

Progress Report February 15, 2012 SW IL Levee System

By Jay Martin







Design Activities – 60% December 16, 2011



- Design and Construction Documents
 - Berms
 - Cut off walls
 - Interior drainage
 - —Pump stations
 - —Ditching
 - Seepage blankets/toe drains
 - Wetlands mitigation
 - Utility relocations
 - Temporary construction access roads
 - Limits of disturbance
 - Existing roadway relocation



Information Provided for 408 Approval

	Levee System		
Document and File Type⁴	Wood River	MESD	Prairie du Pont / Fish Lake
60% Plans (provided under separate cover)	X	X	X
60% Specifications (provided under separate cover)	(One set inclusive of all levees)		
Pipe Hydraulics	X	X	X
Utility Conflicts	X	X	Х
Technical Decision Record (TDR) Log, listing conclusion or action for each levee segment (.pdf)	Х	X	Х
Computations and input, sequential from beginning to end of each levee, identified by station (.pdf)	X	Χ	X
Leaky Blanket Spreadsheet, including Basic Data, Well Design and Seepage Berm tabs (.pdf)	X	X	X
Leaky Blanket Spreadsheet, including Basic Data, Well Design ² and Seepage Berm tabs (xls) ¹	X	Х	X
Underseepage models from Seep/W (.pdf) ³	X	X	Х
Underseepage models from Seep/W (.gsz)	x	X	Х
Trench stability analyses, LWR deep cutoff wall (.pdf and .gsz)	X	N/A	N/A
SWMM Models	X	X	Х
HEC-HMS Models	X	X	Х
HEC-RAS Models	X	X	Х

Corps Review Comments – 60% (February 8, 2012)



	Wood River	MESD	PdP/FL
Total Comments	42	29	41
Match	13	5	19
Filters/Trenches	12	10	-
Cut off Walls	2	-	-
GD/PS/RW	4	3	4
General	11	11	18

Format of 408 comments



- REVIEW CONCERN
- BASIS FOR THE CONCERN
- SIGNIFICANCE OF THE CONCERN
- ACTION NEEDED TO RESOLVE THE CONCERN

Approach to Response



- Reviewed comments
- Distributed to design team
- Currently drafting responses to the more straight forward comments
- Others particularly those regarding the "graded filters and trenches" will require...
 - More effort to analyze the "what if" scenarios raised
 - Additional funding for the evaluations and potentially additional field and laboratory analysis.
 - Time to execute, review and discuss with the Corps
- We remain comfortable with design concepts and committed to adequately addressing the concerns raised.

Performance at 54' on the St Louis gauge ("500-year")



- How will the "graded filters/trenches" function at the 500 year event?
- Are the flows from those features managed?
- Our current design addresses the 'extra' water that the improvements will produce.

Design Activities – 100%



- Reviewed and evaluated design sequencing
- Package #1 Gravity Drains/Toe Drain Rehab (WR & MESD)
 - 100% submitted the USACE February 6, 2012
- Package #2A Pump Stations (PdP,FL) June, 2012

Permits Application



404

- Under review, public comment along with EA, 10 day extension granted (30 day requested), earliest approval date May 15, 2012
- Wetlands mitigation potential property identified
- Cultural Field activities complete on all accessible properties
- Onsite agency coordination meeting Corps lead
 - —Wetland open wetland to upland forest
 - IN bat potential construction timing

401

Under review, public comment soon

Field activities



- Land surveying
- Supplemental Geotechnical data collection





Issues & Concerns



- USACE 408 process
 - Additional reviews (HQ, SAR, etc)
- Weather and river levels
- Permits 404 & 401
- Chair of Rocks and Mel Price certification

Look Ahead



- Respond to technical comments from the Corps on the back up shared at 60%
- Track permit application (404, 401) answer questions, information requests
- Push forward on completion of 100% submittals and 408 requirements, package by package
- Negotiate for wetland mitigation
- Mel Price & Chain of Rocks evaluation



QUESTIONS?

