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Don,

Our recent visit was very informative and has given our committee much insight into the history and repairs of our Lake Tishomingo dam. We have located the valve assembly, found what we think is the drain system from the 1988 repair but not yet located the drain outlet pipe from the 1982 repair. However, there are several items that we either misunderstood or didn't know enough at the time in order to ask additional questions. Following are the questions that were left unanswered:

[Answers from DE are in red.]

Q: Does the drain pipe from the 1982 system run all the way into the creek at the back of the property? We believe the "bubbling up" of water about 50' from the creek is coming from the pipeline. Is that probable, thinking that the drain pipe may have been broken along the line?

A: I don't think so, my recollection was that it stopped in a low spot before it got to the shallow drainage feature that was more or less parallel to the toe of the dam.

Q: With regard to the seepage collector, you said the north inlet was capped, the east inlet was a slotted pipe to pick up spring water direct from the springs, and the south inlet was connected to 250' of drain pipe. (The west pipe is the outlet.) Based on the drawing, it looks like the south and east inlets are slotted pipes. The plans show the 250' drain pipe is *not* connected to the seepage collector. Upon inspection, we have found a 4" pipe draining into the pool area. We are assuming that this pipe is from the 250' perforated pipe and was built according to the plans, i.e. not feeding into the collector?

A: The plans show the "tee" crossed out and a separate line leading parallel to the spring interceptor discharge line. The cross out indicates that the contractor chose to build it differently than originally shown on the plans.

Q: What is the significance of writing that is crossed out on the drawings? Generally, these seem to be elevations, except for the concrete barrier. While it appears that these are elevations, they carry the letters F.L. What does F.L. stand for? We're assuming the crossed out drawings and wordings were the original plans but were crossed out as the actual construction work was done differently, thus "as built"? All other drawing items were built as drawn?

A: The cross outs are an industry standard method to indicate as-built conditions. "FL" stands for flow line, the elevation of the bottom of the pipe at that point.

Q: On the top of dam is the wording "Monitoring Well – to remain". What is a monitoring well? If this can be located, can it be used? How? What would we be monitoring?

A: A monitoring well is an access point into an aquifer to measure either the free water elevation, or to periodically sample water. We don't have a clue as to who put it in, or the rationale behind the installation. These are not used as a water supply.

Q: Also on the top of the dam, the drawings show two "Iron Pins". One on the South side with the wording "STA0+00" and one on the North side with the wording "STA 7+35". What is the significance of these two pins? Are these survey reference stakes? Accurate placement to scale on the plans? Can we use these pins to find the monitoring well?

A: The pins are two known points on the construction base line, used to make sure the contractor lays out the construction dimensions to the same base as the original survey. You should be able to scale close to the well using the base line shown on the drawing.

Q: There is reference to telephones lines buried on the top of the dam? Are there telephone lines are buried there? I found a note that had instructions to "move telephone lines". I have no knowledge if this was done, do you?

A: The phone company said they were there when we drew the plans, they did not impact our construction, and I don't know what happened afterward. At that time the phone lines were overhead to the utility pole near station 8+00 and then were buried to cross the rest of the dam. I think the phone company did that when the first slide took out a utility support pole part way across the dam.

Q: What was the use of the Bentonite cutoff plug?

A: Bentonite is a swelling clay soil that was used in the pipe trench to keep water from seeping out the trench excavation by following the outside of the pipe, it was a seepage seal.

Q: One of the drawings shows the spillway cross-section. It says "as built". I believe you said that R & J did design work on the spillway, but did not do any work. I do remember you saying something about "having to shave off a bend in the spillway for proper flow of the water going into the spillway". This was just a "little project", not what you had designed?

A: The construction plans showed that the spillway channel needed to be improved, the markup on sheet 13 also shows the as built conditions. It was part of our plans.

Your bill was received October 11, 2006. The next Tishomingo Board of Directors is to be held on November 9, 2006 at which time the bill will be submitted to and approved by the Board. You will receive the check shortly thereafter.

When you have had time to look over the questions, you can either phone or write, or email, if you prefer.

Thanks for all your help!!!!!!!!!!!!!!

Clarue Holland – for the Dam Committee