Navigable Pass Concrete Spillway (with Lift Hinged-Crest Gates): 300 ft wide

Fixed Crest Concrete Overflow Spillway: 200 ft wide

Weir 0.90R
Weir 0.85R
Weir 0.78R
Weir 0.74R

Floating Guardwall: 524' long

Navigation Tower

Lock Chamber (with Miter Gates): 110 ft wide by 600 ft long

Floating Guardwall: 524' long

Rock Revetment

Aubtment Pier
APPENDIX B. April 5, 2011 MPLD HSR Model Meeting Minutes

The meeting was conducted via web and teleconference. Ashley used a PowerPoint presentation to display plates and other important visual aids. To begin, she briefly provided background information and explained the model replication.

Ashley then went through the different generic structure sets tested and provided a concise description of the alternatives results and why they were not chosen as the recommended alternative. Although the PowerPoint presentation showed that Alternative 24 was the recommended plan, Ashley presented results from more recent tests of alternatives and then gave a thorough explanation of why the latest recommendation was Alternative 25 based upon the 27 alternatives tested at that time. Alternative 26 (same as Alternative 24, but with every other weir removed) and 27 (same Alternative 25, but with every other weir removed) were presented as showing positive results that would cost less but that they were still being analyzed.

After Ashley asked for other alternative ideas, it was suggested to make some adjustments to Alternative 23 and test that as Alternative 28. So Ashley said she would test the combination of 8 weirs on the RDB from Alternative 27 and the 6 dikes on the LDB from Alternative 23. It was voiced by the group that they would like to see the velocity distribution and alignment through the upstream bend between RM 1.8-1.2. It was agreed that velocity data from RM 1.8-1.2 would be collected for the three alternatives that best met the study goals. Then the final alternative would be chosen based upon the alignment through the bend, outdraft near the lock, and bathymetry.

Following, the group was asked if they had any comments or questions concerning the project. Glen Raible asked the industry folks if they would have any issues with the proposed weir height of 102 ft MSL. John Hoopaugh and John Janoush agreed that there shouldn’t be any problems. There were no further comments or questions.

After the open discussion, Glen and Ashley confirmed with the group, which consisted of both industry and corps members, that she would run one more possible structure set in the model. Then she would collect LDV data from RM 1.8 – 1.2 for the top three alternatives and provide the results to the group. A recommended structure set would then be decided upon by SWL Operations and Hydraulics section, with the input of AREC and industry partners. Everybody thought that was a good plan of action.

Attendees:
Troy Bailey        Ashley Cox        John Janoush        Gil Wooten
Don Bratton       Rob Davinroy     Nick Mitchell       Ashley Zink
Steve Brewer      Keith Garrison    Glen Raible
Jasen Brown       John Hoopaugh    Brad Schoemaker

Montgomery Point Lock and Dam
HSR Model Report – Appendix B