4302Map1997 - Batch No.___

7

HARNETT Co.

4302 1997
map

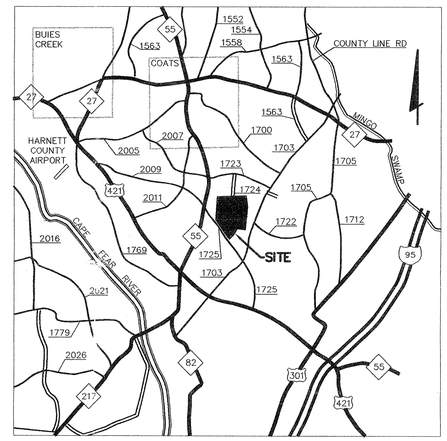
DUNN/ERWIN LANDFILL
LCID LANDFILL

BOARD OF COUNTY COMMISSIONERS

DAN ANDREWS CHAIRMAN
BEATRICE HILL
WALTER E. TITCHNER
TEDDY BYRD
JOSEPH T. BOWDEN

COUNTY MANAGER

NEIL EMORY



VICINITY MAP
SCALE: 1"= 2 MILES

INDEX

COVER SHEET 1
ONE-FOURTH MILE STUDY AREA 2
OVERALL SITE PLAN 3
GRADING AND EROSION CONTROL PLAN 4
CROSS SECTIONS 5
EROSION CONTROL AND SITE DETAILS 6

97

HARNETT COUNTY NORTH CAROLINA

AUGUST 1997

Engineer:
McKim and Creed
5625 Dillard Road
Suite 117
Cary, North Carolina 27511

DESIGNED	BSL
DRAWN	BSL
CHECKED	T.W.
PROJ. ENG.	T.W.

NORTH CAROLINA PROFESSIONAL SEAL 22202 ENGINEER THOMAS J. WAINWRIGHT

P.E.

OCT 08 1997 DATE

APPROVED
DIVISION OF SOLID WASTE MANAGEMENT
DATE _____ BY _____

McKIM&CREED

DATE:	08/06/97
MCE PROJ. #	3040015
DWG FILE #	780P7A01

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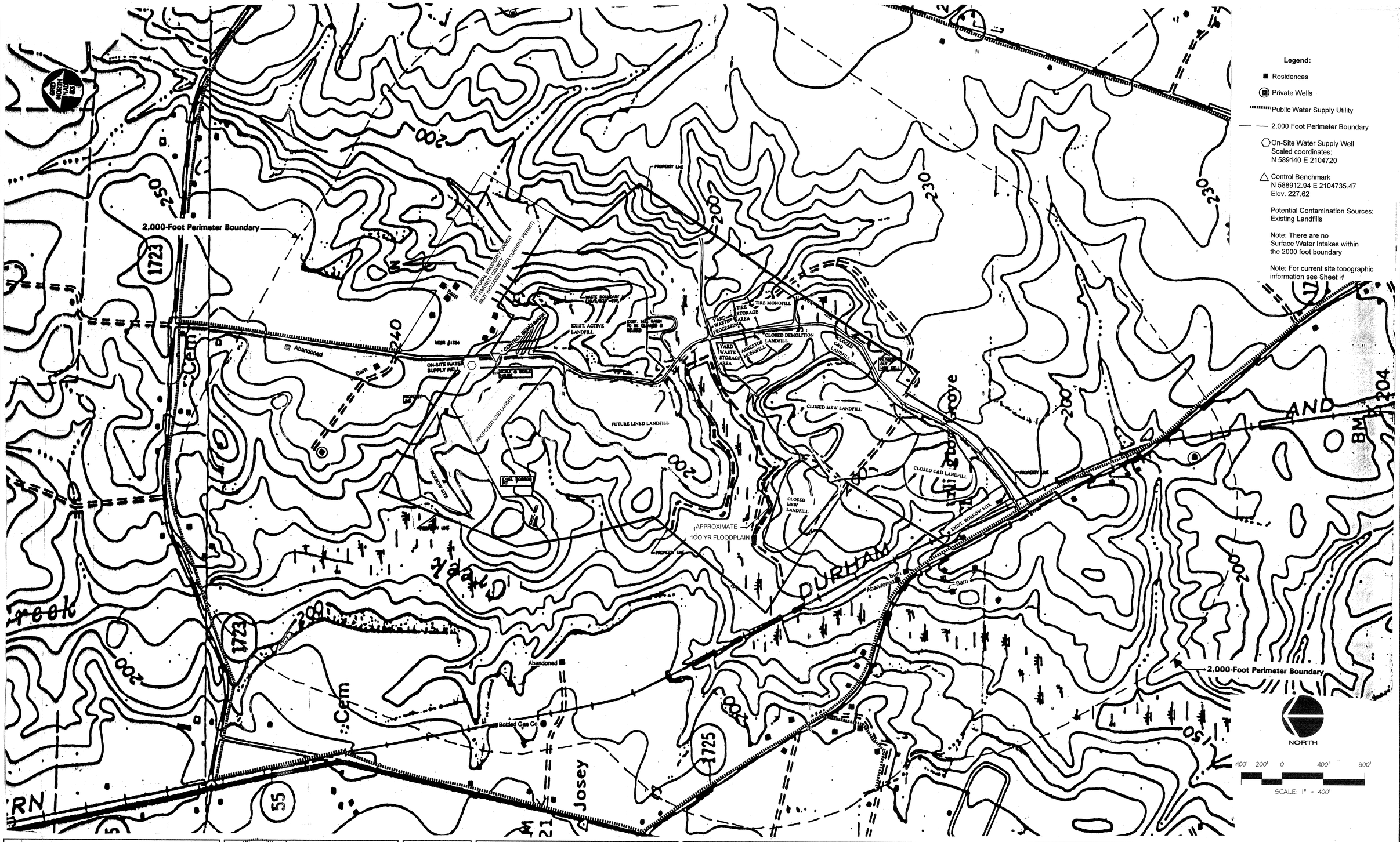

REV.NO.	DESCRIPTIONS	DATE
	REVISIONS	

NORTH CAROLINA PROFESSIONAL SEAL 22202 ENGINEER THOMAS J. WAINWRIGHT

OCT 08 1997 DATE

DESIGNED	B.S.L.
DRAWN	B.S.L.
CHECKED	C.T.C.
PROJ. ENG.	T.W.

McKIM&CREED
ENGINEERS • PLANNERS • SURVEYORS
5625 Dillard Rd. Suite 117, Bldg. 1
Cary, North Carolina 27511

LCID LANDFILL
HARNETT COUNTY
DUNN/ERWIN LANDFILL

ONE-FOURTH MILE
STUDY AREA

DATE:	1 AUGUST 97
MCE PROJ. #	3040015.0R
DWG FILE #	780P7502

SCALE
HORIZONTAL: 1"=400'
VERTICAL: NA

SHEET NO. 2

PROPERTY LINE

EXISTING PROPERTY LINE

50' WETLANDS SETBACK

PROPOSED GRAVEL ROAD

100' SETBACK

CONTROL BENCHMARK
N 589140 E 21047220

EXISTING FRAN DEBRIS

PROPOSED LCID BOUNDARY

PROPOSED LCID LANDFILL

APPROXIMATE EXISTING FRAN DEBRIS BOUNDARY

EXISTING SEDIMENT POND

PROPOSED TRANSFER STATION FACILITY

APPROXIMATE WASTE BOUNDARY

EXISTING MSW LANDFILL

LEGEND

WETLANDS

NORTH

100' 50' 0 100' 200'

SCALE: 1" = 100'

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5625 Dillard Rd. Suite 117, Bldg. 1
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LCID LANDFILL
HARNETT COUNTY
DUNN/ERWIN LANDFILL

OVERALL SITE PLAN

DATE:	06 AUGUST 97
MCE PROJ. #	30400115.OR
DWG FILE #	780P7501

SCALE
HORIZONTAL: 1"=100'
VERTICAL: NA

SHEET NO. 3

LEGEND

WETLANDS

NORTH

50' 25' 0 50' 100'

SCALE: 1" = 50'

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NORTH CAROLINA PROFESSIONAL SEAL 22202 ENGINEER THOMAS J. WAWWRICH

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ENGINEERS • PLANNERS • SURVEYORS
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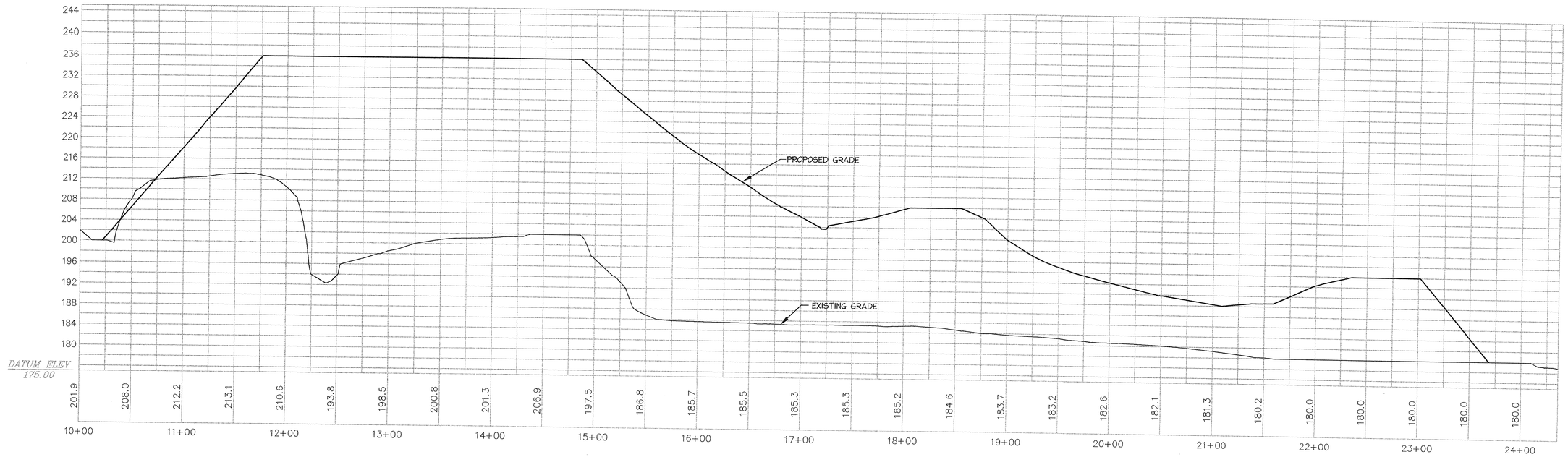
LCID LANDFILL
HARNETT COUNTY
DUNN/ERWIN LANDFILL

GRADING AND EROSION CONTROL PLAN

DATE:	06 AUGUST 97
MCE PROJ. #	3040015.OR
DWG FILE #	780P7503

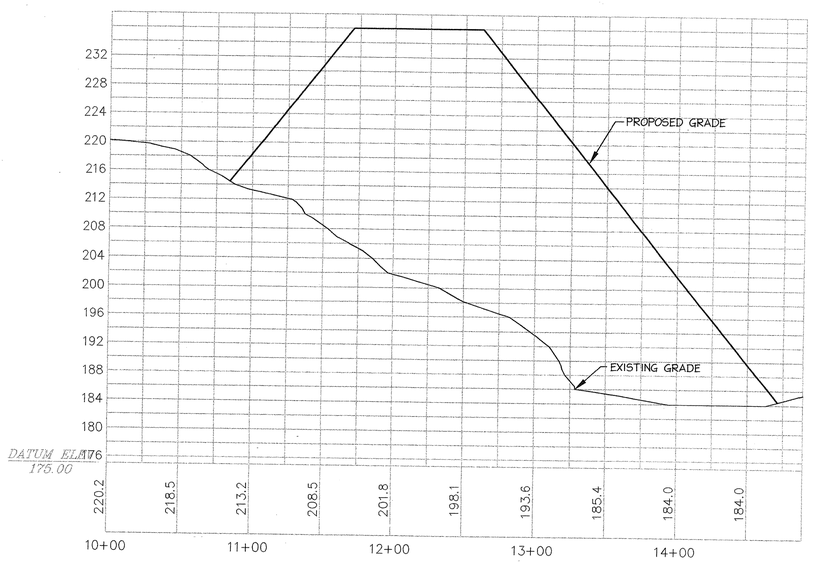
SCALE
HORIZONTAL: 1"=50'
VERTICAL: NA

SHEET NO. 4 of:



SECTION B-B'

1" = 10' VERT.



SECTION C-C'

1" = 10' VERT.

50' 25' 0 50' 100'

SCALE: 1" = 50'

FOR REVIEW ONLY
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REVISIONS

NORTH CAROLINA PROFESSIONAL SEAL 22202 ENGINEER THOMAS J. WAINWRIGHT

OCT 08 1997 DATE

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LCID LANDFILL
HARNETT COUNTY
DUNN/ERWIN LANDFILL

CROSS SECTIONS

DATE:	06 AUGUST 97
MCE PROJ. #	3040015.0R
DWG FILE #	780P7R01

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

SHEET NO. 5

Grading Notes

1. Initiate erosion control sequence before beginning clearing and grading operations.
2. Clear areas to be graded of all vegetation. Protect vegetation beyond grading limits.
3. Strip topsoil to full depth in areas to be graded and stockpile.
4. All areas are to be graded so that no areas of standing water occur.
5. Proposed spot elevations are shown at finished grade.
6. Operator shall field verify existing topography in relation to the proposed grades to ensure drainage in the directions indicated on the plan.

Seedbed Preparation

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW#).
5. CONTINUE TILLAGE UNTIL A WELL - PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60% DAMAGED REESTABLISHED FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

APPLY: AGRICULTURAL LIMESTONE - 2 TONS/ACRE OR 3 TONS/ACRE IN CLAY SOILS
FERTILIZER - 1000 LBS/ACRE (10-10-10)
SUPERPHOSPHATE - 500 LBS/ACRE (20%)
MULCH - 2 TONS/ACRE (SMALL GRAIN STRAW)
ANCHOR - ASPHALT EMULSION AT 450 GAL./ACRE

Erosion Control Notes

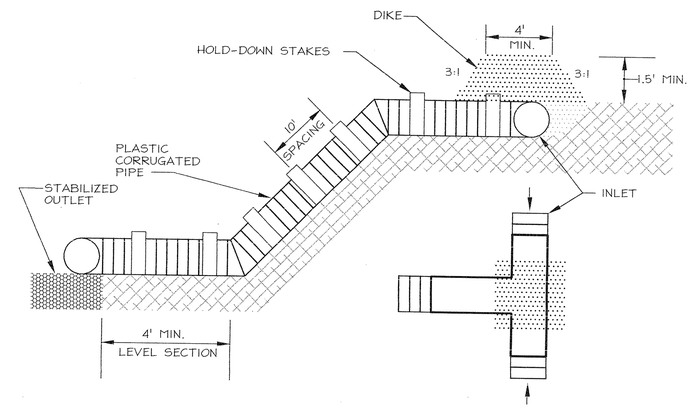
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
2. SUFFICIENT EROSION CONTROL PRACTICES MUST BE INSTALLED AND MAINTAINED TO RETAIN SEDIMENT WITHIN THE BOUNDARIES OF THE SITE. ALL DISTURBED AREAS SHALL BE NONEROSIVE AND STABLE WITHIN THIRTY (30) WORKING DAYS OR 120 CALENDAR DAYS AFTER COMPLETION OF THE ACTIVITY, WHICHEVER IS SHORTER.
3. LIME AND FERTILIZER:
   LIME – APPLY GROUND AGRICULTURAL LIMESTONE 2 TONS/ACRE.
   FERTILIZER – APPLY 10–10–10 AT 1000#/ACRE.
   INCORPORATE BOTH LIME AND FERTILIZER INTO TOP 4" TO 6" OF SOIL.
4. SEEDING: TEMPORARY SEEDING MIXTURES
   SUMMER – GERMAN MILLET 40#/ACRE
   WINTER – RYE GRAIN 120#/ACRE
   NOTE: OVERSEED WINTER PLANTINGS OF RYE WITH KOBE LESPEDEZA IN MARCH IF GRADING NOT COMPLETE.
5. MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF PRODUCING RAINFALL EVENT. NEEDED REPAIRS WILL BE MADE IMMEDIATELY. TOPDRESS TEMPORARY SEEDING WITH 50#/ACRE NITROGEN IN MARCH. IF COVER IS NEEDED THROUGH THE FOLLOWING SUMMER. OVERSEED WITH 50#/ACRE KOBE LESPEDEZA.
6. MAXIMUM GRADED SLOPE SHALL NOT EXCEED THREE (3) TO ONE (1).
7. TOTAL DISTURBED AREA IS 9.3 ACRES.

SD No.	Pipe dia.	Velocity Out	Length	DA
SD #1	15"	10.3	140'	0.7 ac.
SD #2	24"	14.7	88'	2.9 ac.
SD #3	18"	10.6	84'	1.0 ac.
SD #4	12"	7.8	60'	0.4 ac.
SD #5	18"	11.0	40'	0.7 ac.
SD #6	18"	13.6	60'	1.6 ac.

SLOPE DRAIN SCHEDULE

NOTES:

1. SLOPE INLET T-SECTION UNDER THE DIKE TOWARD OUTLET END.
2. HAND TAMP THE SOIL UNDER AND AROUND ENTRANCE SECTIONS IN LIFTS NOT TO EXCEED 6".
3. ENSURE THAT ALL SLOPE DRAIN CONNECTIONS ARE WATER TIGHT.
4. ADDINLET T-SECTION AT TOP AND BOTTOM OF SLOPE.



X-SECTION

STANDARD T-SECTION
PLAN VIEW

SLOPE DRAIN DETAIL
N.T.S.

TYPE "A"
SEEDING SCHEDULE FOR
STABILIZATION GRASS

DATE	TYPE	PLANTING RATE
MAR. 15 - MAY 15	PERRENNIAL SEED MIX N.C. WILDLIFE RESOURCES COMMISSION	10 LBS/ACRE
MAR. 1 - JUN. 1	SERICEA LESPEDEZA (SCARIFIED) &	50 LBS/ACRE
(MAR. 1 - APR. 15)	ADD TALL FESCUE	120 LBS/ACRE
(MAR. 1 - JUN. 30)	OR ADD WEEPING LOVEGRASS	10 LBS/ACRE
(MAR. 1 - JUN. 30)	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN. 1 - SEP 1	*** TALL FESCUE AND	120 LBS/ACRE
	*** BROWNTOP MILLET	35 LBS/ACRE
	*** OR SORGHUM - SUDAN HYBRIDS	30 LBS/ACRE
SEP. 1 - MAR. 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE 120 LBS/ACRE
(NOV. 1 - MAR 1)	AND ABRUZZI RYE	25 LBS/ACRE

TYPE "B"
DEPARTMENT OF TRANSPORTATION
SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)

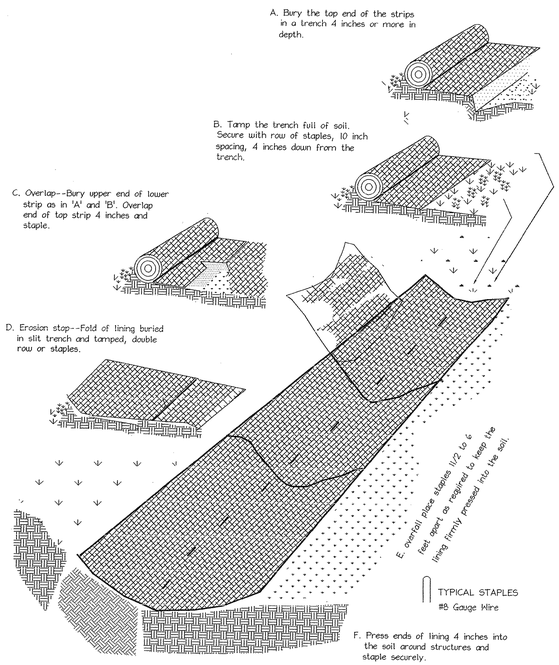
DATE	TYPE	PLANTING RATE
AUG. 15 - NOV. 1	TALL FESCUE	300 LBS/ACRE
NOV. 1 - MAR. 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE 25 LBS/ACRE
MAR. 1 - APR. 15	TALL FESCUE	300 LBS/ACRE
APR. 15 - JUN. 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL. 1 - AUG. 15	TALL FESCUE AND	120 LBS/ACRE
	*** BROWNTOP MILLET	35 LBS/ACRE
	*** OR SORGHUM - SUDAN HYBRIDS	30 LBS/ACRE

SLOPES (3:1 TO 2:1)

MAR. 1 - JUN. 1	SERICEA LESPEDEZA (SCARIFIED) &	50 LBS/ACRE
(MAR. 1 - APR. 15)	ADD TALL FESCUE	120 LBS/ACRE
(MAR. 1 - JUN. 30)	OR ADD WEEPING LOVERGRASS	10 LBS/ACRE
(MAR. 1 - JUN. 30)	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN. 1 - SEP. 1	*** TALL FESCUE AND	120 LBS/ACRE
	*** BROWNTOP MILLET	35 LBS/ACRE
	*** OR SORGHUM - SUDAN HYBRIDS	30 LBS/ACRE
SEP. 1 - MAR. 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE 120 LBS/ACRE
NOV. 1 - MAR. 1	ADD ABRUZZI RYE	25 LBS/ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS.

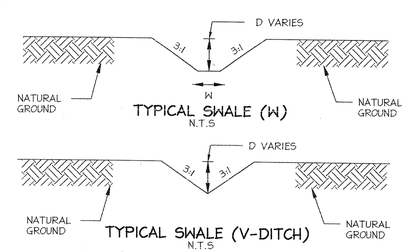
*** TEMPORARY -- RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.



TYPICAL STRAW WITH NET LINING DETAIL
NOT TO SCALE

SWALE #	LENGTH	SLOPE	BOTTOM WIDTH (W)	SIDE SLOPE	DEPTH (D)	TEMPORARY LINER
1	270	5.6	2	3:1	1.5	STRAW W\ NET- GRASS
2	168	1.2	V-DITCH	3:1	2.0	STRAW W\ NET- GRASS
2A	210	5.7	4	3:1	1.5	STRAW W\ NET- GRASS
3	781	1.0	2	3:1	2.0	STRAW W\ NET- GRASS
4	578	4.0	2	3:1	1.5	STRAW W\ NET- GRASS
5	360	1.1	2	3:1	1.5	STRAW W\ NET- GRASS
6	180	1.0	V-DITCH	3:1	1.5	STRAW W\ NET- GRASS
7	180	1.0	V-DITCH	3:1	1.5	STRAW W\ NET- GRASS

OUTLET CHANNEL
NOT TO SCALE

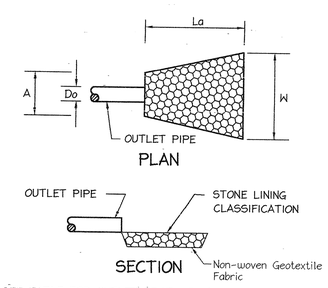


TYPICAL SWALE (W)
N.T.S

TYPICAL SWALE (V-DITCH)
N.T.S

Outlet No.	Pipe dia.	Velocity Out	Length	Width	Class of Stone	Thickness
SD #1	15"	10.3	8'	4'	I	24"
SD #2	24"	14.7	16'	6'	I	24"
SD #3	18"	10.6	9'	5'	I	24"
SD #4	12"	7.8	6'	3'	B	22"
SD #5	18"	11.0	9'	5'	B	22"
SD #6	18"	13.6	9.5'	5'	I	24"

OUTLET PROTECTION
NOT TO SCALE



SEE TABLE FOR OUTLET PROTECTION APRON DIMENSIONS.

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NORTH CAROLINA PROFESSIONAL SEAL 22202 ENGINEER THOMAS J. WAINWRIGHT

OCT 08 1997 DATE

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HARNETT COUNTY
DUNN/ERWIN LANDFILL

EROSION CONTROL AND
SITE DETAILS

DATE:	06 AUGUST 97
MCE PROJ. #	3040015.0R
DWG FILE #	780PTD01

SCALE
HORIZONTAL: NA
VERTICAL: NA

SHEET NO. 6 of: