GREYWATER PLUMBING

Thanks to the guys at Garzac plumbing, the grey water system is now plumbed up and connected. Awaiting only a grey water wetlands to start discharging water into (and, of course, a family living in the house producing grey water!)

The schematic of the grey water system (Grey water schematic) shows what is going on here, but the plumbing ended up being rather complicated as the sewer line from the rear guest house (pipe at the bottom of the picture) comes into the corner, gets joined to the blackwater outlet from the house and discharged to the main sewer line (leaving the picture at the left).

You can see the grey water line exiting the house, and then there is a big diverter valve that lets you divert the water to the sump tank (to the right) or directly into the main sewer at left (if for some reason you are using something in the house you don’t want to go into the grey water system, or if you don’t have your grey water leach fields set up yet!). The black water sewer line exits the house below the grey water line and discharges directly out to the left.

The grey water comes out of the house too low to be discharged directly into the wetlands, so it needs a BRAC sump pump designed to work with grey water to bring it up to the discharge level (this is NOT ideal – we would have avoided much of this complicated plumbing if we could simply have a gravity discharge, but we couldn’t get it to work with the slopes of the property). The tank is not a holding tank – it is a temporary surge tank. The pump is sized to be able to keep up with the drains in the house, and discharge water up out of the pipe sticking out of the top of the tank into the wetlands as fast as it comes in. However, if the pump breaks, grey water needs to overflow directly into the sewer rather than backing up into the house, so the overflow line with the white check valve on it leads from the tank into the main sewer line (if the main sewer line were ever to back up, the last thing you want is sewage backing up into your grey water system which is why the check valve is there).
The big white pipe along the top is connected to the roof downspouts and leads to the rain water cachement tank in the back yard. The grey conduit is the main power and the low voltage data lines running to the back guest house. I wonder if we can get a few more pipes in there somewhere.

The grey water outlet showing the diverter valve, surge tank with top discharge, overflow line with check valve and all the exits to the main sewer at left

The construction of the wetlands will be another big project, and will probably be something we have another construction party for (like the bale raising), so if you missed the bale raising and would like to build some wetlands and a stream later this summer, a general call for volunteers will go out close to the time. Drop me a line if you would like an invite. If you were in the bale raising party... you’re already on the invite list😊

Source : http://www.301monroe.com/?p=711