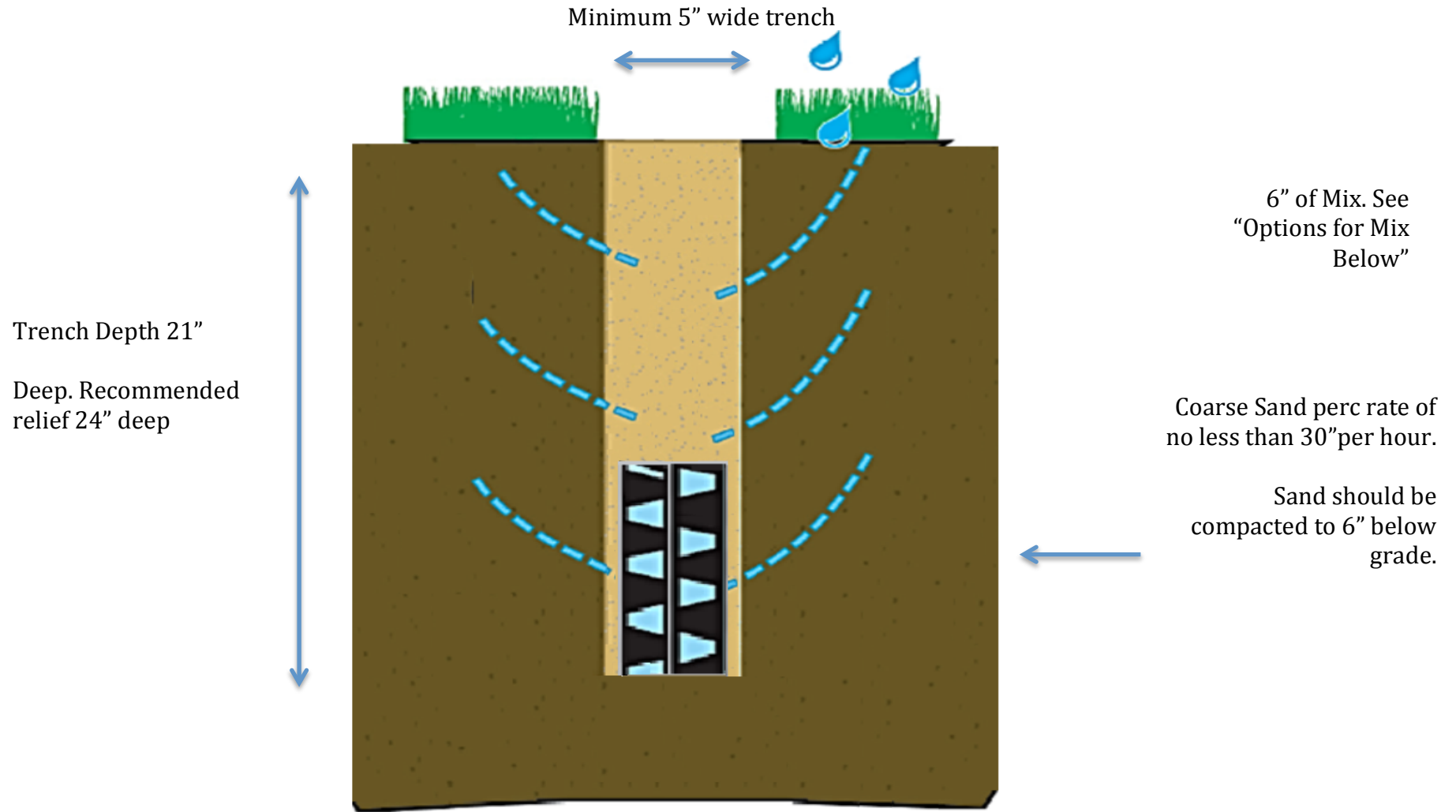


TYPICAL TURF DRAIN DETAIL



Options for Mix

The upper 6" of backfill has several options, depending on the installation. For installations going into established turf that will have the sod replaced, there should be a mix used with a minimum moisture retention of 18%. This is typically something like a 60/40 to 70/30 mix of sand and peat.

For new construction that is being sand capped, the trench can be topped off with the same sand as the plating sand and at the same depth as is specified for the sand cap.

For new construction that is being installed in native soils, a mix with an 18% moisture retention as described above may be used in the top 6" of the backfilled trench. A final float that intermixes native soils with the mix is allowed.

Placement of Turf Drain in Trench

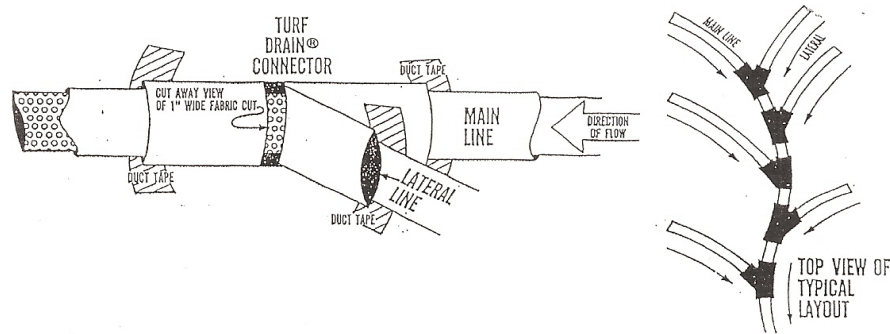
It is acceptable to place the Turf Drain in the center of the trench, or as an alternative installation method to save labor, the contractor may place the Turf Drain against alternating walls. The contractor may pin the Turf Drain against alternating walls with sand, approximately every 5 to 8 feet. This procedure will assure that the Turf Drain material will have a sufficient amount of area where the sand is on both sides of the material. Once the material has been pinned against the walls the trench can be backfilled. It is recommended that a TyCrop or another type of conveyor type material handler be used for this purpose. This will save labor versus trying to keep the Turf Drain standing up vertically in the center of the trench throughout the installation.

Sealing the Turf Drain

Upper ends of the Turf Drain lines must be properly sealed with pipe tape to prevent contamination from entering the system. This is equivalent to using an end cap on a 4" pipe.

CONNECTIONS

Lateral Connections



The Turf Drain lateral connectors are used to connect lateral drain lines to main Turf Drain lines. This is an easy to use method for connecting the lateral lines. This is the only system that allows the direct flow of lateral water into the main line. The lateral connector (U.S. Patent # 4,756,643) will also protect the connection from intruding dirt that could contaminate the system.

- 1.) Dig both the main trench and lateral lines. Clean the bottom of the trenches and prepare for the installation of Turf Drain.
- 2.) Lay the Turf Drain on the ground next to the trenches into which it is to be installed to get the proper length of the lines that will be needed. Starting from the end nearest the lateral, slide the Turf Drain Lateral Connector over the outside of the main line. Simply grab the end of the main line from which you are starting, then pull the connector over the outside of the main line to the point where the lateral will connect. Put one Turf Drain Lateral Connector at each lateral point.
- 3.) Slit the fabric around the core of the main line to expose a 1 inch section of core at the point where the laterals will connect. CAUTION: DO NOT CUT THE CORE. CUT THE FABRIC ONLY. Slide the lateral directly over the cut in the fabric and then insert the Turf Drain coming from the lateral trench. Use Turf Drain plastic drainage tape to secure the ends.

End Line Connections

Turf Drain can be connected to reliefs in several manners.

- 1.) For installations that drain directly to a creek, lake, or other open relief, Turf Drain can exit on the bank above the high water level. Do not submerge the end of the line below the resting lake level.
- 2.) For installations that are being tied into a Perma Basin or Channel Drain (products of Turf Drainage Co. of America), insert the Turf Drain into the universal sleeve that is part of the Perma Basin or Channel Drain. Use wire cutters to open an area large enough that the Turf Drain can be inserted inside of the perimeter of the wire wall so that the water can be observed flowing into the structure. Use Turf Drain plastic drainage tape to secure the sleeve connection around the Turf Drain.
- 3.) Turf Drain can be connected directly to 4" corrugated solid pipe with the use of a Turf Drain to pipe connector available through Turf Drainage Co. of America. Simply insert Turf Drain into the vertical end of the connectors and the pipe into the round end, and use Turf Drain plastic drainage tape to secure the connection.