We started the project last Saturday by removing the stairs and a section of fence





Monday morning we had the boring company (one of their three trucks below), the excavator and the cement contractor arriving in the morning.



After lengthy discussions the boring company started on the west side of the building boring toward the pond.

Below are three pictures of the boring machine:



The angle and depth of the boring is checked every few feet.



At the same time the cement contractor was busy on the ramp.



Because of a plan change to bore the opposite way, the excavator had to leave until the boring was complete.



The depth of our water line (apx. 10') was close to where the boring company wanted to run the 4" pipe. They tried to stay below our water line. They competed the boring twice only to find the outlet was too low by the pond.

They brought in a giant vacuum truck. Along with a pressure washer they vacuumed a 16" hole 10' in the ground to locate our water pipe. Since they didn't find the water pipe at 10' they started the third boring this time going above our water pipe.





The first boring was completed at 10:30 and the final successful boring was completed at 2:00. They could now pull our 4' orange

pipe back through the hole they had bored.



I called the excavator and had him come back. He started by digging a hole back from the retaining wall.



Bill Wolf, the excavator, needed to find the buried end and bring it around the cement "porch".



The cement workers and the excavator workers dug a trench from each side under the wall.



A PVC pipe from the sidewalk drain and the pipe that was bored were connected.



We now had a connection from the trench drain to the outlet near the pond. The excavation hole was filled in.



The drain has a stainless steel grate. Rebar is used to keep the drain in place while the cement is poured.



Today (Wednesday) the cement was poured and finished. We had a bit of a scare when a few rain drops started to fall.



The sidewalk not only slopes down the ramp but also toward the retaining wall. The 4" of cement between the retaining wall and the drain are sloped to keep the water in the trench drain.



Drain without the grates that are flush with the cement.



I was able to get the steps and railings re-installed (with a bit of bobcat help). I also got the fence reinstalled.

We were fortunate to have great people from all three companies working together. The excavator was especially patient with the delays in his schedule.

I'm sure we will be talking about lawn restoration at some point.