLING.
3. COMPACT BERM BY WHEELS OF CONSTRUCTION EQUIPMENT.
4. ENSURE THAT THE TOP OF THE BERM IS ON DESIGN GRADE (EXISTING GRADE PLUS 1.5') OR HIGHER AT ALL POINTS.
5. SEED AND MULCH IMMEDIATELY AFTER CONSTRUCTION.
6. SPACE TDB'S AT APPROXIMATELY 135' INTERVALS ON THE TOP OF FILL PARALLEL WITH CONTOURS. SEE EXAMPLE ON SHEET NO. 6.
7. CONTRACTOR, AT HIS OPTION, MAY LEAVE TDB IN PLACE AFTER COMPLETION OF CONSTRUCTION.



TEMPORARY DIVERSION BERM DETAIL (TDB)

NOT TO SCALE



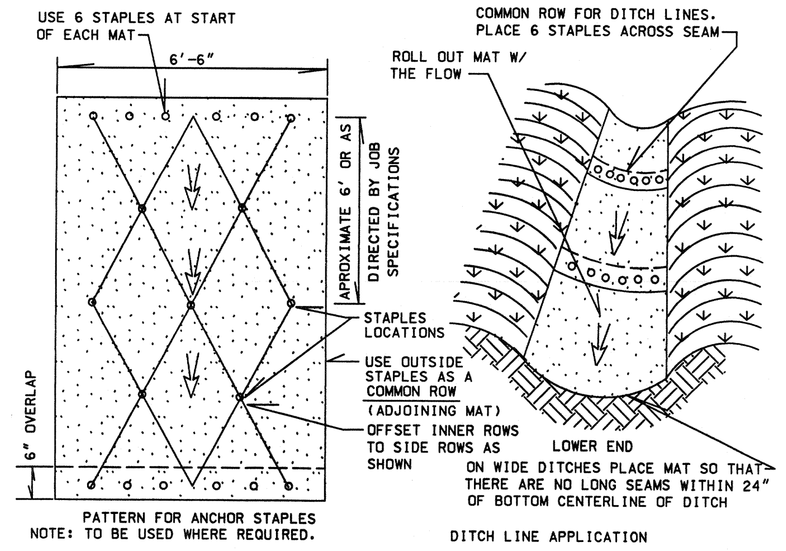
NOTE: FOR USE TEMPORARILY DURING CONSTRUCTION

TEMPORARY SLOPE DRAIN DETAIL

NOT TO SCALE

INSTALLATION RECOMMENDATIONS

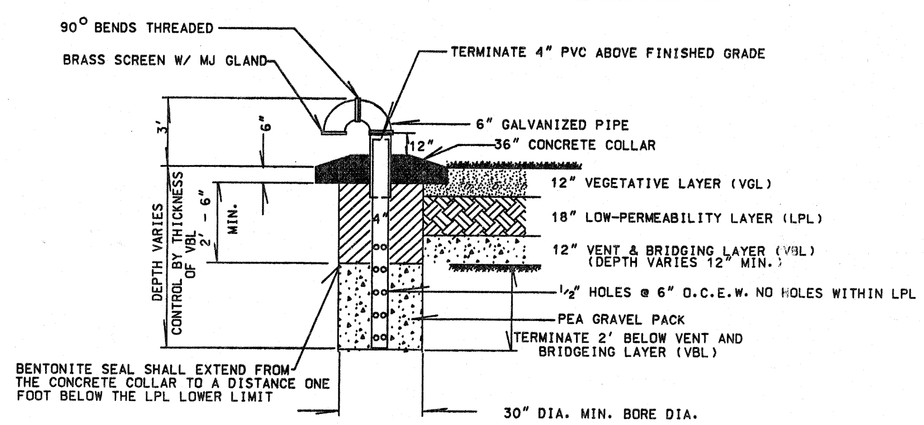
1. PREPARE THE SOIL AND APPLY APPROPRIATE FERTILIZER AND SEED.
2. REMOVE ROLL OF MAT FROM PLASTIC COVER.
3. UNROLL THE MAT WITH NETTING ON TOP AND STRAW FIBERS IN CONTACT WITH THE SOIL.
4. ON SLOPES, PLACE THE MAT VERTICAL TO THE SLOPE AND FOLLOW STAPLING PROCEDURES SHOWN ON DIAGRAM.
5. IN DITCH LINE AREAS, PLACE THE MAT PARALLEL TO THE FLOWLINE OF THE DITCH AND FOLLOW STAPLING PROCEDURES SHOWN ON DIAGRAM.
6. SIDES OF ADJOINING MATS MUST BE BUTTED SNUGLY TOGETHER BEFORE STAPLING.
7. EACH STAPLE MUST ENGAGE A PORTION OF THE PLASTIC NETTING AND BE SET FLUSH WITH THE SOIL SURFACE.
8. TO AVOID DISTURBANCE OF SEED AND FERTILIZER BY WIND OR HEAVY RAIN, MAT SHOULD BE PLACED ON THE TREATED AREA WITHIN 2 TO 4 HOURS.
9. WHERE DIFFICULT SOIL OR GRADE CONDITIONS EXIST, A CLOSER SPACING OF STAPLES MAY BE REQUIRED.



SYNTHETIC MAT PLACEMENT DETAIL

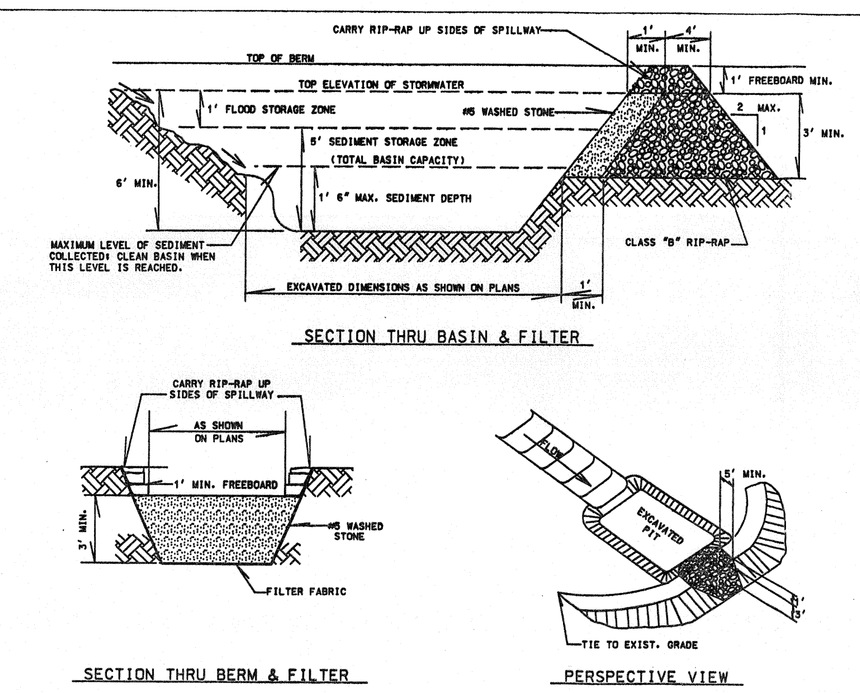
NOT TO SCALE

NOTE: CENTER VENT ON TERRACE BERM, AS SHOWN ON TYPICAL DETAIL FOR MSWLF CAP AND TERRACE. CONTRACTOR SHALL CONSTRUCT WITHOUT PIPE JOINTS BELOW THE GROUND SURFACE.



METHANE GAS VENT DETAIL

NOT TO SCALE



SECTION THRU BASIN & FILTER

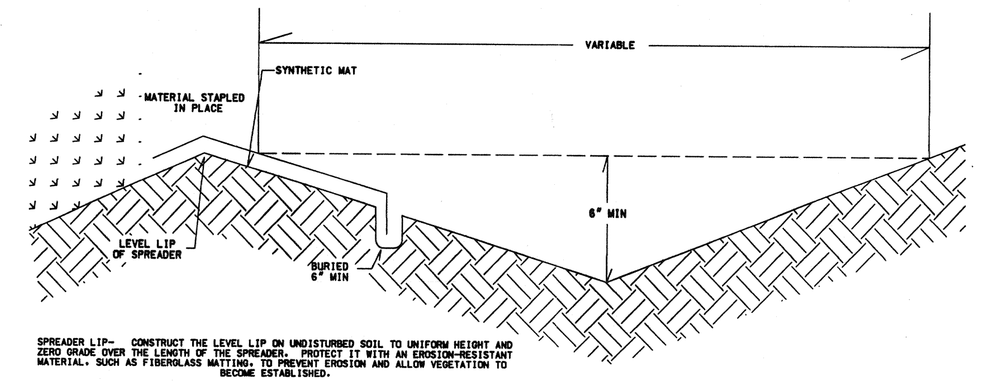
SECTION THRU BERM & FILTER

PERSPECTIVE VIEW

TEMPORARY SEDIMENT TRAP DETAIL

NOT TO SCALE

LEVEL SPREADER CROSS SECTION



SPREADER LIP- CONSTRUCT THE LEVEL LIP ON UNDISTURBED SOIL TO UNIFORM HEIGHT AND ZERO GRADE OVER THE LENGTH OF THE SPREADER. PROTECT IT WITH AN EROSION-RESISTANT MATERIAL, SUCH AS FIBERGLASS MATTING, TO PREVENT EROSION AND ALLOW VEGETATION TO BECOME ESTABLISHED.

OUTLET- THE OUTLET DISPOSAL AREA MUST BE GENERALLY SMOOTH AND WELL-VEGETATED WITH A MAXIMUM SLOPE OF 10%.

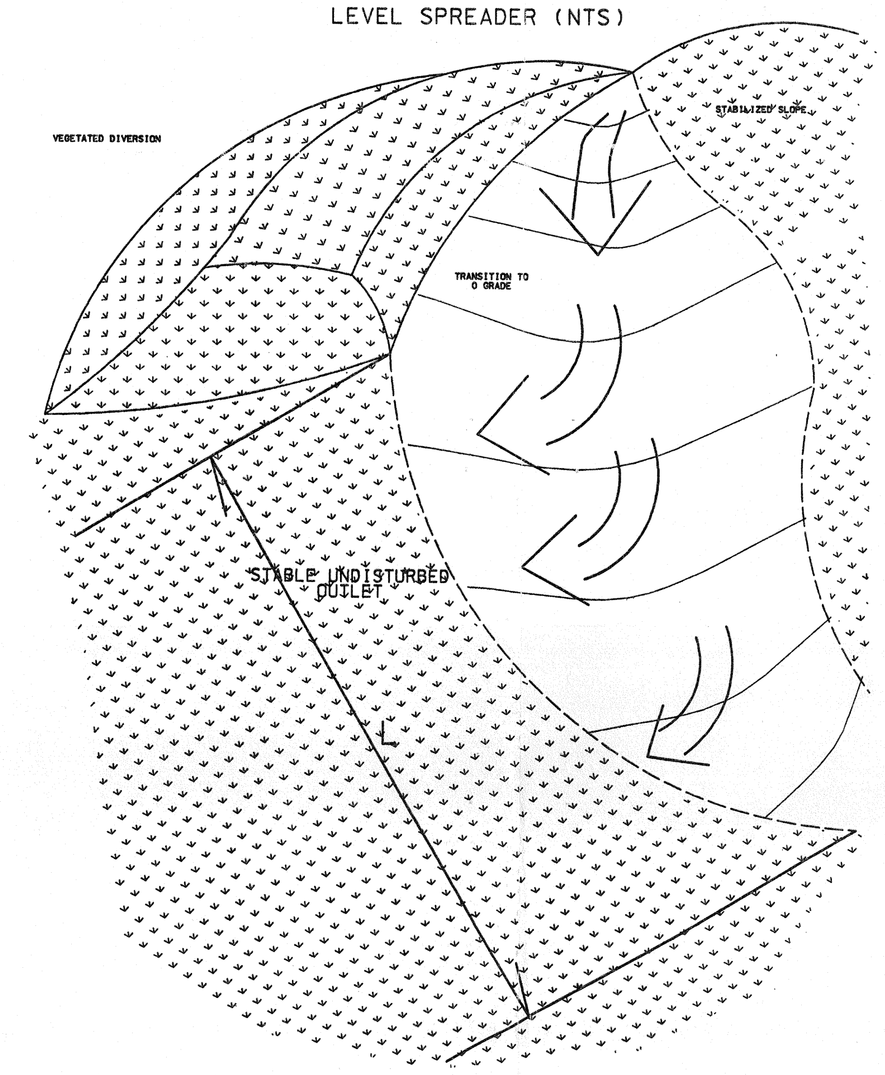
CONSTRUCTION SPECIFICATIONS

1. THE MATTING SHOULD BE A MINIMUM OF 4' WIDE EXTENDING 8" OVER THE LIP AND BURIED 6" DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12" LONG.
2. ENSURE THAT THE SPREADER LIP IS LEVEL FOR UNIFORM SPREADING OF STORM RUNOFF.
3. CONSTRUCT THE LEVEL SPREADER ON UNDISTURBED SOIL (NOT ON FILL)
4. DISPERSE RUNOFF FROM THE SPREADER ACROSS A PROPERLY STABILIZED SLOPE NOT TO EXCEED 10%. MAKE SURE THE SLOPE IS SUFFICIENTLY SMOOTH TO KEEP FLOW FROM CONCENTRATING.
5. IMMEDIATELY AFTER ITS CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE SPREADER

MAINTENANCE

INSPECT LEVEL SPREADERS AFTER EVERY RAINFALL UNTIL VEGETATION IS ESTABLISHED, AND PROMPTLY MAKE NEEDED REPAIRS. AFTER THE AREA HAS BEEN STABILIZED, MAKE PERIODIC INSPECTIONS AND KEEP VEGETATION IN A HEALTHY, VIGOROUS CONDITION.

LEVEL SPREADER (NTS)



REVISIONS

PROJECT NO.	2451-X
DATE:	DEC. 2004
SCALE:	AS SHOWN
DES. BY:	T.A.T.
DWN. BY:	J.W.D.
CHK'D. BY:	T.A.T.

NORTH CAROLINA PROFESSIONAL SEAL 17450 ENGINEER TODD ALAN THREE 10/10/05

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SHEET NO. 3 OF 3 SHEETS

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