

GRADING NOTES

- The Contractor shall insure that all areas where grading has occurred have a minimum of 6 inches of topsoil (compacted depth). The top 6 inches of topsoil shall be free of metal, wood, plastic, paper products, rocks or stones larger than 1.0 inches or any other material declared unsuitable by the Golf Course Architect. The Contractor shall be responsible for determining the method to be used to clean the topsoil of foreign material and rock.
- The teeing surface shall consist of a minimum of 4" in place USGA specification greens mix. All greens mix material shall be approved by the Golf Course Architect.
- All foreign material inclusive of steel, metal, concrete, asphalt, plastic, stumps, roots, and organic matter, or any other material which can not be legally burned or otherwise disposed of on site by the Contractor shall be removed from the site at the Contractor's expense and disposed of in accordance to County regulations and codes.
- The bridges to be constructed will be installed by the owner. The contractor shall be responsible for grading at the bridge abutments as necessary for the bridge installations.
- The retaining walls to be constructed will be installed by the owner. The contractor shall be responsible for grading as necessary to accommodate the retaining wall construction.
- The tees shall be sloped to drain at 1% in the direction shown on the plans.

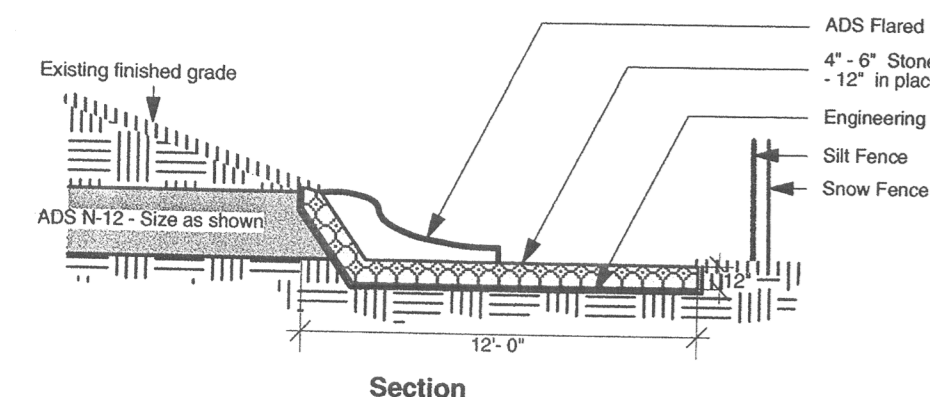
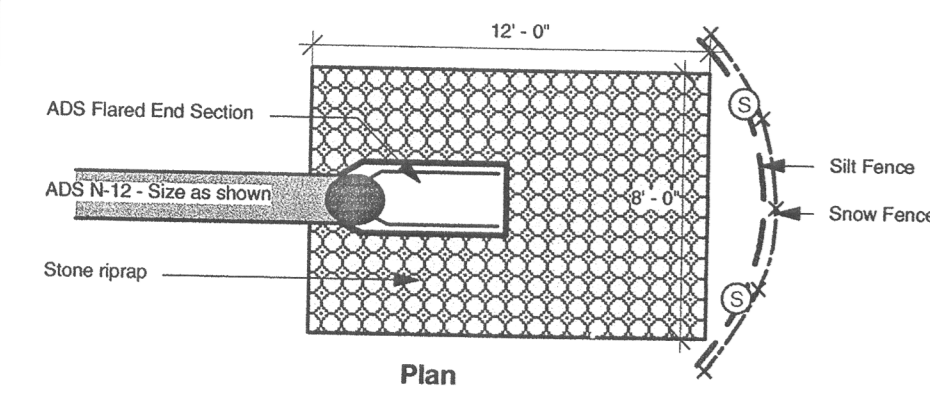
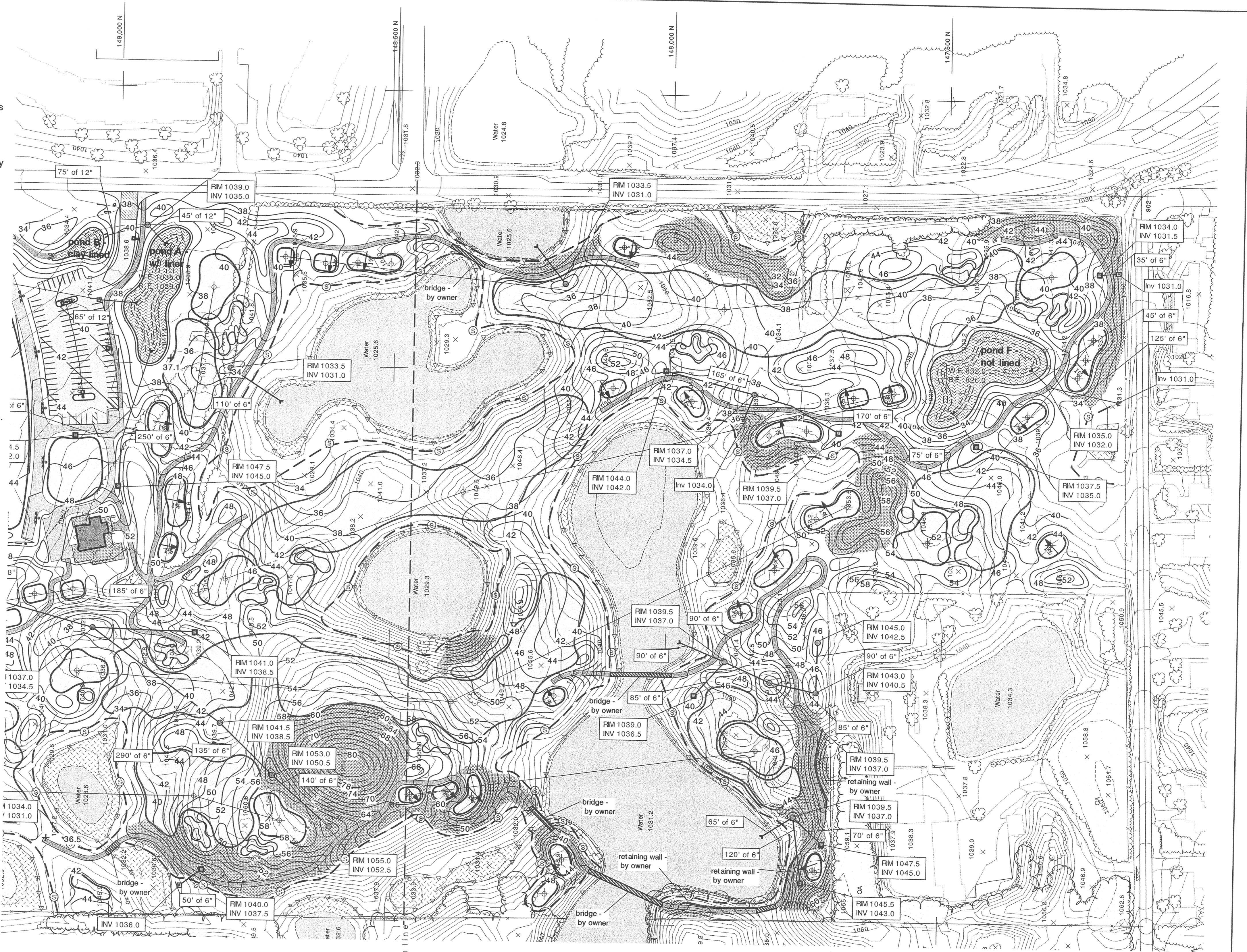
DRAINAGE NOTES:

- All 6, 8, 12, 15, 18 and 24 inch pipe shall be dual wall corrugated polyethylene pipe as manufactured by ADS, Hancor or Prinsco, Inc., or approved equal. All pipes shall be installed with manufacturers' approved gasket assemblies. Pipe shall be installed to the grade and slope as indicated on the drawings.
- All 4 inch perforated and non-perforated greens, bunker or other drain tube, shall be dual wall corrugated polyethylene pipe as manufactured by ADS, Hancor or Prinsco, Inc., or approved equal. Perforated pipe sections shall be installed with approved gravel backfill as shown in the details.
- 24 and 36 inch catch basins or control structures shall be reinforced pre cast concrete structures. Basins shall be set to grade and leveled on poured in place on 4" minimum concrete floor. All basins and structures shall be installed with eccentric rings as required and an approved cast iron or poly grate and frame designed for light duty traffic.
- 12" catch basins shall be as indicated on the detail, manufactured by Nyloplast, 3130 Verona Avenue, Buford, Georgia, 30518, phone 404) 932-2443.
- Areas around all catch basins, manholes and control structures shall be graded to have positive drainage to the center of the basin. All pipe inlets into the structures shall terminate flush with the inside of the structure and be grouted or glued to provide a water tight seal between the surfaces.
- All trench bottoms shall be compacted per specifications. Pipe shall be installed using normal bedding methods (rounded bottom). Fill shall be adequately compacted under the haunches of the pipe and then compacted in 6 to 12 inch lifts to finish grade. Contractor will be responsible for all settlement for a period of one year from date of project acceptance.
- All above grade 12" pipe inlets and outlets shall be fitted with a flared end section and grouted stone rip-rap erosion blanket as shown on the detail.
- The contractor shall be responsible to take measures to insure that drain pipe outlets into the existing wetlands / ponds are secured 3 feet below the normal water elevation.

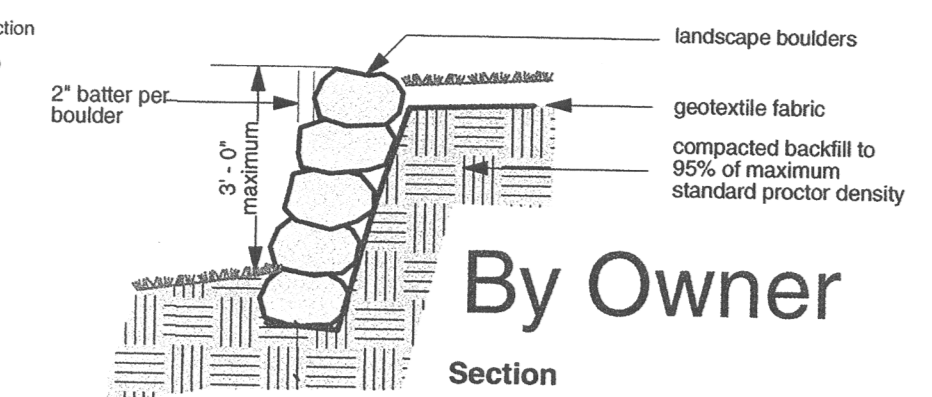
EROSION CONTROL NOTES

- The contractor shall install erosion control fencing as shown on the plans prior to any construction within the area. Silt fencing and installation shall conform to Best Management Practices for Minnesota.
- Erosion control fabric to be installed shall be DS 75 as manufactured by North American Green, Evansville, IN, 47711 and as distributed by Brock White Company, 2575 Kasota Avenue, St. Paul, MN 55108; 800.880.3210 or approved equal.
- Fabric shall be installed around all pond edges to a minimum width of 13 feet and on disturbed areas as shown on the plans or as directed by the Golf Course Architect up to the allowance amount.
- The contractor shall inspect all erosion and sediment control practices for stability and operation following every runoff-producing rainfall but in no case less than once every week. Any needed repairs will be made immediately to maintain all practices as designed.
- Sediment basins shall be cleaned out when the level of sediment reaches 2.0 ft below the top of the riser. Gravel will be cleaned or replaced when the sediment pool no longer drains properly.
- Sediment shall be removed from behind the sediment fence when it becomes about 0.5 ft deep at the fence. The sediment fence will be repaired as necessary to maintain a barrier.
- Sediment fencing shall be maintained throughout all construction phases.
- During construction and until acceptance, the contractor shall be responsible for the removal of silt and sediment from all ponds, detention basin areas, graded areas, roads, walks, drives or any other area having received sediment as directed by the Golf Course Architect.

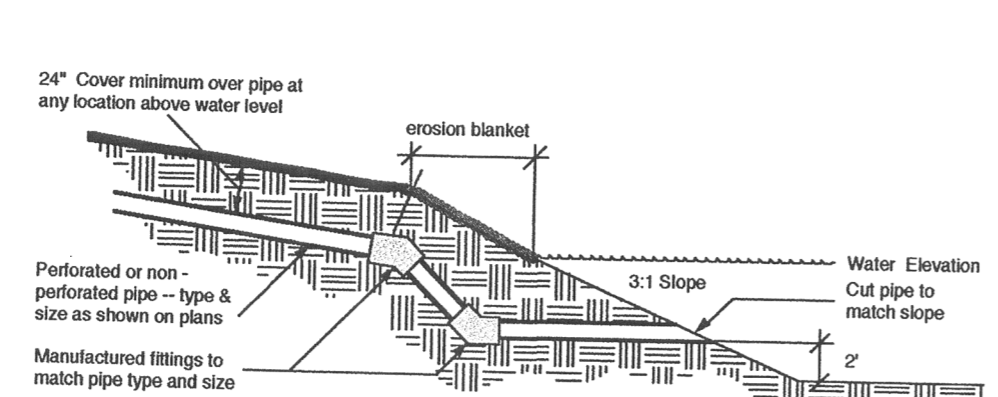
Symbol	Description
⊕	Staking Point - Back Tee, Digging Points and Green Stakes
—	Existing Contours
—	Proposed Contours
•	Spot Elevation
—	Cart Path (min 8')
—	Non-Perforated Tubing (4" unless noted otherwise)
—	Limits of construction impacts
—	Drain Pipe (size as shown)
⊕	12" Catch Basin
⊕	24" Catch Basin
⊕	36" Catch Basin
⊕	Curb Inlet
⊕	Flared end section - 12" or greater size pipe - less than 12" cut pipe to match slope and install rip rap and/or gravel
⊕	Lake Outlet
⊕	Inlet / Outlet
⊕	Ditch Check
⊕	Boulder Retaining Wall
⊕	Silt Fence
⊕	Rock Construction Entrance
⊕	Erosion fabric - refer notes
⊕	Sod



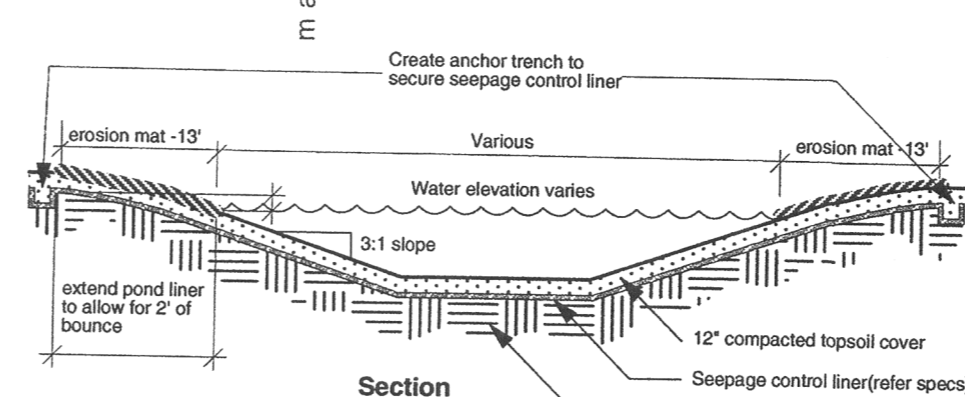
1 Pipe Inlet / Outlet w/Flared End Section (Not to Scale)



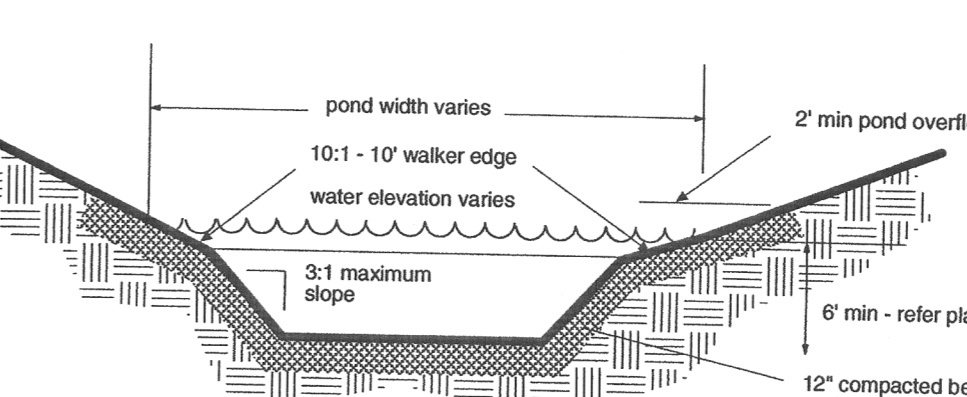
2 Boulder Retaining Wall (Not to Scale)



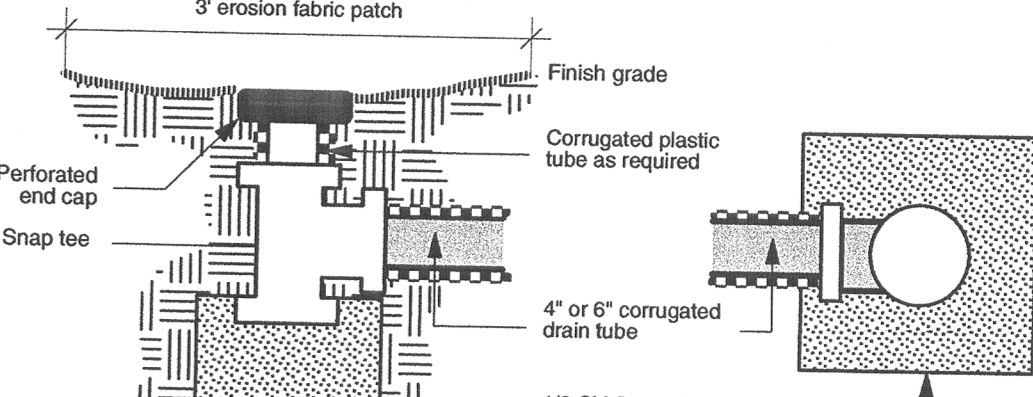
3 Lake Inlet/Outlet Detail (Not to Scale)



4 Pond w/ Seepage Control Liner (Not to Scale)



5 Pond Cross Section (Not to Scale)



6 Drain Tube Outlet (Not to Scale)

No.	Date	Revisions
1.		
2.		
3.		
4.		
5.		