The first step is digging a 42-in. dia. hole in basement floor (left). Then lateral lines are drilled under the floor using a patented process (right).

"Foolproof" Basement Drainage System

Here's a new way to waterproof your basement from inside the house, eliminating the need to dig up your yard to lay tile around the foundation.

Sanford Irrigation's drainage system consists of a sump dug into one corner of the basement, tied to a series of PVC drainage pipes that install under the basement floor.

The first step is digging a 42-in. dia. hole 3 1/2 to 4 ft. deep.

The company then uses a special, patented horizontal drilling process to bore lateral holes up to 50 ft. out from the hole. As the holes are drilled either parallel with the floor at a slight downgrade to the hole, 10-ft. lengths of 3/4-in. dia. slotted PVC drain pipe are inserted.

Once the pipes are installed, a 50-gal. plastic basin is placed in the sump hole, equipped with a 1/3 hp sump pump.

The pump connects to a discharge pipe that carries water away from the house. The last step is to install a manhole cover flush with the floor over the hole.

"It's convenient and neat," says Paul Sanford, developer of the technique. "There's no disruption of yards, shrubs, concrete or decks."

Sanford has installed the system in more than 900 homes in Minnesota and the Dakotas since coming up with the idea. Installation typically takes a day, he says. Cost for an average home with a 24 by 48-ft. basement is $2,900.

Drain pipes connect to a 50-gal. sump which is emptied by a pump.

The company will consider licensees.

Contact: FARM SHOW Followup, Sanford Irrigation, 444 East Highway 79, Elbow Lake, Minn. 56531 (ph 218 685-4344).

"Snowbine" Blows Snow, Runs Auger

"Folks around here call it my 'Snowbine,'" says Garnet Love about the workhorse "tractor" he built out of an old combine to power a snowblower that mounts on front. He also set it up to run a grain auger and do several other jobs as well.

The Portage La Prairie, Manitoba, farmer started with an International 203 combine he bought for $600 from a neighbor. The header, threshing units and other grain cleaning components were worn out and the International 4-cyl., 153 cu. in. engine needed a few repairs.

After stripping the combine down, Love had the valves ground and installed a new radiator core. He also shortened the frame 11 in. and reinforced it with 3-in. channel iron.

He moved the engine to a lower position on the frame and installed a shorter belt between the clutch and variable speed pulleys.

He uses the original header hydraulic lift cylinders to raise and lower the shop-built front-mounted 3-pt.

Besides the snowblower, the 3-pt. also accommodates two 42-in. long forks Love built out of 3-in. channel iron. He uses the forks for heavy lifting chores such as hauling railroad ties or his combine chopper.

He also added a pto on front driven by a belt pulley attachment off an old tractor. "The gearbox originally slid onto the pto drive on back of the tractor," he says. "I mounted it underneath the combine frame and extended the shaft 4 ft. I mounted the gearbox so the belt pulley was direct driven by a pulley on the engine."

Love uses the pto to power a 40-ft. long (8-in. dia.) Sakundiak grain auger.

The trickiest part of the project was moving the operator's platform to the center of the combine. "I had to modify linkages on the steering, brake and motor controls," he says. "I also changed the clutch over from steel rods to a cable and pulley system to make it easier to shift gears."

In the future, he also plans to mount a mower deck on front.

"It's a real handy machine to have around the farm and I hope to make it even more so," he says.

Out-of-pocket expense was about $1,600, excluding the price of the new snowblower.

Contact: FARM SHOW Followup, Garnet R. Love, R.R. 1, Box 38, Portage La Prairie, Manitoba, Canada R1N 3A1 (ph 204 857-8120).

Caddy is equipped with three V-shaped racks on top that hold 24 pieces of 10 and 6-ft. pipe.

Caddy Makes Setting Up Pneumatic Grain-Moving System A Breeze

Before Bruce and Roger Elliott built a caddy for their Kongskilde pneumatic grain-moving system, the Montrose, Ill., brothers had to load the components onto a hay rack with a skid steer loader.

"It took us at least two hours to organize the components, load them and then set them up," says Bruce. "Now, they're all stored together in one place and can be moved quickly to our dryer and bins by our Honda ATV or we can pull it by hand. It takes only a half hour to get completely set up."

The 6 by 9-ft. caddy has an angle iron frame and a plywood floor. The platform rides just 6 in. off the ground.

The Elliotts fitted the shop-built rear axle with 4-bolt hubs and 14-in. tires off an old corn planter. The single pivoting front wheel is fitted with a 4 by 12-in. tire.

They made a gooseneck hitch for the front out of a length of axle off an old Kewanee disk. It was already bent in the shape of the gooseneck.

Three V-angled racks for the system's pipe mount on angle iron supports on the front and back end of the caddy. The top rack, which is 7 ft. off the ground, holds up to eight lengths of 10-ft. (6-in. dia.) pipe, as does the middle rack. The bottom rack holds up to eight lengths of 6-ft. pipe.

The platform underneath holds the Elliotts' assortment of 15, 30, 45, 60 and 90-degree elbows and 1, 2 and 3-ft. lengths of pipe as well as their system's air lock and two 10 hp blowers.

"With more than 24 lengths of pipe and all the elbows, we're able to reach any of our nine grain bins, which are separated from our dryer by up to 300 ft.," notes Bruce. "What's more, when we're done using it in the fall, we simply pull the caddy into the shed and park it. That way, all our components are stored together in one place for the following season.

"Best of all, it cost practically nothing to build since we used scrap materials we had on hand."

Contact: FARM SHOW Followup, Roger and Bruce Elliott, 19478 North 400th St., Montrose, Ill. 62445 (ph 217 924-4350).

Love uses the modified combine to power an Allied snowblower.

Combine also powers Love's 40-ft. long (8-in. dia.) Sakundiak grain auger.