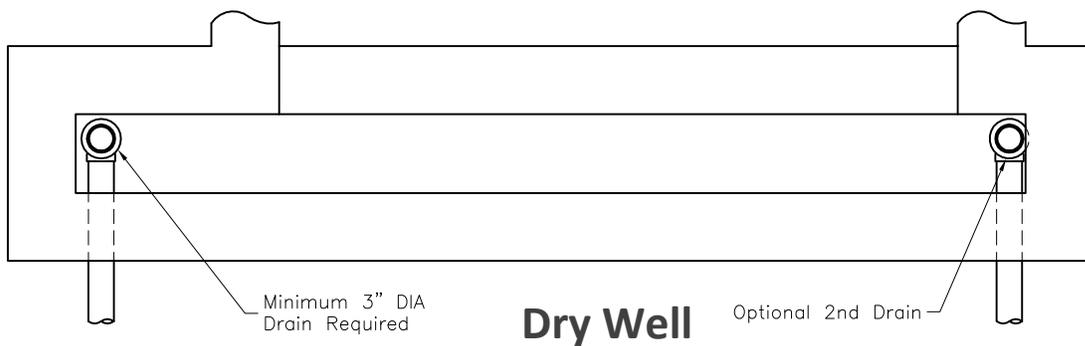
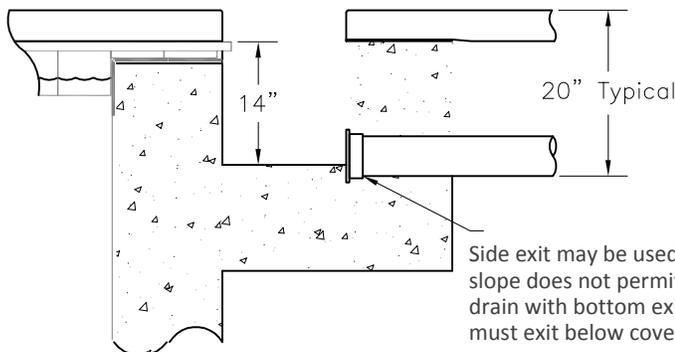
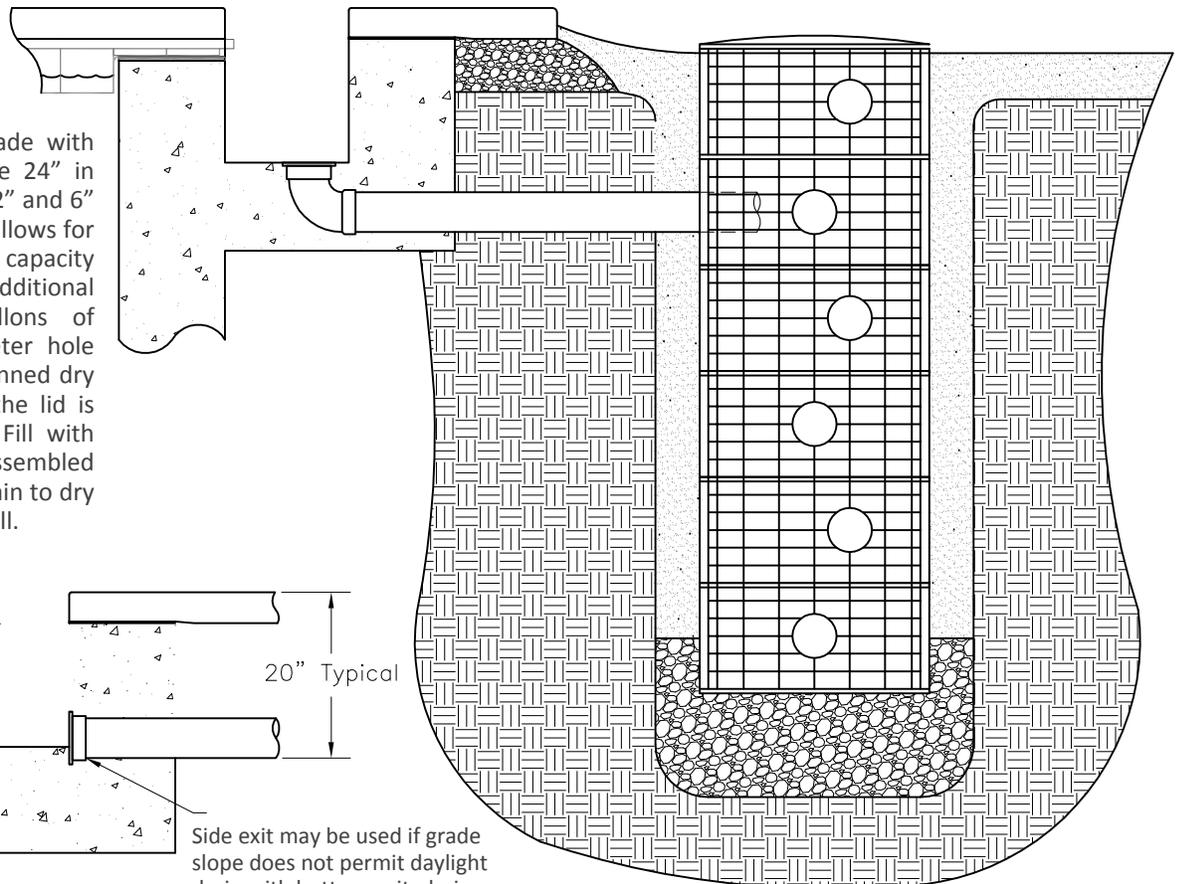


# Cover Housing Drainage

Cover housing drainage should be considered in the planning stages of the pool project. Drains must be 3" diameter (3,000 GPH) minimum. The best drain is a 4" diameter (6,000 GPH) PVC schedule 40, bottom exit drain that runs to daylight (open air). If the site topography has no significant slope, the finished pool height should be elevated 24" above the surrounding grade. The size and number of drains should increase with the pool size. Drains should not be located in the center, but rather at the ends where they are more accessible to servicing. Stub drains before gunite. If using a form for the cover housing, use a closet flange to attach the drain stub to the form. The cover housing floor may be pitched towards drain for a total fall of 1-1/2". Never make the housing less than 14" deep. If it is not possible to drain to daylight, an adequately sized drywell or pump-out pit must be used. **DO NOT** use "French drains" where the drain is buried in a hole with gravel. These types of drains typically fail within a year. Soil may have poor drainage or become saturated in heavy rains. Even the largest gravel pit will not work when silt and debris clog the end of the drain. An open bottom 24" diameter dry well has 36 times the surface of a 4" pipe can be cleaned out and accommodate a sump pump. If the cover housing will be the overflow drain, it must be able to handle a forgotten hose (600-1500 GPH) or rainfall. If a 20 X 40 pool is left uncovered during a storm that has 2" rainfall per hour, the drain would have to handle 1,000 GPH. The drain must work!



Dry well casing can be made with septic riser rings. Rings are 24" in diameter and available in 12" and 6" heights. A 6' deep dry well allows for approximately 117 gallons capacity below the cover box. Each additional 12" ring adds 23.4 gallons of capacity. Dig a 36" diameter hole that is 12" deeper than planned dry well depth. Set depth so the lid is flush with finished grade. Fill with 12" of stone and place assembled rings in place and plumb drain to dry well. Screw lid on and backfill.



Side exit may be used if grade slope does not permit daylight drain with bottom exit, drain must exit below cover housing.