



Memo to: Board of Directors

From: Les Sterman

Subject: Program Status Report for August, 2012

Date: August 13, 2012

Addressing design issues continued to dominate the work effort in July and August. What was thought to be a breakthrough in June in achieving acceptance by the Corps of Engineers of trench drains or “graded filters” as a cost-effective underseepage control has turned out to be an illusion. While accepting the concept, the Corps has conditioned their approval on incorporating the use of number of very conservative design assumptions. Doing so either dramatically increases the costs of these features or makes their construction impractical. The most onerous conditions relate to assumptions about the amount of underseepage to be accommodated in the design.

In brief, we have done over 2,200 borings and related tests to determine the permeability and other properties of the ground under the levees. That information was used to make an estimate of the maximum amount of underseepage that could be reasonably expected during a 100-year flood event. The design was based on that calculation. Instead, the Corps has asked that we consider the 500-year event in the design (about a seven foot increase in river elevation), as well as make assumptions about the variability of soil properties to allow for a far greater flow, as much as 10 times greater, and to assume that the system be 80% efficient or less in reducing pressures and conveying underseepage. Taken together, these assumptions require that our design accommodate about 8 to 10 times the maximum estimated flow and be further modified to reflect a significant loss of efficiency. What this means is that the trenches must be dramatically deepened and widened, and pipes and other conveyance systems be significantly enlarged. These changes add huge costs, making the project effectively unaffordable. In some cases, trenches become so deep that proper placement of filter material and drainage pipes becomes highly problematic, making construction impractical.

While we believe it is possible to cost-effectively design for about 2.5 times the maximum flow, it seems likely that half or more of the graded filters included in the 60% design may no longer be cost-effective or feasible to construct if we go much beyond that benchmark.

We believe that the conditions imposed by the Corps represent a faulty and damaging logic. All concerned agree that our design will indeed provide the 100-year level of protection that is the goal of the project. While the Corps is not unreasonable in asking us to consider a 500-year event, because we need to confirm that the levee system will not be “injured” at its authorized

level of protection, they are making the underlying assumption that the system will indeed provide that level of protection now, an assumption vigorously and repeatedly pronounced as inaccurate.

For nearly 20 years, the Corps has represented that the design deficiency of the area's levee system threatens its performance during a 500-year event. In fact, their representation to FEMA that the system would not perform during a 100-year event was the trigger for the current project. Currently, the Corps has no funding or schedule for restoring the levee system to its authorized level of protection, yet they are measuring our design against that of a fully restored system. In essence, the Corps' position is that rather than significantly increase the level of protection based on our design, it is preferable to leave the levee system in its currently compromised state, accepting the related safety and economic threats that accompany that decision. We cannot accept that judgment.

As the result of the apparent impasse with the Corps, we are now considering other design, financial and legal options. I have asked AMEC to revisit the design to determine if there is an affordable alternative in the areas where grader filters may not meet the Corps' requirements. I am also asking our financial consultant to produce an updated financial model that reflects the current financial conditions and project schedule.

Unless the impasse with the Corps is resolved soon, the project schedule submitted last month may no longer be achievable nor will the current budget be adequate. While some activities continue to move ahead, particularly in the Prairie DuPont/Fish Lake districts, we will soon reach a point where the schedule will be threatened. The Levee Issues Alliance has stopped the "countdown clock" on their website, which I believe to be an accurate reflection of the current situation.

*As I indicated last month we will have a very limited ability to absorb any further delays in the schedule or cost increases without compromising our 2015 goal for certification.*

The Corps has informed us that they have likely reached their authorized spending limit (about \$23.5 million) on the Wood River reconstruction project. That limit is set by Congress in the Water Resources Development Act. The Corps can exceed the authorized amount by a maximum of 20%, which they have already done. While the project is mostly complete, there are a number of essential elements that are unfinished. The Corps is seeking approval of additional funding, but there is no guarantee of that happening any time soon. I am working with the levee district to figure out how to address high priority items with local funds, but these are additional unanticipated costs to our project that were previously assumed to be on the Corps' side of the ledger.

Work is ongoing on the Council's first construction contract, a small contract with Noeth Excavating Systems for restoration of culverts and trench drains in the MESD area.

Discussions with the Illinois Environmental Protection Agency continue on the contents and approach of the Sec. 401 water quality permit. On July 10 we submitted additional materials to IEPA that outline our legal and technical justification to proceed with the Sec. 401 permit

process. Because the levee improvement project will not exacerbate the existing natural flow of pollutants between American Bottom groundwater and the Mississippi River or add pollutants that are not currently discharging, we again requested an unconditional Sec. 401 permit. IEPA responded with a request for significant additional data and analysis that we believe to be unnecessary and excessive. Sen. Haine is facilitating a meeting with IEPA in the near future to try to bring the issue to closure.

There has been no decision yet announced on inclusion of the project on the Federal Infrastructure Projects Dashboard as requested by our congressional delegation. The Dashboard is the result of the Executive Order by the President for *Improving Performance of Federal Permitting and Review of Infrastructure Projects*. The Executive Order created an inter-agency initiative, spearheaded by the Office of Management and Budget, to institutionalize best practices to reduce the amount of time required to make permitting and review decisions and improve environmental and community outcomes. Clearly, this process would be of benefit, since permitting and review processes have been the biggest obstacle to successfully meeting our goals.

Marks and Associates is currently developing our minority business/workforce utilization plan. She will make a report on progress at the August Board meeting. It should be noted that there are no federal funds being used on the project, so our policy is determined solely by the Board of Directors.

The concern about the project budget and schedule that I have expressed at the last few Board meetings has only intensified as a result of recent developments involving the design review by the Corps. Until the current design issues are resolved, it is simply not possible to produce an accurate revision to the project cost estimate and schedule. If we can resolve our differences with the Corps in the next month or two, we should be able to keep the project on track.

