

EROSION CONTROL NOTES

SEEDING SHALL BE ACCOMPANIED BY MULCHING TO ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF EXCAVATION OR PIPE AND PILING WORKING IN ACCORDANCE WITH DISTRICT MANUAL AND/OR AS SPECIFIED BY THE GENERAL SUPERVISOR AND LAND DEVELOPMENT MANUAL.

TEMPORARY SEEDING SHALL BE APPLIED WITHIN ALL NEW ROADWAY AREAS, UTILITY EMBANKMENTS AND/OR AREAS REQUIRING ONLY TEMPORARY SEEDING. SEEDING SHALL BE INSTALLED AS SOON AS GRADING IS COMPLETED AND READY FOR RELEASE. NO RELEASE BEYOND SEEDING SHALL BE MADE FOR ROADWORK UNTIL EROSION CONTROL IS IN PLACE TO PROTECT THE NEW DRIVE.

CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE INCLUDED IN THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS.

APPROPRIATE EROSION CONTROL METHODS MUST BE IN PLACE PRIOR TO ANY EARTHWORK COMMENCING. DETENTION POND, SEDIMENT POND, AND PERIMETER SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND BEFORE ANY EARTHWORK BEGINS. EROSION CONTROL METHODS SHALL CONTRIBUTE TO FUNCTION UNTIL DISTURBED AREAS ARE RE-ESTABLISHED.

DISTURBED AREAS THAT WILL REMAIN UNOCCUPIED FOR A PERIOD OF THIRTY (30) DAYS OR LONGER SHALL BE SEEDING AND MULCHING IMMEDIATELY UPON COMPLETION OF GRADING. WITHIN SEVEN (7) DAYS AFTER EARTH MOVING CEASES, PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL MAINTENANCE AND INSPECTIONS ON A WEEKLY BASIS AND AFTER ALL RAINFALL EXCEEDS 1/2" PER 24 HOUR. ALL MEASURES SHALL BE REMOVED AFTER THE SITE IS STABILIZED AND/OR AS DIRECTED BY SUPERVISOR AGENCIES.
2. THE CONTRACTOR SHALL LEAVE THE SURFACE AREA OF EXPOSED EARTH UNPROTECTED UNLESS PROTECTED BY EROSION CONTROL, MULCHING, AND FILL OPERATIONS AND PROTECT IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT COMPACTION OF ADJACENT STREAMS ON OTHER COURSES, LAYERS, POND, WETLANDS OR OTHER AREAS OF WATER INFILTRATION. LIMITS TO CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING AND/OR FENCING.
3. THE WORK SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGHOUT LINE OF SILT FENCES, SLOPE PROTECTION, SEDIMENT BASINS, MULCHING, SEEDING, FILTER FABRICS, BATCH LINGS AND OTHER EROSION CONTROL DEVICES OR METHODS.
4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. TEMPORARY MEASURES SHALL BE USED WHEN AND AS DIRECTED FOREWARD DURING THE DESIGN STAGE, THAT ARE DEVELOPED PRIOR TO INSTALLATION OF PERMANENT CONTROL FEATURES OR THAT ARE NEEDED TEMPORARILY TO CONTROL EROSION THAT DEVELOPS DURING CONSTRUCTION PRACTICES.
5. EXISTING VEGETATIVE GROWTH SHALL REMAIN UNDISTURBED AS LONG AS POSSIBLE THE CONTRACTOR SHALL REED AND MULCH ALL AREAS DISTURBED BY THE CONSTRUCTION AND WHICH ARE EXPOSED FOR MORE THAN 30 DAYS. SEEDS ARE TO BE INSPECTED, AND AREAS WHERE THE SEED HAS NOT PRODUCED A GOOD COVER SHALL BE RESEED AS NECESSARY BY THE CONTRACTOR. STABILIZE AREAS WITH MULCH WHICH CONDITIONS PROHIBIT SEEDING. STABILIZE AREAS WITHIN 90 FEET OF ANY STREAM OR WETLAND WITHIN 3 DAYS ON ALL INACTIVE DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR FOURTEEN (14) DAYS OR LONGER.
6. TEMPORARY EROSION CONTROL FEATURES SHALL BE ACCEPTABLY MAINTAINED AND SHALL SUBSEQUENTLY BE REMOVED OR REPLACED WHEN DIRECTED BY THE ENGINEER. TEMPORARY AND PERMANENT EROSION CONTROL FEATURES SHALL BE CHECKED AFTER EACH MEASURABLE RAINFALL AND BE RE-ESTABLISHED AS NECESSARY. EROSION CONTROL MEASURES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE SITE.
7. IN THE EVENT THAT TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED DUE TO THE CONTRACTOR'S NEGLIGENCE, CARELESSNESS, OR FAILURE TO INSTALL PERMANENT CONTROLS AS A PART OF THE WORK, SHALL BE PERFORMED BY THE CONTRACTOR AT HIS EXPENSE.
8. ADDITIONAL EROSION CONTROLS MAY BE MANDATED BY THE LAKE COUNTY SOIL.
9. ROUTINE INSPECTION WILL BE CONDUCTED ON ALL EROSION CONTROL PRACTICES FOR THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING ALL DEFICIENCIES REVEALED BY THE INSPECTIONS.
10. THESE NOTES AND DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE O.R.A. MANUAL, RAINFALL AND LAND DEVELOPMENT MANUAL.

SEEDING SPECIFICATIONS

1. TEMPORARY SEEDING AND MULCHING SHALL BE PLACED ON ALL DISTURBED AREAS THAT ARE TO REMAIN OPEN FOR THIRTY (30) DAYS OR LONGER WITHIN SEVEN (7) DAYS.
2. TOPSOIL STOCKPILES SHALL RECEIVE TEMPORARY SEEDING AND MULCHING AS SOON AS STOCKPIILING OPERATIONS ARE COMPLETED OR A SILT FENCE SHALL BE INSTALLED ALONG AND 5' IN FROM THE TOE OF THE STOCKPILE. TOPSOIL SHALL BE REPLACED AS QUICKLY AS CONSTRUCTION PERMITS.
3. SEEDING AND MULCHING IN DITCHES AND SWALES WITH STEEP GRADIENTS OR A FLOW GREATER THAN 3.5 FPS SHALL BE SECURED WITH JUTE OR EROSION MATING.

SEED TYPE

SELECT A SPECIES OF MOISTURE APPROPRIATE FOR THE SITE.

TEMPORARY SEEDING

SEED SPECIES & RATES

	PER 1000 SF	PTH ACR
A. MARCH 1 TO AUGUST 15		
1) OATS OR ANNUAL RYEGRASS	3 lb.	131 lb.
2) PERENNIAL RYEGRASS	3 lb.	131 lb.
3) TALL FESCUE	1 lb.	43 lb.
B. AUGUST 16 TO NOVEMBER 1		
1) GENERAL RYE OR WHEAT	3 lb.	131 lb.
2) 50/50 MIX PERENNIAL ANNUAL RYEGRASS	3-3.6 lb.	262 lb.
3) TALL FESCUE	1 lb.	43 lb.
C. AFTER NOVEMBER (SEE DORMANT SEEDING METHODS BELOW)		
1) STRAW OR HAY MULCH	2-3 BALE	2-3 TONS

SEED BED PREPARATION

1. WORK THE LIME AND FERTILIZER (12-12-12 ANALYSIS, OR EQUIVALENT) INTO THE SOIL TO A DEPTH OF TWO INCHES. ON SLOPING AREAS, THE FINAL OPERATION SHALL BE ON THE CONTOUR.

INSTALLATION

1. APPLY SEED UNIFORMLY WITH A CYCLIC SEEDER, DRILL, CULTIPACKER SEEDER, OR MICRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER). ON A FINAL, MOST SEEDING, COVER TO A DEPTH OF 1/4" TO 1/2", AND FIRM SEEDING WHERE FEASIBLE.

MULCHING

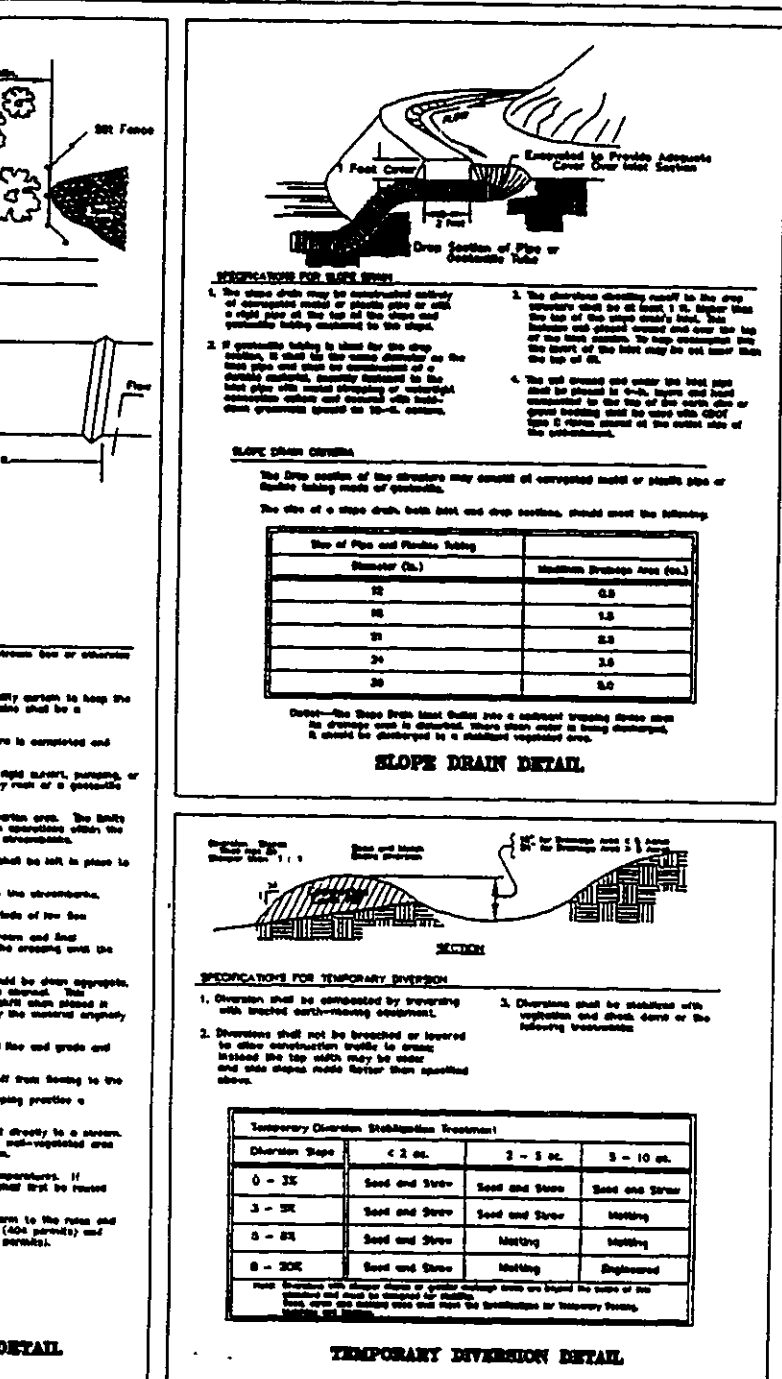
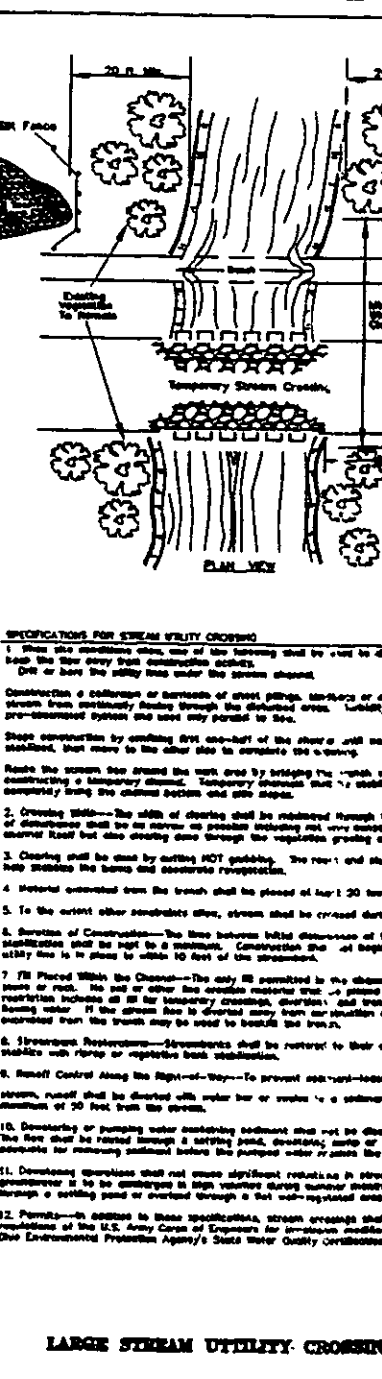
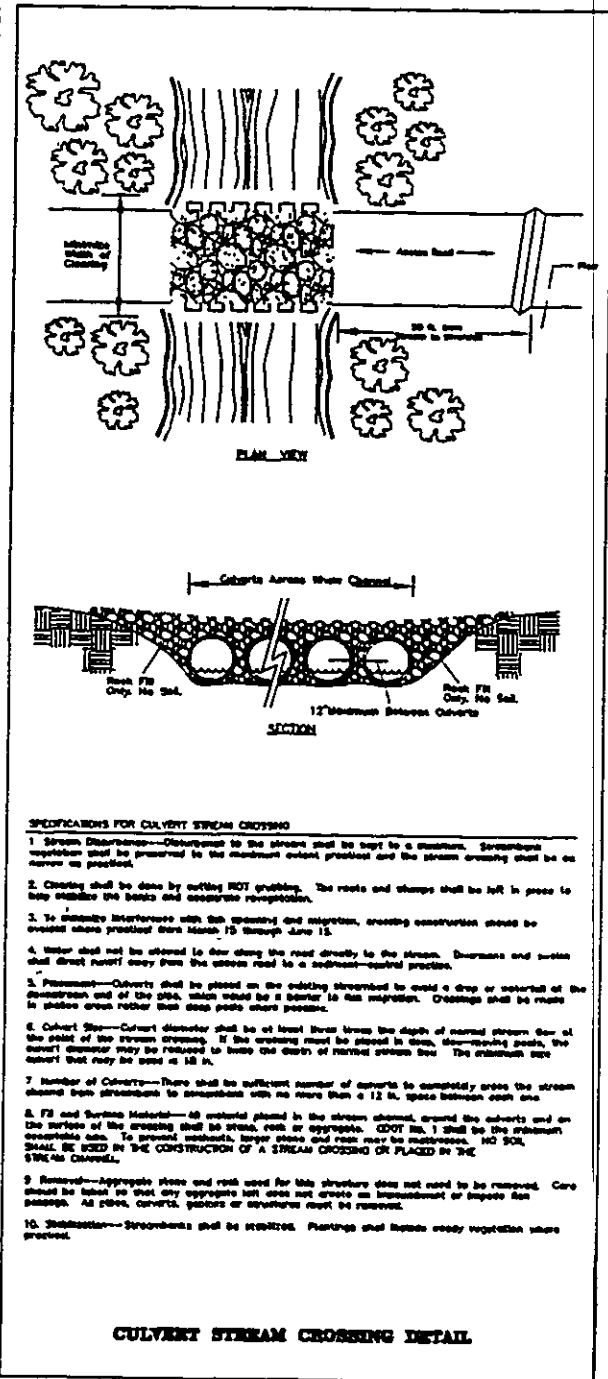
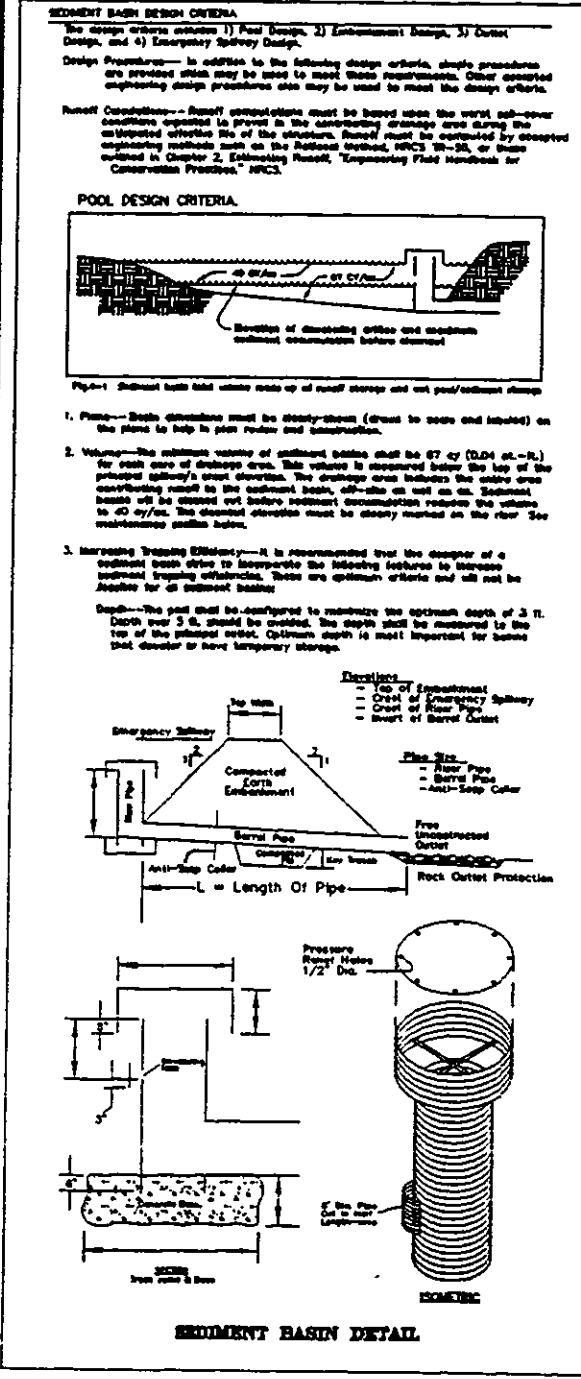
1. MULCH SHALL BE APPLIED TO PROTECT THE SOIL AND PROVIDE A BETTER ENVIRONMENT FOR PLANT GROWTH CONSISTING OF SMALL GRASS STRAW (PREFERABLE WHEAT OR RYE) AND SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE OR 100 LB. (TWO OR THREE BALES) PER 1000 SF.

MAINTENANCE

1. IRRIGATION - IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH UNTIL THEY ARE FINALLY ESTABLISHED.
2. REPAIRS - INSPECT ALL SEEDING AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, RESEEDINGS, AND RE-MULCHING WITHIN THE PLANTING SEASON, IF POSSIBLE.

DORMANT SEEDING

1. SEEDING SHALL NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 30.
2. FROM OCTOBER 1 THROUGH NOVEMBER 30, PREPARE THE SEEDING, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 30, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE, INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
3. FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.



REV. NO.	DATE	BY	CHKD

Ralph W. Kempke Surveying
Professional Land Surveyor

LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT

DATE - _____
SCALE: HOR. _____
VERT. _____
FILENAME _____
CHKD BY _____
F.B. No. _____

STANDARD DETAILS

SHEET NO. **2/2**

CONTRACT NO. _____